Anexa B.9.5.a - Lista de lucrări cadre didactice

Lista de lucrări în domeniul de studii universitare de masterat „Inginerie Energetică”

Numele şi prenumele: **ISTRATE Dumitru-Marcel**

A. ***Teza de doctorat.***

1. „Contribuţii la coordonarea izolaţiei reţelelor electrice, în vederea compactizării liniilor electrice aeriene”, 1996, Domeniul „Inginerie Energetică”, Universitatea Tehnică „Gheorghe Asachi” din Iași, conducător doctorat: prof. dr. ing. Nicolae Gavrilaș.

B. ***Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.***

C. ***Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).***

1. Oprea Roxana, Istrate Marcel, Machidon Dragos, Solutii pentru cresterea performantelor sistemelor fotovoltaice, Editura PIM, 205 pagini, ISBN 978-606-138696-3, 2024.
2. Machidon Dragoș. Istrate Marcel, Modelel matematice de calcul a zonelor de protecție generate de sistemele de paratrăsnete, Editura Universității Tehnice “Gheorghe Asachi“ din Iași, 182 pag, ISBN 978-973-621-537-7, 2024.
3. Beniuga Razvan, Istrate Marcel, Provocari privind integrarea centralelor eoliene in sistemul energetic, Editura Politehnium (cod CNCSIS 211), Iaşi, 208 pag., (31 rânduri/pagină – coeficient 1,03), ISBN 978-973-621-520-9, 2023
4. Machidon D., Istrate M., Tehnica tensiunilor înalte – Lucrari de laborator, Editura Politehnium, Iaşi, 185 pag., 50 exemplare, ISBN 978-973-621-501-8, 2021.
5. Istrate M., Asandei D., Temneau C., Analiza asistată de calculator a coordonării protecţiei de impedanţă Editura Politehnium (cod CNCSIS 211), Iaşi, 255 pag., ISBN 978-973-621-266-4, 2008
6. Guşă M., Istrate M., Bucă C., Tehnica tensiunilor înalte – Aplicaţii. Ediţia a II-a, revizuită, Casa de Editură Venus (cod CNCSIS 199), Iaşi, 351 pag., 100 exemplare, ISBN 973-756-028-0, 2006.
7. Istrate M., Electrosecuritate, Editura Editura Tehnică, ştiinţifică şi didactică CERMI (cod CNCSIS 181), Iaşi, 384 pag., ISBN 978-973-667-274-3, 2007.
8. Istrate M., Tehnologii şi instalaţii pentru reducerea emisiilor poluante – Controlul poluării în termoenergetică, Editura SETIS, Iaşi, cod CNCSIS 279, 428 pag, ISBN 97386764-0-1, 2004.
9. Adam M., Istrate M., Baraboi A., Guşă M., Echipamente de comutaţie şi izolaţia reţelelor electrice, Editura AGIR, Bucureşti, (cod CNCSIS 140) 185 pag., ISBN – 9738130-38-7, 2001.
10. Georgescu Gh., Varvara V., Istrate M., Sisteme de distribuţie a energiei electrice. Volumul II, partea a I-a, Editura Tehnică, ştiinţifică şi didactică CERMI (cod CNCSIS 181), Iaşi, 453 pag., 200 ex., ISBN 978-973-667-314-6, 2008.

11. Georgescu G., Istrate M., Varvara V., Rădăşanu D., Popa B., Transportul şi distribuţia energiei electrice, Vol. II, Editura "Gh.Asachi" Iaşi, (cod CNCSIS 211), 442 pag, 350 ex., ISBN 973-8292-03-4., 2001.
12. Istrate M., Guşă M., Impactul producerii, transportului şi distribuţiei energiei electrice asupra mediului, Editura AGIR, Bucureşti, (cod CNCSIS 140) 210 pagini, 150 exemplare, ISBN 973-99295-5-9, , 2000.

D. ***Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.***

1. Guşă M., Istrate M., Gavrilaş N., Asaftei C.,Tehnica tensiunilor înalte - Supratensiuni în sistemele electroenergetice, Editura Fundaţiei culturale "Renaşterea Română", Iaşi, 300 pagini, 200 exemplare, ISBN 973-97246-3-9, 1997.
2. Asaftei C., Guşă M., Istrate M., Gavrilaş N., Tehnici de control şi supraveghere a reţelelor de distribuţie, Editura Fundaţiei Culturale "Renaşterea Română", Iaşi, 315 pagini, ISBN 973-97246-1-2, 1998.
3. Gavrilaş N., Istrate M., Guşă M., Asaftei C., Tehnica tensiunilor înalte - Supratensiuni în sistemele electroenergetice, Curs litografiat la Universitatea Tehnică "Gheorghe Asachi" din Iaşi, 210 pag., 1996.

E. ***Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.***

1. Istrate M., Machidon D., Electrosecuritate – curs electronic, www.tti.ieeia.tuiasi.ro
2. Istrate M., Machidon D., Regimuri tranzitorii electromagnetice – curs electronic, www.tti.ieeia.tuiasi.ro
3. Istrate M., Guşă M., Machidon D., High Voltage Enegineering – curs electronic, www.tti.ieeia.tuiasi.ro

F. ***Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.***

1. Dragos Machidon, Marcel Istrate, Razvan Beniuga, Wind Shear Coefficient Estimation Based on LIDAR Measurements to Improve Power Law Extrapolation Performance, Remote Sensing, 2025, Vol 17, Issue 1, 23; DOI: 10.3390/rs17010023, https://doi.org/10.3390/rs17010023, Submission received: 2 November 2024 / Revised: 5 December 2024 / Accepted: 23 December 2024 / Published: 25 December 2024, (This article belongs to the Special Issue New Insights from Wind Remote Sensing), https://www.mdpi.com/journal/remotesensing, Revista ISI - Impact factor la data publicarii 4,2, Citescore 8,3, Q1
2. Costel Boariu, Costică Roman, Marcel Istrate, Tor Haakon Bakken, Atle Harby, Elena Pummer, Georgiana Dunca, Diana Maria Bucur, Peculiarities of the run-off-river hydropower potential in Romania, Environmental Engineering and Management Journa, January 2024, Vol. 23, No. 1, pp. 51-60, Print ISSN: 1582-9596, eISSN: 1843-3707, DOI: 10.30638/eemj.2024.005, http://www.eemj.icpm.tuiasi.ro/issues/vol23/vol23no1.htm, Revista ISI - Impact factor la data publicarii 1,1
3. Fadila Barkat, Ali Cheknane, Josep M. Guerrero, Abderezak Lashab, Marcel Istrate, Mihai Gavrilas, Justina G. Motas, Ioan Viorel Banu, Review, analysis, and performance evaluation of the most common four active methods for islanding detection in gridconnected photovoltaic systems, January 2023, Electric Power Systems Research 214(Part A), DOI: 10.1016/j.epsr.2022.108909, LicenseCC BY 4.0,

https://www.sciencedirect.com/science/article/pii/S0378779622009609?via%3Dihub, Revista ISI - Impact factor 3.9, Q2

4. Dragos Machidon, Marcel Istrate, Tilt Angle Adjustment for Incident Solar Energy Increase: A Case Study for Europe, Sustainability 2023, 15(8), 7015; https://doi.org/10.3390/su15087015, Received: 20 March 2023 / Revised: 19 April 2023 / Accepted: 20 April 2023 / Published: 21 April 2023, https://www.mdpi.com/20711050/15/8/7015, Revista ISI - Impact factor 3.889, Q2
5. Ioan Viorel Banu, Fadila Barkat, Marcel Istrate, Josep M.Guerrerod, GeorgeCulea, PetruLivinti, Justina G.Motasb, Bogdan Neagub, Dragos Andrioaia, Passive antiIslanding protection for Three-Phase Grid-Connected photovoltaic power systems, January 2023, International Journal of Electrical Power & Energy Systems 148:108946, DOI: 10.1016/j.ijepes.2023.108946, journal homepage: www.elsevier.com/locate/ijepes, https://doi.org/10.1016/j.ijepes.2023.108946, Received 16 July 2022; Received in revised form 27 October 2022; Accepted 3 January 2023 https://www.sciencedirect.com/science/article/pii/S0142061523000030?via%3Dihub, Revista ISI - Impact factor 5,2, Q1
6. Fadila Barkat; Ali Cheknane; Josep M. Guerrero; Abderezak Lashab; Marcel Istrate; Ioan Viorel Banu, Hybrid islanding detection technique for single-phase grid-connected photovoltaic multi-inverter systems, IET Renewable Power Generation (factor de impact 3,894), DOI: 10.1049/iet-rpg.2019.1183, Print ISSN 1752-1416, Online ISSN 1752-1424 Available online: 16 February 2021, https://digital-library.theiet.org/content/journals/10.1049/iet-rpg.2019.1183, Revista ISI - Impact factor in 2022 = 2.6, Q3
7. Neagu, B.-C.; Ivanov, O.; Grigoras, G.; Gavrilas, M.; Istrate, D.-M. New Market Model with Social and Commercial Tiers for Improved Prosumer Trading in Microgrids. Sustainability 2020, 12, 7265, doi:10.3390/su12187265.
8. Postolaty, V; Berzan, V; Bykova, E; Bosneaga, V; Suslov, V; Ermurachi, I; Grigoras, Gh; Gavrilas, M; Istrate, M, Estimation of Power Exchange through 110 kV Overhead Power Lines at the Interface of the Romanian and Moldovan Power Systems, PROBLEMELE ENERGETICII REGIONALE, Issue: 2, Pages: 46-61, DOI: 10.5281/zenodo.1343396, Published: 2018, pISSN: 1857-0070, Publisher: INST POWER ENGINEERING ACAD SCIENCES MOLDOVA
9. Banu I, Istrate M., Machidon D., Pantelimon R., Study regarding modeling photovoltaic arrays using test data in matlab/simulink, University Politehnica Of Bucharest Scientific Bulletin Series C-Electrical Engineering And Computer Science, Volume: 77 Issue: 2 Pages: 227-234, Published: 2015, ISSN: 2286-3540, eISSN: 2286-3559, Accession Number: WOS:000421799900019.
10. Nemes C., Istrate M., A clear sky irradiation assessment using the ESRA model and SRTM database, Environmental Engineering and Management Journal, vol. 12 (June 2013), no. 6, pp. 1271-1279. ISSN 1582-9596.
11. Lunca E., Istrate M., Salcean A., Comparative Analysis of The Extremely LowFrequency Magnetic Field Exposure from Overhead Power Lines, Environmental Engineering and Management Journal, vol. 12 (June 2013), no. 6, pp. 1145-1151. ISSN 1582-9596.
12. Ursulean R., Lazar A.M., Istrate M., A New Method to Evidence the P300 Eventrelated Potential based on a Lifting Scheme, Elektronika Ir Elektrotechnika. Electronics, No. 2 Vol.19, 2013, ISSN 1392–1215, pp. 31-36.
13. Nemes C., Istrate M., Statistical Analysis of Wind Turbine's Output Power, Electronics and Electrical Engineering Journal, No. 4 (120), 2012, pp. 31-34, ISSN 1392 – 1215.

14. Ursulean R., Lazar A.M., Istrate M., The Sensitivity of the Fractal Spectrum: a Means of Controlling the Statistical Properties of Chaotic Signals, Elektronika Ir Elektrotechnika. Electronics, No. 8(114), 2011, ISSN 1392–1215, pp. 21-26, Electronic version.
15. Grigoras G, Istrate M., An Efficient Clustering Method In Evaluation Of The Electric Energy Consumption From Water Hydrophore Stations, International Review on Modelling and Simulations (I.RE.MO.S.), Vol. 4, No. 2, April 2011, pp. 813-818, Print ISSN: 1974-9821, Cd-Rom ISSN: 1974-983X.
16. Grigoras G., Cartina G., Istrate M., Rotaru F., The Efficiency of the Clustering Techniques in the Energy Losses Evaluation from Distribution Networks, International Journal Of Mathematical Models And Methods In Applied Sciences, Issue 1, Vol.5, 2011, pp. 133-141, ISSN: 1998-0140.
17. Ursulean R., Lazăr A.-M., Istrate M., Structuring Elements for the P300 Event-related Potential Detection, Elektronika Ir Elektrotechnika. System Engineering, Computer Technology, No. 9(105), 2010, ISSN 1392–1215, pp. 85-88, Electronic version
18. Istrate M., Grigoraş Gh., Energy Consumption Estimation in Water Distribution Systems Using Fuzzy Techniqus, Environmental Engineering and management Journal, Vol. 9, No.2, pp.249-256, February 2010. ISSN 1582-9596.
19. Istrate M., Gusa M., Assessment Of Two Single-End Fault Location Algorithms In An ATP Approach, Revue Roumaine de Sciences Techniques – Électrotechique et Énergétique, Tome 54, 4, pp. 345-354, ISSN: 0035-4066.
20. Istrate M., Miron A., Istrate C., Gusa M., Machidon D., Single-phased Fault Location on Transmission Lines Using Unsynchronized Voltages, Advances in Electrical and Computer Engineering, Issue 3, 2009, pages 51-56, ISSN: 1582-7445, e-ISSN: 18447600, Digital Object Identifier: 10.4316/AECE.2009.03010, Accession Number: WOS:000271872000010.

G. ***Lucrări ştiinţifice publicate în reviste din străinătate.***

1. Istrate M., Gavrilaş N., Guşă M., Asaftei C., Calculul supratensiunilor temporare datorate efectului capacitiv pe liniile de foarte înaltă tensiune, cu considerarea descărcării corona, Analele Institutului de Energetică al Academiei de Ştiinţe a Republicii Moldova, pag. 213 – 218, 1996.
2. Asaftei C., Gavrilaş N., Guşă M., Istrate M., Cu privire la transmiterea şi recepţia semnalelor emise de indicatoarele de defect, Analele Institutului de Energetică al Academiei de Ştiinţe a Republicii Moldova, Chişinău, pag. 229 – 237, 1996.
3. Guşă M., Gavrilaş N., Asaftei C., Istrate M., Supratensiuni provocate de scurtcircuitul monofazat în reţele de medie tensiune având neutrul tratat cu inductanţă Analele Institutului de Energetică al Academiei de Ştiinţe a Republicii Moldova, Chişinău, pag. 203 – 212, 1996.
4. Asaftei C., Guşă M., Gavrilaş N., Istrate M., Semnalizarea locală a zonelor cu defect de izolaţie a reţelelor electrice de medie tensiune, Upravlemie Electroperedaci, editat de Academia de Ştiinţe a Republicii Moldova, Vol. 7, pag. 56 – 60, 1993.
5. Asaftei C., Guşă M., Gavrilaş N., Istrate M., Telesemnalizarea zonelor cu defect în liniile de medie tensiune, Buletinul Academiei de Ştiinţe a Republicii Moldova, Seria Fizică şi tehnică, Chişinău, nr.3 (9), pag.101-106, 1992.

H. ***Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.***

21. Machidon D., Istrate M., Oprea R., Some considerations on the photovoltaic conversion of the solar energy in Romania, Bulletin of the Polytechnic Institute of Iasi, Section

Electrotehnica. Energetica. Electronica Volume 62(66), Fasc.3, pg.21-30, ISSN 12238139, (CNCSIS, code 87, http://www.cncsis.ro/, http://www.bulipieee.tuiasi.ro/archive/2016/fasc.3/p2_f3_2016.pdf), 2016.
22. Machidon D., Istrate M., Weather Influence Analysis on the Lightning Protection Current Estimation, Acta Electrotehnica, Number 3-2015, Proceedings of The 6th
23. International Conference on Modern Power Systems, MPS 2015, 18-21 mai 2015 ClujNapoca, Romania, pp.161-164, ISSN 1841-3323, (Indexed in VINITI, DOAJ Lund University Lybraries).
24. Machidon D., Istrate M., Power Station Protection Zones Estimation Using the Rolling Sphere Method and the Elliptic Model, Acta Electrotehnica, Special Issue "Proceedings
25. of The 5th International Conference on Modern Power Systems MPS 2013, ClujNapoca, Romania, Vol. 54, No., 5, 2013, pp.256-261, ISSN 1841-3323, (Indexed in VINITI, DOAJ Lund University Lybraries http://www.doaj.org)
26. Banu I.V., Beniuga R., Istrate M., Study of Temperature for Modeling of Photovoltaic Solar Array using Experimental Test Data, Acta Electrotehnica, Special Issue "Proceedings of The 5th International Conference on Modern Power Systems MPS
27. 2013, Cluj-Napoca, Romania, Vol. 54, No., 5, 2013, pp.51-54, ISSN 1841-3323, (Indexed in VINITI, DOAJ Lund University Lybraries http://www.doaj.org), Revista BDI
28. Beniuga R., Banu I.V., Istrate M., Behaviour od Double-Feed Induction Generatyor Wind Turbines with Crowbar System during Grid Faults, Acta Electrotehnica, Special Issue "Proceedings of The 5th International Conference on Modern Power Systems MPS 2013, Cluj-Napoca, Romania, Vol. 54, No., 5, 2013, pp.59-63, ISSN 1841-3323, (Indexed in VINITI, DOAJ Lund University Lybraries http://www.doaj.org), Revista BDI
29. Machidon D., Istrate M., Guşă M., Dragomir M., The Elliptic Model Implementation For The Estimation Of The Vertical Rod's Protection Zones, World Energy System Conference.Towards Sustainable and Integrated Energy Systems, Suceava, 28-30 iunie 2012, Buletinul AGIR, nr.3/2012, An.XVII, Index Copernicus International, ISSN-L 1224-7928, Online: ISSN 2247-3548, pp.477-482, http://www.buletinulagir.agir.ro/articol.php?id=1426.
30. Istrate M., Machidon D., ATP Analysis Of Transmission Lines Behaviour On Direct Lightning Strokes, World Energy System Conference.Towards Sustainable and Integrated Energy Systems, Suceava, 28-30 iunie 2012, Buletinul AGIR, nr.3/2012, An.XVII, Index Copernicus International, ISSN-L 1224-7928, Online: ISSN 2247-3548, pp.471-476, http://www.buletinulagir.agir.ro/articol.php?id=1425
31. Banu I.V., Istrate M., Modelling And Simulation Of Photovoltaic Arrays, World Energy System Conference.Towards Sustainable and Integrated Energy Systems, Suceava, 28-30 iunie 2012, Buletinul AGIR, nr.3/2012, An.XVII, Index Copernicus International, ISSN-L 1224-7928, Online: ISSN 2247-3548, pp.161-166, http://www.buletinulagir.agir.ro/articol.php?id=1378, Revista BDI
32. Beniugă R., Istrate M., DFIG Wind Turbina Dynamic Under The Stress Of Power System Faults, World Energy System Conference.Towards Sustainable and Integrated Energy Systems, Suceava, 28-30 iunie 2012, Buletinul AGIR, nr.3/2012, An.XVII,
33. Index Copernicus International, ISSN-L 1224-7928, Online: ISSN 2247-3548, pp.429-434, http://www.buletinulagir.agir.ro/articol.php?id=1418, Revista BDI
34. Dragomir M., Istrate M., Beniugă R., Machidon D., Assessment Of Two-End Data Fault Location Algorithms For Transmission Grids, World Energy System Conference.Towards Sustainable and Integrated Energy Systems, Suceava, 28-30 iunie 2012, Buletinul AGIR,

nr.3/2012, An.XVII, Index Copernicus International, ISSN-L 1224-7928, Online: ISSN 2247-3548, pp.435-438.
35. Nemes C., Istrate M., Overview of Optimal Wind Turbine Selecting, Acta Electrotehnica, Vol.52, No.5, 2011, pp.323-326, ISSN 1841-3323.
36. Dragomir M., Istrate M., Gusa M., Machidon D., The Influence of The Power Frequency on the Accuracy of Two-Enda data fault Location Algorithm, Acta Electrotehnica, Vol.52, No.5, 2011, pp.143-146, ISSN 1841-3323.
37. Machidon D., Istrate M., Gusa M., Dragomir M., Lightning Protection Current determination Using ATP Simulations and Leader Progression Model, Acta Electrotehnica, Vol.52, No.5, 2011, pp.243-246, ISSN 1841-3323.
38. Dragomir M., Istrate M., Evaluation of Two-End Data Fault Location Algorithms Used in Fault Location, Buletinul Institutului Politehnic Iaşi, Tomul LVII (LXI), Fasc.3, pag.17-22, ISSN 1223-8139, (Clasificare B+ (CNCSIS cod 87); Indexari BDI: Index Copernicus, getCITED, Ulrich's), http://www.tuiasi.ro/facultati/eth/index.php?page=820 , 2011, Revista BDI
39. Dragomir M., Istrate M., The Influence of the Fault Resistance on The Accuracy of The One-end data Fault Location Algorithms, Buletinul Institutului Politehnic Iaşi, Tomul LVII (LXI), Fasc.3, pag.117-122, ISSN 1223-8139, (Clasificare B+ (CNCSIS cod 87);
40. Indexari BDI: Index Copernicus, getCITED, Ulrich's), http://www.tuiasi.ro/facultati/eth/index.php?page=820 , 2011. Revista BDI
41. Machidon D., Istrate M., Gusa M., Dragomir M., Rolling Sphere Method Application for HV Lines, Acta Electrotechnica, Proceedings of the 3rd International Conference on Modern Power Systems MPS 2010, pp 221-224, Vol. 51, No. 5, 2010, ISSN 1841-3323 (CNCSIS, cod 576 – http://www.cncsis.ro/articole/1901/Arhiva-2005-2008.html, indexata in doua BDI – Rusia VINITI http://catalog.viniti.ru/ si Suedia DOAJ http://www.doaj.org), 2010
42. Istrate M., Varvara V., Dragomir M., The Influence of the Power Frequency on the Accuracy of the Synchrophasors Measurements, Acta Electrotechnica, Proceedings of the 3rd International Conference on Modern Power Systems MPS 2010, pp 196-199, Vol. 51, No. 5, 2010, ISSN 1841-3323 (De categ. B+ CNCSIS, cod 576 – http://www.cncsis.ro/articole/1901/Arhiva-2005-2008.html, indexata in doua BDI – Rusia VINITI http://catalog.viniti.ru/ si Suedia DOAJ http://www.doaj.org), 2010. Revista BDI
43. Dragomir M., Istrate M., Gusa M., Asandei D., Machidon D., Alternative Transients Program Model of The Protection Based on Incremental Signals, Buletinul Institutului Politehnic Iaşi, Tomul LVI (LX), Fasc.3, pag.101-109, ISSN 1223-8139, (CNCSIS, cod 87, http://www.cncsis.ro/ articole/1901/Arhiva-2005-2008.html), 2010.
44. Hriscu I., Gusa M., Istrate M., Some Aspects Concerning the Influence of Surge Arresters upon Lightning Behaviour of Overhead Lines, Scientific Bulletin of the Electrical Engineering Faculty (Valahia University of Targovioste), Year 10, No. 3(14), pp. 64-70, ISSN 1843-6188, http://www.buletinfie.ro
45. Istrate M., Fault Location In Distribution Grids In An ATP Approach, Buletinul Institutului Politehnic Iaşi, Tomul LIV (LVIII), Fasc.3, pag.173-178, ISSN 1223-8139, (Categ. C-CNCSIS, cod 87, http://www.cncsis.ro/ articole/1901/Arhiva-20052008.html), 2008.
46. Istrate M., Gusa M., Analysis of Lightning's Strokes on HV Lines in an ATP Approach, Acta Electrotechnica, Proceedings of the 2nd International Conference on Modern Power Systems MPS 2008, pp 162-165, ISSN 1841-3323 (De categ. B+ CNCSIS, cod 576 – http://www.cncsis.ro/articole/1901/Arhiva-2005-2008.html, indexata in doua BDI – Rusia si Suedia http://catalog.viniti.ru/si.asp), 2008, Revista BDI

47. Istrate M., Guşă M., Simularea ATP a localizării scurtcircuitelor în reţele de transport a energiei electrice, Revista Energetica, anul 56, nr.8, august 2008, pag. 304 –309, ISSN 1453-2360, 2008.
48. Ivanov O., Gavrilaş M., Istrate M., A Radial Basis Function Neural Network With Pruning Strategy for Distance Relaying Systems, Analele Universităţii din Craiova, seria Inginerie Electrică, anul 31, nr.31, 2007, Vol. II, pag. 345-348 ISSN 1842-4805, (Categ. C-CNCSIS, cod 174, http://www.cncsis.ro/ articole/1901/Arhiva-2005-2008.html), 2007.
Istrate M., Guşă M., Aspects Of The Power Grids' Impedance Relaying In An AtpModels Approach, Analele Universităţii din Craiova, seria Inginerie Electrică, anul 31, nr.31, 2007, Vol. II, pag. 327-330 ISSN 1842-4805, (Categ. C-CNCSIS, cod 174, http://www.cncsis.ro/articole/1901/Arhiva-2005-2008.html), 2007., Paratrăsnete verticale sau orizontale pentru protecţia staţiilor de transformare, Revista Energetica, anul 55, nr.7, iulie 2007, pag. 243 –247, ISSN 14532360, (Categ. B-CNCSIS, cod 512, http://www.cncsis.ro/ articole/1901/Arhiva-20052008.html), 2007.
50. Istrate M., Guşă M., Hriscu I., Miron A., First Tripping Zone of Distance Relaying in an ATP-MODELS Approach, Acta Electrotehnica, Volume 47, Number 50, pag. 65-68, ISSN 1841 – 3323, (Categ. B-CNCSIS, cod 576, http://www.cncsis.ro/ articole/1901/Arhiva-2005-2008.html), 2006.
51. Guşă M., Istrate M., Hriscu I., Overhead Lines Lightning Behaviour Improving with Metal-Oxide Arresters, Acta Electrotehnica, Volume 47, Number 50, pag. 61-64, ISSN 1841 – 3323, (Categ. B-CNCSIS, cod 576, http://www.cncsis.ro/ articole/1901/Arhiva2005-2008.html), 2006.
52. Guşă M., Istrate M., Protection of Overhead Lines with Metal_oxide Arresters, Analele Universităţii din Craiova, Seria Inginerie Electrică, Anul 30, nr. 30, pag. 218-222, ISSN 1842 – 4805, (Categ. C-CNCSIS, cod 174, http://www.cncsis.ro/ articole/1901/Arhiva2005-2008.html), 2006.
53. Istrate M., Guşă M., Hriscu I., ATP Models Of Impedance Relays Simulation. Part I: Theory And Algorithms, Buletinul Institutului Politehnic Iaşi, Tomul LII (LVI), Fasc. 5B, pag. 703-708, ISSN 1223-8139, (Categ. B-CNCSIS, cod 87, http://www.cncsis.ro/articole/1901/Arhiva-2005-2008.html), 2006.
54. Istrate M., Guşă M., Miron A., Hriscu I., ATP Models Of Impedance Relays Simulation. Part II: Models Implementation, Buletinul Institutului Politehnic Iaşi, Tomul LII (LVI), Fasc. 5B, pag.709-714, ISSN 1223-8139, (Categ. B-CNCSIS, cod 87, http://www.cncsis.ro/articole/1901/Arhiva-2005-2008.html), 2006.
55. Istrate M., Guşă M., Hriscu I., Miron A., Single End Algorithms for Distance Relaying Coordination in an ATP Approach, Buletinul Institutului Politehnic Iaşi, Tomul LII (LVI), Fasc.5C, pag.1396 - 1401, ISSN 1223-8139, (Categ. B-CNCSIS, cod 87, http://www.cncsis.ro/articole/1901/ Arhiva-2005-2008.html), 2006.
56. Istrate M., Guşă M., ATP Approach of a Double End Algorithm in HV Grids' Fault Location Estimation, Buletinul Institutului Politehnic Iaşi, Tomul LII (LVI), Fasc. 5C, pag. 1402-1407, ISSN 1223-8139, (Categ. B-CNCSIS, cod 87, http://www.cncsis.ro/articole/1901/Arhiva-2005-2008. html), 2006.
57. Guşă M., Istrate M., Hriscu I., Switching Overvoltages on Overhead Lines Protected with Metal-Oxide Arresters, Buletinul Institutului Politehnic Iaşi, Tomul LII (LVI), Fasc. 5C, pag. 1373-1379, ISSN 1223-8139, (Categ. B-CNCSIS, cod 87, http://www.cncsis.ro/articole/1901/Arhiva-2005-2008. html), 2006.

58. Istrate M., Guşă M., Bucă C., Educational ATP Approach Of Distance Protection Coordination In High Voltage Grids, Buletinul Ştiinţific al Universităţii "Politehnica" Timişoara, Tom 50(64), fasc.1-2, pag. 295-302, ISSN 1582-7194, 2005.
59. Guşă M., Istrate M., Aspecte ale protecţiei liniilor electrice aeriene cu descărcătoare cu oxizi metalici, Revista Energetica, vol. 53, nr. 8, 2005, pag. 283 – 288, ISSN 1453-2360, (Categ. B-CNCSIS, cod 512, http://www.cncsis.ro/ articole/1901/Arhiva-20052008.html), 2005.
60. Istrate M., Guşă M., Bucă C., Lişman C, Miron A., ATP Approach of Distance Relaying Coordination in a High Voltage Network, Buletinul Institutului Politehnic Iaşi, Tomul L(LIV), Fasc. 5A, pag. 284-290, ISSN 1223-8139, 2004.
61. Istrate M., Guşă M., Bucă C., Advanced Technologies for SO2 Scrubbing, Buletinul Institutului Politehnic Iaşi, Tomul L(LIV), Fasc. 5A, pag. 348-353, ISSN 1223-8139, 2004.
62. Bucă C., An Analysis of Overhead Electric Lines Lightning Behaviour, Buletinul Institutului Politehnic Iaşi, Tomul L(LIV), Fasc. 5A, pag. 278283, ISSN 1223-8139, 2004.
63. Guşă M., Istrate M., Bucă C., Analiza comparativă a protecţiei realizate de descărcătoarele cu rezistenţă variabilă în staţiile de transformare, Revista Energetica, vol. 51, nr. 10, pag. 428 – 432, ISSN 1453-2360, 2003.
64. Istrate M., Guşă M., Bucă C., Patriciu A., Didactical software dedicated to overhead line's behaviour analysis on lightning overvoltages, Buletinul Ştiinţific al Universităţii "Politehnica" Timişoara, Tom 48(62), fasc.1-2, pag. 287-295, ISSN 1582-7194, 2003.http://www.et.upt.ro/cee/ro/psc/works03/index.htm
65. Istrate M., Guşă M., Patriciu A., Miron A., Didactical Software for High Voltage Networks' Classical Distance Relaying Coordination, Buletinul Institutului Politehnic Iaşi, Tom XLVIII (LII), fasc.5A, pag 211-214, ISSN 1223-8139, 2002.
66. Guşă M., Istrate M., Popa T., Lightning Overvoltages Protection of Transfformer Points Connected to Overhead Lines Via Cable Segments, Buletinul Institutului Politehnic Iaşi, Tom XLVIII (LII), fasc.5A, pag.221-226, ISSN 1223-8139, 2002.
67. Guşă M., Istrate M., Spatariu A., Surge Arresters to Overhead Line Protection Against Lightning Overvoltages, Buletinul Institutului Politehnic Iaşi, Tom XLVIII (LII), fasc.5A, pag 215-220, ISSN 1223-8139, 2002.
68. Miron A, Viziteu I., Istrate M., Guşă M., Some Considerations Regarding The Differential Busbar Protections Fulfilled By Analogical And Numerical Relays And Conventional Current Transformers Effects On Their Operating, Buletinul Institutului Politehnic Iaşi, Tom XLVIII (LII), fasc.5A, pag.257-262, ISSN 1223-8139, 2002.
69. Guşă M., Istrate M., Gavrilaş N., Viziteu I., Aspecte privind protecţia staţiilor de transformare împotriva loviturilor directe de trăsnet, Buletinul Ştiinţific al Universităţii "Politehnica" Timişoara, Tom 46(60), fasc. 1-2, pag. 187-192, ISSN 1582-7194, 2001.
70. Guşă M., Istrate M., Gavrilaş N., Ciobanu C., Solicitarea izolaţiei posturilor de transformare datorită supratensiunilor de trăsnet, Revista Producerea transportul şi distribuţia energiei electrice şi termice, nr.4 /2001, pag. 32-37, ISSN 1224-1113, (publicată şi în volumele de lucrări ale Simpozionului Naţional al Reţelelor Electrice, Iaşi, 2000, vol. II, pag. 396-402).
71. Istrate M., Guşă M., Gavrilaş N., Ciobanu C., EMTP Study of Internal Overvoltages in Very High Voltage Networks with Compact Lines , Buletinul Institutului Politehnic Iaşi, Tom XLV (IL), Fasc.5B, pag. 322-325, ISSN 1223-8139, 1999.
72. Gavrilaş N., Istrate M., Guşă M., Ciobanu C., Concerning The Protective zones of The Vertical Lightning Protection Systems usig The "Rolling Sphere" Method, Buletinul

Ştiinţific al Universităţii "Politehnica"Timişoara, Tom 44 (58), Fasc. 2, vol. I, pag. 6166, ISSN 1582-7194, 1999.

73. Asaftei C., Gabura A., Guşă M., Gavrilaş N., Istrate M., Sistem inteligent pentru supravegherea şi localizarea defectelor în reţelele electrice de distribuţie aeriene, Revista Energetica, nr. 8 – 9, pag. 364 – 368, ISSN 1453-2360, 1999.
74. Istrate M., Guşă M., Miron Al., Asaftei C., Gavrilaş N., A method to generate information transmitting signals in overhead medium voltage networks, Buletinul Ştiinţific al Universităţii "Politehnica" Timişoara, tom 42(56), Fasc.2, vol. III, pag. 107112, ISSN 1582-7194, 1997.
75. Guşă M., Istrate M., Gavrilaş N., Asaftei C., Popa C., Single-phase faults detection in compensated networks using zero-sequence current phase measurement, Buletinul Ştiinţific al Universităţii "Politehnica" Timişoara, tom 42(56),Fasc.2, vol. II, pag. 97– 102, ISSN 1582-7194, 1997.
76. , Asaftei C., Gavrilaş N., Contribuţii la creşterea observabilităţii reţelelor aeriene de medie tensiune, Revista Energetica, seria B, nr.6/1995, pag. 288-293, ISSN 1453-2360, 1995.
77. Istrate M., Guşă M., Gavrilaş N., Asaftei C., Popa C., Possibility of Simulating the Corona Discharge under Transient Regimes determinated by the Switchings in the UHV Networks, Buletinul Institutului Politehnic Iaşi, tom XLI(XLV), Fasc.5, secţia III, pag.527-534, ISSN 1223-8139, 1995.
78. Istrate M., Gavrilaş N., Guşă M., Asaftei C., Popa C., Modelling the Influence of the Corona on the Level of the Temporary Overvoltages, Buletinul Institutului Politehnic Iaşi, tom XLI(XLV), Fasc.5, secţia III, pag.519-526, ISSN 1223-8139, 1995.
79. Guşă M., Istrate M., Asaftei C., Gavrilaş N., Grigoruţ M., Surtensions transitoires creés par les défauts monophasés simples et répétés dans les réseaux moyenne tension, Buletinul Institutului Politehnic Iaşi, tom XLI(XLV), Fasc.5, secţia III, pag.513-518, ISSN 1223-8139, 1995.
80. Asaftei C., Guşă M., Istrate M., Gavrilaş N., Sur la signalisation à distance des courtcircuits dans les réseaux de moyenne tension, Buletinul Institutului Politehnic Iaşi, tom XLI(XLV), Fasc. 1-2, secţia III, pag. 111-116, ISSN 1223-8139, 1995.
81. Asaftei C., Gavrilaş N., Guşă M., Istrate M., Quelques aspects théoriques concernant la propagation des signaux émis par les indicateurs de défaut sur les lignes moyenne tension, Buletinul Institutului Politehnic Iaşi, tom XL(XLIV), Fasc.1-4, secţia III, pag. 111-114, ISSN 1223-8139, 1994.
82. Gavrilaş N., Asaftei C., Guşă M., Istrate M., General Considerations on the Detecting and the Location of the Short-Circuits on Overhead Distribution Lines, Buletinul Institutului Politehnic Iaşi, tom XL(XLIV), Fasc.1-4, secţia III, pag. 123-126, ISSN 1223-8139, 1994.
83. Asaftei C., Guşă M., Gavrilaş N., Istrate M., Construcţia şi funcţionarea unui dispozitiv de semnalizare a defectelor pe linii electrice aeriene de medie tensiune, Revista Energetica, nr.6-B/1992, pag.282-286, ISSN 1453-2360, 1992.
84. Asaftei C., Guşă M., Gavrilaş N., Istrate M., Sur la sensibilité d'un indicateur local des courcircuits pour réseaux aériens, Buletinul Institutului Politehnic Iaşi, tom XXXVIII (XLII), Fasc. 1-4, secţia III, pag.91-97, ISSN 1223-8139, 1992.
85. Guşă M., Asaftei C., Gavrilaş N., Istrate M., Contribuţii privind semnalizarea locală a scurtcircuitelor în reţelele electrice aeriene de medie tensiune, Revista Energetica, nr.1012/1990, pag.425-429, ISSN 1453-2360, 1990.(http://www.engineeringvillage.org/; Database – Inspec)

I. ***Lucrări ştiinţifice publicate în volumele conferinţelor.***

1.Dragos Machidon; Marcel Istrate; Constantin Razvan Beniuga, Wind Speed Estimation based on Power Law Extrapolation Technique, Paper ID:72, Proceedings of the 13th International Conference and Exposition on Electrical and Power Engineering, EPEi 2024, October 2024, Iasi, Romania, IEEE Conferences, https://ieeexplore.ieee.org/document/10758142.
2.Paul-Sergiu Popa; Răzvan Beniugă; Marcel Istrate, Comparing the concept of Nearly Zero-Energy Buildings between EU countries in terms of required renewable energy share, Paper ID:48, Proceedings of the 13th International Conference and Exposition on Electrical and Power Engineering, EPEi 2024, October 2024, Iasi, Romania, IEEE Conferences, https://ieeexplore.ieee.org/document/10758182
3.Constantin Razvan Beniuga; Popa Sergiu-Paul; Oana Cristina Beniuga; Dragos Machidon; Florin C Băiceanu; Dumitru-Marcel Istrate, Cost-effectiveness and sustainability analysis of a NZEB house, Paper ID:64, Proceedings of the 13th International Conference and Exposition on Electrical and Power Engineering, EPEi
4.2024, October 2024, Iasi, Romania, IEEE Conferences, https://ieeexplore.ieee.org/document/10758113
5.Ioan Viorel Banu; Fadila Barkat; Marcel Istrate; Josep M. Guerrero; Nicolay Mihailov; Boris I Evstatiev; Nikolay Valov; George Culea; Petru Gabriel Puiu, Three-Phase GridConnected Electric Vehicles Charging Station with Photovoltaic Panels, Paper ID:131, Proceedings of the 13th International Conference and Exposition on Electrical and Power Engineering, EPEi 2024, October 2024, Iasi, Romania, IEEE Conferences, https://ieeexplore.ieee.org/document/10758069
6.Razvan BENIUGA, Oana BENIUGA, Dragos MACHIDON, Florin C. BAICEANU, Marcel ISTRATE, NZEB Compliance Principles in Romania for Residential Buildings, Modern Power Systems Conference, 10th Edition, Cluj-Napoca, 21st - 23rd of June 2023, https://ieeexplore.ieee.org/xpl/conhome/10187192/proceeding
7.Dragos MACHIDON, Marcel ISTRATE, Razvan BENIUGA, An Application of LIDAR Technology for Wind Speed Measurement, Modern Power Systems Conference, 10th Edition, Cluj-Napoca, 21st - 23rd of June 2023, https://ieeexplore.ieee.org/xpl/conhome/10187192/proceeding
8. Georgiana Dunca, Diana Maria Bucur, Tor Haakon Bakken, Atle Harby, Elena Pummer, Marcel Istrate, Costel Boariu,Costica Roman, Mapping Sites for Retrofitting non-Powered Dams in Romania as Renewable Power Sources, THE 13th INTERNATIONAL SYMPOSIUM ON ADVANCED TOPICS IN ELECTRICAL ENGINEERING, March 23-25, 2023, Bucharest, Romania, ATEE https://ieeexplore.ieee.org/xpl/conhome/10108076/proceeding
9.Machidon, Dragos; Istrate, Marcel, Impact of the Electric Vehicle Sector's Development on Romania's National Power System, EPE 2022, ID 80, https://ieeexplore.ieee.org/search/searchresult.jsp?newsearch=true&contentType=conferences&queryText=Impact%20of%20the%20Electric%20Vehicle%20Sector%E2%80%99s%20Development%20on%20Romania%E2%80%99s%20National%20Power%20Syst em
10. Dragos Machidon, Marcel Istrate, Analysis of Romania's Transmission Power Lines Behavior under Direct Lightning Strikes, ID 47, sesiunea PETD2, SIELMEN 2021, https://ieeexplore.ieee.org/search/searchresult.jsp?newsearch=true&contentType=conferences&queryText=Analysis%20of%20Romania%E2%80%99s%20Transmission%20Power%20Lines%20Behavior%20under%20Direct%20Lightning%20Strikes
11. Razvan BENIUGA, Oana BENIUGA, Florin C. BAICEANU, Marcel ISTRATE, The Influence of Feedwater Preheaters on the Power Plant Thermal Efficiency, 2021 9th

12. International Conference on Modern Power Systems MPS 2021, paper ID 038, 978-16654-3382-2/21/$31.00 ©2021 IEEE, DOI: 10.1109/MPS52805.2021.9492578, https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9492627
13. Razvan BENIUGA, Oana BENIUGA, Dragos MACHIDON, Marcel ISTRATE, Wind Power in Romania Energy Mix Towards Sustainable Development, 2021 9th International Conference on Modern Power Systems MPS 2021, paper ID 107, 978-16654-3382-2/21/$31.00 ©2021 IEEE, DOI: 10.1109/MPS52805.2021.9492578, https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9492673
14. Dragos MACHIDON, Marcel ISTRATE, Roxana OPREA, Razvan BENIUGA, Performance Analysis of Double-Axis Orientating Low Concentration Photovoltaic Systems, 2021 9th International Conference on Modern Power Systems MPS 2021, paper ID 024, 978-1-6654-3382-2/21/$31.00 ©2021 IEEE, DOI: 10.1109/MPS52805.2021.9492578, https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9492623
15. Anca-Teona S. SOLOMON, Marcel ISTRATE, Dragos MACHIDON, Study of Lightning Strokes on HV Overhead Power Lines, 2021 9th International Conference on Modern Power Systems MPS 2021, paper ID 066, 978-1-6654-3382-2/21/$31.00 ©2021 IEEE, DOI: 10.1109/MPS52805.2021.9492578, https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9492600
16. Dragos Machidon, Roxana Oprea, Istrate Marcel, Razvan Beniuga, Energy output increase by using a periodic orientation system for fixed photovoltaic panels, Paper ID:4062, Proceedings of the 10th International Conference and Exposition on Electrical and Power Engineering, EPE 2020, October 2020, Iasi, Romania, IEEE Conferences.
17. Claudiu Buca, Marcel Istrate, Implementation of the Automatic Line Reclosure using PLC and Petri Nets Modelling, Paper ID:3968, Proceedings of the 10th International Conference and Exposition on Electrical and Power Engineering, EPE 2020, October 2020, Iasi, Romania, IEEE Conferences
18. Alexandru Salceanu, Silviu Vornicu, Eduard Lunca, Marcel Istrate, Influence of High Voltage Bundle Configurations on Human Exposure, Proceedings of the 10th International Conference and Exposition on Electrical and Power Engineering, EPE 2020, October 2020, Iasi, Romania, IEEE Conferences
19. D.D. Lucache, M.A. Boukli Hacene, Marcel Istrate, Lotfi Karaouzene, Energy Retroffiting of a Faculty Building:Difference between simulation and implementation, Conference Alternative Energy Source, Materials & Technologies (AESMT ‘ 20), Vol, 2, pp.47-86, 2020, ISSN2603-364X
20. Dragoș Machidon, Roxana Oprea, Marcel Istrate, Power output experimental evaluation of fixed photovoltaic systems when using adjustable tilt angles, 2019 International Conference on Electromechanical and Energy Systems (SIELMEN), Year: 2019 | Conference Paper | Publisher: IEEE, https://ieeexplore.ieee.org
21. Roxana Oprea, Marcel Istrate, Dragos Machidon, Razvan Beniuga, Determination of Optimum Tilt Angle for Fixed Photovoltaic Modules in Iasi, Romania, Proceedings of the 8th International Conference on Modern Power Systems, MPS 2019, 21-23 May 2019, ISBN: 978-1-7281-0750-9, Cluj-Napoca, Romania, DOI:10.1109/MPS.2019.8759661.
22. Roxana Oprea, Marcel Istrate, Dragos Machidon, Analysis of V-trough reflector's geometry influence on Low Concentration Photovoltaic Systems, Proceedings of the 8th International Conference on Modern Power Systems, MPS 2019, 21-23 May 2019, ISBN: 978-1-7281-0750-9, Cluj-Napoca, Romania, DOI: 10.1109/MPS.2019.8759789.

23. Marian Dragomir, Anamaria Iamandi, Marcel Istrate, Alin Dragomir, Dragos Machidon, Estimation of Line Zero Sequence Impedance using Real Field Fault Data for Fault Location Application, Proceedings of the 8th International Conference on Modern Power Systems, MPS 2019, 21-23 May 2019, ISBN: 978-1-7281-0750-9, Cluj-Napoca, Romania, DOI: 10.1109/MPS.2019.8759762.
24. Teona Solomon, Marcel Istrate, Dragos Machidon, Case study on the protection of power stations against ligthning strokes, Proceedings of the 8th International Conference on Modern Power Systems, MPS 2019, 21-23 May 2019, ISBN: 978-1-7281-0750-9, Cluj-Napoca, Romania, DOI: 10.1109/MPS.2019.8759787.
25. Liviu Eduard PUNGARU, Georgiana A. MORARU, Marcel ISTRATE, Energy Management on Water Supply Systems, 2019 International Conference on Modern Power Systems (MPS), Year: 2019, Conference Paper | Publisher: IEEE, https://ieeexplore.ieee.org
26. Georgiana A. MORARU, Liviu Eduard PUNGARU, Marcel ISTRATE, Lighting System of a Commercial Space in an Energy Efficiency Approach, 2019 International Conference on Modern Power Systems (MPS), Year: 2019, Conference Paper | Publisher: IEEE, https://ieeexplore.ieee.org
27. Machidon D., Istrate M., Oprea R., Analysis of the Renewable Energy Sector's Development Impact on the CO2 Emissions in Romania, Proceedings of the 10th International Conference and Exposition on Electrical and Power Engineering, EPE 2018, 18-19 October 2018, Iasi, Romania, pp.578-582.
28. Oprea R., Istrate M., Machidon D., Dragos Achiteni, Efficiency Analysis of Solar Radiation Concentration Technique for a Low Concentration Photovoltaic System, Proceedings of the 10th International Conference and Exposition on Electrical and Power Engineering, EPE 2018, 18-19 October 2018, Iasi, Romania, pp. 589-593.
29. Oprea R., Istrate M., Machidon D., Beniuga R., Experimental Evaluation of the Optimum Tilt Angle for Fixed Photovoltaic Modules, Proceedings of the 10th International Conference and Exposition on Electrical and Power Engineering, EPE 2018, 18-19 October 2018, Iasi, Romania, pp. 594-598.
30. Beniuga R., Istrate M., Beniuga O., Machidon D., Educational Resource for Wind Turbine Behaviour Assessment, Proceedings of the 10th International Conference and Exposition on Electrical and Power Engineering, EPE 2018, 18-19 October 2018, Iasi, Romania, pp.395-398.
31. Trofinov A., Istrate M., New Techniques Used to Implement Transformation Stations and Protection Functions in Transformation Stations, Proceedings of the 10th International Conference and Exposition on Electrical and Power Engineering, EPE 2018, 18-19 October 2018, Iasi, Romania, pp. 296-298.
32. Trofinov A., Istrate M., New Solution for Impedance Protection Intertripping Schemes Implementation, Proceedings of the 10th International Conference and Exposition on Electrical and Power Engineering, EPE 2018, 18-19 October 2018, Iasi, Romania, pp. 299-302.
33. Dragomir M., Istrate M., Dragomir A., Review of Error Sources in One-End Data Impedance-Based Fault Location Algorithms, Proceedings of the 10th International Conference and Exposition on Electrical and Power Engineering, EPE 2018, 18-19 October 2018, Iasi, Romania, pp. 315-320.
34. Mihaes S., Istrate M., Influence of Photovoltaic Power Plants on Single-Phase Faults in Medium Voltage Electrical Networks, Proceedings of the 10th International Conference and Exposition on Electrical and Power Engineering, EPE 2018, 18-19 October 2018, Iasi, Romania, pp. 433-437.

35. Elia Y., Istrate M., Lucache D., Nita V., Technical risks for solar tower CSP plant: A study case, 2017 International Conference on Electromechanical and Power Systems (SIELMEN), Year: 2017, Pages: 327 – 333, IEEE Conferences, https://ieeexplore.ieee.org/search/searchresult.jsp?newsearch=true&queryText=Istrate
36. Iftime S., Istrate M., Special situations regarding the transition of district heating systems. Technical and economic analysis regarding the use of different technologies in transition sources, 2017 International Conference on ENERGY and ENVIRONMENT (CIEM), Year: 2017, Pages: 528 – 532, IEEE Conferences.
37. Moraru G., Istrate M., Elements of energy efficiency in water supply systems. A case study, 2017 International Conference on Modern Power Systems (MPS), Year: 2017, Pages: 1 – 4, IEEE Conferences.
38. Beniuga R., Istrate M., Beniuga O., Crowbar protection impact on wind farm behaviour during grid disturbance, Proceedings of the 7th International Conference on Modern Power Systems, MPS 2017, 6-9 June 2017 Cluj-Napoca, Romania, ISBN 978-1-50906565-3, DOI: 10.1109/MPS.2017.7974374, Pages: 1 – 4, IEEE Conferences.
39. Elia Y., Istrate M., Lucache D., Nita V., "Challenges in the Practical Implementation of Concentrating Solar Thermal Power Projects", Proceeding of 10TH International Conference on Sustainable Energy and Environmental Protection. Vol. Renewable Energy Sources. June 27TH – 30TH, 2017, Bled, Slovenia. University of Maribor Press, ISBN-13: 978-961-286-061-5, DOI: https://doi.org/10.18690/978-961-286-061-5, pp.527-537 (ISI Proceedings Thomson Reuters), Date of first publication: 2017-07-05, Series: SEEP.
40. Oprea R., Istrate M., Machidon D., Electricity output analysis of a small photovoltaic power plant, Proceedings of the 7th International Conference on Modern Power Systems, MPS 2017, 6-9 June 2017 Cluj-Napoca, Romania, ISBN 978-1-5090-6565-3, DOI: 10.1109/MPS.2017.7974374, INSPEC Accession Number: 17028390, WOS:000428462600005.
41. Oprea R., Istrate M., Machidon D., Assessments on the ENERED photovoltaic power plant electricity production, Proceedings of the 7th International Conference on Modern Power Systems, MPS 2017, 6-9 June 2017 Cluj-Napoca, Romania, ISBN 978-1-50906565-3, DOI: 10.1109/MPS.2017.7974375, INSPEC Accession Number: 17028436, . Accession Number: WOS:000428462600006.
42. Elia Y., Istrate M., Lucache D., Nita V., Photovoltaic Luz Flat Tracker Power Plants, Proceedings of the 9th International Conference and Exposition on Electrical and Power Engineering, EPE 2016, 20-22 October 2016, Publisher IEEE, 345 E 47TH ST, NEW YORK, NY 10017 USA, Accession Number: WOS: 000390706300103, ISBN:978-15090-6128-0, ISSN: 2471-6855, Pages: 514 – 519.
43. Dragomir M., Miron A., Istrate M., Dragomir A., A Solution to Obtain Precise Fault Location Using a Two-End Data Algorithm, Proceedings of the 9th International Conference and Exposition on Electrical and Power Engineering, EPE 2016, 20-22 October 2016, Publisher IEEE, 345 E 47TH ST, NEW YORK, NY 10017 USA, Accession Number: WOS: 000390706300103, ISBN:978-1-5090-6128-0, ISSN: 24716855, Pages: 703 – 706.
44. Machidon D., Istrate M., Operating regime efficiency analysis of a small photovoltaic power plant, Proceedings of the 9th International Conference and Exposition on Electrical and Power Engineering, EPE 2016, 20-22 October 2016, Iasi, Romania, Accession Number: WOS:000390706300172, ISBN:978-1-5090-6128-0, pp.880-883.
45. Machidon D., Istrate M., Photovoltaic power plant on the ENERED research platform of the electrical engineering faculty of Iasi, Proceedings of the 9th International Conference and Exposition on Electrical and Power Engineering, EPE 2016, 20-22 October 2016, Iasi,

Romania, Accession Number: WOS:000390706300173, ISBN:9781-5090-6128-0, pp.884-887.
46. Dragos-Lucian Machidon, Istrate M., Implementation of the Attractive Radius Method for the Estimation of the Lightning Protection Zones for a 110 kV Power Substation, Proceedings of the 8th International Conference and Exposition on Electrical and Power Engineering, EPE 2014, 16-18 October 2014, Iasi, Romania, ISBN 978-1-4799-5849-8, IEEE Catalog Number CFP1447S-USB, Accession Number: WOS:000353565300181, pp.989-994.
47. Dragomir M., Miron A., Istrate M., Dragomir A., A review of impedance-based fault location approaches for transmission lines, Electrical and Power Engineering (EPE), 2014 International Conference and Exposition, DOI: 10.1109/ICEPE.2014.6970063, WOS:000353565300186, Pages: 1021 – 1024.
48. Banu I, Istrate M., Machidon D., Pantelimon R., Study regarding modeling photovoltaic arrays using test data in matlab/simulink, University Politehnica Of Bucharest Scientific Bulletin Series C-Electrical Engineering And Computer Science, Volume: 77 Issue: 2 Pages: 227-234, Published: 2015, ISSN: 2286-3540, eISSN: 2286-3559, Accession Number: WOS:000421799900019.
49. Banu I., Istrate M., Diaconu C., Study on three-phase photovoltaic systems under grid faults, Electrical and Power Engineering (EPE), 2014 International Conference and Exposition, DOI: 10.1109/ICEPE.2014.6970086, WOS:000353565300206, Pages: 1132 - 1137,
50. Banu I., Istrate M., Islanding Prevention Scheme for Grid-Connected Photovoltaic Systems in Matlab/Simulink, 49th International Universities Power Engineering Conference (UPEC) Location: Cluj Napoca, ROMANIA Date: SEP 02-05, 2014, DOI: 10.1109/UPEC.2014.6934698, WOS: 000364087800100, ISBN:978-1-4799-6557-1.
51. Pungaru L., Istrate M., Diaconu C., Management and energy efficiency study case concerning CHP implementation, Electrical and Power Engineering (EPE), 2014 International Conference and Exposition, DOI: 10.1109/ICEPE.2014.6970064, WOS:000353565300187, Pages: 1025 - 1029,
52. Machidon D., Istrate M., Banu I., Algorithm Based On Attractive Radius For Estimating The Lightning Protection Efficiency, 14th International Conference on Optimization of Electrical and Electronic Equipment OPTIM 2014 May 22-24, 2014,
53. Brasov, Romania, Book of Abstracts, pp. 5, pp. 27-32, DOI: 10.1109/OPTIM.2014.6850883 Publisher: IEEE
54. Banu I, Istrate M., Machidon D., Pantelimon R., A study on anti-islanding detection algorithms for grid-tied photovoltaic systems, 14th International Conference on Optimization of Electrical and Electronic Equipment OPTIM 2014 May 22-24, 2014, Brasov, Romania, Book of Abstracts, pp. 109, pp. 655-660, DOI: 10.1109/OPTIM.2014.6850940, Publisher: IEEE
55. Banu I., Beniuga R., Istrate M., Comparative Analysis of the Perturb-and-Observe and Incremental Conductance MPPT Methods, Published in Advanced Topics in Electrical Engineering (ATEE), 2013 8th International Symposium, May, Bucharest, pp.1-4, Print ISBN: 978-1-4673-5979-5, Print ISBN: 978-1-4673-5979-5, Digital Object Identifier : 10.1109/ATEE.2013.6563483,
56. Machidon D. Istrate M., A new model based on electro-geometrical theory for estimating the lightning protection zones, Published in Advanced Topics in Electrical Engineering (ATEE), 2013 8th International Symposium, May, Bucharest, pp.1-5, Print ISBN: 978-1-4673-5979-5, Digital Object Identifier : 10.1109/ATEE.2013.6563470

57. Grigoras Gh., Istrate M., Scarlatache F., Electrical energy consumption estimation in water distribution systems using a clustering based method, Published in Electronics, Computers and Artificial Intelligence (ECAI), 2013 International Conference, Pitesti, Romania, Pp: 1 – 6, Print ISBN: 978-1-4673-4935-2,Digital Object Identifier : 10.1109/ECAI.2013.6636174
58. Machidon D., Istrate M., Gusa M., Tibuliac St., Lightning protection zones estimation for a power station using the elliptic model, Electrical and Power Engineering (EPE), 2012 International Conference and Exposition, Digital Object Identifier : 10.1109/ICEPE.2012.6463925, Print ISBN: 978-1-4673-1173-1, Pages: 225 – 230.
59. Lunca E., Istrate M., Salceanu Al., Tibuliac St., Computation of the magnetic field exposure from 110 kV overhead power lines, Electrical and Power Engineering (EPE), 2012 International Conference and Exposition, Digital Object Identifier : 10.1109/ICEPE.2012.6463925, Print ISBN: 978-1-4673-1173-1, Pages: 628 – 631,
60. Banu I.V., Istrate M., Modeling of maximum power point tracking algorithm for photovoltaic systems, Electrical and Power Engineering (EPE), 2012 International Conference and Exposition, Digital Object Identifier : 10.1109/ICEPE.2012.6463925, Print ISBN: 978-1-4673-1173-1, Pages: 953 – 957,
61. Nemes C., Istrate M., Probabilistic assessment of annual energy production from wind farms, 35th International Conference on Fundamentals of Electrotechnics and Circuit Theory (35th IC-SPETO), 23-26.05.2012, Gliwice-Ustron, Poland, pp. 71-72, ISBN 978-83-85940-34-0.
62. Nemes C., Istrate M., Effects of wind profile in the wind energysystems performance, DEMSEE 2011, 6th International Workshop on Deregulated Electricity Market Issues in South-Eastern Europe, 20.-21. September, 2011, Bled, Slovenia, CD-ROM, ISBN 978961-243-183-9, http://www.demsee2011.org/Programme.htm
63. Istrate M., Varvara V., Gusa M., Machidon D., The Effect of the Automatic Singlephased Reclosing on the Fault Location Error, Proceedings of the 6th International Conference on Electrical & Power Engineering (EPE 2010), Vol. I, pp. 121-123, ISBN vol.I:978-606-13-077-8, ISBN general: 978-606-13-0079-2
64. Machidon D., Istrate M., Gusa M, Dragomir M., Power Station Buildings Protection Against Direct Lightning Strokes, Proceedings of the 6th International Conference on Electrical & Power Engineering (EPE 2010), Vol. I, pp. 131-133, ISBN vol.I:978-60613-077-8, ISBN general: 978-606-13-0079-2.
65. Dragomir M., Istrate M., Gusa M., Machidon D., Voltage Phasor Estimation Techniques Used in Fault Location, Proceedings of the 6th International Conference on Electrical & Power Engineering (EPE 2010), Vol. I, pp. 194-197, ISBN vol.I:978-60613-077-8, ISBN general: 978-606-13-0079-2
66. Varvara V., Istrate M., About the Power factor Compensation in the Networks thar Supply Non-Linear Receivers, Proceedings of the 6th International Conference on Electrical & Power Engineering (EPE 2010), Vol. I, pp. 221-223, ISBN vol.I:978-60613-077-8, ISBN general: 978-606-13-0079-2
67. Varvara V., Istrate M., Some Aspects Regarding the Influence of the Non-Symmetrical Receivers upon the Quality of the Electric Energy, Proceedings of the 6th International Conference on Electrical & Power Engineering (EPE 2010), Vol. I, pp. 224-226, ISBN vol.I:978-606-13-077-8, ISBN general: 978-606-13-0079-2
68. Varvara V., Istrate M., Aspects Regarding Power Quality In Networks Operating Under Non-Symmetrical Conditions, 33-th International Conference on Fundamentals of

Electrotechnics and Circuit Theory, Gliwice, Polonia, IC-SPETO 2010, pag. 39-40, ISBN 978-83-85940-32-6; publicată în extenso pe CD-ROM, 2010, (http://vls.icm.edu.pl).
69. Istrate M., Varvara V., Machidon D., Dragomir M., The Effect of The Automatic Reclosing on The fault Location in The Transmission Lines, Proceedings of The 7th National Conference on Industrial Energetics – With International Participation, pp. 183188, ISBN 978-606-527-050-3.
70. Dragomir M., Istrate M., Guşă M., Machidon D., Assessment of PS-based Method and Combined Iterative Algorithm with FCDFT for Elimination of The DC componet from fault Current, Proceedings of The 7th National Conference on Industrial Energetics – With International Participation, pp. 107-112, ISBN 978-606-527-050-3.
71. Machidon D., Istrate M., Guşă M., Dragomir M., Rolling Sphere Method Application to 400 kV Overhead Line, Proceedings of The 7th National Conference on Industrial Energetics – With International Participation, pp. 127-130, ISBN 978-606-527-050-3.
72. Hriscu I., Guşă M., Istrate M., Some Aspects Concerning The Lightning Behaviour of Overhead Lines, Proceedings of The 7th National Conference on Industrial Energetics – With International Participation, pp. 121-126, ISBN 978-606-527-050-3.
73. Dragomir M., Istrate M., Guşă M., Asandei D., Machidon D., ATP/EMTP Model of the Protection based on Incremental Signals, Proceedings of The 7th International Conference of Electromechanical and Power Systems SIELMEM 2009, Vol. I, pp 63-66, ISBN 978-606-520-618-2, ISBN Vol I 978-606-520-617-5
74. Machidon D., Istrate M., Guşă M., Dragomir M., Protective Zone DimensionsDetermination Using Rolling Sphere, Proceedings of The 7th International Conference of Electromechanical and Power Systems SIELMEM 2009, Vol. I, pp 67-70, ISBN 978-606-520-618-2, ISBN Vol I 978-606-520-617-5
75. Hriscu I., Guşă M., Istrate M., Lightning Stroke Against Overhead Electric Lines: A Comparison Between Analytical and Simulation Methods of Study, 32-th International Conference on Fundamentals of Electrotechnics and Circuit Theory, Gliwice, Polonia, IC-SPETO 2009, pp. 85-86, ISBN 978-83-85940-30-2; publicată în extenso pe CDROM, 2009 (http://vls.icm.edu.pl).
76. Varvara V., Istrate M., Active Powers On Harmonics And On Symmetrical Components In Electric Networks, 32-th International Conference on Fundamentals of Electrotechnics and Circuit Theory, Gliwice, Polonia, IC-SPETO 2009, pag. 93-94, ISBN 978-83-85940-31-9; publicată în extenso pe CD-ROM, 2009, (http://vls.icm.edu.pl).
77. Istrate M., Guşă M., Tibuliac S., Assesment of fault Location Algorithms in Transmission Grids, IEEE Bucharest PowerTech 2009, IEEE Catalog number: CFP01895-CDR, ISBN 978-1-4244-2235-7, Library of Congress: 2008901840.
78. Istrate M, Gavrilaş M., Istrate C., Ursulean R., Assessment of Two Double-end Data fault Location Algorithms in Transmission Grids using ATP Simulations, Proceedings of the 9th WSEAS/IASME International Conference on Electric Power Systems, High Voltage, Electric Machines (POWER ’09), pp. 109-114, Publisehd by WSEAS Press (www.wseas.org) ISSN: 1790-5117, ISBN: 978-960-474-130-4
79. Istrate M., Guşă M., ATP-Models Double Terminal data Fault Location in Transmission Grids, 31-th International Conference on Fundamentals of Electrotechnics and Circuit Theory, Gliwice, Polonia, IC-SPETO 2008, pag. 85-86, ISBN 978-8385940-30-2; publicată în extenso pe CD-ROM. (http://vls.icm.edu.pl).
80. Istrate M., Guşă M., ATP-Model of a Faul Locator for Transmission Lines, Proceedings of The 7th International Worls Energy System Conference, 2008, Iasi, Romania,

Paper B083, Section I, 5 pages, Published on Conference's CD-ROM, ISSN 1198-0729 (CIWES Canada).
81. Hriscu I., Guşă M., Istrate M., Analysis of Overhead Lines Behavior To Direct Lightning Strokes, Proceedings of The 7th International Worls Energy System Conference, 2008, Iasi, Romania, Paper B153, Section I, 6 pages, Published on Conference's CD-ROM, ISSN 1198-0729 (CIWES Canada)
82. Gavrilas M., Istrate M., Ivanov O., Estimation of Fundamental Frequency Components of Voltage and Current for Digital Distance Relays, 30-th International Conference on Fundamentals of Electrotechnics and Circuit Theory, Gliwice, Polonia, IC-SPETO 2007, pag. 129-130, ISBN 978-83-85940-29-6; publicată în extenso pe CD-ROM., 2007, (http://www.icspeto. polsl.pl/download/speto-inspec.doc - 6 puncte, http://vls.icm.edu.pl).
83. Temneanu C., Istrate M., Fast Neural Network Based Fault Location Modules used in Distance Relays, 30-th International Conference on Fundamentals of Electrotechnics and Circuit Theory, Gliwice, Polonia, IC-SPETO 2007, pp. 219-220, ISBN 978-83-85940-29-6; 2007, publicată în extenso pe CD-ROM. (http://www.icspeto.polsl.pl/download/speto-inspec.doc - 6 puncte, http://vls.icm.edu.pl).
84. Istrate M., Guşă M., Hriscu I., ATP Models of Impedance Relays as Fault Locators in VHV Grids on Basis on Single End data Algorithms, 30-th International Conference on Fundamentals of Electrotechnics and Circuit Theory, Gliwice, Polonia, IC-SPETO 2007, pp. 229-230, ISBN 978-83-85940-29-6; publicată în extenso pe CD-ROM, 2007, (http://www.icspeto. polsl.pl/download/speto-inspec.doc - 6 puncte, http://vls.icm.edu.pl).
85. Istrate M., Guşă M., ATP Analysis of Lightning's Direct Strokes in Very High Voltage Overhead Lines, 29-th International Conference on Fundamentals of Electrotechnics and Circuit Theory, Gliwice, Polonia, IC-SPETO 2006, Vol. II, pp. 605-608, ISBN-10: 83-85940-28-6; ISBN-13: 978-83-85940-28-9, (http://www.icspeto.polsl.pl/download/speto-inspec.doc, http://vls.icm.edu.pl).
86. Guşă M., Istrate M., Protection of Overhead Lines Against Lightning with MetalOxide Arresters, 29-th International Conference on Fundamentals of Electrotechnics and Circuit Theory, Gliwice, Polonia, IC-SPETO 2006, Vol. I, pp. 179-182, ISBN-10: 8385940-28-6; ISBN-13: 978-83-85940-28-9 ((http://vls.icm.edu.pl)).
87. Istrate M., Guşă M., Bucă C. ATP Approach of HVAC Overhead Lines' Behavior at Direct Lightning Strokes, The 5-th International Conference on Electromecanical and Power Systems, SIELMEN 2005, Chisinau, Vol.1, pp.402-405, ISBN 973-716-208-0; 973-716-209-9.
88. Istrate M., Guşă M., Bucă C., An Analysis of Hybrid and Integrated Technologies to Control Fossil Fuels' Combustion Air Pollution, The 5-th International Conference on Electromecanical and Power Systems, SIELMEN 2005, Chisinau, Vol. 2, pp.739-742, ISBN 973-716-208-0; 973-716-230-7.
89. Guşă M., Istrate M., Bucă C., Comparative Study Regarding Overhead Lines' Behavior at Direct Lightning Strokes, The 5-th International Conference on Electromecanical and Power Systems, SIELMEN 2005, Chisinau, Vol.1, pp.387-390, ISBN 973-716-208-0; 973-716-209-9.
90. Bucă C., Guşă M., Istrate M., Application of The Electrogeometrical Method for The Protection of a Substation Against The Lightning, The 5-th International Conference on Electromecanical and Power Systems, SIELMEN 2005, Chisinau, Vol.1, ppg.406-409, ISBN 973-716-208-0; 973-716-209-9.

91. Istrate M., Guşă M., Bucă C., Analiză prin simulare ATP a nivelului supratensiuniulor de comutaţie într-o reţea de transport a energiei electrice, Conferinţa Internaţională Energetica Moldovei - 2005, Chisinau, sept 2005, A21, pag. 226-235, Institutul de Energetică al Academiei de Ştiinţe a Moldovei, ISBN 9975-62-145-7.
92. Guşă M., Istrate M., Bucă C., Partial Protection of Overhead Lines with Metal-Oxide Arresters, Lucrările Conferinţei Internaţionale Energie - Mediu, CIEM 2005, Bucureşti, Section I, pag. 1.60-1.65, Editura Universul Energiei.
93. Guşă M., Istrate M., Bucă C., Influence of Surge Arrester Parameters on Overhead Lines Protection Against Lightning Strokes, Proceedings of 7th International Conference of Applied and Theoretical Electricity ICATE 2004, pag.270-275, Editura Universitaria, Craiova, ISBN 973-8043-554-4.
94. Istrate M., Guşă M., Bucă C., In Furnace Reduction of NOx Emissons of Coal Fired Power Plants, The 4-th International Conference on Electromecanical and Power Systems, SIELMEN 2003, Chisinau, Vol. I, pp. 247-250, ISBN 9975-9704-9-4; 99759771-0-3.
95. Guşă M., Istrate M., Bucă C., Metal Oxide Arresters on Overhead Lines, The 4-th International Conference on Electromecanical and Power Systems, SIELMEN 2003, Chisinau, Vol. III, pag. 115-118, ISBN 9975-9704-9-4; 9975-9771-0-3.
96. Istrate M., Guşă M., Bucă C., The Perspectives of Particulate Filtering Systems, Lucrările Conferinţei Internaţionale Energie - Mediu, CIEM 2003, Bucureşti, Vol. II, pag.4-67 - 4.73, Editura Academiei Române, ISBN 973-27-1032-2.
97. Guşă M., Istrate M., Bucă C., Reabilitarea protecţiilor staţiilor de transformare împotriva trasnetelor, Lucrările Conferinţei Internaţionale Energie - Mediu, CIEM 2003, Bucureşti, Vol. I, pag.1-120 - 1-126, Editura Academiei Române, ISBN 973-27-1032-2.
98. Guşă M., Istrate M., Supratensiuni în linii de joasă tensiune transmise din LEA medie tensiune, A 3-a Conferinţă internaţională de sisteme electromecanice şi energetice SIELMEN 2001, Chişinău, oct. 2001, Vol II, pag.91 –95.
99. Asaftei C., Voinea E., Istrate M., Cu privire la analiza financiară, pe baza criteriului DRI, a soluţiei de retehnologizare a cazanelor de 420 t/h aferente CET, A 3-a Conferinţă internaţională de sisteme electromecanice şi energetice SIELMEN 2001, Chişinău, oct. 2001, Vol II, pag.19 –22.
100. Asaftei C., Istrate M., Guşă M., Gabură A., Cu privire la un sistem de semnalizare centralizat a defectelor de izolaţie pe LEA de medie tensiune, Universitatea Tehnică a Moldovei, Conferinţa Naţională de Energetică “CNE-M-2000”, Chişinău, 2000, Vol. I, pag. 196-199.
101. Asaftei C., Guşă M. Istrate M., Evoluţii în aplicarea metodei încercării şi erorii de identificare şi izolare a zonelor cu defect de izolaţie pe o linie electrică de medie tensiune, Universitatea Tehnică a Moldovei, Conferinţa Naţională de Energetică “CNEM-2000”, Chişinău, 2000, Vol. I, pag. 200-205.
102. Istrate M., Guşă M., Gavrilaş N., Ciobanu C., EMTP Study of Complex Unsymmetrical Faults in Distribution Networks, 22-st Seminar on Fundamentals of Electrotechnics and Circuit Theory, Gliwice, Polonia, 1999, pag. 383÷386, ISBN 83-85940-21-9.
103. Guşă M., Istrate M., Gavrilaş N., Ciobanu C., A Model Study of Lightning Overvoltages Transmission in Low Voltage Lines Through MV/LV Transformer Points, 22-st Seminar on Fundamentals of Electrotechnics and Circuit Theory, Gliwice, Polonia, 1999, pag. 369÷372, ISBN 83-85940-21-9.
104. Kiorsac M., Boshneaga V., Guşa M., Istrate M., Calculation and Analysis of Electromagnetic Transients at Short Circuits in the Line with Controlled Series Compensation,

Proceedings of the 3-rd International Conference “New Trends in Automation of Energetic Processes”, Technical University of Brno, Cehia, 1998, pag. 185-189.
105. Istrate M., Guşă M., Asaftei C., Gavrilaş N., Miron A., Low Frequency Signals for Remote Control in Distribution Networks, 21-st Seminar on Fundamentals of Electrotechnics and Circuit Theory, Gliwice, Polonia, 1998, pag. 477÷480, ISBN 8385940-20-0.
106. Istrate M., Gavrilaş N., Guşă M., Asaftei C., Phase-to-Phase overvoltages in VHV networks, Proceedings of The International Conference on Applied and Theoretical Electricity ICATE –1998, Craiova, 1996, vol.II, pag.117-122.
107. Guşă M., Istrate M., Gavrilaş N., Asaftei C., Martinaş E., The Selectivity of Zerosequence Current Protection in Underground Distribution Networks, International Conference on Applied and Theoretical Electricity ICATE –1998, Craiova, iunie 1998 – vol. II, pg. 317÷322
108. Gavrilaş N., Istrate M., Guşă M., Asaftei C., Supratensiuni temporare în reţele cu linii compacte de foarte înaltă tensiune, Lucrările simpozionului internaţional “Electro ‘96”, Chişinău, Editura Tehnică Chişinău, 1997, vol.II, pag.13 - 18.
109. Guşă M., Gavrilaş N., Istrate M., Asaftei C., Popa C., Posibilităţi de detectare a defectelor monofazate în reţele aeriene de medie tensiune, Lucrările simpozionului internaţional “Electro ‘96”, Editura Tehnică Chişinău, 1997, vol.II, pag.93 - 98.
110. Istrate M., Gavrilaş N., Guşă M., Asaftei C., Evaluation Method for Switching Overvoltages for Compact Three-phase Overhead Lines, Proceedings of Very High Voltage Networks Symposium, Sibiu 1995, vol. III, pag. 30-33.
111. Istrate M., Guşă M., Gavrilaş N., Asaftei C., Phase-to-Phase Switching Overvoltages for Compact Transmission Lines, Proceedings of Very High Voltage Networks Symposium, Sibiu 1995, vol. III, pag. 62-66.
112. Istrate M., Guşă M., Assessment of Two Single-end Fault Location Algorithms in an ATP Approach, Volumul Conferinţei SNET 2008, Universitatea Politehnica Bucureşti, pag. 305-310, ISBN 978-606-521-045-5, 2008.
113. Guşă M., Istrate M., Popa C., Brumă N., Riscul de avarie în staţiile de transformare datorită loviturilor de trăsnet, Al XVIII-lea simpozion naţional “Siguranţa în funcţionare a sistemului energetic” - SIG 2003, Oradea, septembrie 2003, pag.148-154.
114. Istrate M., Guşă M., Gavrilaş N., Popa Coculeana, Pachet de programe pentru calculul supratensiunilor temporare cu considerarea unor pierderi şi neliniarităţi, Al VII-
115. lea simpozion naţional de tehnica tensiunilor înalte, Craiova, octombrie 2001, pag.255260.
116. Guşă M., Istrate M., Gavrilaş N., Ciobanu C., Brumă N., Comportarea transformatoarelor de distribuţie la tensiune de impuls de trăsnet, Al VII-lea simpozion naţional de tehnica tensiunilor înalte, Craiova, octombrie 2001, pag.45-51.
117. Istrate M., Guşă M., Ciobanu C., Gavrilaş N., Miron A., Simularea EMTP a funcţionării unor protecţii din reţelele electrice, Simpozionul Naţional al Reţelelor Electrice, Iaşi, 2000, vol. I, pag. 645-654.
118. Gavrilaş N., Ciobanu C., Istrate M., Guşă M., Determinarea zonelor de protecţie ale unor sisteme de paratrăsnete verticale prin metoda mo-delării electrogeometrice, Simpozionul Naţional al Reţelelor Electrice, Iaşi, 2000, vol. I, pag. 655-658.
119. Gabură A., Asaftei C., Guşă M., Istrate M., Popa C., Sistem inteligent de monitorizare a defectelor pe liniile electrice de distribuţie, Simpozionul Naţional al Reţelelor Electrice, Iaşi, 2000, vol. II, pag. 555-559.

120. Istrate M., Guşă M., Gavrilaş N., Ciobanu C., Studiu prin simulare EMTP a supratensiunilor de comutaţie în reţele de transport a energiei electrice cu linii compacte, Volumul celui de al VI-lea Simpozion Naţional "Tehnica Tensiunilor Inalte", Bucureşti, 1999.
121. Guşă M., Istrate M., Gavrilaş N., Ciobanu C., Aspecte privind protecţia posturilor de transformare din liniile aeriene de distribuţie împotriva supratensiunilor de trăsnet, Volumul celui de al VI-lea Simpozion Naţional "Tehnica Tensiunilor Inalte", Bucureşti, 1999.
122. Gavrilaş N., Istrate M., Guşă M., Ciobanu C., Folosirea metodei sferei fictive la construirea zonelor de protecţie ale unor sisteme de paratrăsnete, Volumul celui de al VI-lea Simpozion Naţional "Tehnica Tensiunilor Inalte", Bucureşti, 1999.
123. Istrate M., Guşă M., Gavrilaş N., Asaftei C., Popa C., Aplicaţie de calcul a supratensiunilor temporare în reţele cu pierderi, Simpozionul Naţional al Reţelelor Electrice, Piteşti, septembrie 1998, vol. II, pag. 710-716.
124. Guşă M., Istrate M., Gavrilaş N., Asaftei C., Martinaş E., Protecţia homopolară de curent temporizată în reţelele de medie tensiune având neutrul tratat prin resistor, Simpozionul Naţional al Reţelelor Electrice, Piteşti, septembrie 1998, vol. II, pag. 1056÷1064.
125. Asaftei C, Istrate M., Guşă M., Gavrilaş N., Popa C., Cu privire la un sistem de testare a indicatoarelor de defect, Simpozionul Naţional al Reţelelor Electrice, ediţia a VIII-a, Cluj-Napoaca, 1996, pag. 211-212.
126. Istrate M., Gavrilaş N., Guşă M., Asaftei C., Posibilităţi de calcul a supratensiunilor de comutaţie în reţele trifazate, Simpozionul Naţional al Reţelelor Electrice, ediţia a VIIa, Suceava 1994, Editura Licurici Suceava, vol. I, pag. 330-338, ISBN 973-95737-1-1.
127. Istrate M., Pompaş F., Gavrilaş N., Guşă M., Asaftei C., Studiul comportării liniilor electrice aeriene compactizate la supratensiuni atmosferice, Simpozionul Naţional al Reţelelor Electrice, ediţia a VII-a, Suceava 1994, Editura Licurici Suceava, vol. II, pag. 183-191, ISBN 973-95737-2-X.
128. Guşă M., Istrate M., Asaftei C., Gavrilaş N., Câmpul magnetic al liniilor electrice de medie tensiune, Simpozionul Naţional al Reţelelor Electrice, ediţia a VII-a, Suceava 1994, Editura Licurici Suceava, vol. II, pag. 200-208, ISBN 973-95737-2-X.
129. Istrate M., Gavrilaş N., Guşă M., Asaftei C., Metodă de evaluare a supratensiunilor la reconectarea liniilor lungi de construcţie compactă, Conferinţa de electroenergetică, Facultatea de Electrotehnică din Timişoara, 1994, Editura Helicon - Timişoara, pag. 618-625, ISBN 973-9159-98-2.
130. Guşă M., Istrate M., Asaftei C., Gavrilaş N., Detectarea magnetică a scurtcircuitelor pe liniile electrice aeriene de medie tensiune, Conferinţa de electroenergetică, Facultatea de Electrotehnică din Timişoara, 1994, Editura Helicon - Timişoara, pag. 335-341, ISBN 973-9159-98-2.
131. Istrate M., Asaftei C., Guşă M., Dispozitiv trifazat de semnalizare centralizată a zonelor cu defect în reţelele electrice de medie tensiune, Simpozionul Naţional al Reţelelor Electrice, ediţia a VI-a, Bacău 1992, Editura Helicon - Timişoara, vol. II, pag. 193-198, ISBN 973-9133-20-7.
132. Asaftei C., Istrate M., Gavrilaş N., Guşă M., Contribuţii privind semnalizarea locală şi la distanţă a zonelor cu defect de izolaţie, Simpozionul Naţional al Reţelelor Electrice, ediţia a VI-a, Bacău 1992, Editura Helicon - Timişoara, vol. II, pag. 199202, ISBN 973-9133-20-7.

J. ***Invenţii.***

1. Guşă M., Istrate M., Asaftei C., Gavrilaş N., Procedeu de autodeclanşare selectivă şi semnalizare pentru separatoare de sarcină, Brevet România, 116988/2001. International Patent Classification H02J-013/00,http://apps.isiknowledge.com

2. Asaftei C., Istrate M., Guşă M., Gavrilaş N, Popa C., Dispozitiv de semnalizare cu bloc de testare, Brevet Romania 114197B1/1998, Inter-national Patent Classification G01R031/08, http://apps.isiknowledge.com
3. Asaftei C., Istrate M., Guşă M., Gavrilaş N, Popa C., Sistem de testare cu autoalimentare, Brevet Romania 114048/1998, International Patent Classification G01R031/08, http://apps.isiknowledge.com
4. Istrate M., Asaftei C., Guşă M., Gavrilaş N., Sistem de testare a semnalizatoarelor locale de scurtcircuit din reţelele electrice de medie tensiune, Brevet România, 113907B/30.11.1998. International Patent Classification G01R-031/02, http://apps.isiknowledge.com
5. Asaftei C., Guşă M., Istrate M., Gavrilaş N., Vorobchevici M., Indicator local pentru scurtcircuit, Brevet România, nr.106621 C1/1996, Interna-tional Patent Classification G01R-031/02, http://apps.isiknowledge.com
6. Asaftei C., Guşă M., Istrate M., Gavrilaş N, Ciutea I., Sistem de semna-lizare locală şi la distanţă, Brevet România nr. 105862 C1/1992, Interna-tional Patent Classification G01R031/02, http://apps.isiknowledge.com
7. Asaftei C., Guşă M., Gabură A., Istrate M., Gavrilaş N., Tărăboanţă I., Receptor pilotat cu cuarţ, Brevet România, nr. 105747 C1/1992, Interna-tional Patent Classification H02J013/00, http://apps.isiknowledge.com
8. Asaftei C., Guşă M., Gabură A., Istrate M., Gavrilaş N., Tărăboanţă I., Emiţător pilotat cu cuarţ, Brevet România, nr. 105754 C1/1992. Interna-tional Patent Classification H04B-003/54 http://apps.isiknowledge.com
9. Asaftei C., Guşă M., Istrate M., Gavrilaş N., Instalaţie pentru emiterea semnalelor electrice pe linii de medie tensiune, Brevet România, nr.105638 B1/1992. International Patent Classification H04B-003/54, http://apps.isiknowledge.com
10. Guşă M., Gavrilaş N., Asaftei C., Istrate M., Regulator automat pentru bobine de stingere, Brevet România, nr. 104711/1991. International Patent Classification H02J003/18, http://apps.isiknowledge.com.Acest brevet a fost medaliat cu argint la la Salonul internaţional al invenţiilor şi tehnicii noi, Iaşi 1994 şi medaliat cu aur la Salonul internaţional al invenţiilor "EUREKA '94"- Bruxelles, 1994.
11. Istrate M., Guşă M., Asaftei C., Gavrilaş N., Dispozitiv trifazat de semnalizare locală şi la distanţă, Brevet România nr. 104650/1991, Inter-national Patent Classification H02H007/26, http://apps.isiknowledge.com
12. Istrate M., Guşă M., Asaftei C., Gavrilaş N., Releu de semnalizare locală şi la distanţă, Brevet România, nr.104649/1991, International Patent Classification H02H-007/26, http://apps.isiknowledge.com
13. Asaftei C., Guşă M., Istrate M., Gavrilaş N., Botez C., Receptor de semnale codificate, Brevet România, nr. 104264/1991, International Patent Classification G08B-025/00, http://apps.isiknowledge.com
14. Guşă M., Asaftei C., Istrate M., Gavrilaş N., Instalaţie de semnalizare centralizată, Brevet România, nr. 103783/1991, International Patent Classification G08B-025/00, http://apps.isiknowledge.com
15. Asaftei C., Guşă M., Istrate M., Gavrilaş N., Ciutea I., Receptor pentru semnalizarea centralizată a zonelor cu defect de izolaţie pe linii electrice de medie tensiune, Brevet România, nr. 103548/1991, International Patent Classification H02J-013/00, http://apps.isiknowledge.com
16. Istrate M., Guşă M., Asaftei C., Gavrilaş N., Sufleţel N., Botez C., Metodă şi dispozitiv emiţător pentru stabilirea zonelor cu defect de izolaţie, Brevet România,

nr.103448/1991, International Patent Classification G01N-031/03, http://apps.isiknowledge.com

17. Asaftei C., Guşă M., Gavrilaş N., Istrate M., Sufleţel N., Dispozitiv de semnalizare a depăşirii unui curent maxim într-un conductor, Brevet România, nr. 103490/1990, International Patent Classification H02H-003/04, http://apps.isiknowledge.com

K. ***Contracte de cercetare/granturi.***

1. Grant Dezvoltarea Instituțională a TUIASI Prin Creșterea Performanței in Cercetare, Dezvoltare si Inovare COMPETE 2.0, https://www.compete.tuiasi.ro/, finanțat prin Contractul nr. 27PFE/30.12.2021– Proiecte de finanțare a excelenței în CDI din cadrul PNCDI III. Domeniul 3 – Energie, mediu, schimbari climatice, Suma bugetata = 6.578.117 lei, in trei etape anuale, astfel: anul 2022 – 2.466.918 lei; anul 2023 – 3.546.772 lei; anul 2024 – 546.427 lei, Istrate M – Responsabil stiintific.
2. Contractul nr. 11155/06.04.2022 TUIASI, Innovation Norway No. 2021/332809 din 24.03.2022, EEA and Norway Grants 2014-2021, „Energy Generation from NonPowered Dams - ENERGYDAM", Implementare iunie 2022-decembrie 2023, Sume; Total proiect: 346958 Euro, din care in 2022 – 154175 Euro si in 2023 – 192783 Euro, Istrate M. – Manager proiect si membru in echipa de cercetare pe anumite pachete de lucru.
3. Grant Dezvoltarea Instituțională a TUIASI Prin Creșterea Vizibilității și a Performanței Cercetării TUIASI-COMPETE, https://www.compete.tuiasi.ro/, finanțat prin Contractul nr. 9PFE/2018 în cadrul Programului 1 - Dezvoltarea sistemului național de cercetaredezvoltare, Subprogramul 1.2 – Performanță instituțională – Proiecte de dezvoltare instituțională – Proiecte de finanțare a excelenței în CDI din cadrul PNCDI III. Domeniul 3 – Energie, mediu, schimbari climatice, Suma bugetata = 4.530.000 lei, in trei etape anuale, astfel: anul 2018 – 203750 lei; anul 2019 -2090769 lei; anul 2020 – 2235481 lei; Istrate M – Responsabil stiintific
4. Analiza regimurilor tranzitorii electromagnetice în rețele de medie tensiune în vederea implementării automaticii de reanclanșare rapidă monofazată, Contractul de cercetare nr. 1264P/21.01.2019, Istrate M.- Director tema, Beneficiar: beneficiarului SC EXIMPROD GRUP SA, cu sediul în Buzău, contract obtinut prin negociere directa – suma 10000 lei +TVA
5. Analiza și interpretarea datelor, întocmirea algoritmilor de prelucrarea datelor, simularea asistată de calculator și întocmirea rapoartelor de simulare, cod CPV 71335000-5; Beneficiar: Societatea pentru Servicii de Mentenață a Rețelei Electrice de Transport "SMART" S.A. București Sucursala de Mentenanță SIBIU, 2015-2018, tema 27373/22.12.2015, Istrate M.- Responsabil contract, Machidon D. Contract obţinut prin procedura de licitaţie deschisă – publicată pe SEAP. Valoare studiu: 185.000 lei +TVA
6. Studiu privind verificarea schemelor de protecţie împotriva loviturilor directe de trăsnet în cazul staţiei 220/110/20 kV Munteni. Analiză comparată a metodei normate şi a metodei electrogeometrice", cod CPV 71335000-5; Beneficiar: CN Transelectrica SA, Sucursala de Transport Bacău, 2013, tema 8795/17.05.2013, Istrate M.- Director tema, Machidon D. Valoare 57000+TVA RON; Contract obţinut prin procedura de licitaţie deschisă – publicată pe SEAP; Cursul de schimb valutar BNR la data semnarii contractului a fost de 4,4111 lei/Euro (echivalentul in Euro al sumei contractate este de 12922 Euro fara TVA sau 16023 Euro cu TVA). Asimilat grant de cercetare obținut prin competiție, conform Ordin MECT nr. 5896, din 11.11.2008
7. Analiza asistată de calculator a riscului producerii loviturilor directe de trăsnet în echipamentele de 400/110 kV ale staţiei de transformare Roman Nord. Analiza comparată a metodei normate şi a metodei electrogeometrice; Beneficiar: CN Transelectrica SA, Sucursala de Transport Bacău, 2012, tema 8731/25.05.2012, Istrate M.- Director tema, Machidon D.

Valoare 77000+TVA RON; Contract obţinut prin procedura de licitaţie deschisă – publicată pe SEAP; Cursul de schimb valutar BNR la data semnarii contractului a fost de 4,45 lei/Euro (echivalentul in Euro al sumei contractate este de 17300 Euro fara TVA sau 21400 Euro cu TVA). Asimilat grant de cercetare obținut prin competiție, conform Ordin MECT nr. 5896, din 11.11.2008

8. Studiu privind analiza asistată pe calculator a riscului producerii loviturilor de trăsnet în echipamente de 220 kV şi 400 kV ale staţiei de transformare Suceava. Analiza comparată a metodei normate şi a metodei electrogeometrice; Beneficiar: CN Transelectrica SA, Sucursala de Transport Bacău, 2011, tema 1090P/03.05.2011, Istrate M.- Director tema, Guşă M, Machidon D. Valoare 70000+TVA RON; Contract obţinut prin procedura de licitaţie deschisă – publicată pe SEAP; Cursul de schimb valutar BNR la data semnarii contractului a fost de 4,1073 lei/Euro (echivalentul in Euro al sumei contractate este de 17042,8 Euro fara TVA sau 21133,1 Euro cu TVA). Asimilat grant de cercetare obținut prin competiție, conform Ordin MECT nr. 5896, din 11.11.2008

9. Studiu privind expertizarea instalaţiilor de 110 şi 220 kV din staţia FAI, urmare modificării schemelor de conexiuni, prin metoda electrogeometrică, privind riscul producerii loviturilor directe de trăsnet în echipamentele staţiei; Beneficiar: CN Transelectrica SA, Sucursala de Transport Bacău, 2009, tema 9958P/15.07.2009, Istrate M.- Director tema, Guşă M, Machidon D. Valoare 48000+TVA RON; Contract obţinut prin procedura de licitaţie deschisă – publicată pe SEAP; Cursul de schimb valutar BNR la data semnarii contractului a fost de 4,2175 lei/Euro (echivalentul in Euro al sumei contractate este de 11381,5 Euro fara TVA sau 13543,6 Euro cu TVA). Asimilat grant de cercetare obținut prin competiție, conform Ordin MECT nr. 5896, din 11.11.2008.

10. Instrument software destinat creşterii securităţii sistemelor electroenergetice prin coordonarea protecţiei de distanţă, dezvoltat pe baza unor tehnici de inteligenţă artrificială. Grant CNCSIS, A, contract nr. GR 77/11.06.2008, tema nr. 20, cod CNCSIS 283; Istrate M.-Director grant, Guşă M., Gavrilas M., Asandei D., Temnenau C. Valoare 36000 RON

11. Sistem inteligent de predicţie şi control al congestiilor în reţelele de transport şi distribuţie la înaltă tensiune, Grant PN2-Parteneriate, contract 22-126 / 2008, membru în echipa de cercetare; Valoare UTI: 1.800.000 lei, Valoare UTI 2008: 67779, 5 membri/2008 în echipa de cercetare, Director proiect: Mihai Gavrilaş, Istrate M.. – responsabil partener UTI.

12. Sistem video automatizat cu grad ridicat de interschimbabilitate pentru etalonare metrologică a echipamentelor de măsurare; Grant PN2-Parteneriate, contract 72173/2008, director C. Donciu; Valoare UTI: 1.130.000 lei; 17 membri în echipa de cercetare, Istrate M.. – membru echipa partener UTI.

13. Sistem informatic de instruire interactiva bazat pe algoritmi multitask de mare viteza, dezvoltat pe platforma reconfigurabila online pentru aplicatii de tip laborator virtual., Proiect CEEX Modul 1 – INFOSOC, Contract nr. 137 / 02.10.2006, Director proiect: Codrin Donciu, Durata proiect 1 an si 11 luni (predare etapa finala 30.08.2008), Valoare totala proiect: 880.000 lei, Valoare UTI: 606.164 lei, Istrate M.. – membru echipă partener UTI.

14. Instrument software destinat creşterii securităţii sistemelor electroenergetice prin coordonarea protecţiei de distanţă, dezvoltat pe baza unor tehnici de inteligenţă artrificială. Grant CNCSIS, A, contract nr. GR 80 /23.05.2007, tema nr. 28, cod CNCSIS 283; Istrate M.-Director grant, Guşă M., Gavrilas M., Asandei D., Temnenau C. Valoare 44000 RON. (Medie grant CNCSIS-UTI 2007 – 41408).

15. Analiza asistată de calculator a influenţei defectelor din reţeaua de 110 kV asupra funcţionării reţelei de transport a ST Bacău, Beneficiar: CN Trans-electrica SA, Sucursala de Transport Bacău, tema 2220P/02.06.2006, Istrate M., Guşă M.. Valoare 35700 RON cu TVA,

contract obţinut prin procedura de licitaţie deschisă. Cursul de schimb valutar BNR la data semnarii contractului a fost de 3.5309 lei/Euro (echivalentul in Euro al sumei contractate este de 10110.7 Euro cu TVA)

16. Analiza asistată de calculator a riscului producerii loviturilor directe de trăsnet în echipamantele staţiei 220/110 kV Dumbrava. Aplicaţie a metodei electrogeometrice, Beneficiar: CN Transelectrica SA, Sucursala de Transport Bacău, tema 2219P/02.06.2006 Istrate M., Guşă M. Valoare 23800 RON cu TVA, contract obţinut prin procedura de licitaţie deschisă. Cursul de schimb valutar BNR la data semnarii contractului a fost de 3.5309 lei/Euro (echivalentul in Euro al sumei contractate este de 6740,5 Euro cu TVA)

17. Instrument software destinat creşterii securităţii sistemelor electroenergetice prin coordonarea protecţiei de distanţă, dezvoltat pe baza unor tehnici de inteligenţă artrificială. Grant CNCSIS, A, contract nr. 2735/ 19.05.2006, tema nr. 16, cod CNCSIS 283; Istrate M.-Director grant, Guşă M., Gavrilas M., Asandei D., Temnenau C.; Valoare 46000 RON.

18. Cercetări privind oportunitatea instalării de descărcătore cu rezistenţă variabilă pe liniile electrice aeriene; Grant CNCSIS, contract 2741/ 19.05.2006, tema 40, cod CNCSIS 483, Colectiv: Guşă M., Istrate M., Valoare contract: 10000 RON

19. Cercetări privind oportunitatea instalării de descărcătore cu rezistenţă variabilă pe liniile electrice aeriene; Grant CNCSIS, A, contract 27637/2005, tema 28, cod CNCSIS 483, Colectiv: Guşă M., Istrate M., Bucă C., Valoare contract: 100000000 lei

20. Studiul zonelor de protecţie prin metoda sferei fictive aplicată staţiei de transformare 400(220)/110 kV Munteni. Beneficiar: C.N. Transelectrica SA, S.T. Bacău, Tema 61P/2003. Colectiv: Guşă M., Istrate M., Bucă C., Valoare contract 71400000 lei cu TVA

21. Aplicaţie software pentru analiza regimurilor electromagnetice tranzitorii generate de funcţionarea unor protecţii şi instalaţii automate din RET 220/400 kV. Beneficiar: CN Transelectrica SA, Sucursala de Transport Bacău (contract obţinut prin procedura de licitaţie deschisă, la care au fost şi alţi participanţi - TRAPEC Bucureşti), Tema 61P/2003. Istrate M. – Director temă, Guşă M. Valoare contract 77350000 lei cu TVA.

22. Analiza modului de realizare a protecţiei împotriva loviturilor directe de trăsnet în staţia de transformare Iaşi - Sud. Beneficiar: S.D.F.E.E. Iaşi Tema 965P/2002. Colectiv: Guşă M., Istrate M., Valoare contract 47600000 lei cu TVA.

23. Studiul zonelor de protecţie împotriva loviturilor directe de trăsnet prin metoda sferei fictive – Aplicaţie pentru staţia de transformare Suceava. Beneficiar: S.D.E.E. Bacău, Tema 422P/2002. Col.: Guşă M., Istrate M. Valoare contract 50000000 lei cu TVA.

24. Analiza asistată a regimurilor tranzitorii din reţelele de joasă tensiune. Beneficiar: Electrica S.A. – S.D.E.E. Bacău, Tema 807P/2001. Asaftei C., Istrate M., Guşă M. Valoare contract 65000000 lei cu TVA.

25. Studiul zonelor de protecţie împotriva loviturilor directe de trăsnet prin metoda sferei fictive–Aplicaţie pentru staţia de transformare Roman Nord. Beneficiar: SDEE Bacău, Tema 194P/2001. Colectiv: Guşă M., Istrate M. Valoare contract 40000000 lei cu TVA

26. Analiza asistată de calculator a funcţionării protecţiilor de distanţă în reţeaua de transport 220/400 kV a S.T. Bacău. Beneficiar: CN Transelectrica - ST Bacău, 2001. Istrate M. – Director temă, Guşă M. Valoare contract 48 milioane lei.

27. Protecţia reţelelor de distribuţie de JT împotriva supratensiunilor transmise din reţelele de MT. Grant ANSTI, contract nr. 6177/2000, număr temă: B-50. Două etape: 2000 şi 2001. Colectiv: Guşă M., Istrate M. Valoare contract: 43100000 lei

28. Evaluarea nivelului de ţinere la impuls de trăsnet a izolaţiei echipamentelor de joasă tensiune din posturile de transformare MT/JT. Beneficiar: S.D.E.E. Bacău, Tema 1627P/2000. Col.: Guşă M., Istrate M., Asaftei C. Valoare contract: 50000000 lei

29. Soluţii pentru evitarea incendiilor determinate de trăsnet la rezervoarele metalice cu capac flotant pentru produse petroliere. Beneficiar: S.C. “Oil Terminal” S.A. Constanţa, Tema 1633P/2000. Col.: Guşă M., Istrate M. Valoare contract: 15500000
30. Studiul asistat de calculator al protecţiei staţiilor de transformare împotriva loviturii directe de trăsnet. Beneficiar: Sucursala de Transport a Energiei Electrice Constanţa; Tema 1740P/1999(2000). Colectiv: Gavrilaş N., Istrate M., Guşă M., Valoare contract: 60000000
31. Transmiterea supratensiunilor de trăsnet prin transformatoarele de distribuţie de medie tensiune/joasă tensiune. Beneficiar: S.D.E.E. Iaşi, Tema 567P/2000. Colectiv: Guşă M., Istrate M., Asaftei C. Valoare contract: 45000000 lei
32. Studiu privind modelarea pe calculator a regimurilor de defect monofazat în reţeaua de distribuţie de 20 kV a municipiului Galaţi, având neutrul tratat prin rezistor. Beneficiar: S.D.E.E. Galaţi, Tema 849P/2000. Colectiv: Asaftei C., Istrate M., Guşă M. Valoare contract: 40000000 lei
33. Analiza regimurilor complexe de avarie şi postavarie în reţeaua de transport a STD Bacău. Beneficiar: Sucursala Transport Dispecer Bacău, Tema 303P/1999. Colectiv: Guşă M., Istrate M.Valoare contract: 45000000 lei.
34. Protecţia împotriva supratensiunilor atmosferice a posturilor de transformare MT/JT şi a reţelei de joasa tensiune aferente. Beneficiar: S.D.E.E. Bacău, Tema 283P/1998. Colectiv: Guşă M., Istrate M., Asaftei C. Valoare contract: 30000000
35. Analiza tensiunilor de regim tranzitoriu în zona de reţea de medie tensiune a municipiului Sibiu. Beneficiar: S.D.E.E. Sibiu, Tema 147P/1998. Colectiv: Guşă M., Istrate M., Gavrilaş N. Valoare contract: 30000000 lei
36. Sistem de autodeclanşare selectivă, telecomandă şi telesemnalizare centralizată pentru reţelele aeriene de 20 kV. Beneficiar: F.T.D.E.E. Suceava, Tema 3587/1997. Colectiv: Asaftei C., Istrate M., Guşă M., Gavrilaş N. Valoare contract: 15000000 lei.
37. Studiu privind asigurarea selectivităţii şi sensibilităţii protecţiei în reţelele de medie tensiune aferente staţiilor cu neutrul tratat prin rezistenţă din municipiul Botoşani. Beneficiar: F.D.E.E. Botoşani, Tema 11941/1997. Colectiv: Guşă M., Istrate M., Gavrilaş N. Valoare contract: 12000000
38. Realizarea unui tester de verificare a indicatoarelor de defect pe LEA de medie tensiune şi montarea unor astfel de indicatoare în zona Tg.Frumos. Beneficiar: F.R.E. Iaşi, Tema 9397/1996. Colectiv: Asaftei C., Istrate M., Guşă M., Gavrilaş N. Valoare contract: 4000000 lei
39. Optimizarea funcţionării reţelelor compensate prin implementarea unor mijloace de detectare a defectelor monofazate. Beneficiar: F.R.E. Iaşi, Tema 4730/1996. Colectiv: Guşă M., Istrate M., Gavrilaş N., Asaftei C. Valoare contract: 6000000 lei
40. Analiza supratensiunilor interne în reţelele de 110 kV şi 220 kV cu considerarea unor fenomene nelineare. Beneficiar: Filiala de Reţele Electrice Iaşi, Teama 6147/1996.
41. Istrate M. – Director temă, Guşă M, Gavrilaş N., Asaftei C. Valoare contract: 4000000 lei, Determinarea supratensiunilor în reţele de înaltă tensiune cu considerarea unor pierderi şi neliniarităţi. Beneficiar: Filiala de Reţele Electrice Iaşi, 1995, Tema 6456, Istrate M. – Director temă, Guşă M, Gavrilaş N., Asaftei C.; Valoare contract: 3000000 lei.
42. Studiul posibilităţilor de detectare a zonelor de defect pe LEA de medie tensiune cu neutrul tratat cu bobină de stingere. Beneficiar: F.R.E. Iaşi, 1995; Tema 6455; Colectiv: Guşă M., Istrate M., Gavrilaş N., Asaftei C. Valoare contract: 4000000 lei
43. Determinarea supratensiunilor interne şi atmosferice în reţele de înaltă tensiune. Beneficiar: Filiala de Reţele Electrice Iaşi, 1994. Tema 3745/1994; Istrate M. – Director temă, Guşă M, Gavrilaş N., Asaftei C. Valoare contract: 1500000 lei

44. Studiul posibilităţilor de realizare şi realizarea unui tester de verificare a indicatoarelor de defect pe LEA de medie tensiune. Beneficiar: F.R.E. Iaşi, 1994. Tema 3850; Colectiv: Asaftei C., Istrate M., Guşă M., Gavrilaş N. Valoare contract: 4000000 lei
45. Autodeclanşarea selectivă a separatoarelor de sarcină în SF6 de pe derivaţii şi de pe axele de MT, cu semnalizare în staţia de alimentare, prin transmisie pe conductoarele LEA. Beneficiar: F.R.E. Suceava; Tema 6630/1994, 1995 şi 1996. Tema 6630/1994,1995,1996 Colectiv: Asaftei C., Istrate M., Guşă M., Gavrilaş N. Valoare totala contract: 32000000 lei
46. Solicitarea izolaţiei liniilor electrice debuclate. Beneficiar: F.R.E. Bacău, 1994, Colectiv: Guşă M., Istrate M., Gavrilaş N., Asaftei C. Valoare contract: 1500000 lei.
47. Studiul comportării în exploatare a descărcătoarelor cu rezistenţă variabilă din instalaţiile FRE Iaşi. Beneficiar: Filiala de Reţele Electrice Iaşi, 1993. Tema 2540. Istrate M. – Director temă, Guşă M, Gavrilaş N., Asaftei C. Valoare contract: 900000 lei
48. Comanda declanşării întrerupătoarelor din reţelele aeriene de 20 kV cu neutrul tratat prin rezistenţă şi semnalizarea centralizată a funcţionării acestuia. Beneficiar: F.R.E. Suceava, 1993, Tema 6360; Colectiv: Guşă M., Gavrilaş N., Istrate M., Asaftei C. Valoare contract: 1000000 lei
49. Cercetări teoretice şi încercări experimentale privind rezistenţa la oboseală mecanică a izolatoarelor de tip IsNs. Beneficiar: F.R.E. Bacău, 1993, Colectiv: Guşă M., Istrate M., Gavrilaş N., Asaftei C. Valoare contract: 1000000 lei
50. Cercetări privind implementarea şi funcţionarea unui sistem de semnalizare centralizată a defectelor în reţelele aeriene de distribuţie de medie tensiune. Beneficiar: RENEL, Divizia Strategie şi Retehnologizare, Bucureşti 1992, Tema 1433/1992; Colectiv: Asaftei C., Guşă M., Gavrilaş N., Istrate M.; Valoare contract: 700000 lei
51. Controlul stării izolaţiei LEA de medie şi înaltă tensiune. Beneficiar: F.R.E. Bacău, 1992. Tema 9223; Guşă M., Gavrilaş N., Istrate M.,, Asaftei C. Valoare contract: 400000 lei
52. Proiectarea prototipului de sistem de semnalizare centralizată a defectelor în reţele electrice de distribuţie. Beneficiar: Ministerul Învăţământului şi Ştiinţei, 1992. Tema 1433; Colectiv: Asaftei C., Guşă M., Gavrilaş N., Istrate M. Valoare contract: 700000 lei
53. Cercetarea comportării în exploatare a descărcătoarelor cu rezistenţă variabilă din instalaţiile de transport electric feroviar. Beneficiar: Regionala de Căi Ferate Iaşi, 1991. Tema 896; Istrate M. – Director temă, Guşă M, Gavrilaş N.; Valoare contract: 24705 lei
54. Studiul posibilităţilor de realizare a detectării şi semnalizării centralizate a defectelor în reţelele electrice de distribuţie. Beneficiar: Ministerul Învăţământului şi Ştiinţei, 1991. Tema 2439 (1541); Colectiv: Asaftei C., Guşă M., Gavrilaş N., Istrate M. Valoare contract: 300000 lei
55. Realizarea şi testarea sistemului de semnalizare centralizată a defectelor într-o reţea aeriană de 20 kV cu un singur emiţător. Beneficiar: I.R.E. Iaşi, 1991. Tema 6156; Colectiv: Asaftei C., Guşă M., Gavrilaş N., Istrate M. Valoare contract: 380000 lei
56. Proiectarea, realizarea şi experimentarea echipamentului pentru semnalizarea centralizată a defectelor într-o reţea aeriană de 20 kV. Beneficiar: I.R.E. Iaşi, 1990. Tema 229; Colectiv: Asaftei C., Guşă M., Gavrilaş N., Istrate M. Valoare contract: 230000 lei
57. Cercetarea posibilităţilor de localizare de la distanţă a scurtcircuitelor monofazate în reţelele aeriene de medie tensiune având neutrul tratat prin rezistor. Beneficiar: I.R.E. Iaşi, 1989., Tema 80; Colectiv: Asaftei C., Guşă M., Gavrilaş N., Istrate M. Valoare contract: 220000 lei.

L. ***Premii, distincţii.***

1. Brevetul de invenţie Regulator automat pentru bobine de stingere, Brevet România, nr. 104711/1991. International Patent Classification H02J-003/18, http://apps.isiknowledge.com a fost medaliat cu argint la la Salonul internaţional al

invenţiilor şi tehnicii noi, Iaşi 1994 şi medaliat cu aur la Salonul internaţional al invenţiilor “EUREKA ‘94”- Bruxelles, 1994.

2. Premiul pentru grupul care a contribuit la atragerea celor mai multe fonduri private pentru cercetare,– Contractul de 185000 lei din 27373/22.12.2015 cu Transelectrica/Smart Sibiu, premiu acordat pe 15 noiembrie 2019, la nivelul TUIASI.

M. ***Alte realizări semnificative.***

1. Grant FDI, mai-decembrie 2019, proiect nr. CNFIS-FDI-2019-0120, cu titlul „CONSILIERE ȘI ORIENTARE PENTRU STUDENȚII TUIASI – C.O.S.T.”, Competitie nationala interuniversitara, Istrate M. - Director grant, Valoare finantare = 400000 lei.
2. Proiect POR „Consolidare si reabilitare termica imobil EN”, depus la data de 16.04.2018, codul SMIS al cererii de finanțare 120774., contract semnat in mai 2020, suma=8.831.866,83 lei , Istrate M. - manager proiect.
3. Proiect "Reabilitare termică corp TEX2 din cadrul Facultății de Textile, Pielărie și Management Industrial", depus la data de 16.04.2018, codul SMIS al cererii de finanțare 120773, contract semnat in mai 2020, suma=3.654.667,21lei, Istrate M. - manager proiect.
4. Proiect "Reabilitare termică imobil CH", depus la data de 16.04.2018, codul SMIS al cererii de finanțare 120775., contract semnat in august 2019, suma=17.526.985,81 lei, Istrate M. - manager proiect.
5. Titlul de Profesor Bolgna, acordat de ANOSR, in anul 2012.

Data,

02.04.2025

Prof. dr. ing. Istrate Dumitru-Marcel

Lista de lucrări în domeniul de studii universitare de masterat Inginerie Energetică

Numele şi prenumele: **Prof. dr. ing. Mihai GAVRILAȘ**

A. Teza de doctorat.

1. Cercetări privind optimizarea structurii şi regimurilor liniilor de transport a energiei electrice compacte, 1994, Domeniul „Inginerie Energetică", Universitatea Tehnică „Gheorghe Asachi" din Iași, conducător doctorat: prof. dr. ing. Alexandru Poeată.

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

1. Neagu B.C., **Gavrilaș M.**, Ivanov O., Grigoraș, The Crowdsourcing Concept-Based Data Mining Approach Applied in Prosumer Microgrids, Chapter in The Future of Data Mining, editor C.U. Baytar. Nova Science Publisher, 18 pag., 2022, 978-1-53618-508-9
2. **Gavrilaș M.**, Neagu B.C., Enhanced metaheuristic search algorithms; Applications in the management of electricity distribution systems, Lambert Academic Publishing, Riga, Lituania, 140 pag., 2020, 978-620-2-51263-3
3. Neagu B.C., **Gavrilaș M.**, Optimal Placement of Energy Storage Systems in Prosumer Microgrids, Chapter in Advances in Engineering Research, editor V.M. Petrova, Nova Science Publisher, 48 pag., 2020, 978-1-53618-508-9
4. Grigoraş G., Neagu B.C., Ivanov O., **Gavrilaș M.,** Scarlatache F., Smart Meter Data-based Strategies in the Optimal Operation of Electric Distribution Systems, Lambert Academic Publishing, Riga, Lituania, 256 pg., 2019, 978-620-0-50306-0 (30 pag. Gavrilaș M.)

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS.

1. Ivanov O., **Gavrilaș M.**, Algoritmi metaeuristici cu aplicații în energetică, Editura PIM Iași, 2018, 210 pag, ISBN 978-606-13-4698-1 (21% contribuție)
2. **Gavrilaș M.,** Aplicatii ale inteligentei artificiale si calculului inteligent in energetica; capitol in EMERG 2017 (Energie, Mediu, Eficienta, Resurse, Globalizare), Editura AGIR, pp. 73-118.
3. **Gavrilaș M.,** Piata de energie electrică, Editura PIM Iasi, 2017, 188 pag., ISBN 978-606-13-4144-3.
4. **Gavrilaș M.**, Stabilitatea si controlul sistemelor electroenergetice, Editura Politehnium, Iasi, 2011, 300 pag., ISBN 978-973-621-329-8.
5. **Gavrilaș M.**, Aspecte moderne în modelarea sistemelor electroenergetice, Casa de editura Venus, Iasi, 2008, 258 pag., ISBN 978-973-756-033-9.
6. **Gavrilaș M.**, Cartina Gh., Alexandrescu V., Grigoras Gh., Ivanov O., Modelarea sarcinilor din retelele electrice – Vol. 2, Editura Cermi Iasi, 2008, 116 pag., ISBN 978-973-667-315-3
7. **Gavrilaș M.**, Cartina Gh., Alexandrescu V., Grigoras Gh., Ivanov O., Modelarea sarcinilor din retelele electrice - Vol. 1, Editura PIM Iasi, 2006, 124 pag., ISBN 973-716-433-4, ISBN 978-973-716-433-4
8. **Gavrilaș M.**, Inteligenta artificiala si aplicatii in energetica; Vol. II – Teorie si aplicatii, Editura Polytechnium, 2005, 194 pag., ISBN 973-8292-20-4, ISBN 973-621-116-9
9. **Gavrilaș M.**, Inteligenta artificiala si aplicatii in energetica; Vol. I – Teorie, Editura „Gh. Asachi‖ Iasi, 2002, 320 pag., ISBN 973-8292-20-4, ISBN 973-8292-21-2

10. **Gavrilaș M.**, Filimon M.N., Tendinte moderne in distributia energiei electrice, Editura AGIR Bucuresti, 2001, 163 pag., ISBN 973-8130-47-6
11. **Gavrilaș M.**, Calcul numeric cu aplicatii in Turbo Pascal, Editura "Gh. Asachi" Iasi, 1999, 502 pag., ISBN 973-9178-65-0
12. Cartina Gh., Georgescu Gh., **Gavrilaș M.**, Bonciu Cl., Retele neuronale artificiale si sisteme expert in energetica, Editura „Gh. Asachi" Iasi, 1994, 195 pag., ISBN 973-9178-06-5

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

1. Georgescu Gh., **Gavrilaș M.**, Radasanu D., Calculul si reducerea pierderilor de putere si energie in retelele electrice, Editura SPECTRUM Iasi, 1997, 165 pag., ISBN 973-98335-1-9
2. **Gavrilaș M.,** Utilizarea calculatoarelor in proiectarea si exploatarea retelelor electrice - Metode numerice, Litografia Universitatii Tehnice "Gh. Asachi" Iasi, 200 pag., 1995
3. Georgescu Gh., **Gavrilaș M.,** Transportul energiei electrice; Analiza asistata de calculator a regimurilor de functionare a liniilor lungi, Litografia Universitatii Tehnice "Gh. Asachi" Iasi, 174 pag., 1992

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

1. **Gavrilaș M.**, Sisteme electroenergetice I – note de curs (83 pag.), http://www.mihai-gavrilas.ieeia.tuiasi.ro/SEE_1/Sisteme_1.htm
2. **Gavrilaș M.**, Sisteme electroenergetice II – note de curs (44 pag.), http://www.mihai-gavrilas.ieeia.tuiasi.ro/SEE_2/Sisteme_2.htm
3. **Gavrilaș M.**, Stabilitatea și controlul sistemelor electroenergetice – note de curs (121 pag.), http://www.mihai-gavrilas.ieeia.tuiasi.ro/SCSEE/SCSEERom.html
4. **Gavrilaș M.**, Sisteme cu inteligență artificială – note de curs (95 pag.), http://www.mihai-gavrilas.ieeia.tuiasi.ro/SIA/AI.htm
5. **Gavrilaș M.**, Piețe de enrgie – management și reglementare – note de curs (32 pag.), http://www.mihai-gavrilas.ieeia.tuiasi.ro/PEMR/PEMRRom.html **Gavrilaș M.**, Piața de energie și politici energetice – note de curs (14 pag.), http://www.mihai-gavrilas.ieeia.tuiasi.ro/PEPE/PEPERom.html
6. **Gavrilaș M.**, Computational Intelligence and Applications – course notes (99 pag.), http://www.mihai-gavrilas.ieeia.tuiasi.ro/CIA/CIA.htm

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

1. Barkat F., Cheknane A., Guerrero J.M., Lashab A., Istrate M., **Gavrilas M.,** Motas J.G., Banu I.V., 2023. Review, analysis, and performance evaluation of the most common four active methods for islanding detection in grid-connected photovoltaic systems. Electric Power Systems Research, 214, p.108909, DOI: 10.1016/j.epsr.2022.108909**.]**.
2. Kriukov A., **Gavrilaș M.**, Ivanov O., Grigoraș G., Neagu B.-C., Scarlatache F., Novel Decentralized Voltage-Centered EV Charging Control Algorithm Using DSRC System in Low Voltage Distribution Networks, IEEE Access (Early Access), Decembrie 2021, 9, pp. 164779-164800, doi: 10.1109/ACCESS.2021.3132419
3. Ivanov O., Neagu B.-C., **Gavrilaș M.**, Grigoraș G., A Phase Generation Shifting Algorithm for Prosumer Surplus Management in Microgrids using Inverter Automated Control, Electronics, vol. 10, nr. 22, 2740, 2021, WOS:000727513800001

4. Grigoraș G., Noroc L., Chelaru E., Scarlatache F., Neagu B.-C., Ivanov O., **Gavrilaș M.**, Coordinated Control of Single-Phase End-Users for Phase Load Balancing in Active Electric Distribution Networks, Mathematics, vol. 9, nr. 21, 2662, 2021, Accession Number: WOS:000719474900001
5. Ivanov, O., Neagu B.C., Grigoras G., Scarlatache F., **Gavrilas M.**, 2021. A metaheuristic algorithm for flexible energy storage management in residential electricity distribution grids. Mathematics, 9(19), p.2375. https://doi.org/10.3390/math9192375
6. **Gavrilas M.**, Toma R., Flexible Alternating Current Transmission System Optimisation In The Context Of Large Disturbance Voltage Stability. Revue Roumaine Des Sciences Techniques—Série Électrotechnique Et ÉnergétiquE, 2021, 66(1), pp.21-26, WOS:000645139100004
7. Banerjee A., Chattopadhyay S., **Gavrilas M.** Grigoras, G., Optimization and estimation of reliability indices and cost of Power Distribution System of an urban area by a noble fuzzy-hybrid algorithm. *Applied Soft Computing*, 2021, *102* p.107078235, DOI: 10.1016/j.asoc.2021.107078, WOS:000632598600011
8. Neagu B.C., Ivanov O., Grigoras Ghg., **Gavrilaș M.**, A New Vision on the Prosumers Energy Surplus Trading Considering Smart Peer-to-Peer Contracts, Mathematics 2020, 8(2), 235; https://doi.org/10.3390/math8020235
9. Ivanov O., Chattopadhyay S., Banerjee S., Neagu B.C., Grigoras Gh., **Gavrilas M.,** A Novel Algorithm with Multiple Consumer Demand Response Priorities in Residential Unbalanced LV Electricity Distribution Networks, Mathematics 2020, 8(8), 1220; https://doi.org/10.3390/math8081220
10. Neagu, B.C., Ivanov O., Grigoras Gh., **Gavrilaș M**., Istrate D.M., New Market Model with Social and Commercial Tiers for Improved Prosumer Trading in Microgrids, Sustainability 2020, 12(18), 7265; https://doi.org/10.3390/su12187265
11. Grigoraș Gh., Neagu B.C., **Gavrilaș M.,** Triștiu I., Bulac C., Optimal Phase Load Balancing in Low Voltage Distribution Networks Using a Smart Meter Data-Based Algorithm, Mathematics 2020, 8(4), 549; https://doi.org/10.3390/math8040549
12. Ivanov O., Neagu B.C., Grigoras Gh., **Gavrilas M.**, Optimal Capacitor Bank Allocation in Electricity Distribution Networks Using Metaheuristic Algorithms. Energies 2019, 12, 4239, Accession Number: WOS:000504898500017 (FI =2.702, JCR 2019)
13. Postolaty V., Berzan V. Bykova E., Bosnaega V., Suslov V., Ermurachi Iu., Grigoras Gh., **Gavrilas M.,** Istrate M., Estimation of Power Exchange through 110 kV Overhead Power Lines at the Interface of the Romanian and Moldovan Power Systems, PROBLEMELE ENERGETICII REGIONALE, Issue 2, 2018, pp. 46-61, ISSN: 1857-0070, DOI:10.5281/zenodo.1343396
14. Banerjee A., Chattopadhyay S., Grigoras Gh., **Gavrilas M.**, Minimization of reliability indices and cost of power distribution systems in urban areas using an efficient hybrid meta-heuristic algorithm, Soft Computing, 2017, pp. 1-25, 1432-7643, DOI: https://doi.org/10.1007/s00500-017-2846-6
15. Coroama I., Chicco G., **Gavrilas M.**, Russo A., Distribution system optimisation with intra-day network reconfiguration and demand reduction procurement, Electric Power Systems Research, Vol. 98, 2013, pp. 29-38, ISSN: 0378-7796, DOI: https://doi.org/10.1016/j.epsr.2013.01.004
16. **Gavrilas, M**., Stahie, V., Cascade hydropower plants optimization with Honey Bee Mating Optimization algorithm**,** *International Review of Electrical Engineering, Vol.* 6, No. 5, 2011, pp. 2456-2466
17. **Gavrilaş M.,** Rusu I., Gavrilaş G., Ivanov O., Synchronized Phasor Measurements for State Estimation, Revue Roumaine des Sciences Techniques-Serie Electrotechnique et Energetique, Oct – Dec. 2009, Vol.54, No.4, pp. 335-344, ISSN: 0035-4066

18. **Gavrilas M.**, Ivanov O., Load profiling by self organization with affinity control strategy; Revue Roumaine des Sciences Techniques-Serie Electrotechnique et Energetique, Oct – Dec. 2008, Vol.53, No.4, pp. 413-421, ISSN: 0035-4066
19. **Gavrilas M.**, Gavrilas G., Improving energy efficiency in water distribution systems based on water consumption profiling; Environmental Engineering and Management Journal, May/June 2008, Vol.7, No.3, pp. 321-327, ISSN: 1582-9596, DOI: 10.30638/eemj.2008.035
20. **Gavrilas M.**, Gavrilas G., Ivanov O., Electricity load prediction for water supply systems; Environmental Engineering and Management Journal, July/August 2008, Vol.7, No.4, pp. 453-458, ISSN: 1582-9596, DOI: 10.30638/eemj.2008.067
21. Kriukov A., **Gavrilaș M.,** Smart Charging of Multiple EVs in Smart Grid Radial Low Voltage Distribution Networks. Bulletin of the Polytechnic Institute of Iași. Electrical Engineering, Power Engineering, Electronics Section, 2021. 67 (3), pp. 9-20, (**Index Copernicus, getCITED, Ulrich's, cod CNCSIS: 87**)
22. Neagu, B.C., **Gavrilas, M.,** Tirsu, M., Covalenco, N. and Negura, I., 2021. Environmental Performance Evaluation for a Small Scale Trigeneration System. *Bulletin of the Polytechnic Institute of Iași. Electrical Engineering, Power Engineering, Electronics Section*, *67*(4), pp.73-85 (**Index Copernicus, getCITED, Ulrich's, cod CNCSIS: 87**)
23. Neagu B.C., Ivanov O., Grigoraș G., **Gavrilaș M.,** Short-term Load Forecast Approach Based on Artificial Neural Networks, Buletinul Institutului Politehnic din Iasi, Secţia: Electrotehnică, Energetică, Electronică, Volumul 65 (69), Fasc. 2, pp. 9-22, 2019, ISSN 1223-8139 (**Index Copernicus, getCITED, Ulrich's, cod CNCSIS: 87**)

G. Lucrări ştiinţifice publicate în reviste din străinătate.

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

1. **Gavrilaș M.,** Grigoraș Gh., Cazacu M., Carp C.O., Andrei I., Reducing Active Energy Losses in Low Voltage Distribution Grids, Journal of Sustainable Energy, Vol. 8, No. 3, pp. 113 – 120, ISSN: 2067-5534, 2017 (**cod CNCSIS 817**)
2. Grigoras Gh., **Gavrilaș M.**, Scarlatache Fl., Cazacu M., Cosarca G., Assessing Energy Losses in Unbalanced Low Voltage Electric Distribution Networks, Energetica, Vol. 64, Nr. 2, pp. 53 – 59, ISSN: 1453-2360, 2016 (**cod CNCSIS 512**)
3. Kriukov Al., **Gavrilas M.,** Managing a multi-purpose parking lot for electric vehicles, Buletinul AGIR, nr. 3, 2013, ISSN 1224-7928 si ISSN online 2247-3548, pp. 307-312 (**cod CNCSIS 415**)
4. Stativa A., **Gavrilas M.,** Small signal stability enhancement using supplementary signals from PMU, Buletinul AGIR, nr. 3, 2013, ISSN 1224-7928 si ISSN online 2247-3548, pp. 261-267 (**cod CNCSIS 415**)
5. Stativa A., **Gavrilas M.,** Using DIGSILENT in small signal stability studies, Buletinul AGIR, nr. 3, 2013, ISSN 1224-7928 si ISSN online 2247-3548, pp. 269-274 (**cod CNCSIS 415**)
6. Vicol B., **Gavrilas M**., Ivanov O., Modern technologies for power systems monitoring, Buletinul AGIR, nr. 3, 2013, ISSN 1224-7928 si ISSN online 2247-3548, pp. 299-305 (**cod CNCSIS 415**)
7. Coroama I., **Gavrilas M.,** Chicco G., Multiobjective Optimization for Smart Grids, Revista Energetica, Vol. 61, Nr. 5, pag. 178-183, 2013, ISSN 1453-2360 (**cod CNCSIS 512**)
8. Coroama I., **Gavrilas M**., Chicco G., Multiobjective Optimization for Smart Grids, Revista Energetica, Vol. 61, Nr. 5, pag. 178-183, 2013, ISSN 1453-2360 (**cod CNCSIS 512**)
9. Ivanov O., **Gavrilas M**., Static Power Systems State Estimation. A Neural Network Software Approach, Revista Energetica, Vol. 61, Nr. 5, pag. 184-188, 2013, ISSN 1453-2360 (**cod CNCSIS 512**)
10. Vicol B., **Gavrilas M.,** Ivanov O., Estimation f Electrical Overhead Lines Parameters using Synchro-Phasor Measurements, Revista Energetica, Vol. 61, Nr. 5, pag. 194-198, 2013, ISSN 1453-2360 (**cod CNCSIS 512**)

11. **Gavrilas M.,** Cazacu M., Cosarca G., Postolache D., Assessement of Technical Energy Losses for Low Voltage Distribution Networks with Uncertain Load Characteristics, Revista Energetica, Vol. 61, Nr. 6, pag. 221-227, 2013, ISSN 1453-2360 (**cod CNCSIS 512**)
12. Ivanov O., **Gavrilaş M.,** Vicol B., New models for power systems state estimation, UPB Scientific Bulletin, Series C: Electrical Engineering, Volume 74, Issue 1, 2012, Pages 181-188, ISSN: 2286-3540 (**Scopus**)
13. Coroamă I.**, Gavrilaş M.**, Ivanov O.**,** Multi-objective Pareto Network Optimization Problem for Technical, Economical and Environmental Objectives, Buletinul AGIR nr. 3/2012, iunie-august, ISSN 1224-7928 si ISSN online 2247-3548, pag 587-594, iunie 2012 (**cod CNCSIS 415**)
14. Stativă A., **Gavrilaş M.**, A metaheuristic approach for power system stability enhancement, Buletinul AGIR nr. 3/2012, iunie-august, ISSN 1224-7928 si ISSN online 2247-3548, pag 483-488, iunie 2012 (**cod CNCSIS 415**)
15. Kriukov Al., Vicol B., **Gavrilaş M.**, Ivanov O., A stochastic method for calculating energy losses in low voltage distribution networks using genetic algorithms, Buletinul AGIR nr. 3/2012, iunie-august, ISSN 1224-7928 si ISSN online 2247-3548, pag 595-602, iunie 2012 (**cod CNCSIS 415**)
16. Ivanov O., **Gavrilas M.,** Enhanced REI Equivalents with Phasor Measurements, Buletinul Institutului Politehnic Iasi, Tom LVII (LXI), Fasc. 1, 2011, Electrotehnica, Energetica, Electronica, pp.129-136,2007,ISSN 1223-8139 (**cod CNCSIS 87**)
17. **Gavrilas M**., Ivanov O., Gavrilas G., *REI equivalent design for electric power systems with genetic algorithms*, WSEAS Transactions on Circuits and Systems, v 7, n 10, 2008, p 911921, ISSN: 1109-2734 (**Compendex, Scopus)**
18. Dragoi C., Csulak F., Anisie D., **Gavrilas M.**, Ivanov O., Analiza CPT in reteaua de 110 kV a E.ON Moldova distributie in conditiile realizarii insulei Stanca-Costesti, Revisa Energetica, nr. 3, pp. 96-103, 2008, ISSN 1453-2360 (**cod CNCSIS 512**)
19. **Gavrilas M**., Rusu I., Ivanov O., Estimarea stării sistemelor electroenergetice folosind măsurări fazoriale, Revisa Energetica, nr. 8, pp. 334-340, 2008, ISSN 1453-2360 (**cod CNCSIS 512**)
20. Ivanov O., **Gavrilas M.**, Istrate M., A Radial Basis Function Neural Network with Pruning Strategy for Distance Relaying Systems, Analele Universităţii din Craiova, Seria Inginerie electrica, Transportul şi distribuţia energieie electrice, pp. 345-348, 2007, ISSN 1842-4805 (**cod CNCSIS 174)**
21. Gavrilas G., **Gavrilas M.**, Chirila C., Energetic efficiency in the environmental politics, element of sustainable development, Revista de cadastru, RevCAD – Journal of Geodesy and Cadastre, No. 7, pp. 193-196, 2007, ISSN 1583-2279 (**cod CNCSIS 634**)
22. **Gavrilas M.**, Ivanov O., Sfintes C.V. – Electricity Costs Optimization by Customer Activity Scheduling; Buletinul Institutului Politehnic Iasi, Tom LIII (LVII), Fasc. 3-4, 2007, Electrotehnica, Energetica, Electronica, pp.129-136,2007,ISSN 1223-8139 (**cod CNCSIS 87**)
23. **Gavrilas M**., Ivanov O. – *Medium Term Load Forecasting in Distribution Systems Using Load Profiling*; Buletinul Institutului Politehnic Iasi, Tom LIII (LVII), Fasc. 3-4, 2007, Electrotehnica, Energetica, Electronica, pp. 137-143., 2007, ISSN 1223-8139 (**cod CNCSIS 87**)
24. **Gavrilas M.**, Sfintes C.V., Ivanov O., Demand Response Modeling Under Electricity Market Conditions Using an Object-Oriented Approach, Analele Universităţii din Craiova, Seria Inginerie electrica, Transportul şi distribuţia energieie electrice, pp. 339-344, 2007, ISSN 1842-4805 (**cod CNCSIS 174**)
25. **Gavrilas M**., Cartina Gh., Grigoras Gh., Ivanov O., *Integrated Model for Electric Load Profiling*; Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Electronica, Tom LII (LVI), Fasc. 5, pp. 1187-1192, 2006, ISSN 1223-8139, (**cod CNCSIS 87**)
26. **Gavrilas M.**, Ivanov O., G. Ivaniciuc, O. Braisteanu, 2006, *Load Profiling by SelfOrganization*; Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Electronica, Tom LII (LVI), Fasc. 5, pp. 1193-1198, 2006, ISSN 1223-8139, (**cod CNCSIS 87**)
27. **Gavrilas M.**, Sfintes C.V., *Fuzzy Self-Organizing Approach to Electric Load Profiling*; Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Electronica, Tom LII (LVI), Fasc. 5, pp. 1181-1186, 2006, ISSN 1223-8139, (**cod CNCSIS 87**)

28. **Gavrilas M.**, Ivanov O., Distribution systems optimization with computational intelligence algorithms; The Annals of „Dunarea de Jos" University of Galati, Fascicle III, Electrotechnics, Electronics, Automatic control, Informatics, pp. 49-55, 2006, ISSN 1221-454X (**cod CNCSIS 482**)
29. Ivanov O., **Gavrilas M.**, *Finding the optimal path of electrical distribution networks using cooperating agents*, Proceedings EPE 2004, Iasi, Romania, Tom L (LIV), Fasc. 5A, Electrotehnica-Energetica-Electronica, pag. 163-168, 2004, ISSN 1223-8139, (**cod CNCSIS 87**)
30. **Gavrilas M.**, Raileanu C., *Model hibrid statistic neuronal pentru prognoza pe termen mediu a consumului de energie electrica*; Revista Energetica, Nr.6, pag. 214-219, 2003, ISSN 14532360 (**cod CNCSIS 512**)
31. **Gavrilas M.**, Hongu D., *Profilarea sarcinii, o componenta majora a politicilor de marketing ale furnizorilor de energie electrica – aplicatii ale inteligentei artificiale*; Revista Energetica, Nr. 7, pp. 298-303, 2002, ISSN 1453-2360 (**cod CNCSIS 512**)
32. **Gavrilas M.**, Filimon M.N., Sfintes C.V., *Prognoza pe termen mediu, instrument pentru fundamentarea contractelor cadru de portofoliu intre producatori si furnizori*; Revista Energetica, Nr. 12, pp. 532-537, 2001, ISSN 1453-2360 (**cod CNCSIS 512**)
33. **Gavrilas M.**, Coca D., Stefanovici C., *Prognoza pe termen scurt a consumului de energie electrica la S.D. Suceava cu un model bazat pe inteligenta artificiala*, Revista Energetica, nr. 8-9, pag. 407-415, 2000, ISSN 1453-2360 (**cod CNCSIS 512**)
34. **Gavrilas M.**, *Medium-term load forecasting using a mixed fuzzy-neural networks approach,* Buletinul Institutului Politehnic Iasi, Tom XLVI (L), Fasc. 1-2, pag. 407-415, 2000, ISSN 1223-8139, (**Inspec**)
35. Georgescu Gh. , Radasanu D., **Gavrilas M.**, *A technical-economical approach for optimal capacitor placement using simulating methods and genetic algorithms*, Buletinul Institutului Politehnic Iasi, Tom XLV (XLIX), Fasc. 1-2, pag. 120-124, 1999, ISSN 1223-8139, (**Inspec**)
36. **Gavrilas M.**, Georgescu Gh., Radasanu D., *Load profile identification using the adaptive resonance theory*, Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Tomul XLV (XLIX), Fasc. 1-2, pag. 231-236, 1999, ISSN 1223-8139, (**Inspec**)
37. **Gavrilas M.**, Georgescu Gh., *Multiobjective optimization in power distribution networks using an evolutionary computation approach,* Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Electronica, Tomul XLV (IL), Fasc. 3-4, pag. 183-188, 1999, ISSN 1223-8139, (**Inspec**)
38. Georgescu Gh., **Gavrilas M.**, Radasanu D., *Previziunea pe termen scurt si mediu a puterii folosind retele neuronale artificiale*, Revista Energetica, Nr. 8-9, pag. 351-356, 1999, ISSN 1453-2360 (**cod CNCSIS 512**)
39. **Gavrilas M.**, Georgescu Gh., Radasanu D., *Optimal selection of capacitors for reactive power compensation in distribution systems using genetic algorithms*, Buluetinul Institutului Politehnic Iasi, Fasc. 1-2, Sectia III, Electrotehnica, Energetica, Tomul XLIV (XLVIII), Fasc. 1-2, pag. 139-146, 1998, ISSN 1223-8139, (**cod CNCSIS 87**)
40. Radasanu D., Georgescu Gh., **Gavrilas M**., Poeata T., *Tehnici noi de estimare a pierderilor de putere in retelele electrice folosind inteligenta artificiala*; Revista Energetica, Nr. 10, pag. 490-496, 1998, ISSN 1453-2360 (**cod CNCSIS 512**)
41. Georgescu Gh., **Gavrilas M.**, Radasanu D., *An artificial neural network approach for medium and short-term forecasting of electric load*, Buluetinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Tomul XLIV (XLVIII), Fasc. 3-4, pag. 115-120, 1998, ISSN 1223-8139, (**cod CNCSIS 87**)
42. Radasanu D., **Gavrilas M.**, Georgescu Gh., *An artificial neural network approach for the evaluation of active losses in power transmission systems*, Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Tomul XLIII (XLVII), Fasc. 3-4, pag. 115-120, 1997, ISSN 1223-8139, (**cod CNCSIS 87**)
43. **Gavrilas M.**, Georgescu Gh., *Real-time control of switching operations in electric substations using a connectionist approach*, Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Tomul XLI I (XLVI), Fasc. 3-4, pag. 139-144, 1996, ISSN 12238139, (**Inspec**)

44. Georgescu Gh., **Gavrilas M.**, *Optimal design of the rural electric distribution networks*, Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Tomul XLII (XLVI), Fasc. 1-2, pag. 151-153, 1996, ISSN 1223-8139, (**cod CNCSIS 87**)
45. **Gavrilas M.**, Georgescu Gh., *Utilizarea algoritmilor genetici pentru determinarea schemei optime de functionare a retelelor de distributie urbana*, Revista Energetica, Nr. 6, pag. 249256, 1996, ISSN 1453-2360 (**cod CNCSIS 512**)
46. Georgescu Gh., **Gavrilas M.**, Cartina Gh., Luchian I., Tibuleac St., *Aspects concerning the computation of energy losses in distribution networks*, Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Tomul XLI (XLV), Fasc. 5, pag. 487-492, 1995, ISSN 1223-8139, (**cod CNCSIS 87**)
47. Cartina Gh., **Gavrilas M.**, Georgescu Gh., Vasiliu Z.H., Federenciuc D., *L'utilisation des reseaux neuronaux artificiels a la planification et a la conduite previsionnelle des systemes energetiques*, Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Tomul XLI (XLV), Fasc. 5, pag. 557-562, 1995, ISSN 1223-8139, (**cod CNCSIS 87**)
48. Georgescu Gh., Poeata Al., **Gavrilas M.**, *Calculul pierderilor de energie in retelele de distributie folosind descompunerea graficelor de sarcina in serii Fourier*, Revista Energetica, Nr.5, pag. 223-226, 1995, ISSN 1453-2360 (**cod CNCSIS 512**)
49. Georgescu Gh., **Gavrilas M.**, Cartina Gh., Alexandrescu V., *The optimal planning of medium voltage power distribution networks*, Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Tomul XLI (XLV), Fasc. 1-2, pag. 117-123, 1995, ISSN 12238139, (**cod CNCSIS 87**)
50. **Gavrilas M.**, Georgescu Gh., *Consumer category identification in distribution networks using Hopfield nets*, Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Tomul XLI (XLV), Fasc. 3-4, pag. 161-166, 1995, ISSN 1223-8139, (**cod CNCSIS 87**)
51. **Gavrilas M.**, Georgescu Gh., Cartina Gh., Bruma N., Popa C., *A connectionist approach to real-time control of power system substations*, Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Tomul XLI (XLV), Fasc. 5, pag. 551-556, 1995, ISSN 12238139, (**cod CNCSIS 87)**
52. Georgescu Gh., **Gavrilas M.**, *Some aspects about the spectral analysis of load curves of electric distribution networks*, Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Electronica, Tomul XL (XLIV), Fasc. 1-4, pag. 115-121, 1994, ISSN 1223-8139, (**cod CNCSIS 87**)
53. **Gavrilas M.**, Georgescu Gh., *Consumer category identification of the loads from electric distribution systems using artificial neural networks*, Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Electronica, Tomul XL (XLIV), Fasc. 1-4, pag. 127133, 1994, ISSN 1223-8139, (**cod CNCSIS 87**)
54. **Gavrilas M.**, *Remarks about the study of self-compensated overhead lines with bundled conductors*, Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Electronica, Tom XXXIX (XLIII), Fasc. 1-4, pag. 121-127, 1993, ISSN 1223-8139, (**cod CNCSIS 87**)
55. Georgescu Gh., **Gavrilas M.**, *Optimizarea dezvoltarii si exploatarii instalatiilor energetic*, Raport sectiunea I, Revista Energetica, Seria B, nr. 1, pag. 42-44, 1992, ISSN 1453-2360 (**cod CNCSIS 512)**
56. Poeata Al., **Gavrilas M.**, *Remarks about the study of compact overhead electric power transmission lines*, Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Electronica, Tom XXXVIII (XLII), Fasc. 1-4, pag. 85-89, 1992, ISSN 1223-8139, (**cod CNCSIS 87**)

I. Lucrări științifice publicate în volumele conferințelor.

1. B. -C. Neagu, M. -A. Luca, **M. Gavrilas**, G. Grigoras, O. Ivanov and F. Scarlatache, "Leveraging Energy Storage Systems and Virtual Power Lines to Minimize Curtailment in Future Distribution Grids," *2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi)*, Iasi, Romania, 2024, pp. 495-500, doi: 10.1109/EPEi63510.2024.10758096 (**IEEE Proceedings**).
2. M. Nastase and **M. Gavrilaș**, "Load Shifting as a Demand Side Management Technique," *2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi)*, Iasi, Romania, 2024, pp. 585-590, doi: 10.1109/EPEi63510.2024.10758065 (**IEEE Proceedings**).

3. M. -A. Luca, **M. Gavrilaş**, O. Ivanov and B. -C. Neagu, "Efficient Operation Approach of Microgrids Enriched with Prosumers and Storage Systems," *2023 10th International Conference on Modern Power Systems (MPS)*, Cluj-Napoca, Romania, 2023, pp. 1-5, doi: 10.1109/MPS58874.2023.10187493 (**IEEE Proceedings**).
4. A. -I. Pricop, **M. Gavrilaş**, A. SĂlceanu and B. -C. Neagu, "Power systems resilience against cyber-attacks. A systematic analysis," *2023 10th International Conference on Modern Power Systems (MPS)*, Cluj-Napoca, Romania, 2023, pp. 1-7, doi: 10.1109/MPS58874.2023.10187420 (**IEEE Proceedings**).
5. M. Nastase and M. Gavrilaş, "Prosumer Concept Considering the Building Energy Efficiency Situation," *2022 International Conference and Exposition on Electrical And Power Engineering (EPE)*, Iasi, Romania, 2022, pp. 583-588, doi: 10.1109/EPE56121.2022.9959820 (**IEEE Proceedings**).
6. O. Ivanov, B. -C. Neagu, N. -C. Toma, G. Grigoras, P. -D. Ghilan and **M. Gavrilas**, "Metaheuristic Approaches for Distributed Generation Placement Optimization in Electrical Grids : A comparison between PSO, Tiki-Taka and Archimedes Optimzation Algorithms," *2022 International Conference and Exposition on Electrical And Power Engineering (EPE)*, Iasi, Romania, 2022, pp. 208-212, doi: 10.1109/EPE56121.2022.9959077 (**IEEE Proceedings**).
7. B. Livadariu, G. Grigoraş, B. -C. Neagu, O. Ivanov, F. Scarlatache and **M. Gavrilas**, "Optimal Power Flow with the Clustering-Improved Fuzzy Models for Uncertainty Sources of Wind Power and Nodal Loads," *2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi)*, Iasi, Romania, 2024, pp. 484-489, doi: 10.1109/EPEi63510.2024.10758170 (**IEEE Proceedings**).
8. Ivanov O., Neagu B.C., Grigoras G., **Gavrilaș M.,** Capacitor Banks Placement Optimization Improvement Using the Sperm Whale Algorithm, 2019 11th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Pitești, Arges, Romania, June 27– June 29, 2019, pp. 1-6. (**WoS Proceedings**)
9. Neagu B. C., **Gavrilaș M**., Pentiuc R.D., Hopulele E., Optimal Placement of Energy Storage Systems in Microgrids Using a PSO Based Approach, IEEE PES Innovative Smart Grid Technologies Europe (ISGT-Europe), September 29 to October 2, 2019, București, Romania, pp. 1-6. (**WoS Proceedings**)
10. Hopulele E., Pentiuc R.D., Neagu B. C., **Gavrilaș M**., Optimizing the Operation of a Trigeneration System Designed to Meet Energy Requirements for a Consumer, IEEE PES Innovative Smart Grid Technologies Europe (ISGT-Europe), September 29 to October 2, 2019, București, Romania, pp. 1-6 (**WoS Proceedings**)
11. **Gavrilaș M.,** Neagu B.C., Pentiuc R., Hopulele E., Overview on Distributed Generation Integration in Distribution Systems, Proceedings of 2018 International Conference and Exposition on Electrical and Power Engineering (EPE 2018), Iasi, Romania, 18-19 Oct. 2018, pp. 1063-1069, WOS:000458752200208 (**WoS Proceedings**)
12. Matei Gh., Neagu B.C., **Gavrilaș M.,** Optimal Voltage Control Based on a Modified Line Drop Compensation Method in Distribution Systems, Proc. 2018 IEEE International Conference on Environment and Electrical Engineering and 2018 IEEE Industrial and Commercial Power Systems Europe (EEEIC/I&CPS Europe, Palermo, Italy, 12-15 June 2018, WOS:000450163702009 (**WoS Proceedings**)
13. Neagu B.C., **Gavrilaș M.,** Matei Gh., Voltage/VAR Control with Reactive Power Injection in Distribution Networks using a Proper Metaheuristic Approach, Proc. 2018 IEEE International Conference on Environment and Electrical Engineering and 2018 IEEE Industrial and Commercial Power Systems Europe (EEEIC/I&CPS Europe, Palermo, Italy, 12-15 June 2018, WOS:000450163701095 (**WoS Proceedings**)
14. Toma N., Ivanov O., Neagu B.C., **Gavrilaș M.,** A PSO Algorithm for Phase Load Balancing in Low Voltage Distribution Networks, Proceedings of 2018 International Conference and Exposition on Electrical and Power Engineering (EPE 2018), Iasi, Romania, 18-19 Oct. 2018, pp. 857-862, WOS:000458752200167 (**WoS Proceedings**)
15. Toma R., **Gavrilaș M.,** Voltage Stability Assessment based on a Load Flow Sensitivity Method, Proceedings of 2018 International Conference and Exposition on Electrical and Power Engineering

(EPE 2018), Iasi, Romania, 18-19 Oct. 2018, pp. 712-717, WOS:000458752200140 (**WoS Proceedings**)

16. P. Kar, Chattopadhyay S., Ivanov O., **Gavrilaș M.,** Optimal Demand Response Allocation in LV Distribution Networks Using the PSO Algorithm, Proceedings of 2018 International Conference and Exposition on Electrical and Power Engineering (EPE 2018), Iasi, Romania, 18-19 Oct. 2018, pp. 697-702, WOS:000458752200137 (**WoS Proceedings**)
17. Grigoraș Gh., **Gavrilaș M.,** An Improved Approach for Energy Losses Calculation in Low Voltage Distribution Networks based on the Smart Meter Data, Proceedings of 2018 International Conference and Exposition on Electrical and Power Engineering (EPE 2018), Iasi, Romania, 18-19 Oct. 2018, pp. 749-754, WOS:000458752200146 (**WoS Proceedings**)
18. Ivanov O., Neagu B.C., **Gavrilaș M.**, A Parallel PSO Approach for Optimal Capacitor Placement in Electricity Distribution Networks, Proc. 7th International Conference on Modern Power Systems (MPS), Cluj Napoca, Romania, June 06-09, 2017, pp.1-5, ISBN:978-1-5090-6565-3, Accession Number: WOS:000428462600018 (Clarivate/ISI) (**WoS Proceedings**)
19. Neagu B. C., Ivanov O., **Gavrilaș M.**, Voltage profile improvement in distribution networks using the whale optimization algorithm, Proc. 9th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Targoviste, Romania, 29 June-1 July 2017, ISBN:978-1-5090-6458-8, ISSN: 2378-7147, Accession Number: WOS:000425865900081 (ISI/Clarivate) (**WoS Proceedings**)
20. Ivanov O., Neagu B.C., **Gavrilaș M.**, Voltage Profile Improvement in Electricity Distribution Networks - A Genetic Algorithm Benchmark Study, Proc. International Conference on Electromechanical and Power Systems (SIELMEN), Iasi, ROMANIA, October 11-13, 2017, pp.560-564, ISBN:978-1-5386-1846-2, Accession Number: WOS:000426906000107 (ISI/Clarivate) (**WoS Proceedings**)
21. Neagu B.C., Ivanov O., **Gavrilaș M.,** A Comprehensive Solution for Optimal Capacitor Allocation Problem in Real Distribution Networks, Proc. International Conference on Electromechanical and Power Systems (SIELMEN), Iasi, ROMANIA, October 11-13, 2017, pp.565-570, ISBN:978-1-5386-1846-2, Accession Number: WOS:000426906000107 (ISI/Clarivate) (**WoS Proceedings**)
22. Banerjee A., **Gavrilas M.**, Grigoras Gh., Chattopadhyay S., A fuzzy hybrid approach for reliability optimization problem in power distribution systems, Proc. 2016 International Conference and Exposition on Electrical and Power Engineering (EPE 2016), Iasi, Romania, 20-22 Oct. 2016, pp. 809-814, DOI: 10.1109/ICEPE.2016.7781449 (**WoS Proceedings**)
23. Hopulele E., Atanasoae P., **Gavrilas M.**, The influence of the tariff charged by electricity suppliers on the optimal running of a trigeneration plant, Proc. 2016 International Conference and Exposition on Electrical and Power Engineering (EPE 2016), Iasi, Romania, 20-22 Oct. 2016, pp. 792 – 797, DOI: 10.1109/ICEPE.2016.7781446 (**WoS Proceedings**)
24. Matei G., **Gavrilas M.**, Voltage regulation in distribution networks with distributed generation — A review, Proc. 2016 International Conference and Exposition on Electrical and Power Engineering (EPE 2016), Iasi, Romania, 20-22 Oct. 2016, pp. 728 – 732, DOI: 10.1109/ICEPE.2016.7781435 (**WoS Proceedings**)
25. Banerjee A., **Gavrilas M.**, Grigoras Gh., Chattopadhyay S., Decision making in assessment of RRAP of WSN using fuzzy-hybrid approach, Trans. 2015 IEEE International Conference on Advanced Networks and Telecommuncations Systems (ANTS), Kolkata, India, 15-18 Dec. 2015 , pp. 1-6, DOI: 10.1109/ANTS.2015.7413655 (**WoS Proceedings**)
26. Banerjee A., **Gavrilas M.**, Ivanov O., Chattopadhyay S., Reliability improvement and the importance of power consumption optimization in wireless sensor networks, Proc. 9th International Symposium on Advanced Topics in Electrical Engineering (ATEE), Bucharest, Romania, 7-9 May 2015, pp. 735-740, DOI: 10.1109/ATEE.2015.7133902 (**WoS Proceedings**)
27. Hopulele E., **Gavrilas M.**, Atanasoae P., Optimal design of a hybrid distributed generation system, Proc. 49th International Universities Power Engineering Conference (UPEC 2014), Cluj-Napoca, Romania, 2-5 Sept. 2014, pp. 1-6, ISBN 978-1-4799-6556-4 (**WoS Proceedings**)
28. Kriukov Al., Vicol B., **Gavrilas M.**, Applying a micro-market inside an electric vehicles parking facility, Proc. 49th International Universities Power Engineering Conference (UPEC 2014), Cluj-Napoca, Romania, 2-5 Sept. 2014, pp. 1-6, ISBN 978-1-4799-6556-4 (**WoS Proceedings**)

29. Toma R., **Gavrilas M.**, The impact on voltage stability of the integration of renewable energy sources into the electricity grids, Proc. 2014 International Conference and Exposition on Electrical and Power Engineering (EPE 2014), Iasi, Romania, 16-18 Oct. 2014, pp. 1051-1054, ISBN 10.1109/ICEPE.2014.6970069 (**WoS Proceedings**)
30. Ivanov O., **Gavrilas M.**, State estimation with Neural Networks and PMU voltage measurements, Proc. 2014 International Conference and Exposition on Electrical and Power Engineering (EPE 2014), Iasi, Romania, 16-18 Oct. 2014, pp. 983-988, ISBN 10.1109/ICEPE.2014.6970056 (**WoS Proceedings**)
31. Ivanov O., **Gavrilas M.**, Neagu B., Intelligent monitoring and control in transmission and distribution networks, Proc. Conference on Optimization of Electrical and Electronic Equipment OPTIM 2014, Bran, Romania, 22-24 May, 2014, pp. 185-191, ISBN 978-1-4799-5183-3 (**WoS Proceedings**)
32. Stativa A., **Gavrilas M.**, Ivanov O., Optimal Power System Stabilizer design using multiple wide-area input signals, Proc. 14th International Conference on Environment and Electrical Engineering (EEEIC 2014), Krakow, Poland , 10-12 May 2014, pp. 34-39, ISBN 978-1-4799-4660-0 (**WoS Proceedings**)
33. Kriukov Al., Grigoras Gh., **Gavrilas M.**, Scarlatache F., An analyze of slow voltage variations from the electric distribution systems with a clustering based approach, Proc. 16th International Conference on Harmonics and Quality of Power (ICHQP), Bucharest, Romania , 25-28 May 2014, pp. 689-693, ISBN 978-1-4673-6487-4 (**WoS Proceedings**)
34. Vicol B., **Gavrilas M.**, Ivanov O., Neagu B., Grigoras Gh., Synchrophasor measurement method for overhead line parameters estimation in MV distribution networks, Proc. 16th International Conference on Harmonics and Quality of Power (ICHQP), Bucharest, Romania , 25-28 May 2014, pp. 862-865, ISBN 978-1-4673-6487-4 (**WoS Proceedings**)
35. **Gavrilas M.**, Ivanov O., Gavrilas G., Electricity load forecasting based on a mixed statistical-neural-computational intelligence approach, Proc. 12th Symposium on Neural Network Applications in Electrical Engineering (NEUREL 2014), Belgrade, Serbia, 25-27 Nov. 2014, pp. 61-66, ISBN 978-1-4799-5887-0 (**WoS Proceedings**)
36. Grigoras Gh., **Gavrilas M.**, Ivanov O., Customer classification and load profiling using data from Smart Meters, Proc. 12th Symposium on Neural Network Applications in Electrical Engineering (NEUREL 2014), Belgrade, Serbia, 25-27 Nov. 2014, pp. 73-78, ISBN 978-1-4799-5887-0 (**WoS Proceedings**)
37. Ivanov O., **Gavrilas M.**, State Estimation for Power Systems with Multilayer Perceptron Neural Networks, Proc. 11th Symposium on Neural Network Applications in Electrical Engineering (NEUREL 2012), Belgrade, SERBIA, 20-22 Sep., 2012, pp. 243-246, ISBN: 978-1-4673-1572-2 (**WoS Proceedings**)
38. **Gavrilas M.,** Gavrilas G., Needs of Higher Education for Future Power Engineers; Proceedings of 6th International Seminar on the Quality Management in Higher Education, JUL 08-09, 2010 Tulcea, ROMANIA, pp. 427-430, ISBN: 978-973-662-567-1 (**WoS Proceedings**)
39. Coroama I., **Gavrilas M.**, A study on wind energy generation forecasting using connectionist models, Poceedings of the 12-th International Conference on Optimization of Electrical and Electronic Equipment, OPTIM 2010, pp. 1257 – 1262, ISBN: 978-973-131-7018-1 **(WoS Proceedings)**
40. Ivanov O., **Gavrilas M.**, Intelligent distributed state estimation using REI system equivalents and phasor measurements, Poceedings of the 12-th International Conference on Optimization of Electrical and Electronic Equipment, OPTIM 2010, pp. 1263 – 1268, ISBN: 978-973-1317018-1 **(WoS Proceedings)**
41. Ivanov O., **Gavrilas M.,** Applying Genetic Algorithms to REI system equivalents, 2009 IEEE PowerTech Conference, Bucuresti, 28 Iunie-2 Iulie 2009, ISBN 978-1-4244-2235-7, Library of Congress 2008901840, IEEE Catalog Number: CFP09815-CDR, CD-ROM (**WoS Proceedings**)
42. **Gavrilas M.,** Gavrilas G., Impact of renewable energy sources over the existing electrical network, Proceedings of the 6-the International Conference on Management of Technological Changes, Alexandropoulis, Grecia, 2-5 Sept. 2009, ISBN: 978-960-89832-8-1, (**WoS Proceedings**)
43. **Gavrilas M.,** Recent Advances and Applications of Synchronized Phasor Measurements in Power Systems, Poceedings of the 9-th WSEAS/IASME International Conference on Electric Power Systems,

High Voltage, Electric Machines (POWER '09), Genova, Italy, Oct. 17-19, 2009, Book Series: Recent Advances in Electrical Engineering, pp. 82-91, ISBN:978-960474-130-4, ISSN: 1790-5117. (**WoS Proceedings**)

44. **Gavrilas M.,** Gavrilas G., Ivanov O., A Network Reduction Method with Synchronized Phasor Measurements, Poceedings of the 9-th WSEAS/IASME International Conference on Electric Power Systems, High Voltage, Electric Machines (POWER '09), Genova, Italy, Oct. 17-19, 2009, Book Series: Recent Advances in Electrical Engineering**,** pp. 92-97, ISBN:978960-474-130-4, ISSN: 1790-5117. (**WoS Proceedings**)
45. Ivanov O., **Gavrilas M.,** Improving WLS estimation results using PMU measurements, Poceedings of the 9-th WSEAS/IASME International Conference on Electric Power Systems, High Voltage, Electric Machines (POWER '09), Genova, Italy, Oct. 17-19, 2009, Book Series: Recent Advances in Electrical Engineering**,** pp. 98-103, ISBN:978-960-474-130-4, ISSN: 1790-5117. (**WoS Proceedings**)
46. Grigoras Gh., Cartina Gh., **Gavrilas M.,** Using of Clustering Techniques in Optimal Placement of Phasor Measurements Units, Poceedings of the 9-th WSEAS/IASME International Conference on Electric Power Systems, High Voltage, Electric Machines (POWER '09), Genova, Italy, Oct. 17-19, 2009, Book Series: Recent Advances in Electrical Engineering**,** CD-ROM, în curs de pp. 104-108, ISBN:978-960-474-130-4, ISSN: 17905117. (**WoS Proceedings**)
47. Istrate M., **Gavrilas M.,** Istrate C., Ursulean R., Assessment of Two Double-end Data Fault Location Algorithms in Transmission Grids using ATP simulations, Poceedings of the 9-th WSEAS/IASME International Conference on Electric Power Systems, High Voltage, Electric Machines (POWER '09), Genova, Italy, Oct. 17-19, 2009, Book Series: Recent Advances in Electrical Engineering**,** pp. 109-114, ISBN:978-960-474-130-4, ISSN: 1790-5117. (**WoS Proceedings**)
48. **Gavrilas M.**, Ivanov O., Gavrilas G., Load Profiling with Fuzzy Self-Organizing, 9th Symposium on Neural Network Applications in Electrical Engineering NEUREL 2008**,** Sept. 25–27, 2008, Belgrade, Serbia, CD-ROM, ISBN: 978-1-4244-2903-S (**WoS Proceedings**)
49. **Gavrilas M**., Ivanov O., Gavrilas G., A New Static Network Reduction Technique Based on REI Equivalents and Genetic Optimization, Poceedings of the 8th WSEAS International Conference on Power Systems and Power Technology (PS '08), Santander, Cantabria, Spain, Sept. 23-25, 2008, Book Series: Recent Advances in Electrical Engineering**,** pp. 106 – 111, ISBN 978-960-474-006-2 (**WoS Proceedings**)
50. **Gavrilas M.**, Sfintes C.V., Ivanov O., Comparison of Neural and Evolutionary Approaches to Peak Load Estimation in Distribution Systems; EUROCON 2005, Nov. 22-24, Belgrade, Serbia & Montenegro, 2005, CD-ROM, ISBN: 1-4244-0049-X (**WoS Proceedings**)
51. **Gavrilas M.**, Sfintes C.V., Filimon M.N., Identifying typical load profiles using neural-fuzzy models; Proceedings of the 2001 IEEE / PES Transmission and Distribution Conference, Oct. 28 – Nov. 2, Atlanta, Georgia, 2001, CD-ROM, ISBN 07803-7287-5/01 (**WoS Proceedings**)
52. **Gavrilas M.**, Georgescu Gh., Cartina Gh., A Connectionist Approach to Real-Time Control and Simulation of Switching Operations in Power Systems Substations; Proceedings of the 8th Mediterranean Electrotechnical Conference MELECON'96, Vol. III, May 13-16, 1996, Bari, Italy, pp. 1431-1434, 1996, (**WoS Proceedings**)
53. Zetu C., Neagu B.C., Grigoras G., Ivanov O., **Gavrilas M.** Overhead Transmission Lines Capacity Management Based on Different Weather Conditions. In The 16th International Conference Interdisciplinarity in Engineering: Inter-Eng 2022 Conference Proceedings 2022 Dec 16 (pp. 660-681). Cham: Springer International Publishing. DOI: 10.1007/978-3-031-22375-4_53.
54. Nastase M, **Gavrilaş M.** Prosumer Concept Considering the Building Energy Efficiency Situation. In2022 International Conference and Exposition on Electrical and Power Engineering (EPE) 2022 Oct 20 (pp. 583-588). IEEE. DOI: 10.1109/EPE56121.2022.9959820.
55. Ivanov O, Neagu BC, Toma NC, Grigoras G, Ghilan PD, **Gavrilas M.** Metaheuristic Approaches for Distributed Generation Placement Optimization in Electrical Grids: A comparison between PSO, Tiki-Taka and Archimedes Optimzation Algorithms. In2022 International Conference and Exposition on Electrical And Power Engineering (EPE) 2022 Oct 20 (pp. 208-212). IEEE. DOI: 10.1109/EPE56121.2022.9959077.

56. Ivanov O., Neagu B.C., Cibotărică A., **Gavrilaş M.** Multiobjective Prosumer Surplus Management for Optimal Microgrid Operation. In2021 10th International Conference on ENERGY and ENVIRONMENT (CIEM) 2021 Oct 14 (pp. 1-5). IEEE. DOI: 10.1109/CIEM52821. 2021.9614729.
57. Kriukov A., **Gavrilas M.** EV Charging Control Using DSRC System in LVDN with DG Penetration. In2021 10th International Conference on ENERGY and ENVIRONMENT (CIEM) 2021 Oct 14 (pp. 1-5). IEEE. DOI: 10.1109/CIEM52821.2021.9614837.
58. Sanduleac M., Eremia M., Toma L., Damian C., **Gavrilas M.**, Grigoras G., Stratan I., Gropa V. Islanded Microgrids control by using Grid Former and Synthetic Slack Bus concept-A preliminary analysis. In2021 International Conference on Electromechanical and Energy Systems (SIELMEN) 2021 Oct 6 (pp. 231-236). IEEE. DOI: 10.1109/SIELMEN53755.2021.9600347.
59. Luca, M.A., Neagu, B.C., Ivanov, O., **Gavrilas, M.** and Grigoras, G., 2021, October. A Deeper Analysis about the Impact of Prosumers on Power Losses in Low Voltage Microgrids. In *2021 International Conference on Electromechanical and Energy Systems (SIELMEN)* (pp. 155-158). IEEE DOI: 10.1109/SIELMEN53755.2021.9600366.
60. Tirsu M., Covalenco N., Zaitsev D., Negura I., **Gavrilas M.**, Neagu B.C. Photovoltaic-Thermal System for Trigenerating Electricity, Hot Water and Cold. In2021 International Conference on Electromechanical and Energy Systems (SIELMEN) 2021 Oct 6 (pp. 092-096). IEEE DOI: 10.1109/SIELMEN53755.2021.9600378.
61. Ivanov, O., Neagu, B.C., Nițu, A.I. and **Gavrilaş, M.**, 2021, June. An Improved Metaheuristic Algorithm for Load Balancing in LV Distribution Networks. In 2021 9th International Conference on Modern Power Systems (MPS), pp. 1-5, IEEE, DOI: 10.1109/MPS52805.2021.9492680
62. Ivanov O., Neagu B.C., **Gavrilaş M.,** Grigoras G., Sfintes C., Phase Load Balancing in Low Voltage Distribution Networks Using Metaheuristic Algorithms, 12th International Conference on Electromechanical and Energy Systems – SIELMEN2019, Chișinău, Republica Moldova, 10 – 11 octombrie, 2019, (**IEEE Xplore**)
63. Neagu B.C., **Gavrilaş M.,** Grigoras G., Ivanov O., Voltage Control in Microgrids in the Presence of Small-Scale Renewable Energy Source, 12th International Conference on Electromechanical and Energy Systems – SIELMEN2019, Chișinău, Republica Moldova, 10 – 11 octombrie, 2019, pp. 1-6. (**IEEE Xplore**)
64. Grigoras G., **Gavrilaş M.,** Neagu B.C., Ivanov O., Triștiu I., Bulac C., An Efficient Method to Optimal Phase Load Balancing in Low Voltage Distribution Network, 9th International Conference on Energy and Environment – CIEM2019, Timisoara, Romania, 17 – 18 octombrie, 2019, pp. 1-6. (**IEEE Xplore**)
65. Ivanov O., **Gavrilas M.**, A hybrid GA-PSO algorithm for static VAR compensation, Proc. 2016 International Conference and Exposition on Electrical and Power Engineering (EPE 2016), Iasi, Romania, 20-22 Oct. 2016, pp. 681-686, DOI: 10.1109/ICEPE.2016.7781425 (**IEEE Xplore**)
66. Toma R., **Gavrilas M.**, Voltage stability assessment for wind farms integration in electricity grids with and without consideration of voltage dependent loads, Proc. 2016 International Conference and Exposition on Electrical and Power Engineering (EPE 2016), Iasi, Romania, 20-22 Oct. 2016, pp. 754-759, DOI: 10.1109/ICEPE.2016.7781440 (**IEEE Xplore**)
67. Grigoras Gh., **Gavrilas M.**, Phase swapping of lateral branches from low-voltage distribution networks for load balancing, Proc. 2016 International Conference and Exposition on Electrical and Power Engineering (EPE 2016), Iasi, Romania, 20-22 Oct. 2016, pp. 715 – 718, DOI: 10.1109/ICEPE.2016.7781432 (**IEEE Xplore**)
68. Toma R., **Gavrilas M.**, Study on voltage dynamics in power grids with renewable energy sources integration, Proc. 2016 International Conference and Exposition on Electrical and Power Engineering (EPE 2016), Iasi, Romania, 20-22 Oct. 2016, pp. 760 – 765, DOI: 10.1109/ICEPE.2016.7781441 (**IEEE Xplore**)
69. Kriukov Al., **Gavrilas M.**, Smart energy management in distribution networks with increasing number of electric vehicles, Proc. 2014 International Conference and Exposition on Electrical and Power Engineering (EPE 2014), Iasi, Romania, 16-18 Oct. 2014, pp. 1069-1044, ISBN 10.1109/ICEPE.2014.6970067 (**IEEE Xplore**)
70. Hopulele E., **Gavrilas M.**, Optimization of a combined cool, heat and power plant based on genetic algorithms and specialized software, Proc. 2014 International Conference and Exposition on Electrical

and Power Engineering (EPE 2014), Iasi, Romania, 16-18 Oct. 2014, pp. 1030-1033, ISBN 10.1109/ICEPE.2014.6970065 (**IEEE Xplore**)

71. Ivanov O., **Gavrilas M.**, Multilayer Perceptron architecture optimization for peak load estimation, Proc. 12th Symposium on Neural Network Applications in Electrical Engineering (NEUREL 2014), Belgrade, Serbia, 25-27 Nov. 2014, pp. 67-72, ISBN 978-1-4799-5887-0 (**IEEE Xplore**)
72. **Gavrilas M.**, Coroama I., Optimal VAR Compensation with DG Penetration Using an Enhanced Gravitational Search Algorithm, Proc. 4th International Symposium on Electrical and Electronics Engineering ISEEE 2013, Galati, Romania, 11-13 Oct., 2013, pp. 1-6, ISBN: 978-1-4799-2441-7 (**IEEE Xplore**)
73. **Mihai Gavrilaş,** Enhanced Evolutionary Search Algorithms for Multiobjective Optimization in Power System, Proceedings of 13th WSEAS International Conference on Evolutionary Computing, publicată în volumul Latest advance in information science, circuits and systems cu ISSN 1790-5109 si ISBN:978-1-61804-099-2, pag. 77-86, 2012 (**Google Scholar**)
74. Liva Graffin Rakotoarimanana, **Mihai Gavrilaş**, Ovidiu Ivanov, Multiobjective optimization of Capacitor Banks Placement in Distribution Networks, , Proceedings of 13th WSEAS International Conference on Evolutionary Computing, publicată în volumul Latest advance in information science, circuits and systems cu ISSN 1790-5109 si ISBN:978-1-61804-099-2, pag. 87-92, 2012 (**Google Scholar**)
75. Iulia Coroamă**, Mihai Gavrilaş**, Ovidiu Ivanov**,** A hybrid Differential Evolution – Analytic Hierarchy Process Method for Multi-objective Optimization, Proceedings of 13th WSEAS International Conference on Evolutionary Computing 2012, publicată în volumul Latest advance in information science, circuits and systems cu ISSN 1790-5109 si ISBN:978-161804-099-2, pag. 93-99 (**Google Shcolar**)
76. Stativa A., **Gavrilas M.**, Stahie V., Optimal tuning and placement of Power System Stabilizer using Particle Swarm Optimization algorithm, Proceedings of the 2012 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, 25-27 Oct. 2012, pp. 242 – 247 (**IEEE Xplore**)
77. Aparaschivei E.D., Ivanov O., **Gavrilas M.**, Load flow estimaton in electrical systems using artificial neural networks, Proceedings of the 2012 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, 25-27 Oct. 2012, pp. 276 – 279 (**IEEE Xplore**)
78. Coroama I., **Gavrilas M.**, Ivanov O., Stahie V., Meta-heuristic-based methods for multiobjective non-conflicting optimization of distribution networks operation, Proceedings of the 2012 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, 25-27 Oct. 2012, pp. 280 – 285 (**IEEE Xplore**)
79. **Gavrilas M.**, Gavrilas G., An Enhanced ANN Wind Power Forecast Model Based on a Fuzzy Representation of Wind Direction, Proceedings of the 10th Symposium on Neural Network Applications in Electrical Engineering, NEUREL 2010, Sept. 23-25, 2010, Belgrade, Serbia, pp. 31-36, ISBN: 978-1-4244-8818-6 **(IEEE Xplore)**
80. **Gavrilas M.**, Heuristic and Metaheuristic Optimization Techniqoes with Applications to Power Systems, Proceedings of the 12-th WSEAS International Conference on Mathematical Methods and Computational Techniques in Electrical Engineering (MMACTEE ,10), October 21-23, 2010, Timisoara, Romania, pp.95-103, ISBN: 978-960-474-238-7 **(Scopus)**
81. **Gavrilas M.**, Stahie V., A Metaheuristic Approach to Hydropower Reservoir Optimization Based on Honey Bee Mating Algorithm, Proceedings of the 12-th WSEAS International Conference on Mathematical Methods and Computational Techniques in Electrical Engineering (MMACTEE ,10), October 21-23, 2010, Timisoara, Romania, pp.110-115, ISBN: 978-960-474-238-7 **(Scopus)**
82. Coroama I., **Gavrilas M.**, Ivanov O., A Genetic Algorithm Approach to Voltage-VAR Control in Systems with Distributed Generation, Proceedings of the 12-th WSEAS International Conference on Mathematical Methods and Computational Techniques in Electrical Engineering (MMACTEE ,10), October 21-23, 2010, Timisoara, Romania, pp.104109, ISBN: 978-960-474-238-7 **(Scopus)**
83. **Gavrilas M.,** Gavrilas G., Sfintes C.V., Application of Honey Bee Mating Optimization algorithm to load profile clustering, Proceedings of 2010 IEEE International Conference on Computational

Intelligence for Measurement Systems and Applications (CIMSA), 6-8 Sept. 2010, Taranto, Itally, pp. 113-118, ISBN: 978-1-4244-7229-1 (**IEEE Xplore**)

84. **Gavrilas M.**, Istrate M., Ivanov O., Estimation of fundamental frequency components of voltage and current for digital distance relays, Proc. 30-th International Conference of Electrotechniques and Circuit Theory, IC-SPETO 2007, Gliwice, Poland, 23-25 May 2007, pp. 129-130, ISBN 978-83-85940-29-6 (**Inspec on OvidSP**)
85. **Gavrilas M.**, Sfintes C., Ivanov O., Load profiling methodology for electricity market, Proc. 30-th International Conference of Electrotechniques and Circuit Theory, IC-SPETO 2007, Gliwice, Poland, 23-25 May 2007, pp. 223-224, ISBN 978-83-85940-29-6 (**Inspec on OvidSP**)
86. **Gavrilas M.**, Ciutea I., Tanasa C., Medium-term load forecasting with artificial neural network models; 16th International Conference on Electricity Distribution, CIRED 2001, 1821 June, Amsterdam, Olanda, 2001, CD-ROM, ISBN 0-85296-735-7/0-85296-734-9 (**Inspec, Compendex, Scopus**)
87. Georgescu Gh., **Gavrilas M.**, Cartina Gh., Aspects Concerning Power Distribution Networks Planning Using the Artificial Intelligence, 14th International Conference on Electricity Distribution, CIRED '97, 2-5 June, Birmingham, England, pp. 876-881, 1997, ISBN: 085296-674-1, (**Inspec, Scopus**)

J. Invenţii.

1. Grigoraș G., Ivanov O., Neagu B.C., **Gavrilaș M.,** Scarlatache Fl., Platformă software de management și control integrat al consumurilor de energie electrică și gaze naturale în scopul creșterii eficienței energetice la întreprinderile mici și mijlocii, A/00922-13.11.2017 (cerere brevet).
2. Grigoraș G., Ivanov O., Neagu B.C., Scarlatache Fl., **Gavrilaș M.**, Platforma software de asistare a deciziilor în proiectarea ecologică optimă a instalațiilor electrice cu producere si stocare locală a energiei în scopul creșterii eficienței energetice la toate categoriile de consumatori, A/00923-21.11.2018 (cerere brevet).

K. Contracte de cercetare.

Granturi / proiecte câștigate prin competiție

1. „Cercetarea și promovarea generării eficiente de energie prin trigenerare și utilizare a resurselor solare regenerabile pentru obținerea energiei electrice, căldurii și frigului și achiziționare de echipamente", cod 2SOFT/1.2.66, (2020-2022). în cadrul Programului Operaţional Comun România – Republica Moldova 2014–2020 **Gavrilaș M.** (director grant din partea TUIASI)
2. Sistem inteligent de predictie si control al congestiilor in retelele de transport si distributie la inalta tensiune, Grant PNCDI II – Parteneriate, contract nr. 22126 / 01.10.2008, valoare 86911 Euro, 2008-2010, **Gavrilaș M.** (director grant)
3. Amplasarea surselor de putere în reţelele de distribuţie de 110 kV şi MT ale S.C. E.ON Moldova Distribuţie S.A. după criteriul pierderilor minime de energie şi al apropierii surselor de consumator şi studio privind compensarea şi reglarea puterii reactive în scopul optimizării nivelului de tensiune în reţelele de 110 kV ale S.C. E.ON Moldova Distribuţie S.A., Contract de cerectare nr. 7405 P / 26.10.2007, valoare 43627 Euro, 2007-2008, **Gavrilaș M.** (director contract)
4. Tehnici de inteligenta artificiala si modele noi pentru dezvoltarea studiilor de sarcina in scopul utilizarii eficiente a energiei electrice in conditiile impuse de functionarea pietei de energie electrica, Grant CNCSIS tip A, cod 241, tema 13 / 2006, contract nr. 63GR/19.05.2006 si tema 26 / 2007, contract nr. GR80/23.05.2007, valoare 25648 Euro, 2006-2007, **Gavrilaș M.** (director grant)
5. Modele ale inteligentei artificiale pentru prognoza pe termen scurt si mediu a consumului de energie electrica, Grant nr. 6177 / B29 / 2000, valoare 753 Euro, Benficiar: Ministerul Educatiei și Cecetarii, 2000, **Gavrilaș M.** (coordonator grant).
6. Managementul inteligent al centralelor electrice virtuale cu ajutorul platformelor software bazate pe inteligenta artificiala, in contextul competitivității energetice Europene, Contract nr. 173CI din 02/07/2018 (PN-III-P2-2.1-CI-2018-1011), UEFISCDI, valoare 10672 Euro, 2018, **Gavrilaș M.** (membru echipa)

7. Platforma software de asistare a deciziilor în proiectarea ecologică optimă a instalațiilor electrice cu producere si stocare locală a energiei, în contextul creșterii eficienței energetice, Grant PN-III-P2-2.1-CI-2018-1128, Contract 192CI/25.07.2018, UEFISCDI, valoarea 10803 Euro, 2018, **Gavrilaș M.** (membru echipa)
8. Platforma de management si control integrat al fluxurilor purtatorilor de energie in scopul cresterii eficientei energetice la IMM-uri, Grant PN-III-P2-2.1-CI-2017-0190, Contract 105CI/25.07.2017, UEFISCDI, valoare 10961 Euro, 2017, **Gavrilaș M.** (membru echipa)
9. Instrument software pentru gestiunea tranzacțiilor pe piața de energie electrică (GTMarket), Contract PNCDI III nr.45CI/2017, cod PN-III-P2-2.1-CI-2017-0328, UEFISCDI, valoare 10959 Euro, 2017, **Gavrilaș M.** (membru echipa)
10. Platformă software inovativa pentru managementul energetic al consumatorilor finali in vederea cresterii eficientei energetice și a reducerii emisiilor de carbon, Contract nr. 174CI din 04/07/2018 (PN-III-P2-2.1-CI-2018-1017), UEFISCDI, valoarea 10724 Euro, 2018, **Gavrilaș M.** (membru echipa)
11. Instrument software destinat cresterii securitatii sistemelor electroenergetice prin coordonarea protectiei de distanta, dezvoltat pe baza unor tehnici de inteligenta artificiala, Grant CNCSIS tip A, cod 283, tema nr. 16, contract nr. 2735/19.05.2006 si tema nr. 28, contract nr. GR80/23.05.2007, valoare 23824 Euro, 2006-2007, **Gavrilaș M.** (membru echipa)

Contracte de cercetare / consultanță

1. Prognoza de consum propriu tehnologic pentru reteaua de energie electrica din zona de activitate a Delgaz Grid. S.A. pentru anul 2018, contract nr. 3105/ 14.02.2018, valoare 9981 Euro, 2018, **Gavrilaș M.** (director contract)
2. Prognoza de consum propriu tehnologic pentru reteaua de energie electrica din zona de activitate a Delgaz Grid. S.A., contract nr. 448P / 15.03.2017, valoare 9881 Euro, 2017, **Gavrilaș M.** (director contract)
3. Servicii de consultanta de specialitate in proiectul EON Moldova Distributie de reducere a pierderilor tehnice in retelele de distributie, contract nr. 684P / 21.04.2016, valoare 13396 Euro, 2016, **Gavrilaș M.** (director contract)
4. Servicii de consultanta de specialitate in proiectul EON Moldova Distributie de reducere a pierderilor tehnice in retelele de distributi, contract nr. 1398P / 08.10.2014, valoare 43654 Euro, 2014-2015, **Gavrilaș M.** (director contract)
5. Norma de consum propriu tehnologic in retelele de distributie pentru anul 2013, contract de cercetare nr. 337P / 21.03.2014, valoare 2250 Euro, Beneficiar: E.ON Moldova Distribuţie S.A., 2014, **Gavrilaș M.** (director contract)
6. Incarcarea dinamica a liniilor electrice aeriene prin evaluarea on-line a capacitatii de transport, contract nr. 912P / 03.07.2012, valoare 14583 Euro, 2012, **Gavrilaș M.** (director contract)
7. Studiu de determinare a consumului propriu tehnologic in retelele de joasa tensiune aferente jud. Bacau, apartinand E.ON Moldova Distributie S.A., contract de cercetare nr. 3564P / 01.11.2011, valoare 11799 Euro, 2011, **Gavrilaș M.** (director contract)
8. Cercetari privind analiza si optimizarea regimurilor de functionare ale retelelor electrice de distributie folosind elemente ale inteligentei artificiale, Contract de cercetare nr 4030P/15.11.2004, valoare 7482 Euro, Beneficiar: F.D.F.E.E. Electrica „Muntenia Sud" Bucuresti, 2004, **Gavrilaș M.** (director contract).
9. Studiu privind planificarea tranzactiilor cu energie electrica la nivelul furnizorilor – prognoze pe termen scurt si mediu, Contract de cercetare nr. 966P/2002, valoare 1885 Euro, Beneficiar: S.D.F.E.E. Iasi, 2002, **Gavrilaș M.** (director contract).
10. Controlul si conducerea retelelor electrice cu modele ale inteligentei artificiale, Contract de cercetare nr. 915P/2000, valoare 2007 Euro, Beneficiar: Transelectrica, S.T. Bacau, 2000, **Gavrilaș M.** (director contract)
11. Aplicatii software ale sistemelor hibride de inteligenta artificiala pentru proiectarea si dezvoltarea retelelor electrice, Contract de cercetare nr. 557P/2000, valoare 2685 Euro, Beneficiar: S.D.F.E.E. Iasi, 2000, **Gavrilaș M.** (director contract)

12. Prognoza consumului de energie electrica pe termen scurt pentru S.D. Iasi, Contract de cercetare 742P / 1999, valoare 2450 Euro, Beneficiar: S.D. Iasi, 1999, **Gavrilaș M.** (director contract)
13. Studiu privind regimurile de scurtcircuit din reteaua de transport exploatata de Sucursala de Transport Constanta, Contract de cercetare nr. 1739P/1999, valoare 3676 Euro, Beneficiar: Transelectrica, S.T. Constanta, 1999, **Gavrilaș M.** (director contract)
14. Studiu privind prognoza pe termen scurt a consumului de energie electrica la S.D. Buzau, Contract de cercetare 735P / 1999, valoare 1838 Euro, Beneficiar S.D. Buzău, 1999, **Gavrilaș M.** (director contract).
15. Studiu privind prognoza pe termen scurt a consumului de energie electrica la S.D. Botoșani, Contract de cercetare 730P / 1999, valoare 1838 Euro, Beneficiar S.D. Botoșani, 1999, **Gavrilaș M.** (director contract).
16. Utilizarea retelelor neuronale artificiale in previziunea sarcinii pe termen scurt si mediu la nivelul F.R.E. Suceava., act aditional 1 / 1999 la contractul de cercetare 3625 / 1997, valoare 1838 Euro, Beneficiar: F.R.E. Suceva, 1999, **Gavrilaș M.** (director contract).
17. Utilizarea retelelor neuronale artificiale in previziunea sarcinii pe termen scurt si mediu la nivelul F.R.E. Suceava., act aditional 1 / 1998 la contractul de cercetare 3625 / 1997, valoare 924 Euro, Beneficiar: F.R.E. Suceva, 1998, **Gavrilaș M.** (director contract).
18. Previziunea pe termen scurt a puterii absorbite si a consumului de energie folosind elemente ale inteligentei artificiale, Contract de cercetare 6760 /1998, valoare 973 Euro, Beneficiar F.R.E. Vaslui, 1998, **Gavrilaș M.** (director contract).
19. Utilizarea retelelor neuronale artificiale in previziunea sarcinii pe termen scurt si mediu, Contract de cercetare nr. 3625/1997, valoare 1586 Euro, Beneficiar F.R.E. Suceava, 1997, **Gavrilaș M.** (director contract).
20. Cercetari privind optimizarea multicriteriala a structurii si regimurilor de functionare ale retelelor electrice de distributie in vederea cresterii calitatii energiei electrice si reducerii consumurilor proprii tehnologice, Contract de cercetare nr. 6685/1996, valoare 1604 Euro, Beneficiar F.R.E. Iași, 1996, **Gavrilaș M.** (director contract).
21. Utilizarea retelelor neuronale in supravegherea si conducerea retelelor electrice, Contract de cercetare nr. 5857/1995, valoarea 1475 Euro, Beneficiar: F.R.E. Iași, 1995, **Gavrilaș M.** (director contract).
22. Utilizarea retelelor neuronale in supravegherea si conducerea retelelor electrice, Contract de cercetare 2443 / 1994, Beneficiar: F.R.E. Iași, 1994, **Gavrilaș M.** (director contract).
23. Studiu pentru reconfigurarea retelelor de distributie de medie si joasa tensiune tinand seama de incarcarea optima a retelelor si de caderile de tensiune, in vederea scaderii consumului propriu tehnologic, contract de cercetare nr. 3624/1997, valoare 2018 Euro, Beneficiar: F.R.E. Focsani, 1997, **Gavrilaș M.** (membru echipă)
24. Utilizarea inteligentei artificiale in supravegherea si conducerea retelelor electrice, tema nr. 31 / 557, grant nr. 7002/1997, valoare 2096 Euro, 1997, **Gavrilaș M.** (membru echipa)
25. Utilizare inteligentei artificiale (algoritmi genetici) in vederea optimizarii structurii si regimurilor de functionare ale retelelor electrice de distributie, Contract de cercetare nr. 4027/1997, valoare 836 Euro, Beneficiar: F.R.E. Galați, 1997, **Gavrilaș M.** (membru echipă).
26. Cresterea calitatii supravegherii si conducerii retelelor electrice prin utilizarea metodelor moderne ale inginerii datelor si inteligentei artificiale; Contract de cercetare nr. 6726/1996, valoare 963 Euro, Beneficiar: F.R.E. Galați, 1996, **Gavrilaș M.** (membru echipă).
27. Utilizarea inteligentei artificiale in controlul si conducerea optimala a regimurilor retelelor electrice, Contract de cercetare nr. 6686/1996, valoare 723 Euro, Beneficiar: F.R.E. Iași, 1996, **Gavrilaș M.** (membru echipă).
28. Estimarea nivelului de tensiune, a consumului propriu tehnologic si cai de reducere a acestuia, folosind inteligenta artificiala, Contract de cercetare nr. 5856/1995, valoare 922 Euro, Beneficiar: F.R.E. Iași, 1996, **Gavrilaș M.** (membru echipă).
29. Cresterea calitatii supravegherii si conducerii retelelor electrice prin utilizarea metodelor moderne ale inginerii datelor si inteligentei artificale, Contract de cercetare nr. 5842/1995, valoare 1327 Euro, Beneficiar: F.R.E. Galați, 1995, **Gavrilaș M.** (membru echipă).
30. Evaluarea consumului propriu tehnologic in retelele de distributie si stabilirea eficientei diferitelor metode de reducere a acestora, Contract de cercetare nr. 3610/1995, valoare 1106 Euro, Beneficiar: F.R.E. Botoșani, 1995, **Gavrilaș M.** (membru echipă).

31. Optimizarea regimurilor de functionare ale retelelor de distributie urbana si rurala, Contract de cercetare nr. 1827/1994, Beneficiar: F.R.E. Bistrița Năsăud, 1994, **Gavrilaș M.** (membru echipă).
32. Planificarea optimala a retelelor de distributie rurala, Contract de cercetare nr. 2444/1994, Beneficiar: F.R.E. Iași, 1994, **Gavrilaș M.** (membru echipă).
33. Dezvoltarea optimala a retelelor de distributie de medie si joasa tensiune, in cazul zonelor de munte, cu densitate redusa de consum, Contract de cercetare 6296 / 1993, Beneficiar: F.R.E. Suceava, 1993, **Gavrilaș M.** (membru echipă).
34. Planificarea optimala a retelelor de distributie urbana si rurala, Contract de cercetare 3763 / 1993, Beneficiar: F.R.E. Iași, 1993, **Gavrilaș M.** (membru echipă).
35. Posibilitati de extindere a utilizarii tehnicii de calcul in conducerea retelelor electrice de distributie, Contract de cercetare 2437 / 1991, Beneficiar: Ministerul Invatamantului si Stiintei, 1991, **Gavrilaș M.** (membru echipă).
36. Optimizarea regimurilor de functionare ale retelelor de distributie de medie si joasa tensiune ale F.R.E. Iași, Contract de cercetare 4167 / 1990, Beneficiar: F.R.E. Iași, 1993, **Gavrilaș M.** (membru echipă).
37. Optimizarea regimurilor de functionare ale retelelor de distributie de medie tensiune ale I.R.E. Iasi, Contract de cercetare 11693 / 1989, Beneficiar: I.R.E. Iași, 1989, **Gavrilaș M.** (membru echipă).
38. Cresterea capacitatii de transport si micsorarea pierderilor in retele prin modificarea geometriei si a parametrilor LEA, contract de cercetare 2161 / 1989, contract de cercetare 2889 / 1989, Beneficiar: F.R.E. Iași, 1993, **Gavrilaș M.** (membru echipă).
39. Cercetari privind conducerea optimala a regimurilor retelelor din gestiunea I.R.E. Iasi in scopul ameliorarii indicatorilor tehnico-economici, Contract de cercetarea 10681 / 1987, **Gavrilaș M.** (membru echipă).

L. Premii, distincţii.

1. IEEE Senior Member din 2012 (http://ewh.ieee.org/ieee/tv/MGA/SMUpdates/2012/March.xls)
2. Best Paper Award of EC'12 (13th WSEAS International Conference on Evolutionary Computing 2012): Enhanced Evolutionary Search Algorithms for multiobjective Optimization in Power Systemby Mihai Gavrilas (web site: http://www.wseas.org/cms.action?id=2816)
3. Premiu UEFISCDI prin programul Planul National de Cercetare, Dezvoltare si Inovare pentru perioada 2015-2020, PNCDI III, Programul Dezvoltarea sistemului national de cercetare-dezvoltare, Subprogramul 1.1. – Resurse Umane, Premierea rezultatelor cercetarii – articole, in anul 2020 pentru lucrarea A Novel Algorithm with Multiple Consumer Demand Response Priorities in Residential Unbalanced LV Electricity Distribution Networks publicata in jurnalul Mathematics https://uefiscdi.gov.ro/resource-824820-precisi_lista-1_partial-2_rezultate-eligibilitate_articole-2020_.pdf?&wtok=&wtkps=XU5ZasMwEL2LvhtHIyFkjX9yghDICVyP7A5YcbC8pATfPZJb6PI1b97Gq9HiM6JGEZlEFdEoFLCo1nL3HqDt2a2h7uZxpttipPL9oJye3KcfDxTuztoDPZT70DkLKDjfVGHgG5wmUdVJee5y+P0kL2MJ0lXbtk9oKGbKaJPLLAqi++1yPWorValKacq9NEV/mDcFYDSAhq8JZk+d/2VAovhrTNNWn4FOKAw0974Yxq6YfcuxIS4W9mtRjxM3Qy+q7QU=&wchk=20b953a24c2cc61b474b8ca651f69217f6bacb92
4. Premiu UEFISCDI prin programul Planul National de Cercetare, Dezvoltare si Inovare pentru perioada 2015-2020, PNCDI III, Programul Dezvoltarea sistemului national de cercetare-dezvoltare, Subprogramul 1.1. – Resurse Umane, Premierea rezultatelor cercetarii – articole, in anul 2020 pentru lucrarea An Advanced Decision Support Platform in Energy Management to Increase Energy Efficiency for Small and Medium Enterprisespublicata in jurnalul Applied Sciences https://uefiscdi.gov.ro/resource-824820-precisi_lista-1_partial-2_rezultate-eligibilitate_articole-2020_.pdf?&wtok=&wtkps=XU5ZasMwEL2LvhtHIyFkjX9yghDICVyP7A5YcbC8pATfPZJb6PI1b97Gq9HiM6JGEZlEFdEoFLCo1nL3HqDt2a2h7uZxpttipPL9oJye3KcfDxTuztoDPZT70DkLKDjfVGHgG5wmUdVJee5y+P0kL2MJ0lXbtk9oKGbKaJPLLAqi++1yPWorValKacq9NEV/mDcFYDSAhq8JZk+d/2VAovhrTNNWn4FOKAw0974Yxq6YfcuxIS4W9mtRjxM3Qy+q7QU=&wchk=20b953a24c2cc61b474b8ca651f69217f6bacb92
5. Premiu UEFISCDI prin programul Planul National de Cercetare, Dezvoltare si Inovare pentru perioada 2015-2020, PNCDI III, Programul Dezvoltarea sistemului national de cercetare-dezvoltare, Subprogramul 1.1. – Resurse Umane, Premierea rezultatelor cercetarii – articole, in anul 2020 pentru lucrarea A New Vision on the Prosumers Energy Surplus Trading Considering Smart Peer-to-Peer

Contracts publicata in jurnalul Mathematics https://uefiscdi.gov.ro/resource-824820-precisi_lista-1_partial-2_rezultate-eligibilitate_articole-2020_.pdf?&wtok=&wtkps=XU5ZasMwEL2LvhtHIyFkjX9yghDICVyP7A5YcbC8pATfPZJb6PI1b97Gq9HiM6JGEZlEFdEoFLCo1nL3HqDt2a2h7uZxpttipPL9oJye3KcfDxTuztoDPZT70DkLKDjfVGHgG5wmUdVJee5y+P0kL2MJ0lXbtk9oKGbKaJPLLAqi++1yPWorValKacq9NEV/mDcFYDSAhq8JZk+d/2VAovhrTNNWn4FOKAw0974Yxq6YfcuxIS4W9mtRjxM3Qy+q7QU=&wchk=20b953a24c2cc61b474b8ca651f69217f6bacb92

6. Premiu UEFISCDI prin programul Planul National de Cercetare, Dezvoltare si Inovare pentru perioada 2015-2020, PNCDI III, Programul Dezvoltarea sistemului national de cercetare-dezvoltare, Subprogramul 1.1. – Resurse Umane, Premierea rezultatelor cercetarii – articole, in anul 2020 pentru lucrarea Optimal Phase Load Balancing in Low Voltage Distribution Networks Using a Smart Meter Data Based Algorithm, publicata in jurnalul Mathematics https://uefiscdi.gov.ro/resource-824264-precisi_lista-1_partial-3_rezultate-eligibilitate_articole-2020_.pdf?&wtok=&wtkps=XU5LDsIgEL0La61MkRSnG09gTDxBA2hIQUhpbbTp3YVq4mc1b94vr8EKp4gMSTSK1BF5giA6N0LzMPJupXNuEJWzAe6hfUQXwAtOdditobetHOxabWXwLIcBicm3RMLhDfY9qZukTIvsvp/kNSiA7up5XjZIFTPFGc9lFRKlwvV42rCKlqIUlIulNEU/zKoE4AyAwWsCX1KHvwxQJL/GNG3UGbCEnFeD1YXvLsWgzyZKZYqb0WPRdL2R3pJ6fgI=&wchk=172db632aeb47c7292fcf3a0408dde5be7d69c0f**.).**

M. Alte realizări semnificative.

Citări în reviste WOS și volumele conferințelor WOS

1. Lucrarea citata [11]

Gavrilas M., Sfintes C.V., Filimon M.N., Identifying typical load profiles using neural-fuzzy models; Proceedings of the 2001 IEEE / PES Transmission and Distribution Conference, Oct. 28 – Nov. 2, Atlanta, Georgia, 2001, CD-ROM, ISBN 07803-7287-5/01.

Lucrarea care citeaza

1. Chung-Chian Hsu – Generalizing Self-Organizing Map for Categorial Data ; IEEE Transactions on Neural Networks, Vol. 17, No. 2, March 2006, pp. 294-304 (**revistă WoS**).
2. Garcia Ramon J.I. et al., Method of assessment of the state of charge and voltage level in the electric power distribution network. Implementation in the improvement of supply quality, international Journal of Electrical Power & Energy Systems, Vol. 28, 2006, pp. 496-502 (**revistă WoS**).
3. Wolter M., Reactive Power Profiles, PROCEEDINGS OF THE 8TH WSEAS INTERNATIONAL CONFERENCE ON POWER SYSTEMS AND POWER TECHNOLOGY, Book Series: Recent Advances in Electrical Engineering, 2008, Pages: 81-88 (**revistă WoS**).
4. Baharudin, Z., Kamel, N., Autoregressive method in short term load forecast, IEEE 2nd International Power and Energy Conference, 2008. PECon 2008, 1-3 Dec. 2008, Page(s):1597 – 1602 (**conferință WoS**).
5. Bobric E.C., Cartina Gh., Grigoras Gh., Clustering Techniques in Load Profile Analysis for Distribution Stations, ADVANCES IN ELECTRICAL AND COMPUTER ENGINEERING, Vol. 9, Issue 1, 2009, Pages: 63-66 – 2 citări (**revistă WoS**).
6. Reese, C.; Hofmann, L., Determination of load and generation composition in distribution grids, Power Systems Conference and Exposition, 2009. PES '09. IEEE/PES, 15-18 March 2009, Page(s):1 – 7 (**conferință WoS**).
7. Zakaria Z., Lo KL, Two-stage Fuzzy Clustering Approach for Load Profiling, Proceedings of the 44-th International Universities Power Engineering Conference, UPEC 2009, pp. 976-980, Glasgow, England, Sept. 01-04, 2009 (**conferință WoS**).
8. Reese, C.; Buchhagen, C.; Hofmann, L., Enhanced method for voltage range controlled OLTC-equipped distribution transformers, Proceedings of the IEEE Power and Energy Society General Meeting, 2012 IEEE, San Diego, California, July 22-26, pp. 1-8 (**conferință WoS**
9. Murata N., Wakao S., Hayashi Y., A Versatile Clustering Method for Electricity Consumption Pattern Analysis in Households, IEEE Transactions on Smart Grids, Vol. 4, Issue 2, 2013, pp. 1048-1057, 2 citări (**revistă WoS**).
10. Zhong S., Tam K.S., Hierarchical Classification of Load Profiles Based on Their Characteristic Attributes in Frequency Domain, IEEE Transactions on Power Systems, Vol. 30, No. 5, pp. 2434-2441, Sept. 2015, DOI: 10.1109/TPWRS.2014.2362492 (**revistă WoS**).

11. Pan B.R., Zhang Y., Wan Y., et al., Strategic Study on Reduction of Loading Rate of the Distributing Line based on Demand Response, Proc. of International Conference on Industrial Technology and Management Science (ITMS), Tianjin, CHINA, MAR 27-28, 2015, pp. 1521-1526 (**conferință WoS**).

2. Lucrarea citata [**6**]

Gavrilas M., Ciutea I., Tanasa C., Medium-term load forecasting with artificial neural network models; 16th International Conference on Electricity Distribution, CIRED 2001, 18-21 June, Amsterdam, Olanda, 2001, CD-ROM, ISBN 0-85296-735-7/0-85296-734-9.

Lucrarea care citeaza

1. Ghiassi M., Zimbra D.K., Saidane H., Medium term system load forecasting with a dynamic artificial neural network model, Electric Power Systems Research, Vol. 76, issue 5, March 2006, pp. 302-316 (**revistă WoS**).
2. Falvo M.C. et al, A Knowledge Based system for Medium Term Load Forecasting, PES Transmission and Distribution Conference, May 21-24 2006, pp. 1291-1295 – 2 citări (**conferință WoS**).
3. Terra G.S., Lopes M.C.S., Ebecken N.F.F., A Data Mining Approach for Medium-Term Demand Forecasting, Management Information Systems, Vol. 7, 2003, pp. 437-446 (**conferință WoS**).
4. Maia MR, Veloso KDOG, Okamoto MT, et al., A data mining approach to support the development of long-term load forecasting, 7th International Conference on Data, Text and Web Mining and Their Business Application and Management Information Engineering, JUL 11-13, 2006 Prague, CZECH REPUBLIC, Book Series: WIT TRANSACTIONS ON INFORMATION AND COMMUNICATION TECHNOLOGIES, Volume: 37, Pages: 339-348 (**conferință WoS).**
5. Liang, J.J.; Song, H.; Qu, B.Y.; Liu, W.; Qin, A.K.; Neural Network Based on Dynamic Multi-swarm Particle Swarm Optimizer for Ultra-Short-Term Load Forecasting; Lecture Notes in Computer Science, Advances in Swarm Intelligence, Volume: 8795, 2014, Springer Int Publishing Ag, ISSN: 0302-9743 pp. 384-391 (**revistă WoS**).
6. Khuntia S.R., Rueda J.L., van der Meijden M.A.M.M., Forecasting the load of electrical power systems in mid- and long-term horizons: a review, IET Generation Transmission & Distribution, Vol. 10, No. 16, pp. 3971-3977, DOI: 10.1049/iet-gtd.2016.0340, Dec. 2016 (**revistă WoS**).

3. Lucrarea citata [**6**]

Gavrilas M., Ciutea I., Tanasa C., Medium-term load forecasting with artificial neural network models; 16th International Conference on Electricity Distribution, CIRED 2001, 18-21 June, Amsterdam, Olanda, 2001, CD-ROM, ISBN 0-85296-735-7/0-85296-734-9.

Lucrarea care citeaza

1. Ghiassi M., Zimbra D.K., Saidane H., Medium term system load forecasting with a dynamic artificial neural network model, Electric Power Systems Research, Vol. 76, issue 5, March 2006, pp. 302-316 (**revistă WoS**).
2. Falvo M.C. et al, A Knowledge Based system for Medium Term Load Forecasting, PES Transmission and Distribution Conference, May 21-24 2006, pp. 1291-1295 – 2 citări (**conferință WoS**).
3. Terra G.S., Lopes M.C.S., Ebecken N.F.F., A Data Mining Approach for Medium-Term Demand Forecasting, Management Information Systems, Vol. 7, 2003, pp. 437-446 (**conferință WoS**).
4. Maia MR, Veloso KDOG, Okamoto MT, et al., A data mining approach to support the development of long-term load forecasting, 7th International Conference on Data, Text and Web Mining and Their Business Application and Management Information Engineering, JUL 11-13, 2006 Prague, CZECH REPUBLIC, Book Series: WIT TRANSACTIONS ON INFORMATION AND COMMUNICATION TECHNOLOGIES, Volume: 37, Pages: 339-348 (**conferință WoS**).
5. Liang, J.J.; Song, H.; Qu, B.Y.; Liu, W.; Qin, A.K.; Neural Network Based on Dynamic Multi-swarm Particle Swarm Optimizer for Ultra-Short-Term Load Forecasting; Lecture Notes in Computer Science, Advances in Swarm Intelligence, Volume: 8795, 2014, Springer Int Publishing Ag, ISSN: 0302-9743 pp. 384-391 (**revistă WoS**).
6. Khuntia S.R., Rueda J.L., van der Meijden M.A.M.M., Forecasting the load of electrical power systems in mid- and long-term horizons: a review, IET Generation Transmission & Distribution, Vol. 10, No. 16, pp. 3971-3977, DOI: 10.1049/iet-gtd.2016.0340, Dec. 2016 (**revistă WoS**).

4. Lucrarea citata [**1**]

Gavrilas M., Sfintes C.V., Ivanov O., Comparison of Neural and Evolutionary Approaches to Peak Load Estimation in Distribution Systems; EUROCON 2005, Nov. 22-24, Belgrade, Serbia & Montenegro, 2005, CD-ROM, ISBN: 1-4244-0049-X.

Lucrarea care citeaza

1. Jian Zhou Wang, Liang Wu, Hai-Yan Lu, Special periods peak load analysis and superior forecasting method based on LS-SVM ; Proceendings of the International Conference on Wavelet Analysis and Pattern Recognition, ICWAPR'07, Vol. 1, 2007, pp. 249-253 (**conferință WoS**).

5. Lucrarea citata [**2**]

Gavrilas M., Coca D., Stefanovici C., Prognoza pe termen scurt a consumului de energie electrica la S.D. Suceava cu un model bazat pe inteligenta artificiala, Revista Energetica, nr. 8-9, pag. 407-415, 2000, ISSN 1453-2360

Lucrarea care citeaza

1. Mihai P, Matei M, Popescu CL, et al., Artificial intelligency methods used for electrical energy consumption forecasting, PROCEEDINGS OF THE 9TH WSEAS INTERNATIONAL CONFERENCE ON AUTOMATION AND INFORMATION Book Series: Recent Advances in Electrical Engineering, 2008, Pages: 309-314 (**conferință WoS**)
2. Mihai P., Popescu C.L., Popescu M.O., Mid Term Load Forecasting Using Analog Neural Networks, Revue Roumaine des Sciences Techniques-Serie Electrotechnique et Energetique, Vol. 54, No. 2, APR-JUN 2009, pp. 147-155 – 4 citări (**revistă WoS**).

6. Lucrarea citata [**1**]

Gavrilas M., Calcul numeric cu aplicatii in Turbo Pascal, Editura "Gh. Asachi" Iasi, 502 pag., 1999 (ISBN 973-9178-65-0).

Lucrarea care citeaza

1. Enescu D, Coanda HG, Virjoghe EO, et al., Numerical investigation by means of polynomial regression method for determining the temperature fields in a medium with phase transition, PROCEEDINGS OF THE 8TH WSEAS INTERNATIONAL CONFERENCE ON SYSTEMS THEORY AND SCIENTIFIC COMPUTATION (ISTAC'08), Book Series: Mathematics and Computers in Science and Engineering, Pages: 88-93 (**conferință WoS**).

7. Lucrarea citata [**2**]

Gavrilas M., Cartina Gh., Alexandrescu V., Grigoras Gh., Ivanov O., Modelarea sarcinilor din retelele electrice - Vol. 1, Editura PIM Iasi, 124 pag., 2006 (ISBN 973-716-433-4, ISBN 978-973-716-433-4).

Lucrarea care citeaza

1. Bobric E.C., Cartina Gh., Grigoras Gh., Clustering Techniques in Load Profile Analysis for Distribution Stations, ADVANCES IN ELECTRICAL AND COMPUTER ENGINEERING, Vol. 9, Issue 1, 2009, Pages: 63-66 – 2 citări (**revistă WoS**).
2. Mihai P., Popescu C.L., Popescu M.O., Mid Term Load Forecasting Using Analog Neural Networks, Revue Roumaine des Sciences Techniques-Serie Electrotechnique et Energetique, Vol. 54, No. 2, APR-JUN 2009, pp. 147-155 – 4 citări (**revistă WoS**).

8. Lucrarea citata [**4**]

Gavrilas M., Inteligenta artificiala si aplicatii in energetica; Vol. I – Teorie, Editura „Gh. Asachi" Iasi, 320 pag., 2002 (ISBN 973-8292-20-4, ISBN 973-8292-21-2).

Lucrarea care citeaza

1. Mihai P., Popescu C.L., Popescu M.O., Mid Term Load Forecasting Using Analog Neural Networks, Revue Roumaine des Sciences Techniques-Serie Electrotechnique et Energetique, Vol. 54, No. 2, APR-JUN 2009, pp. 147-155 – 4 citări (**revistă WoS**).
2. Felea, I; Dan, F; Dzitac, S, Consumers Load Profile Classification Corelated to the Electric Energy Forecast, Proceedings of the Romanian Academy Series A-Mathematics Physics Technical Sciences Information Science, Volume: 13 Issue: 1 Pages: 80-88, JAN-MAR 2012 (**revistă WoS**).
3. Dragomir O.E., Dragomir F., Radulescu M., Matlab Application of Kohonen Self- Organizing Map to Classify Consumers' Load Profiles, Proc. of 2nd International Conference on Information Technology and Quantitative Management (ITQM), Natl Res Univ, Higher Sch Econ, Moscow, RUSSIA, JUN 03-05, 2014, pp. 474-479 (**conferință WoS**).
4. Neagu B., Georgescu Gh., Wind Farm Cable Route Optimization Using a Simple Approach, Proc. of 8th International Conference And Exposition On Electrical And Power Engineering (EPE), Iasi, ROMANIA, OCT 16-18, 2014, pp. 1004-1009 (**conferință WoS**).

9. Lucrarea citata [**2**]

Gavrilas M., Inteligenta artificiala si aplicatii in energetica; Vol. II – Teorie si aplicatii, Editura Polytechnium, 194 pag., 2005 (ISBN 973-8292-20-4, ISBN 973-621-116-9).

Lucrarea care citeaza

1. Mihai P., Popescu C.L., Popescu M.O., Mid Term Load Forecasting Using Analog Neural Networks, Revue Roumaine des Sciences Techniques-Serie Electrotechnique et Energetique, Vol. 54, No. 2, APR-JUN 2009, pp. 147-155 – 4 citări (**revistă WoS**).
2. Andrusca M., Adam M., Baraboi A., et al., Using Fuzzy Logic for Diagnosis of Technical Condition of Power Circuit Breakers, Proc. of 8th International Conference And Exposition On Electrical And Power Engineering (EPE), Iasi, ROMANIA, OCT 16-18, 2014, pp. 268-273 (**conferință WoS**).

10. Lucrarea citata [**2**]

Gavrilas M., Gavrilas G., Ivanov O., Electricity load prediction for water supply systems; Environmental Engineering and Management Journal, July/August 2008, Vol.7, No.4, pp. 453-458, ISSN: 1582-9596 (revistă cotată ISI– ISI Web of Knowledge).

Lucrarea care citeaza

1. Jaliu C, Diaconescu D, Neagoe M, et al., The eco-impact of small hydro implementation, Environmental Engineering and Management Journal, Volume 8, Issue 4, JUL-AUG 2009, Pages: 837-841 – 2 citări (**revistă WoS**).
2. Bunea F., Ciocan G.D., Oprina G., Baran G., Babutanu C.A.; Hydropower Impact on Water Quality, Environmental Engineering and Management Journal, Vol. 9, Issue 11, Nov. 2010, pp. 1459-1464, 2 citări (**revistă WoS**)

11. Lucrarea citata [**3**]

Gavrilas M., Gavrilas G., Improving energy efficiency in water distribution systems based on water consumption profiling; Environmental Engineering and Management Journal, May/June 2008, Vol.7, No.3, pp. 321-327, ISSN: 1582-9596

Lucrarea care citeaza

1. Jaliu C, Diaconescu D, Neagoe M, et al., The eco-impact of small hydro implementation, Environmental Engineering and Management Journal, Volume 8, Issue 4, JUL-AUG 2009, Pages: 837-841 – 2 citări (**revistă WoS**).
2. Bunea F., Ciocan G.D., Oprina G., Baran G., Babutanu C.A.; Hydropower Impact on Water Quality, Environmental Engineering and Management Journal, Vol. 9, Issue 11, Nov. 2010, pp. 1459-1464, 2 citări (**revistă WoS**)
3. Magadan Marta ; Rivas Jesus; The Impact of Energy Consumption on the Benefit Functions of Enterprises: Proposal of an Energy Efficiency Indicator; Environmental Engineering and Management Journal, Volume 10, Issue 12, Dec. 2011, pp. 1831-1834 (**revistă WoS**).

12. Lucrarea citata [**2**]

Gavrilas M., Ivanov O., Gavrilas G., REI equivalent design for electric power systems with genetic algorithms, WSEAS Transactions on Circuits and Systems, v 7, n 10, 2008, p 911-921, ISSN: 1109-2734.

Lucrarea care citeaza

1. Gabriel Nicolae Popa, Sorin Deaconu, Corina Maria Dinis, Angela Iagar, Implementation of a numerical distance relay for the 110kV electric lines, Proceedings of the 13th WSEAS International Conference on Systems Mathematics and Computers in Science Engineering, 22-24 July 2009, Rodos, Greece, ISBN ~ ISSN:1790-2769 , 978-960-474-097-0, pp. 271-276, 2009 (**conferință WoS**).
2. Haji M.M., Xu W., Online Determination of External Network Models Using Synchronized Phasor Data, IEEE Transactions on Smart Grid, Vol. PP, Issue 99, 2016, pp.1-1, DOI: 10.1109/TSG.2016.2559486, to be published (**revista WoS**).

13. Lucrarea citata [**2**]

Gavrilas M., O. Ivanov, C. V. Sfintes, Enhanced Particle Swarm Optimization Method for Power Loss Reduction in Distribution Systems, 19th International Conference on Electricity Distribution, Paper 0088, Session 5, Austria, 2007.

Lucrarea care citeaza

1. Secui D.C., Dzitac S., Bendea G.V., et al, An ACO Algorithm for Optimal Capacitor Banks Placement in Power Distribution Networks, Studies in Informatics and Control, Vol.18, Issue 4, pp: 305-314, December 2009 (**revista WoS**).

2. Secui D.C., Felea I., Dzitac S., et al, A Swarm Intelligence Approach to the Power Dispatch Problem, International Journal of Computers Communications & Control, Vol. 5, Issue 3, pp. 375-384, Sept. 2010. (**revista WoS**).

14. Lucrarea citata [**1**]

Georgescu Gh., **Gavrilas M.,** Radasanu D., "The Computation of Energy and Power Losses in Electric Networks and their Minimization" (in Romanian), Spectrum Printing House, Iasi, 1998, Romania.

Lucrarea care citeaza

1. Porumb R., Toader C., Golovanov N., et al., Energy Efficiency Rating of Transformers under Unbalanced Linear Regime, Proc. of Int Aegean Conference on Electrical Machines and Power Electronics (ACEMP) / Int Conference on Optimization of Electrical and Electronic Equipment (OPTIM) / Int Symposium on Advanced Electromechanical Motion Systems (ELECTROMOTION), Side, TURKEY, Sept. 02-04, 2015, pp. 538-544 (**conferință WoS**).

15. Lucrarea citata [**1**]

Georgescu Gh., **Gavrilas M.,** Cartina Gh., Aspects Concerning Power Distribution Networks Planning Using the Artificial Intelligence, 14th International Conference on Electricity Distribution, CIRED '97, 2-5 June, Birmingham, England, pp. 876-881, 1997, ISBN: 0-85296-674-1.

Lucrarea care citeaza

1. Sudhakar T.D., Srinivas K.N., Restoration of power network – a bibliographic survey, European Transactions on Electrical Power, Vol. 21, Issue 1, Jan. 2011, pp. 635-655, ISSN:1430-144X (**revista WoS**).

16. Lucrarea citata [**1**]

Gavrilas M., Georgescu Gh., Cartina Gh., A Connectionist Approach to Real-Time Control and Simulation of Switching Operations in Power Systems Substations; Proceedings of the 8th Mediterranean Electrotechnical Conference MELECON'96, Vol. III, May 13-16, 1996, Bari, Italy, pp. 1431-1434, 1996.

Lucrarea care citeaza

1. Tang, Z., Graph theory based expert system to form de-icing route in Changsha power grid, International Journal of Electrical PoVII.83wer and Energy Systems, 43 (1) , pp. 1318-1321, 2012 (**revista WoS**).

17. Lucrarea citata [**5**]

Grigoras Gh., Cartina Gh., **Gavrilas M.,** Using of Clustering Techniques in Optimal Placement of Phasor Measurements Units, Poceedings of the 9-th WSEAS/IASME International Conference on Electric Power Systems, High Voltage, Electric Machines (POWER '09), Genova, Italy, Oct. 17-19, 2009, Book Series: Recent Advances in Electrical Engineering, pp: 104-108, ISBN 978-960474130-4.

Lucrarea care citeaza

1. Fl. Scarlatache, Gh. Grigoras, Gh. Cartina, G. Chicco, A Comparative Study Regarding the Optimal Placement of the DG Sources, Proceedings of the 2012 International Conference and Exposition on Electrical and Power Engineering, EPE'2012, Iasi, Romania, Oct. 2012, pp. 231-236 (**conferință WoS**).
2. Scarlatache, F., Grigoras, G., Optimal Coordination of Wind and Hydro Power Plants in Power Systems, Transactions of 2014 International Conference on Optimization of Electrical and Electronic Equipment (OPTIM), Brasov, Romania, May 22-24, 2014, Pages: 689-694 (**conferință WoS**).
3. Takata M., Miyata Y., Nishikawa N., Proposal of analytics software architecture with data preparation layer for fast event identification in wide-area situational awareness, Proc. of IEEE International Conference on Industrial Technology (ICIT), Seville, SPAIN, MAR 17-19, 2015, pp. 1741-1746 (**conferință WoS**).
4. Scarlatache Fl., Grigoras Gh., Placement of DG Sources Using a Clustering Based Partitioning Method in Distribution Systems, Proc. of 9th International Symposium on Advanced Topics in Electrical Engineering (ATEE), Univ Politehnica Bucharest, ROMANIA, MAY 07-09, 2015, pp. 868-872 (**conferință WoS**).
5. Priyadharshini M., Meenakumari R., Probabilistic approach based Optimal placement of Phasor Measurement Units via the estimation of Dynamic Vulnerability Assessment, Proc. of International Conference on Green Computing Communication and Electrical Engineering (ICGCCEE), Coimbatore, INDIA, MAR 06-08, 2014 (**conferință WoS**).

18. Lucrarea citata [**5**]

Gavrilas M., Gavrilas G., Ivanov O., A Network Reduction Method with Synchronized Phasor Measurements, Poceedings of the 9-th WSEAS/IASME International Conference on Electric Power Systems, High Voltage, Electric Machines (POWER '09), Genova, Italy, Oct. 17-19, 2009, Book Series: Recent Advances in Electrical Engineering, CD-ROM, ISBN:978-960-474-130-4, ISSN: 1790-5117.

Lucrarea care citeaza

1. Georgiev, Georgi; Zicmane, Inga; Antonov, Eduard, Elimination of Load Nodes of Power System with Dynamic Characteristics, Book Editor(s): Kolcun, M; Kolcunova, I; Kurimsky, J, Proceedings of the 6th International Scientific Symposium on Electrical Power Engineering (ELEKTROENERGETIKA 2011), Stara Lesna, SLOVAKIA, SEP 21-23, 2011, pp. 48-51 (**conferință WoS**).
2. Georgiev, Georgi; Zicmane, Inga; Functional accuracy of static and dynamic models of electrical systems obtained after an elimination of several nonlinear loads, Book Editor(s): Kolcun, M; Kolcunova, I; Kurimsky, J, Proceedings of the 6th International Scientific Symposium on Electrical Power Engineering (ELEKTROENERGETIKA 2011), Stara Lesna, SLOVAKIA, SEP 21-23, 2011, pp. 81-84 (**conferință WoS**).
3. Georgi GEORGIEV, Inga ZICMANE, Eduard ANTONOV, Sergejs KOVALENKO, An aggregate analytical load model with voltage dependant characteristics, The 6th International Conference on Electrical and Control Technologies, Kaunas, Lithuania, May 5-6, 2011, pp. 196-201 (**conferință WoS**)
4. Georgi Georgiev, Inga Zicmane, Eduard Antonov, Comparison of two Methodologies for Power System Nodal Model Reduction presenting Nonlinear Load Elimination, Proc. of Electric Power Engineering EPE 2012, Brno, Czech Republic, pp. 109-113 (ISI Conference Proceedings Citation Index- Science).
5. Georgiev, Georgi; Zicmane, Inga; Antonov, Eduard, Transformation algorithm of complex power system by means of load nodes elimination, represented as its static and dynamic characteristics, Proceedings of the 2012 International Conference and Exposition on Electrical and Power Engineering, EPE'2012, Iasi, Romania, Oct. 2011, pp. 732-737 (**conferință WoS**).

19. Lucrarea citata [6]

Gavrilas M., Gavrilas G., Sfintes C.V., Application of Honey Bee Mating Optimization algorithm to load profile clustering, Proceedings of 2010 IEEE International Conference on Computational Intelligence for Measurement Systems and Applications (CIMSA), 6-8 Sept. 2010, Taranto, Itally, pp. 113-118, ISBN: 978-1-4244-7229-1

Lucrarea care citeaza

1. Jalili, H., Amirzadeh, A., Noorafkan, A., Jalili, G., A new evolutionary algorithm based on data sharing concept for solving optimization problems, Scientific Research and Essays, Volume 6, Issue 23, 16 October 2011, Pages 5082-5090, ISSN: 1992-2248 (**revista WoS**).
2. Kai-le Zhou, Shan-lin Yanga, Chao Shena, A review of electric load classification in smart grid environment, Renewable and Sustainable Energy Reviews, Volume 24, August 2013, Pages 103–110, 2 citări (**revista WoS**).
3. Verma A., Asadi A., Yang K., et al. A data-driven approach to identify households with plug-in electrical vehicles (PEVs), APPLIED ENERGY, Vol. 160, pp. 71-79, Dec. 15 2015, DOI: 10.1016/j.apenergy.2015.09.013 (**revista WoS**).
4. Gonzalez-Pardo A., Del Ser J., Camacho D., On the Applicability of Ant Colony Optimization to Non-Intrusive Load Monitoring in Smart Grids, Proc. of 16th Conference of the Spanish-Association-for-Artificial-Intelligence (CAEPIA), Albacete, SPAIN, NOV 09-12, 2015, pp. 312-321 (**conferință WoS**).
5. Azad S., Ali A. B. M. Shawkat, Wolfs P., Identification of Typical Load Profiles using K-Means Clustering Algorithm, Proc. of Asia Pacific World Congress Computer Science Engineering, Nadi, FIJI, NOV 04-05, 2014 (**conferință WoS**).
6. R Damayanti, A G Abdullah, W Purnama1 and A B D Nandiyanto, Electrical Load Profile Analysis Using Clustering Techniques, IOP Conference Series: Materials Science and Engineering, Volume 180, Number 1, pp. 1-7 (**conferință WoS**).

20. Lucrarea citata [3]

Gavrilas M., Recent Advances and Applications of Synchronized Phasor Measurements in Power Systems, Poceedings of the 9-th WSEAS/IASME International Conference on Electric Power Systems, High Voltage, Electric Machines (POWER '09), Genova, Italy, Oct. 17-19, 2009, Book Series: Recent Advances in Electrical Engineering, ISBN: 978-960-474-130-4.

Lucrarea care citeaza

1. Abdolkhalig, A; Zivanovic, R, Phasor measurement based on IEC 61850-9-2 and Kalman-Filtering, MEASUREMENT, Elsevier, ISSN: 0263-2241, Vol. 50, Pages: 126-134, Apr. 2014 (**revista WoS**)
2. Stogov Al. Yu., Belyaev A.N., The Autonomous Power System Control on the Basis of the Wide Area Measurement System Data, Proc. of IEEE North-West-Russia-Section Young Researchers in Electrical and Electronic Engineering Conference (ElConRusNW), Saint Petersburg Electrotechn Univ LETI, St Petersburg, RUSSIA, Feb. 02-03, 2016, pp. 694-698 (**conferință WoS**).

3. Yang T.C., Zolotas A.C., Wren T., et al., Exploring future directions of Control, Proc. of United-Kingdom-Automatic-Control-Council (UKACC) 10th International Conference on Control (CONTROL), Loughborough, UNITED KINGDOM, JUL 09-11, 2014, pp. 525-530. (**conferință WoS**).

21. Lucrarea citata [**2**]

M. Gavrilas. "Heuristic and metaheuristic optimization techniques with application to power systems", In Proceedings of the 12th WSEAS international conference on Mathematical methods and computational techniques in electrical engineering (MMACTEE'10), WSEAS Press, Stevens Point, Wisconsin, USA, 2005, pp. 95-103.

Lucrarea care citeaza

1. Gavela, P., Rueda, J. L., Vargas, A. and Erlich, I. (2014), Performance comparison of heuristic optimization methods for optimal dynamic transmission expansion planning. International Transactions on Electrical Energy Systems. doi: 10.1002/etep.1785, Volume: 24 Issue: 10 Pages: 1450-1472 (**revista WoS**)
2. Bhatia N., Kumar V., Rana, K. P. S.; et al. Development of a Flower Pollination Algorithm Toolkit in LabVIEW (TM), Proc. of 3rd International Conference on Computing for Sustainable Global Development (INDIACom), New Delhi, INDIA, March 16-18, 2016, pp. 309-314 (**conferință WoS**).

22. Lucrarea citata [**2**]

Gavrilas M., Gavrilas G., An Enhanced ANN Wind Power Forecast Model Based on a Fuzzy Representation of Wind Direction, Proceedings of the 10th Symposium on Neural Network Applications in Electrical Engineering, NEUREL 2010, Sept. 23-25, 2010, Belgrade, Serbia, pp. 31-36, ISBN: 978-1-4244-8818-6.

Lucrarea care citeaza

1. Ata R., Artificial neural networks applications in wind energy systems: a review, Renewable & Sustainable Energy Reviews, Vol. 49, pp. 534-562, Sept. 2015, DOI: 10.1016/j.rser.2015.04.166 (**revista WoS**).
2. Ozkan M.B., Karagoz P., A Novel Wind Power Forecast Model: Statistical Hybrid Wind Power Forecast Technique (SHWIP), IEEE Transactions on Industrial Informatics, Vol. 11, No. 2, pp. 375-387, Apr. 2015, DOI: 10.1109/TII.2015.2396011 (**revista WoS**).

23. Lucrarea citata [**1**]

Ivanov O., Gavrilas M., Intelligent distributed state estimation using REI system equivalents and phasor measurements, Poceedings of the 12-th International Conference on Optimization of Electrical and Electronic Equipment, OPTIM 2010, pp. 1263 – 1268, ISBN: 978-973-131-7018-1.

Lucrarea care citeaza

1. Dos Angelos, E.W.S. , Asada, E.N., Multi-area state estimation with PMU and external system modeling, Proceedings of IEEE Power and Energy Society General Meeting, PES 2012;San Diego, CA, pp. 1-7 (**conferință WoS**).

24. Lucrarea citata [2]

Coroama I., Gavrilas M., A study on wind energy generation forecasting using connectionist models, Poceedings of the 12-th International Conference on Optimization of Electrical and Electronic Equipment, OPTIM 2010, pp. 1257 – 1262, ISBN: 978-973-131-7018-1

Lucrarea care citeaza

1. Hagan K.E., Oyebanjo O.O., Masaud T.M. et al. A Probabilistic Forecasting Model for Accurate Estimation of PV Solar and Wind Power Generation, Proc. of IEEE Power and Energy Conference at Illinois (PECI), Urbana, IL, Feb. 19-20, 2016 (**conferință WoS**).
2. Maheswaran N.S., SSSC based SSR mitigation in hybrid system using optimized fuzzy logic controller, Optoelectronics and Advanced Materials-Rapid Communications, Vol. 9, No. 3-4, pp.424-430, MAR-APR 2015 (**revista WoS**).

25. Lucrarea citata [1]

Mihai Gavrilaş, Enhanced Evolutionary Search Algorithms for Multiobjective Optimization in Power System, Proceedings of 13th WSEAS International Conference on Evolutionary Computing, publicată în volumul Latest advance in information science, circuits and systems cu ISSN 1790-5109 si ISBN:978-1-61804-099-2, pag. 77-86, 2012

Lucrarea care citeaza

1. G. Chicco, A. Mazza and A. Russo, Optimization and Decision-Making in Electrical Distribution Networks, Proceedings of the 2012 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, 25-27 Oct. 2012, pp. 297 – 306, 2 citari (**conferință WoS**)

26. Lucrarea citata [2]

Gavrilas M., Ivanov O., Load profiling by self organization with affinity control strategy; Revue Roumaine des Sciences Techniques-Serie Electrotechnique et Energetique, Oct – Dec. 2008, Vol.53, No.4, pp. 413-421, ISSN: 0035-4066

Lucrarea care citeaza

1. Bornoiu, I.V., Grigore, O., Evaluation of multiple levels of psychological stress using only electrodermal activity data, Revue Roumaine des Sciences Techniques-Serie Electrotechnique et Energetique, Vol. 59, Issue: 3, JUL-SEP 2014, Pages: 325-334 (**revista WoS**)
2. Hino H., Shen H., Murata N., Wakao S., Hayashi Y., A Versatile Clustering Method for Electricity Consumption Pattern Analysis in Households, IEEE Transactions on Smart Grids, Vol. 4, Issue 2, 2013, pp. 1048-1057, 2 citări (**revista WoS**).

27. Lucrarea citata [1]

Gavrilas M., Ivanov O., Gavrilas G., Load Profiling with Fuzzy Self-Organizing Algorithm, 9th Symposium on Neural Network Applications in Electrical Engineering NEUREL 2008, Sept. 25–27, 2008, Belgrade, Serbia, CD-ROM, ISBN: 978-1-4244-2903-S

Lucrarea care citeaza

1. Kai-le Zhou, Shan-lin Yanga, Chao Shena, A review of electric load classification in smart grid environment, Renewable and Sustainable Energy Reviews, Volume 24, August 2013, Pages 103–110, 2 citări (**revista WoS**).

28. Lucrarea citata [3]

Gavrilas, M., Stahie, V., Cascade hydropower plants optimization with Honey Bee Mating Optimization algorithm, International Review of Electrical Engineering, Vol. 6, No. 5, 2011, pp. 2456-2466

Lucrarea care citeaza

1. Karami, H.A. Shayanfara, J. Aghaeib, A. Ahmadic, Scenario-based security-constrained hydrothermal coordination with volatile wind power generation, Renewable and Sustainable Energy Reviews, Volume 28, December 2013, Pages 726–737 (**revista WoS**)
2. Karami, M.; Shayanfar, H. A.; Aghaei, J.; et al., Mixed integer programming of security-constrained daily hydrothermal generation scheduling (SCDHGS); SCIENTIA IRANICA Volume: 20 Issue: 6 Pages: 2036-2050, DEC 2013 (**revista WoS**).
3. Aghaei, J., Shiraz, Iran. ; Karami, M. ; Muttaqi, K.M. ; Shayanfar, H.A., MIP-Based Stochastic Security-Constrained Daily Hydrothermal Generation Scheduling, IEEE Systems Journal, Vol. 9 , Issue: 9, 2015, pp. 615-628, 10.1109/JSYST.2013.2289771 (**revista WoS**).

29. Lucrarea citata [1]

Coroama I., Gavrilas M. and Ivanov O., Multi-objective Pareto network optimization problem for technical, economical and environmental objectives, Proc. 9th World Energy System Conference (WESC 2012), Suceava, Romania, 28-30 June 2012, pp. 587-594.

Lucrarea care citeaza

1. G. Chicco, A. Mazza and A. Russo, Optimization and Decision-Making in Electrical Distribution Networks, Proceedings of the 2012 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, 25-27 Oct. 2012, pp. 297 – 306, 2 citari (**conferință WoS**)

30. Lucrarea citata [12]

Coroamă, I., Chicco, G., Gavrilaş, M., Russo, A., Distribution system optimisation with intra-day network reconfiguration and demand reduction procurement, Electric Power Systems Research, Vol. 98, 2013, pp. 29-38

Lucrarea care citeaza

1. Giaourisa D, Papadopoulosa A.I., Ziogoua Ch, et al, Performance investigation of a hybrid renewable power generation and storage system using systemic power management models, Energy, ISSN: 0360-5442, Volume 61, 1 November 2013, Pages 621–635 (**revista WoS**).

2. Mistry, K.D., Roy, R., Impact of demand response program in wind integrated distribution network, Electric Power Systems Research, Volume 108, March 2014, Pages 269-281 (**revista WoS**).
3. Tomoiaga, B., Micu, D.D., A comparative study of pareto optimal approaches for distribution system reconfiguration, 49th International Universities Power Engineering Conference, UPEC 2014; Cluj-Napoca; Romania; 2 September 2014 through 5 September 2014; Category number CFP14569-ART; Code 108773; Article number 6934784 (SCOPUS).
4. Paterakis N.G., Mazza A., Santos S.F., et al., Multi-Objective Reconfiguration of Radial Distribution Systems Using Reliability Indices, IEEE Transactions on Power Systems, Vol. 31, No. 2, pp. 1048-1062, Mar. 2016 (**revista WoS**).
5. Jabbari-Sabet R., Moghaddas-Tafreshi S.M., Mirhoseini S.S., Microgrid operation and management using probabilistic reconfiguration and unit commitment, International Journal of Electrical Power & Energy Systems, Vol. 75, pp. 328-336, Feb. 2016 (**revista WoS**).
6. Garcia E., Isaac I., Demand response systems for integrating energy storage batteries for residential users, Proc. of IEEE Ecuador Technical Chapters Meeting (ETCM), Guayaquil, ECUADOR, Oct. 12-14, 2016 (**conferință WoS**).
7. Li Guang-Ming; Peng Min-Fang; Zhu Liang; et al. Multi-period Reconfiguration of the Distribution Network Based on the Improved EM Algorithm, Proc. of International Conference on Artificial Intelligence - Techniques and Applications (AITA), Shanghai, CHINA, Sept. 25-26, 2016, pp. 215-219 (**conferință WoS**).
8. Jordehi A.R., Optimisation of electric distribution systems: A review, RENEWABLE & SUSTAINABLE ENERGY REVIEWS, Vol. 51, pp. 1088-1100, Nov. 2015, DOI: 10.1016/j.rser.2015.07.004 (**revista WoS**).
9. Mazza A., Chicco G., Andrei H., et al. Determination of the relevant periods for intraday distribution system minimum loss reconfiguration, International Transactions on Electrical Energy Systems, Vol. 25, No. 10, pp. 1992-2023, Oct 2015, DOI: 10.1002/etep.1941 (**revista WoS**).
10. Silvente J., Aguirre A.M., Zamarripa M.A., et al. Improved time representation model for the simultaneous energy supply and demand management in microgrids, Energy, Vol. 87, pp. 615-627, July 1 2015, DOI: 10.1016/j.energy.2015.05.028 (**revista WoS**).
11. Giaouris D., Papadopoulos A., Voutetakis S., et al. A power grand composite curves approach for analysis and adaptive operation of renewable energy smart grids, Clean Technologies and Environmental Policy, Vol. 17, No. 5, Special Issue: SI, pp. 1171-1193, June 2015, DOI: 10.1007/s10098-015-0940-y (**revista WoS**).
12. Paterakis N.G., Santos S.F., Catalao J.P.S., et al., Multi-Objective Optimization of Radial Distribution Networks using an Effective Implementation of the epsilon-constraint Method, Proc. of Australasian Universities Power Engineering Conference (AUPEC), Perth, AUSTRALIA, SEP 28-OCT 01, 2014 (**conferință WoS**).
13. Beenish Sultana, Distribution system loss minimization with network reconfiguration and cost-benefit price based demand reduction modeling, Journal of Engineering Research, Vol 5, No 1 (2017), pp. 140-162 (**revista WoS**).

31. Lucrarea citata [1]

Coroama I., Gavrilaş M., Ivanov O., Stahie V.,Meta-heuristic-based methods for multi-objective non-conflicting optimization of distribution networks operation, Proceedings of the 2012 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, 25-27 Oct. 2012, pp. 280 - 285, ISBN: 978-1-4673-1171-7.

Lucrarea care citeaza

1. Naz M.N., Mushtaq M.I., Naeem M., Iqbal M., Altaf M.W., Haneef M., Multicriteria decision making for resource management in renewable energy assisted microgrids, RENEWABLE & SUSTAINABLE ENERGY REVIEWS, Volume: 71, Pages: 323-341, DOI: 10.1016/j.rser.2016.12.059, May 2017 (**revista WoS**).

32. Lucrarea citata [2]

Kriukov Al., Gavrilaş M., Smart energy management in distribution networks with increasing number of electric vehicles, Proceedings of the 2014 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, Oct. 2014, pp. 1039 - 1044, DOI: 10.1109/ICEPE.2014.6970067.

Lucrarea care citeaza

1. Manbachi M., Farhangi H., Palizban A., Arzanpour S., Smart grid adaptive volt-VAR optimization: Challenges for sustainable future grids, Sustainable Cities and Society, Vol. 28, pp. 242-255, May 2017, DOI: 10.1016/j.scs.2016.09.014. (**revista WoS**).

2. Manbachi M., Sadu A., Farhangi H. et al., Impact of EV penetration on Volt-VAR Optimization of distribution networks using real-time co-simulation monitoring platform, Applied Energy, Vol. 169, pp. 28-39, May 1 2016, DOI: 10.1016/j.apenergy.2016.01.084 (**revista WoS**).

33. Lucrarea citata [6]

Stativa A., Gavrilas M., Stahie V., Optimal Tuning and Placement of Power System Stabilizer using Particle Swarm Optimization Algorithm, Proceedings of the 2012 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, 25-27 Oct. 2012, pp. 242-247, ISBN: 978-1-4673-1171-7.

Lucrarea care citeaza

1. Velasquez M.A., Quijano N. Cadena A.I., Optimal placement of switches on DG enhanced feeders with short circuit constraints, Electric Power Systems Research, Vol. 141, pp. 221-232, Dec. 2016, DOI: 10.1016/j.epsr.2016.08.001 (**revista WoS**).
2. Quevedo A.D., Santamaria F.A., Jorge A., Analysis of Plug-in electric vehicles penetration in residential buildings under deterministic and stochastic scenarios, Proc. of IEEE PES Transmission & Distribution Conference and Exposition-Latin America (PES T&D-LA), Morelia, MEXICO, Sept. 20-24, 2016 (**conferință WoS**).
3. Ruglheck S., Wangdee W., Power System Stabilizer Tuning Comparison for WECC Standard-based and PSO-based Methods, Proc. of 13th International Conference on Electrical Engineering / Electronics, Computer, Telecommunications and Information Technology (ECTI-CON), Chiang Mai, THAILAND, June 28-July 01, 2016 (**conferință WoS**).
4. Latif A., Shahzad M., Palensky P., et al., An Alternate PowerFactory Matlab Coupling Approach, Proc. of 2015 International Symposium on Smart Electric Distribution Systems and Technologies (EDST), Vienna, AUSTRIA, SEP 07-11, 2015, pp. 486-491 (**conferință WoS**).
5. Kharrazi Ali,Tuning of Power System Stabilizer in Single Machine Infinite Bus (SMIB) using Genetic Algorithm and Power Factory Modal Analysis, Proc. of Australasian Universities Power Engineering Conference (AUPEC), Wollongong, AUSTRALIA, Sept. 27-30, 2015 (**conferință WoS**).
6. Velasquez M.A., Quijano N., Cadena A.I., Multi-Objective Planning of Recloser-Based Protection Systems on DG Enhanced Feeders, Proc. of IEEE PES Innovative Smart Grid Technologies Latin America (ISGT LATAM) Conference, Montevideo, TURKEY, OCT 05-07, 2015, pp. 822-827 (**conferință WoS**).

34. Lucrarea citata [3]

Stativa A., Gavrilas M., Ivanov O., Optimal Power System Stabilizer Design Using Multiple Wide-Area Input Signals, Proceedings of the 14th International Conference on Environment and Electrical Engineering (EEEIC) Location: Krakow, Poland, May 10-12, 2014, pp. 34-39.

Lucrarea care citeaza

1. Shakarami M.R., Davoudkhani I.F., Wide-area power system stabilizer design based on Grey Wolf Optimization algorithm considering the time delay, Electric Power Systems Research, Vol. 133, pp. 149-159, Apr. 2016, DOI: 10.1016/j.epsr.2015.12.019 (**revista WoS**).
2. Alshimmari A. M., Damping Control Loops for Mitigating Power System Oscillation with Wind Parks Support, Proc. of IEEE PES Transmission & Distribution Conference and Exposition-Latin America (PES T&D-LA), Morelia, MEXICO, Sept. 20-24, 2016 (**conferință WoS**).
3. Zeyad Assi Obaida, L.M. Cipcigana, Mazin T. Muhssina, Power system oscillations and control: Classifications and PSSs' design methods: A review, Renewable and Sustainable Energy Reviews, Volume 79, November 2017, Pages 839–849, doi.org/10.1016/j.rser.2017.05.103 (**revista WoS**).

35. Lucrarea citata [2]

Ivanov O., Gavrilas M., State estimation for power systems with multilayer perceptron neural networks, Proc. of 11th Symposium on Neural Network Applications in Electrical Engineering, NEUREL 2012, Belgrade, Serbia, 20-22 Sep., 2012, pp. 243-246.

Lucrarea care citeaza

1. Fainti R., Alamaniotis M., Tsoukalas L.H., Three-Phase Congestion Prediction Utilizing Artificial Neural Networks, Proc. of 7th International Conference on Information, Intelligence, Systems & Applications (IISA), Chalkidiki, Greece, July 13-15, 2016 (**conferință WoS**).
2. Mosbah H., El-Hawary M., Multilayer Artificial Neural Networks for Real Time Power System State Estimation, Proc. of IEEE Electrical Power and Energy Conference (EPEC), Ontario, CANADA, OCT 26-28, 2015, pp. 344-351 (**conferință WoS**).

36. Lucrarea citata [2]

Ivanov O., Gavrilas M., Neagu B., Intelligent Monitoring and Control in Transmission and Distribution Networks, Proc. of International Conference on Optimization of Electrical and Electronic Equipment (OPTIM 2014), Brasov, Romania, May 22-24, 2014, pp. 185-191.

Lucrarea care citeaza

1. Fainti R., Alamaniotis M., Tsoukalas L.H., Three-Phase Congestion Prediction Utilizing Artificial Neural Networks, Proc. of 7th International Conference on Information, Intelligence, Systems & Applications (IISA), Chalkidiki, Greece, July 13-15, 2016 (**conferință WoS**).
2. Ali, S.M; Jawad, M; Khan, B. et al. - Wide area smart grid architectural model and control: A survey, Renewable and Sustainable Energy Reviews. Volume 64, October 2016, Pages 311–328, DOI: 10.1016/j.rser.2016.06.006 (Elsevier), ISSN: 1364-0321, Accession Number: WOS:000381833200022 (**revista WoS**)

37. Lucrarea citata [1]

Ivanov O., Gavrilas M., Applying genetic algorithms to REI system equivalents, Proc. of 2009 IEEE Bucharest PowerTech Conference, Bucharest, Romania, 28 June-2 July 2009, pp. 1-6, DOI: 10.1109/PTC.2009.5281875

Lucrarea care citeaza

1. Klein D., Spieker C., Rueberg S., et al. Aggregation of Large-Scale Electrical Energy Transmission Networks, Proc. of IEEE International Energy Conference (ENERGYCON), Leuven, Belgium, Apr. 04-08, 2016 (**conferință WoS**).

38. Lucrarea citata [1]

Hopulele E., Gavrilas M., Optimization of a Combined Cool, Heat and Power Plant Based on Genetic Algorithms and Specialized Software, Proc. of 8th International Conference and Exposition on Electrical And Power Engineering (EPE), Iasi, ROMANIA, Oct. 16-18, 2014, pp. 1030-1033.

Lucrarea care citeaza

1. Cenusa V.E., Darie G., Energetic Analysis of the Subcritical Low-Temperature ORC by Imposing the Hot Source Outlet Temperature, Proc. of 9th International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, ROMANIA, Oct. 20-22, 2016, pp. 766-770. (**conferință WoS**).

39. Lucrarea citata [1]

Stativa A., Gavrilas M., Small Signal Stability Enhancement Using Supplementary Signals From PMU, Buletinul AGIR, nr. 3, 2013, pp. 261-267

Lucrarea care citeaza

1. Ruglheck S., Wangdee W., Power System Stabilizer Tuning Comparison for WECC Standard-based and PSO-based Methods, Proc. of 13th International Conference on Electrical Engineering / Electronics, Computer, Telecommunications and Information Technology (ECTI-CON), Chiang Mai, THAILAND, June 28-July 01, 2016 (**conferință WoS**).

40. Lucrarea citata [1]

Stativa A., Gavrilas M., Using DIgSILENT in Small Signal Stability Studies, Buletinul AGIR, nr. 3, 2013, pp. 269-274.

Lucrarea care citeaza

1. Ruglheck S., Wangdee W., Power System Stabilizer Tuning Comparison for WECC Standard-based and PSO-based Methods, Proc. of 13th International Conference on Electrical Engineering / Electronics, Computer, Telecommunications and Information Technology (ECTI-CON), Chiang Mai, THAILAND, June 28-July 01, 2016 (**conferință WoS**).

41. Lucrarea citata [1]

Toma R., Gavrilas M., The Impact on Voltage Stability of the Integration of Renewable Energy Sources into the Electricity Grids, Proc. of 8th International Conference and Exposition on Electrical And Power Engineering (EPE), Iasi, ROMANIA, Oct. 16-18, 2014, pp. 1051-1054.

Lucrarea care citeaza

1. Abd M.K., Cheng S.J., Sun H.S., Optimal Placement and Optimal Mix of RDGs for Improving Voltage Stability and Maximum Loadability Using PSAT, Proc. of IEEE 11th Conference on Industrial Electronics and Applications (ICIEA), Hefei, China, June 05-07, 2016, pp. 1574-1578 (**conferință WoS**).

42. Lucrarea citata [1]

Kriukov Al., Vicol B., Gavrilas M., Applying a micro-market inside an electric vehicles parking facility, Proc. of 49th International Universities Power Engineering Conference (UPEC 2014), Cluj-Napoca, Romania, 2-5 Sept. 2014, pp. 1-6

Lucrarea care citeaza

1. Longo M., Zaninelli D., Viola F., et al. How is the Spread of the Electric Vehicles?, Proc. of IEEE 1st International Forum on Research and Technologies for Society and Industry (RTSI 2015), Torino, ITALY, Sept. 16-18, 2014 (**conferință WoS**).

43. Lucrarea citata [1]

Ivanov O., Gavrilas M., State estimation with Neural Networks and PMU voltage measurements, Proc. of 2014 International Conference and Exposition on Electrical and Power Engineering (EPE 2014), Iasi, Romania, 16-18 Oct. 2014, pp. 983-988.

Lucrarea care citeaza

1. Mosbah H., El-Hawary M., Multilayer Artificial Neural Networks for Real Time Power System State Estimation, Proc. of IEEE Electrical Power and Energy Conference (EPEC), Ontario, CANADA, OCT 26-28, 2015, pp. 344-351. (**conferință WoS**).

44. Lucrarea citata [4]

Gavrilas M., Ivanov O., Gavrilas G., Electricity Load Forecasting Based on a Mixed Statistical-Neural-Computational Intelligence Approach, Proc. of 12th Symposium on Neural Network Applications in Electrical Engineering (NEUREL 2014), Belgrade, Serbia, 25-27 Nov. 2014, pp. 61-66.

Lucrarea care citeaza

1. Mustapha M., Mustafa M.W., Khalid S. N., et al., Classification of Electricity Load Forecasting Based on the Factors Influencing the Load Consumption and Methods Used: An-overview, Proc. of IEEE Conference on Energy Conversion (CENCON), Johor Bahru, MALAYSIA, OCT 19-20, 2015, pp. 442-447. (**conferință WoS** Science).
2. Gavrilescu M., Noise robust Automatic Speech Recognition system by integrating Robust Principal Component Analysis (RPCA) and Exemplar-based Sparse Representation, Proc. of 7th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Bucharest, ROMANIA, JUN 25-27, 2015, pp. S29-S33 (**conferință WoS**).
3. Gavrilescu M., Improved Automatic Speech Recognition System by using Compressed Sensing Signal Reconstruction based on L0 and L1 estimation algorithms, Proc. of 7th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Bucharest, ROMANIA, JUN 25-27, 2015, pp. S23-S27. (**conferință WoS**).
4. Gavrilescu M., Recognizing emotions from videos by studying facial expressions, body postures and hand gestures, Proc. of 20th Telecommunications Forum (TELFOR), Belgrade, SERBIA, NOV 24-26, 2015, pp. 720-723 (**conferință WoS**).

45. Lucrarea citata [1]

Kriukov A., Grigoras G., Gavrilas M., Scarlatache Fl., An Analyze of Slow Voltage Variations from the Electric Distribution Systems with a Clustering Based Approach, Proc. of International Conference on Harmonics and Quality of Power (ICHQP), Bucharest, Romania, May, 2014, pp. 689-693.

Lucrarea care citeaza

1. Neagu B., Grigoras Gh., Assessment of Slow Voltage Variations from the Electric Distribution Systems with Fuzzy Techniques, Proc. of 7th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Bucharest, ROMANIA, JUN 25-27, 2015, pp. P61-P66. (**conferință WoS**).

46. Lucrarea citata [1]

Grigoras G., Ivanov O., Gavrilas M., Customer classification and load profiling using data from Smart Meters, Proc. of 12th Symposium on Neural Network Applications in Electrical Engineering, NEUREL 2014, Belgrade, Serbia, 25-27 November 2014, pp. 73-78.

Lucrarea care citeaza

1. Grigoras Gh., Scarlatache Fl., Processing of Smart Meters Data for Peak Load Estimation of Consumers, Proc. of 9th International Symposium on Advanced Topics in Electrical Engineering (ATEE), Univ Politehnica Bucharest, ROMANIA, MAY 07-09, 2015, pp. 864-867. (**conferință WoS**).

47. Lucrarea citata [1]

Georgescu Gh., Poeata A., Gavrilas M., Energy Losses Computation using Fourier Series Load Curves Decomposition, in Romanian, Energetica, No. 5, 1995.

Lucrarea care citeaza

1. Georgescu Gh., Neagu B., Pintea A., Aspects Regarding the Power and Energy Losses Evaluation from Public Electricity Repartition Systems, Proc. of International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, ROMANIA, Oct. 25-27, 2012, pp. 253-258. (**conferință WoS**).

48. Lucrarea citata [1]

Matei Gh., Gavrilas M., Voltage regulation in distribution networks with distributed generation — A review, 2016 International Conference and Exposition on Electrical and Power Engineering (EPE 2016), Iasi, Romania, 20-22 Oct. 2016, pp. 728 - 732, DOI: 10.1109/ICEPE.2016.7781435.

Lucrarea care citeaza

1. N. Shaukata, et al., A survey on electric vehicle transportation within smart grid system, Renewable and Sustainable Energy Reviews, Available online 16 June 2017, In Press, DOI: https://doi.org/10.1016/j.rser.2017.05.092 (**revista WoS**).

Citări în reviste și volumele conferințelor BDI

1. Lucrarea citata [**4**]

Gavrilas M., Sfintes C.V., Filimon M.N., Identifying typical load profiles using neural-fuzzy models; Proceedings of the 2001 IEEE / PES Transmission and Distribution Conference, Oct. 28 – Nov. 2, Atlanta, Georgia, 2001, CD-ROM, ISBN 07803-7287-5/01.

Lucrarea care citeaza

1. Lo K.L., Zakaria Z., Sohod M.H, Application of Two-Stage Fuzzy C-means in Load profiling; WSEAS Transactions on Infromation Science and Applications, Vol. 2, Issue 11, November 2005, pp. 1905-1912 (**conferință SCOPUS**).
2. Kohan N.M., Moghaddam M.P., Bidaki S.M., Yousefi G.R., Comparison of Modified K-Means and Hierachical Algorithms in Custormes Load Curves Clustering for Designing Suitable Tariffs in Electricity Markets, Proceedings of the 43rd International Universities Power Engineering Conference, UPEC 2008; Padova; 1 - 4 September 2008, ISBN: 978-888988409-6 (**conferință SCOPUS**)
3. C. Reese, C. Buchhagen and L. Hofmann, Voltage Range as Control Input for OLTC-equipped Distribution Transformers, 2012 IEEE PES Transmission and Distribution Conference and Exposition (T&D), 7-10 May 2012, pp. 1-6 (**conferință IEEE Xplore**).
4. C. Reese, L. Hofmann, Synthetic Three-Phase Load Profiles, 22nd International Conference on Electricity Distribution, C I R E D 2013, Stockholm, 10-13June 2013, paper 1392 (**conferință IEEE Xplore**)

2. Lucrarea citata [**6**]

Gavrilas M., Ciutea I., Tanasa C., Medium-term load forecasting with artificial neural network models; 16th International Conference on Electricity Distribution, CIRED 2001, 18-21 June, Amsterdam, Olanda, 2001, CD-ROM, ISBN 0-85296-735-7/0-85296-734-9.

Lucrarea care citeaza

1. Haque M.T., Kashtiban A.M., Application of Neural Networks in Power Systems; A Review, Proceedings – WEC 05, Fourth World Enformatika Conference, Vol. 6, 2005, pp. 53-57 (**conferință SCOPUS**).
2. Baharudin, Z., Kamel, N., AR modified covariance in one week ahead short term load forecast, Proceedings of the 4th IASTED Asian Conference on Power and Energy Systems, AsiaPES 2008, 2008, Pages 204-209 (**conferință SCOPUS**).
3. Osofisan P.B., Nwaeke C.N., Application of Artificial Neural Network (ANN) for Short-Term Load Forecasting (Case Study on National Control Centre (PHCN) Oshogbo, Osun State, Nigeria), Journal of Engineering and Applied Sciences, Vol. 5, No. 2, 2010, pp. 78-83, ISSN:1814-949X (**revista SCOPUS**).
4. Men De-yue, Liu Wen-ying, Application of Least Squares Support Vector Machine(LS-SVM) Based on Time Series in Power System Monthly Load Forecasting, Proceedings of the Power and Energy Engineering Conference (APPEEC), 2011 Asia-Pacific, Wuhan, China, ISSN: 2157-4839, Print ISBN: 978-1-4244-6253-7 (**conferință SCOPUS** , **IEEE Xplore**).

5. Oliveira, M. O., Marzec, D. P., Bordin, G., Bretas, A. S., Bernardon, D., Climate change effect on very short-term electric load forecasting, Proceedings of PowerTech, 2011 IEEE Conference, Trondheim, 2011, pp. 1-7, 2 citări, (**conferință IEEE Xplore**)
6. Qingming Wang ; Buxiang Zhou ; Zuo Li ; Jian Ren ; Forecasting of short-term load based on fuzzy clustering and improved BP algorithm, Proceedings of the 2011 International Conference on Electrical and Control Engineering Conference (ICECE), 16-18 Sept. 2011, pp. 4519 – 4522, ISBN: 978-1-4244-8162-0 (**conferință IEEE Xplore**).

3. Lucrarea citata [**6**]

Gavrilas M., Ciutea I., Tanasa C., Medium-term load forecasting with artificial neural network models; 16th International Conference on Electricity Distribution, CIRED 2001, 18-21 June, Amsterdam, Olanda, 2001, CD-ROM, ISBN 0-85296-735-7/0-85296-734-9.

Lucrarea care citeaza

1. Haque M.T., Kashtiban A.M., Application of Neural Networks in Power Systems; A Review, Proceedings – WEC 05, Fourth World Enformatika Conference, Vol. 6, 2005, pp. 53-57 (**conferință SCOPUS**).
2. Baharudin, Z., Kamel, N., AR modified covariance in one week ahead short term load forecast, Proceedings of the 4th IASTED Asian Conference on Power and Energy Systems, AsiaPES 2008, 2008, Pages 204-209 (**conferință SCOPUS**).
3. Osofisan P.B., Nwaeke C.N., Application of Artificial Neural Network (ANN) for Short-Term Load Forecasting (Case Study on National Control Centre (PHCN) Oshogbo, Osun State, Nigeria), Journal of Engineering and Applied Sciences, Vol. 5, No. 2, 2010, pp. 78-83, ISSN:1814-949X (**revista SCOPUS**).
4. Men De-yue, Liu Wen-ying, Application of Least Squares Support Vector Machine(LS-SVM) Based on Time Series in Power System Monthly Load Forecasting, Proceedings of the Power and Energy Engineering Conference (APPEEC), 2011 Asia-Pacific, Wuhan, China, ISSN: 2157-4839, Print ISBN: 978-1-4244-6253-7 (**conferință SCOPUS**).
5. Oliveira, M. O., Marzec, D. P., Bordin, G., Bretas, A. S., Bernardon, D., Climate change effect on very short-term electric load forecasting, Proceedings of PowerTech, 2011 IEEE Conference, Trondheim, 2011, pp. 1-7, 2 citări, (**conferință IEEE Xplore**)
6. Qingming Wang ; Buxiang Zhou ; Zuo Li ; Jian Ren ; Forecasting of short-term load based on fuzzy clustering and improved BP algorithm, Proceedings of the 2011 International Conference on Electrical and Control Engineering Conference (ICECE), 16-18 Sept. 2011, pp. 4519 – 4522, ISBN: 978-1-4244-8162-0 (**conferință IEEE Xplore**).

4. Lucrarea citata [**2]**

Gavrilas M., Coca D., Stefanovici C., Prognoza pe termen scurt a consumului de energie electrica la S.D. Suceava cu un model bazat pe inteligenta artificiala, Revista Energetica, nr. 8-9, pag. 407-415, 2000, ISSN 1453-2360

Lucrarea care citeaza

1. Bindiu R., Chindris M., Gecan C.O., Pop G.V., Vasiliu R., Gheorghe D., Short term load forecasting for a distribution operator in Romania, Journal of Sustainable Energy, Vol. 1, No. 2, June 2010, pp. 1- 7 , ISSN: 2067-5538 (**Index Copernicus**).

5. Lucrarea citata [**1**]

Gavrilas M., Calcul numeric cu aplicatii in Turbo Pascal, Editura "Gh. Asachi" Iasi, 502 pag., 1999 (ISBN 973-9178-65-0).

Lucrarea care citeaza

1. Diana Enescu, Elena Otilia Virjoghe, Numerical modeling of heat transfer phenomena in bodies with mobile boundaries, Proceedings of the 14th WSEAS international conference on Systems: part of the 14th WSEAS CSCC multiconference - Volume II, July 2010, ISBN: 978-960-474-214-1, pp. 651-656 (**ACM Digital Library**).

6. Lucrarea citata [**1**]

Gavrilas M., Inteligenta artificiala si aplicatii in energetica; Vol. I – Teorie, Editura „Gh. Asachi" Iasi, 320 pag., 2002 (ISBN 973-8292-20-4, ISBN 973-8292-21-2).

Lucrarea care citeaza

1. E. Hopulele, A modeling and optimization approach based on genetic algorithms for a hybrid trigeneration system with stirling engine, Buletinul AGIR nr. 3/2012, iunie-august, ISSN 1224-7928 si ISSN online 2247-3548, CNCSIS categoria B+, cod 415, pag 579-586, iunie 2012 (2 citări) (**revista CNCSIS, B+**).

7. Lucrarea citata [**1**]

Gavrilas M., Inteligenta artificiala si aplicatii in energetica; Vol. II – Teorie si aplicatii, Editura Polytechnium, 194 pag., 2005 (ISBN 973-8292-20-4, ISBN 973-621-116-9).

Lucrarea care citeaza

1. Miron A., Chindriş M.D., Cziker A.C,Complex electric signals analysis using virtual instrumentation, International Review on Computers and Software, Volume 6, Issue 5, September 2011, Pages 667-677, ISSN: 1828-6003 (**revistă Scopus**)

8. Lucrarea citata [**7**]

Georgescu Gh., **Gavrilas M.,** Radasanu D., Calculul si reducerea pierderilor de putere si energie in retelele electrice, Editura SPECTRUM Iasi, 165 pag., 1997 (ISBN 973-98335-1-9).

Lucrarea care citeaza

13. Stanescu, D., Rosca, I., Blagu, I., PQ indices evaluation in distribution networks using AMR database, 20th International Conference and Exhibition on Electricity Distribution (CIRED 2009),Prague, Czech Republic, 8-11 June 2009, ISBN: 978 1 84919 126 5, pp. 564, doi:10.1049/cp.2009.0844, IET Conference Publications (550 CP) (**conferinţă SCOPUS**)
14. Golovanov, C. Toader, P. Postolache, R. Porumb, Influence of the unbalance factors on power and energy losses for electric lines under harmonic regime, Buletinul AGIR nr. 3/2012, iunie-august, ISSN 1224-7928 si ISSN online 2247-3548, CNCSIS categoria B+, cod 415, pag 803-809, iunie 2012 (**revista CNCSIS, B+).**
15. B.C. Neagu, Gh. Georgescu, A comparative study regarding the efficiency of technical losses evaluation method in low voltage electricity networks, Buletinul AGIR nr. 3/2012, iunie-august, ISSN 1224-7928 si ISSN online 2247-3548, CNCSIS categoria B+, cod 415, pag 603-610, iunie 2012 (**revista CNCSIS, B+**).
16. Gh. Georgescu, B. Neagu, Some aspects concerning the mathematical models ans software application for evaluation of technical losses in operation of medium voltage public distribution networks, Buletinul Institutului Politehnic din Iaşi, Secţia Electrotehnică, Energetică, Electronică, Tom LVII (LXI), Fasc. 2, 2011, pp. 129-142, ISSN 1223-8139 (2 citări) (**revistă CNCSIS, B+**).
17. Gh. Georgescu, B. Neagu, Opportunities evaluation in operation of the technical losses under load from low voltage networks which opperate in symmetric state, Buletinul Institutului Politehnic din Iaşi, Secţia Electrotehnică, Energetică, Electronică, Tom LVII (LXI), Fasc. 5, 2011, pp. 159-173, ISSN 1223-8139 (**revistă CNCSIS, B+**).
18. B. Neagu,Gh. Georgescu, The load curves profiling and their parameters of different consumer categories supplied from electric energy repartition and distribution systems, Buletinul Institutului Politehnic din Iaşi, Secţia Electrotehnică, Energetică, Electronică, Tom LVII (LXI), Fasc. 4, 2011, pp. 167-177, ISSN 1223-8139 (2 citări) (**revistă CNCSIS, B+**).
19. Golovanov, C. Toader, P. Postolache, R. Porumb, Influence of the unbalance factors on power and energy losses for electric lines under harmonic regime, Buletinul AGIR nr. 3/2012, iunie-august, ISSN 1224-7928 si ISSN online 2247-3548, CNCSIS categoria B+, cod 415, pag 803-809, iunie 2012 (**revista CNCSIS, B+**)

9. Lucrarea citata [**11**]

Gavrilas M., Ivanov O., Gavrilas G., REI equivalent design for electric power systems with genetic algorithms, WSEAS Transactions on Circuits and Systems, v 7, n 10, 2008, p 911-921, ISSN: 1109-2734.

Lucrarea care citeaza

1. Kala, Z., Kala, J., Sensitivity analysis of stability problems of steel structures using shell finite elements and nonlinear computation methods, WSEAS Transactions on Applied and Theoretical Mechanics 4 (3), 2009, pp. 105-114 (**revistă SCOPUS**).
2. Popa G.N., Deaconu S., Dinis C.M., Iagar A., A Case Study of an Analogical Distance Relay for the 110 kV Electric Power Lines, WSEAS TRANSACTIONS on SYSTEMS, ISSN: 1109-2777, Issue 10, Volume 9, October 2010, pp. 1063-1072 (**revista SCOPUS**).
3. Li Z., Yang H., Application of REI Equivalent in Reactive Power Optimization Control in Regional Power Grid, Proceedings of the Power and Energy Engineering Conference (APPEEC), 2011 Asia-Pacific, Wuhan, China, ISSN: 2157-4839, Print ISBN: 978-1-4244-6253-7 (**conferinţă IEEE Xplore**).
4. Popa, G.N., Deaconu, S., Diniş, C.M., Iagăr, A., An analogical distance relay for the 110kV electric lines, Proceedings of 14th WSEAS International Conference on Systems, Part of the 14th WSEAS CSCC Multiconference; Corfu Island; 22 -24 July 2010, Vol. 1, pp: 165-170, ISBN: 978-960474199-1 (**conferinţă SCOPUS**)

5. Li Z., Yang H., Application of REI equivalent and varying-intercept linear regression in voltage and reactive power optimization control in regional power grid, Power System Protection and Control, ISSN: 1674-3415, Vol. 40, Issu e, Jan. 2012, pp. 18-22+42 (**revista SCOPUS**).
6. Li, Z., Yang, H., Reactive power optimization of regional power grid considering voltage and reactive power characteristics of boundary buses, Power System Technology 36 (9) , pp. 126-132, 2012 (**revista SCOPUS**).
7. Li Z., Yang H., Li W., Reactive power optimization of regional power grid considering voltage and reactive power characteristics of boundary buses, Proceedings of Asia-Pacific Power and Energy Engineering Conference, APPEEC 2012; Shanghai; pp.1-4 (**conferință IEEE Xplore**).
8. Goh, H.H., Chua, Q.S. ; Kok, B.C. ; Goh, K.C. ; Lee, S.W. ; Teo, K.T.K., Early warning and prevention of potential wide-area voltage instability problem, Proceedings of 12th International Conference on Environment and Electrical Engineering (EEEIC), 5-8 May 2013, pp. 479 – 484 (**conferință IEEE Xplore**).
9. Goh, H.H., Chua, Q.S., Lee, S.W., Goh, K.C., Teo, K.T.K., Power stability monitoring based on voltage instability prediction approach through wide area system, American Journal of Applied Sciences, ISSN:1546-9239, 11 (5), 2014, pp. 717-731(**revista SCOPUS**).
10. Sarić A.T., Transtrum M.K., Stanković A.M., Dynamic model estimation for power system areas from boundary measurements, Proc. of 2016 IEEE Power and Energy Society General Meeting (PESGM), Boston, MA, USA, 17-21 July 2016, pp. 1 - 5, DOI: 10.1109/PESGM.2016.7741214 (**conferință IEEE Xplore**).
11. Gunadin, Indar Chaerah; Said, Sri Mawar; Irsan, Muhammad, Determination of Stability Index of Electrical Power System Using REI-Dimo Methods, Journal of Theoretical and Applied Information Technology; Islamabad Vol. 90, No. 1 (Aug 2016), ISSN: 1992-8645, pp.161-167 (**revista SCOPUS**).

10. Lucrarea citata [**2**]

Georgescu Gh., **Gavrilas M.,** Radasanu D., "The Computation of Energy and Power Losses in Electric Networks and their Minimization" (in Romanian), Spectrum Printing House, Iasi, 1998, Romania.

Lucrarea care citeaza

1. Toader, C. ; Scutariu, M. ; Dumitriu, C., The analysis of optimal energy losses in two-windings transformers, Proc. of 10th Mediterranean Electrotechnical Conference, 2000. MELECON 2000, 29-31 May 2000, Volume: 3, pp. 1072 – 1075, DOI: 10.1109/MELCON.2000.879720 (**conferință IEEE Xplore**)
2. Marinescu, C.; Deaconu, A.; Ciurea, E.; Marinescu, D.; From Microgrids to Smart Grids: Modeling and simulating using graphs part II optimization of reactive power flow, Poceedings of the 12-th International Conference on Optimization of Electrical and Electronic Equipment, OPTIM 2010, pp. 1251 - 1256 (**conferință IEEE Xplore**).

11. Lucrarea citata [**2**]

Georgescu Gh., **Gavrilas M.,** Radasanu D., "The Computation of Energy and Power Losses in Electric Networks and their Minimization" (in Romanian), Spectrum Printing House, Iasi, 1998, Romania.

Lucrarea care citeaza

1. Toader, C. ; Scutariu, M. ; Dumitriu, C., The analysis of optimal energy losses in two-windings transformers, Proc. of 10th Mediterranean Electrotechnical Conference, 2000. MELECON 2000, 29-31 May 2000, Volume: 3, pp. 1072 – 1075, DOI: 10.1109/MELCON.2000.879720 (**conferință IEEE Xplore**)
2. Marinescu, C.; Deaconu, A.; Ciurea, E.; Marinescu, D.; From Microgrids to Smart Grids: Modeling and simulating using graphs part II optimization of reactive power flow, Poceedings of the 12-th International Conference on Optimization of Electrical and Electronic Equipment, OPTIM 2010, pp. 1251 - 1256 (**conferință IEEE Xplore**).

12. Lucrarea citata [**1**]

Georgescu Gh., **Gavrilas M.,** Cartina Gh., Aspects Concerning Power Distribution Networks Planning Using the Artificial Intelligence, 14th International Conference on Electricity Distribution, CIRED '97, 2-5 June, Birmingham, England, pp. 876-881, 1997, ISBN: 0-85296-674-1.

Lucrarea care citeaza

2. B. Neagu,Gh. Georgescu, The load curves profiling and their parameters of different consumer categories supplied from electric energy repartition and distribution systems, Buletinul Institutului Politehnic din Iaşi, Secţia Electrotehnică, Energetică, Electronică, Tom LVII (LXI), Fasc. 4, 2011, pp. 167-177, ISSN 1223-8139 (2 citări) (**revistă CNCSIS, B+**).

13. Lucrarea citata [**1**]

Gavrilas M., Georgescu Gh., Cartina Gh., A Connectionist Approach to Real-Time Control and Simulation of Switching Operations in Power Systems Substations; Proceedings of the 8th Mediterranean Electrotechnical Conference MELECON'96, Vol. III, May 13-16, 1996, Bari, Italy, pp. 1431-1434, 1996.

Lucrarea care citeaza

1. Tang Z., Guo W., Graph Theory Based Expert System to form De-icing Route in the Power Grid, Journal of Computational Information Systems , Vol. 6. No.8, 2010, pp. 2651-2657, ISSN: 1553-9105 (**revistă** Scopus).

14. Lucrarea citata [**2**]

Istrate M., **Gavrilas M.,** Istrate C., Ursulean R., Assessment of Two Double-end Data Fault Location Algorithms in Transmission Grids using ATP simulations, Poceedings of the 9-th WSEAS/IASME International Conference on Electric Power Systems, High Voltage, Electric Machines (POWER '09), Genova, Italy, Oct. 17-19, 2009, Book Series: Recent Advances in Electrical Engineering, CD-ROM

Lucrarea care citeaza

1. Istrate, Assessemnt of power-frequency based algorithms for fault location in power grids, Proceedings of the 12-th WSEAS International Conference on Mathematical Methods and Computational Techniques in Electrical Engineering (MMACTEE ,10), October 21-23, 2010, Timisoara, Romania, pp. 37-46, ISBN: 978-960-474-238-7 (**conferință Scopus**).
2. Toader, D., Haragus, S., Blaj, C., Cata, I., Numerical simulation of single phase faults in medium voltage electrical networks, WSEAS Transactions on Power Systems, Vol. 5, Issue 2, 2010, pp. 64-74 (revista SCOPUS).

15. Lucrarea citata [**6**]

Grigoras Gh., Cartina Gh., **Gavrilas M.,** Using of Clustering Techniques in Optimal Placement of Phasor Measurements Units, Poceedings of the 9-th WSEAS/IASME International Conference on Electric Power Systems, High Voltage, Electric Machines (POWER '09), Genova, Italy, Oct. 17-19, 2009, Book Series: Recent Advances in Electrical Engineering, pp: 104-108, ISBN 978-960474130-4.

Lucrarea care citeaza

1. Grigoras, G., Cartina, G., Istrate, M., Rotaru, F., The efficiency of the clustering techniques in the energy losses evaluation from distribution networks, International Journal of Mathematical Models and Methods in Applied Sciences, Volume 5, Issue 1, 2011, Pages 133-141 (**revista SCOPUS**).
2. Florina Scarlatache, Gheorghe Grigoraş, Gianfranco Chicco, Gheorghe Cârţină, Using k-means clustering method in determination of the optimal placement of distributed generation sources in electrical distribution systems, 13-th International Conference on Optimization of Electrical and Electronic Equipment (OPTIM 2012), Brasov, Romania, 24-26 May 2012, pp. 953-958 (**conferință IEEE Xplore**).
3. Grigoraş, G., Cârtină, G., Impact on the fuzzy modeling in operation of electric distribution systems, WSEAS Transactions on Circuits and Systems, Volume 11, Issue 4, April 2012, Pages 105-114 (**revista SCOPUS**).
4. Scarlatache Fl., Grigoraş Gh., An approach regarding the placement of distributed generation sources in electric distribution systems using Hurwitz criterion, Buletinul Institutului Politehnic din Iaşi, Tomul LVIII (LXII), Fasc. 4, 2012, Secţia Electrotehnică. Energetică. Electronică, pp. 109-117 (**revista CNCSIS, B+**).
5. Scarlatache Fl., Grigoraş Gh., The influence of the DG sources in the optimal operation of the electrical distribution systems, Proceedings of the 8th International Symposium on Advanced Topics in Electrical Engineering ATEE 2013, 23-25 May 2013, Bucharest, ISBN: 978-1-4673-5979-5 (**conferință IEEE Xplore**).
6. Cepeda, J. C.; Colomé, D. G., Evaluación de la Vulnerabilidad del Sistema Eléctrico de Potencia en Tiempo Real usando Tecnología de Medición Sincrofasorial, Revista Técnica Energía, 2014, pp. 91-101. 11p (**revistă EBSCO**).

16. Lucrarea citata [**1**]

Gavrilas M., Gavrilas G., Ivanov O., A Network Reduction Method with Synchronized Phasor Measurements, Poceedings of the 9-th WSEAS/IASME International Conference on Electric Power Systems, High Voltage, Electric Machines (POWER '09), Genova, Italy, Oct. 17-19, 2009, Book Series: Recent Advances in Electrical Engineering, CD-ROM, ISBN:978-960-474-130-4, ISSN: 1790-5117.

Lucrarea care citeaza

1. Georgiev, Georgi; Zicmane, Inga; Antonovs, Eduards; Sergey, Kovalenko; Elimination of nodes with voltage dependent load characteristics in electrical network models, Proceedings of the 10th International Conference on Environment and Electrical Engineering (EEEIC), 8-11 May, 2011, Rome, Italy, Pages 1-4, ISBN: 978-1-4244-8779-0 (**conferință IEEE Xplore**).

17. Lucrarea citata [2]

Gavrilas M., Gavrilas G., Sfintes C.V., Application of Honey Bee Mating Optimization algorithm to load profile clustering, Proceedings of 2010 IEEE International Conference on Computational Intelligence for Measurement Systems and Applications (CIMSA), 6-8 Sept. 2010, Taranto, Itally, pp. 113-118, ISBN: 978-1-4244-7229-1

Lucrarea care citeaza

1. P. Panapakidis, M. C. Alexiadis, and G. K. Papagiannis, Load Profiling in the Deregulated Electricity Markets: A Review of the Applications, 9-th International Conference on the European Energy Market (EEM 2012), Florence, Italy, 10-12 May 2012, pp. 1-8 (**conferință IEEE Xplore**).
2. Kalyani, K; Chakravarthy, T - Load Profile Clustering: An Algorithmic Approach With Improved Replacement In Bee Optimization Algorithm, ICTACT Journal On Soft Computing: Special Issue On Soft Computing Theory, Application And Implications In Engineering And Technology, January 2015, Vol. 05, Issue 02, pp. 905-910 (**revistă DOAJ**)

18. Lucrarea citata [1]

Gavrilas M., Georgescu Gh., Consumer category identification in distribution networks using Hopfield nets, Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Tomul XLI (XLV), Fasc. 3-4, pag. 161-166, 1995, ISSN 1223-8139.

Lucrarea care citeaza

1. Zhang, M., Lo, K.L., Zakaria, Z., Research on load profiling in distribution system operation, Proceedings of 2006 China International Conference on Electricity Distribution, CICED 2006; Beijing; 17 September 2006 through 20 September 2006; IET Conference Publications Issue 527 CP, 2006, Pages 141-148, ISBN: 978-086341638-5 (**conferință SCOPUS**).

19. Lucrarea citata [2]

Gavrilaş M., Rusu I., Gavrilaş G., Ivanov O., Synchronized Phasor Measurements for State Estimation, Revue Roumaine des Sciences Techniques-Serie Electrotechnique et Energetique, Oct – Dec. 2009, Vol.54, No.4, pp. 335-344, ISSN: 0035-4066.

Lucrarea care citeaza

1. Manousakis, N.M. , Korres, G.N. , Georgilakis, P.S., Optimal placement of phasor measurement units: A literature review, Proceedings of the 16th International Conference on Intelligent System Applications to Power Systems, ISAP 2011; Hersonisos, Crete; 25 - 28 September 2011 (**conferință SCOPUS**).
2. Chouhan, Dolly; Jaiswal, Varsha - A Literature Review on Optimal Placement of PMU and Voltage Stability, Indian Journal of Science and Technology, Vol 9(47), DOI: 10.17485/ijst/2016/v9i47/101724, December 2016, ISSN (Print) : 0974-6846 ISSN (Online) : 0974-5645 (**revistă DOAJ, IndexCopernicus**)

20. Lucrarea citata [1]

Gavrilas M., Recent Advances and Applications of Synchronized Phasor Measurements in Power Systems, Poceedings of the 9-th WSEAS/IASME International Conference on Electric Power Systems, High Voltage, Electric Machines (POWER '09), Genova, Italy, Oct. 17-19, 2009, Book Series: Recent Advances in Electrical Engineering, ISBN: 978-960-474-130-4.

Lucrarea care citeaza

1. Rihan, Mohd; Ahmad, Mukhtar; Beg, M. Salim; Phasor measurement units in the Indian smart grid, Proceedings of 2011 IEEE PES Innovative Smart Grid Technologies - India (ISGT India), ISBN: 978-1-4673-0316-3, 1-3 Dec. 2011, pp. 261 - 267 (**conferință IEEE Xplore**).

21. Lucrarea citata [3]

M. Gavrilas. "Heuristic and metaheuristic optimization techniques with application to power systems", In Proceedings of the 12th WSEAS international conference on Mathematical methods and computational techniques in electrical engineering (MMACTEE'10), WSEAS Press, Stevens Point, Wisconsin, USA, 2005, pp. 95-103.

Lucrarea care citeaza

1. Jumaat S.A., Musirin, I., Othman M.M., Mokhlis H., A Hybrid Meta-heuristis Optimization Technique for Loss Minimization and Cluster Identification in Power System Network, Proceedings of 8-th IEEE International Power Engineering and Optimization Conference, PEOCO 2014, Langkawi, Malaysia, 24-25 March 2014, pp. 568-572 (**conferință IEEE Xplore**)

2. Jumaat S.A., Musirin, I., Othman M.M., Mokhlis H., Rahmat N.A., Developed Cluster of SVC Installation in Power System Network via Hybrid Meta-Heuristic Method, Proceedings of IEEE Jordan Conference on Applied Electrical Engineering and Computing Technologies, AEECT 2013, pp. 1-6, (**conferință IEEE Xplore**)
3. Hany A. Abdelsalam, et al., Impact of distribution system reconfiguration on optimal placement of phasor measurement units, Proceedings of Power Systems Conference (PSC), 2014 Clemson University, Date 11-14 March 2014, pp. 1-6, ISBN 978-1-4799-3960-2, DOI 10.1109/PSC.2014.6808114 (**conferință IEEE Xplore**)

22. Lucrarea citata [**2**]

Coroama I., Gavrilas M., A study on wind energy generation forecasting using connectionist models, Poceedings of the 12-th International Conference on Optimization of Electrical and Electronic Equipment, OPTIM 2010, pp. 1257 – 1262, ISBN: 978-973-131-7018-1

Lucrarea care citeaza

1. Chiang, Ching-Tsan, Chien Hsin, Zhongli City, Lu, Wen-Lung ; Jhuang, Hao-An, Extremely short-term wind speed prediction based on RSCMAC, Proceedings of the 9th Asian Control Conference ASCC 2013, 23-26 June 2013, Istanbul, Turkey, pp. 1-6, ISBN: 978-1-4673-5767-8, DOI: 10.1109/ASCC.2013.6606189 (**conferință IEEE Xplore**).
2. Yavanoglu U, Kaplan O, et al., Intelligent Decision Support System for energy Investments, Proceedings of the 12-th IEEE International Conference on Machine Learning and Applications, 4-7 Dec. 2013, Miami, Florida, DOI 10.1109/ICMLA.2013.127, pp. 224-231, (**conferință IEEE Xplore**)

23. Lucrarea citata [3]

Gavrilas M., Ivanov O., Gavrilas G., Load Profiling with Fuzzy Self-Organizing Algorithm, 9th Symposium on Neural Network Applications in Electrical Engineering NEUREL 2008, Sept. 25–27, 2008, Belgrade, Serbia, CD-ROM, ISBN: 978-1-4244-2903-S

Lucrarea care citeaza

1. Zhang, T.; Gu, M - Overview of electricity customer load pattern extraction technology and its application, Dianwang Jishu/Power System Technology, Volume 40, Issue 3, 5 March 2016, Pages 804-811, ISSN: 10003673, DOI: 10.13335/j.1000-3673.pst.2016.03.021 (**revistă SCOPUS**)
2. Kalyani, K; Chakravarthy, T - Load Profile Clustering: An Algorithmic Approach With Improved Replacement In Bee Optimization Algorithm, ICTACT Journal On Soft Computing: Special Issue On Soft Computing Theory, Application And Implications In Engineering And Technology, January 2015, Vol. 05, Issue 02, pp. 905-910 (**revistă DOAJ, EBSCO**)
3. Chakaravarthy, T.; Kalyani, K. - A brief survey of Honey Bee mating optimization algorithm to efficient data clustering, Indian Journal of Science and Technology, Volume 8, Issue 24, September 01, 2015, 7p, ISSN: 09746846, DOI: 10.17485/ijst/2015/v8i24/5921 (**revistă SCOPUS**)

24. Lucrarea citata [1]

Gavrilas, M., Stahie, V., Cascade hydropower plants optimization with Honey Bee Mating Optimization algorithm, International Review of Electrical Engineering, Vol. 6, No. 5, 2011, pp. 2456-2466

Lucrarea care citeaza

1. Nakib A., Talbi El-G., Fuser A., Hybrid Metaheuristic for Annual Hydropower Generation Optimization, Proc. of 2014 IEEE International Parallel & Distributed Processing Symposium Workshops, Phoenix, AZ, USA, 19-23 May 2014, pp. 412 - 419, DOI: 10.1109/IPDPSW.2014.53 (**conferință IEEE Xplore**).

25. Lucrarea citata [1]

Coroamă, I., Chicco, G., Gavrilaş, M., Russo, A., Distribution system optimisation with intra-day network reconfiguration and demand reduction procurement, Electric Power Systems Research, Vol. 98, 2013, pp. 29-38

Lucrarea care citeaza

1. Tomoiaga, B., Micu, D.D., A comparative study of pareto optimal approaches for distribution system reconfiguration, 49th International Universities Power Engineering Conference, UPEC 2014; Cluj-Napoca; Romania; 2 September 2014 through 5 September 2014; Category number CFP14569-ART; Code 108773; Article number 6934784 (**conferință SCOPUS**).

26. Lucrarea citata [2]

Gavrilas M., Ivanov O., Optimization in Distribution Systems Using Particle Swarm Optimization and Immune Algorithms; First International Symposium on Electrical and Electronics Engineering – ISEEE,13-14 Oct., Galati, pp. 86-91, 2006, ISBN 973-627-325-3.

Lucrarea care citeaza

1. Jumaat S.A., Musirin, I., Othman M.M., Mokhlis H., A Hybrid Meta-heuristis Optimization Technique for Loss Minimization and Cluster Identification in Power System Network, Proceedings of 8-th IEEE International Power Engineering and Optimization Conference, PEOCO 2014, Langkawi, Malaysia, 24-25 March 2014, pp. 568-572 (**conferință IEEE Xplore**)
2. Jumaat S.A., Musirin, I., Othman M.M., Mokhlis H., Rahmat N.A., Developed Cluster of SVC Installation in Power System Network via Hybrid Meta-Heuristic Method, Proceedings of IEEE Jordan Conference on Applied Electrical Engineering and Computing Technologies, AEECT 2013, pp. 1-6, (**conferință IEEE Xplore**)

27. Lucrarea citata [2]

Gavrilas M., Sfintes C.V., Ivanov O., Loss Reduction in Distribution Systems Using Ant Colony Algorithms; The 2-nd CIRED Regional Conference on Electricity Distribution, 17-20 Oct., Zlatibor, Serbia, CD-ROM, 2006, ISBN 86-83171-13-2.

Lucrarea care citeaza

1. Jumaat S.A., Musirin, I., Othman M.M., Mokhlis H., A Hybrid Meta-heuristis Optimization Technique for Loss Minimization and Cluster Identification in Power System Network, Proceedings of 8-th IEEE International Power Engineering and Optimization Conference, PEOCO 2014, Langkawi, Malaysia, 24-25 March 2014, pp. 568-572 (**conferință IEEE Xplore**)
2. Jumaat S.A., Musirin, I., Othman M.M., Mokhlis H., Rahmat N.A., Developed Cluster of SVC Installation in Power System Network via Hybrid Meta-Heuristic Method, Proceedings of IEEE Jordan Conference on Applied Electrical Engineering and Computing Technologies, AEECT 2013, pp. 1-6, (**conferință IEEE Xplore**)

28. Lucrarea citata [2]

Aparaschivei E.D., Ivanov O., Gavrilas M., Load flow estimaton in electrical systems using artificial neural networks, Proceedings of the 2012 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, 25-27 Oct. 2012, pp. 276 – 279, ISBN: 978-1-4673-1171-7

Lucrarea care citeaza

1. Boopathi, C.S., Venkadesan, A., Dash, S.S., Comparison of various learning algorithms for artificial neural network based on-line load flow analysis, International Review on Modelling and Simulations, Volume 7, Issue 2, 2014, Pages 323-330 (**revistă SCOPUS**)
2. Zarkovic M., Sosic D., ANN for solving the harmonic load flow in electric power systems with DG, Proc. of Mediterranean Conference on Power Generation, Transmission, Distribution and Energy Conversion (MedPower 2016), Belgrade Serbia, 6-9 Nov. 2016, pp. 1-4, DOI: 10.1049/cp.2016.0990 (**conferință IEEE Xplore**)

29. Lucrarea citata [1]

Ivanov O., Gavrilaș M., Vicol B., New models for power systems state estimation, UPB Scientific Bulletin, Series C: Electrical Engineering, Volume 74, Issue 1, 2012, Pages 181-188, ISSN: 2286-3540.

Lucrarea care citeaza

1. Presada, V.I., Cristea, C.V., Eremia, M., Toma, L., State estimation in power systems with FACTS devices and PMU measurements, Proceedings of the 49th International Universities Power Engineering Conference, UPEC 2014; Cluj-Napoca; Romania; 2 - 5 September 2014, Article number 6934712 (**conferință SCOPUS**)

30. Lucrarea citata [1]

Stativa A., Gavrilas M., Stahie V., Optimal Tuning and Placement of Power System Stabilizer using Particle Swarm Optimization Algorithm, Proceedings of the 2012 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, 25-27 Oct. 2012, pp. 242-247, ISBN: 978-1-4673-1171-7.

Lucrarea care citeaza

1. Sosa Ríos M.R., González-Fernández R.A., Coordinated tuning of power system controllers using metaheuristic techniques, Proc. of 2014 Power Systems Computation Conference, Wroclaw, Poland, 18-22 Aug. 2014, pp. 1-8, DOI: 10.1109/PSCC.2014.7038318 (**conferință IEEE Xplore**).

31. Lucrarea citata [1]

Stativa A., Gavrilas M., Ivanov O., Optimal Power System Stabilizer Design Using Multiple Wide-Area Input Signals, Proceedings of the 14th International Conference on Environment and Electrical Engineering (EEEIC) Location: Krakow, Poland, May 10-12, 2014, pp. 34-39.

Lucrarea care citeaza

1. Tashchilin V., Chusovitin P., Shabalin G., Pazderin A., Gerasimov K., Measurements-based approach for PSS retuning, Proc. of 2015 IEEE 15th International Conference on Environment and Electrical Engineering (EEEIC), Rome, Italy, 10-13 June 2015, DOI: 10.1109/EEEIC.2015.7165348 (**conferință IEEE Xplore**).

32. Lucrarea citata [2]

Ivanov O., Gavrilas M., State estimation for power systems with multilayer perceptron neural networks, Proc. of 11th Symposium on Neural Network Applications in Electrical Engineering, NEUREL 2012, Belgrade, Serbia, 20-22 Sep., 2012, pp. 243-246.

Lucrarea care citeaza

1. Fainti R., Alamaniotis M., Tsoukalas L.H., Distribution congestion prediction using artificial neural networks for big data, Proc. of Mediterranean Conference on Power Generation, Transmission, Distribution and Energy Conversion (MedPower 2016), Belgrade, Serbia, 6-9 Nov. 2016, pp. 1 - 7, DOI: 10.1049/cp.2016.1108 (**conferință IEEE Xplore**).
2. Fainti, Rafik; Alamaniotis, Miltiadis; Tsoukalas, Lefteri H. - Backpropagation Neural Network for Interval Prediction of Three-Phase Ampacity Level in Power Systems, International Journal of Monitoring and Surveillance Technologies Research (IJMSTR), Volume 4, Issue 3, 2016, p. 1-20 (**revistă ACM DL**)

33. Lucrarea citata [2]

Ivanov O., Gavrilas M., Neagu B., Intelligent Monitoring and Control in Transmission and Distribution Networks, Proc. of International Conference on Optimization of Electrical and Electronic Equipment (OPTIM 2014), Brasov, Romania, May 22-24, 2014, pp. 185-191.

Lucrarea care citeaza

1. Fainti, Rafik; Alamaniotis, Miltiadis; Tsoukalas, Lefteri H. - Backpropagation Neural Network for Interval Prediction of Three-Phase Ampacity Level in Power Systems, International Journal of Monitoring and Surveillance Technologies Research (IJMSTR), Volume 4, Issue 3, 2016, p. 1-20 (**revistă ACM DL**).
2. Fainti R., Alamaniotis M., Tsoukalas L.H., Distribution congestion prediction using artificial neural networks for big data, Proc. of Mediterranean Conference on Power Generation, Transmission, Distribution and Energy Conversion (MedPower 2016), Belgrade, Serbia, 6-9 Nov. 2016, pp. 1 - 7, DOI: 10.1049/cp.2016.1108 (**conferință IEEE Xplore**).

34. Lucrarea citata [1]

Toma R., Gavrilas M., The Impact on Voltage Stability of the Integration of Renewable Energy Sources into the Electricity Grids, Proc. of 8th International Conference and Exposition on Electrical And Power Engineering (EPE), Iasi, ROMANIA, Oct. 16-18, 2014, pp. 1051-1054.

Lucrarea care citeaza

1. Zhang X, Wang B, Wang K, Zhang L. Probability assessment for power system voltage stability margin with renewable energy source using slice sampling. Int Trans Electr Energ Syst. 2017;e2366. https://doi.org/10.1002/etep.2366 (**revistă Wiley Online Library**)

35. Lucrarea citata [1]

Kriukov Al., Vicol B., Gavrilas M., Applying a micro-market inside an electric vehicles parking facility, Proc. of 49th International Universities Power Engineering Conference (UPEC 2014), Cluj-Napoca, Romania, 2-5 Sept. 2014, pp. 1-6

Lucrarea care citeaza

1. Pol Olivella-Rosell et al., Day-ahead micro-market design for distributed energy resources, 2016 IEEE International Energy Conference (ENERGYCON), 4-8 April 2016, Leuven, Belgium, DOI: 10.1109/ENERGYCON.2016.7513961 (**conferință IEEE Xplore**)

36. Lucrarea citata [1]

Cartina G., Georgescu G., Gavrilas M., Bonciu Cl., Neural Networks and Expert Systems in Power Systems, "Gh. Asachi" Publishing House, Iasi, Romania, 1994.

Lucrarea care citeaza

1. Cartina G., Bonciu C., Musat M., Zisman Z., Losses minimization in power systems using artificial neural networks, Proc. of 9th Mediterranean Electrotechnical Conference, 1998. MELECON 98, Vol. 2, pp. 1103 – 1106, DOI: 10.1109/MELCON.1998.699403 (**conferință IEEE Xplore**)

37. Lucrarea citata [1]

Cartina G., Bonciu Cl.,Georgescu G., Gavrilas M., Optimization Algorithms for Artificial Neural Networks, Proc. of 5th Symposium on Automatic Control and Computer Science, Iasi, Romania, Vol. 1, October 1995, pp. 194-199.

Lucrarea care citeaza

1. Cartina G., Bonciu C., Musat M., Zisman Z., Losses minimization in power systems using artificial neural networks, Proc. of 9th Mediterranean Electrotechnical Conference, 1998. MELECON 98, Vol. 2, pp. 1103 – 1106, DOI: 10.1109/MELCON.1998.699403 (**conferință IEEE Xplore**)

38. Lucrarea citata [1]

Cartina G., Georgescu G., Gavrilas M., Bonciu C., Alexandrescu V., Neural Solution to the Voltage Violations Problem in on-line Contingency Analysis, ELECTRIMACS 1996, St. Nazaire, Vol. 2, pp.465-468.

Lucrarea care citeaza

1. Cartina G., Bonciu C., Musat M., Zisman Z., Losses minimization in power systems using artificial neural networks, Proc. of 9th Mediterranean Electrotechnical Conference, 1998. MELECON 98, Vol. 2, pp. 1103 – 1106, DOI: 10.1109/MELCON.1998.699403 (**conferință IEEE Xplore**)

39. Lucrarea citata [1]

Cartina G., Gavrilas M., Georgescu G., Bonciu Cl., Bociu C., Approximation / Correction of Voltage Overstepping with Artificial Neural Networks, International Symposium on Signals, Circuits and Systems, SCS 1997, Iasi, Romania, Vol. 2, pp.535-538.

Lucrarea care citeaza

1. Cartina G., Bonciu C., Musat M., Zisman Z., Losses minimization in power systems using artificial neural networks, Proc. of 9th Mediterranean Electrotechnical Conference, 1998. MELECON 98, Vol. 2, pp. 1103 – 1106, DOI: 10.1109/MELCON.1998.699403 (**conferință IEEE Xplore**)

40. Lucrarea citata [2]

Vicol Bogdan, Gavrilas Mihai, Ivanov Ovidiu, Neagu Bogdan, Grigoras Gheorghe - Synchrophasor measurement method for overhead line parameters estimation in MV distribution networks, Proc. of 2014 16th International Conference on Harmonics and Quality of Power (ICHQP), 2014, pp. 862-865, Bucharest, Romania, 25-28 May 2014, DOI: 10.1109/ICHQP.2014.6842833 (IEEExplore), Accession Number: WOS:000343776100177, ISBN:978-1-4673-6487-4, ISSN: 2164-0610 (ISI Thomson Reuters)

Lucrarea care citeaza

1. Zvada, P.; Zelenskii, E.; Kononov, Y. - The experimental studies to improve the measurements synchronization accuracy in the 10 kV feeder at zero crossing by calculated compensation of phase shift of voltage, 21st IMEKO TC-4 International Symposium on Understanding the World through Electrical and Electronic Measurement, and 19th International Workshop on ADC Modelling and Testing; Budapest; Hungary; 7-9 September 2016, 2016, p. 284-287 (**conferință Scopus**)
2. Zelenskii, E. G.; Kononov, Yu. G., Levchenko, I. I. - Identification of the parameters of distribution networks by synchronized current and voltage measurements, Russian Electrical Engineering, July 2016, Volume 87, Issue 7, pp 363–368, DOI: 10.3103/S1068371216070129 (**revistă Springer**)

41. Lucrarea citata [1]

Coroama Iulia, Gavrilas Mihai, Ivanov Ovidiu, A Genetic Algorithm Approach to Voltage-VAR Control in Systems with Distributed Generation, Proceedings of thr The 11th WSEAS International Conference on Mathematical

Methods And Computational Techniques In Electrical Engineering (MMACTEE '10), Timisoara, Romania, October 21-23 2010, pp.104-109, 6 pg., 2010, Code 85094, ISBN: 978-960474238-7 (Scopus)

Lucrarea care citeaza

1. Zajkowski, Konrad; Scaticailov, Serghei, Determination of the Environmental Impact of Reactive Power Compensation in the Power Grid, Revista de Tehnologii Neconventionale; Sibiu 20.2 (Jun 2016) p. 54-61 (**revistă ProQuest**)

42. Lucrarea citata [1]

Ivanov Ovidiu, Gavrilas Mihai, Improved WLS Estimation in Large Systems Using Genetic Algorithms, Proceedings of the 2009 The International Conference Interdisciplinarity in Engineering INTER-ENG, Tg. Mures, Romania, 2009, pp. 82-87.

Lucrarea care citeaza

1. Tungadio D.H., Jordaan J.A., Siti M.W., Power system state estimation solution using modified models of PSO algorithm: Comparative study, Measurement, Volume 92, October 2016, Pages 508–523, doi.org/10.1016/j.measurement.2016.06.052 (**revistă Elsevier**)

43. Lucrarea citata [1]

Grigoras Gh., Gavrilas M., Phase swapping of lateral branches from low-voltage distribution networks for load balancing, 2016 International Conference and Exposition on Electrical and Power Engineering (EPE 2016), Iasi, Romania, 20-22 Oct. 2016, pp. 715 - 718, DOI: 10.1109/ICEPE.2016.7781432.

Lucrarea care citeaza

1. Gheorghe Grigoras ; Bogdan-Constantin Neagu ; Florina Scarlatache, Smart metering based approach for phase balancing in low voltage distribution systems, 2017 10th International Symposium on Advanced Topics in Electrical Engineering (ATEE), 23-25 March 2017, Bucharest, Romania, DOI: 10.1109/ATEE.2017.7905027 (**conferință IEEE Xplore**)

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Modelarea solicitărilor componentelor sistemelor electroenergetice în calculele de fiabilitate, 2005., Universitatea Tehnică „Gh. Asachi" din Iaşi, Domeniul Inginerie Industriala, conducător ştiinţific: prof.dr.ing. Dumitru Ivas.

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C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS.

1. **Ciprian Nemeş**, Metode și tehnici de evaluare a fiabilității - aplicații în energetică, Editura PIM Iaşi, ISBN 978-606-13-5347-7, 156 pg., 2019.
2. **Ciprian Nemeş**, Florin Munteanu, Adecvabilitatea sistemelor de producere a energiei electrice, Editura Politehnium Iaşi, ISBN 978-973-621-480-6, 208 pg., 2018.
3. **Ciprian Nemeş**, Florin Munteanu, Monica Atudori, Staţii electrice - îndrumar de proiectare, Editura Politehnium Iaşi, ISBN: 978-973-621-419-6, 230 pg., 2013.
4. **Ciprian Nemeş**, Florin Munteanu, Producerea şi distribuţia energiei electrice. Partea I – Producerea energiei electrice, Editura Politehnium Iaşi, ISBN: 978-973-621-318-2, 225 pg., 2011.
5. Florin Munteanu, **Ciprian Nemeş**, Fenomenul de scurtcircuit ... de la terorie la practică, Editura Politehnium Iaşi, ISBN: 978-973-621-302-1, 284 pg., 2010.
6. **Ciprian Nemeş**, Florin Munteanu, Dumitru Ivas, Tehnici moderne de analiză a disponibilităţii elementelor şi sistemelor, Editura Politehnium Iaşi, ISBN: 978-973-621- 240-6, 264 pg., 2008.

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

1. Florin Munteanu, Maricel Adam, Dumitru Ivas, **Ciprian Nemeş**, Aparate şi comutări inteligente în sistemele electroenergetice, Casa de editură Venus Iaşi, ISBN 973-756-025-6, 317pg, 2006.
2. Florin Munteanu, Dumitru Ivas, **Ciprian Nemeş**, Centrale electrice - partea electrică - vol I. Analiza fenomenului de scurtcircuit, Editura Setis Iaşi, ISBN 973-86764-6-0, 341 pg., 2005.
3. **Ciprian Nemeş**, Dumitru Ivas, Florin Munteanu, cap. Metode de determinare a fiabilităţii având la bază raportul solicitare–rezistenţă, cap. Calculul probabilităţii de defect în cazul solicitărilor multiple dependente, Capitole în volumul Sisteme expert de asigurare a calităţii totale in industria de materiale şi echipamente electrotehnice, Seria QUALINDSER, ISBN 973-8292-29-8, pp. 50-59, pp. 59-69, 20 pg., 2002.
4. Dumitru Ivas, Florin Munteanu, Mugurel Rotariu, Eugeniu Voinea, **Ciprian Nemeş**, Ingineria fiabilităţii sistemelor complexe, Editura Perfect Bucureşti, ISBN 973-85069-3-X, 320 pg., 2001.

5. Florin Munteanu, Dumitru Ivas, **Ciprian Nemeş**, Proiectarea si analiza asistată de calculator a instalaţiilor de alimentare cu energie electrică. Seria Energie – Mediu, Editura AGIR Bucureşti, ISBN 973-8130-44-1, 140 pg., 2001.
6. Florin Munteanu, Dumitru Ivas, **Ciprian Nemeş**, Ingineria disponibilităţii subsistemelor de distribuţie a energiei electrice, Editura Spectrum Iaşi, ISBN 973-98335-3-5, 254 pg., 1999.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

- F.Baiceanu, O.Ivanov, R. Beniuga, C. Neagu, **C. Nemes**, A Continuous Multistage Load Shedding Algorithm for Industrial Processes Based on Metaheuristic Optimization. *Mathematics* 2023, *11*, 2684. **Impact Factor:** 2.3 (**2023**), https://doi.org/10.3390/math11122684, WOS:001017561300001
- Baiceanu Florin Constantin, Munteanu Florin, Nemes Ciprian-Mircea, Transient Residual Voltage Influence on the Dynamic Load Transfer, Bulletin of the Polytechnic Institute of Iași. Electrical Engineering, Power Engineering, Electronics, vol. 67, issue 4, **2022**, Secţia ELECTROTEHNICĂ. ENERGETICĂ. ELECTRONICĂ, pp. 57-71, DOI: https://doi.org/10.2478/bipie-2021-0022, https://sciendo.com/article/10.2478/bipie-2021-0022
- Tiganasu Cosmin, Cercel George, **Nemes Ciprian**, An overview of the home energy management system, Buletinul Institutului Politehnic din Iaşi Publicat de Universitatea Tehnică „Gheorghe Asachi" din Iaşi, vol. 67 (71), no 2, **2021** Secţia ELECTROTEHNICĂ. ENERGETICĂ. ELECTRONICĂ, pp.9-18, DOI:10.2478/bipie-2021-0007, https://sciendo.com/issue/BIPIE/67/2
- George Cercel, Cosmin Tigănaşu, **Ciprian Nemeş**, Photovoltaic Systems Maximum Power Point Tracking Algorithms, Buletinul Institutului Politehnic din Iaşi Publicat de Universitatea Tehnică „Gheorghe Asachi" din Iaşi, vol. 67 (71), no 2, **2021** Secţia ELECTROTEHNICĂ. ENERGETICĂ. ELECTRONICĂ, pp.19-29, DOI:10.2478/bipie-2021- 0007, https://sciendo.com/issue/BIPIE/67/2
- F. Munteanu, F.Baiceanu, **C. Nemes**, Switch-off transients affecting the dynamic load transfer, University Politehnica of Bucharest Scientific Bulletin Series C-Electrical Engineering and Computer Science, vol. 82, iss. 1, **2020**, pp. 289-300, WOS:000518413400022
- 7 Alexandra Ciobanu, Florin Munteanu, **Ciprian Nemeş**, Adochiţei M., *Dynamic Bayesian network for weather forecast and evaluation of renewable resources availability*, Journal of Sustainable Energy, vol. 9, no. 2, ISSN 2067-5534, pp.58-63, June **2018**.
- **Ciprian Nemeş**, Florin Munteanu F., Astanei D., *Analysis of grid-connected photovoltaic system integration on low-voltage distribution network*. 22th Conference of Energy Engineering, CIE 2016, 02-04 June 2016, Oradea. Published in Journal of Sustainable Energy ISSN 2067-5534, vol. 7, no. 1, pp.9-14, March **2016**.
- Alexandra Ciobanu, Florin Munteanu, **Ciprian Nemeş**, Dragoş Astanei, *Availability Evaluation of Nodal Architectures using Bayesian Networks*, Buletinul Institutului Politehnic din Iaşi Bulletin of the Polytechnic Institute of Iaşi, ISSN 1223-8139, Vol. 62 (66), no. 3 **2016**, pp 31-40.
- Sorina Costinas, **Ciprian Nemes**, Current maintenance using geographical information system, part of the global smart-grid technology solution, Buletinul Institutului Politehnic din Iaşi, Tomul LX (LXIV), Fasc.1, pp. 103-110, **2014**.
- **Ciprian Nemeş,** *A clear sky irradiation assessment using the European Solar Radiation Atlas model and Shuttle Radar Topography Mission database: A case study for Romanian territory*,

J.Renewable Sustainable Energy, vol. 5, is. 4, no. 041807, Impact Factor 2013: 1.51, 12 pg., **2013**. DOI: 10.1063/1.4813001, WOS:000323945600008

- **Ciprian Nemeş**, Marcel Istrate, *A Clear Sky Irradiation Assessment Using The Esra Model And SRTM Database*, Environmental Engineering And Management Journal , vol. 12, iss. 6, ISSN: 1582- 9596, Impact Factor: 1.258, pp.: 1271-1279, **2013**, WOS:000325632500021
- **Ciprian Nemeş**, Marcel Istrate, *Statistical Analysis of Wind Turbine's Output Power*, Electronics and Electrical Engineering Journal, no. 4 (120) 2012, print ISSN: 1392-1215, online ISSN: 2029-5731, Impact Factor 2012: 0.411, pp. 31-34, 4 pg., **2012**. DOI: 10.5755/j01.eee.120.4.1447, WOS:000303226800006
- **Ciprian Nemeş**, Florin Munteanu, *Operational parameters evaluation for optimal wind energy systems development*, Published in U.P.B. Sci. Bulletin, Series C, vol. 74, iss. 1, ISSN 1454-234x, pp. 223-230, 8 pg., 2012.
- Florin Munteanu, **Ciprian Nemeş**, *Belief networks utilization for nodal power quality and availability assessment*, Published in U.P.B. Sci. Bulletin, Series C, vol. 74, iss. 1, ISSN 1454-234x, pp. 215- 222, 8 pg., 2012.
- Giuseppe Marco Tina, Gilles Notton, **Ciprian Nemeş**, *Time frame measurements impact on probabilistic behaviour of photovoltaic systems,* Paper published in Bulletin AGIR - B+ , XVII, nr. 2, April-June 2012, ISSN-L 1224-7928, ISSN-online 2247-3548. pp. 1-9, 9 pg., 2012.
- **Ciprian Nemeş,** Florin Munteanu, *The Wind Energy System Performance Overview: Capacity Factor vs. Technical Efficiency,* International Journal of Mathematical Models and Methods in Applied Sciences, North Atlantic University Union, iss. 1, vol. 5, ISSN: 1998-0140, pp. 159-166, 8 pg., 2011.
- **Ciprian Nemeş,** *A comparative analysis of wind speed distribution evaluation*. Bulletin of the Polytechnic Institute of Iaşi, tom LVII (LXI), fasc.2, ISSN 1223-8139, pp. 145-151, 7 pg., 2011.
- **Ciprian Nemeş**, Marcel Istrate, *Overview of Optimal Wind Turbine Selecting*, Proceedings of the 4th International Conference on Modern Power Systems – MPS 2011 Cluj-Napoca, Published in Acta Electrotehnica, vol. 52, no. 5, ISSN 1841-3323, pp.323-326, 4 pg., 2011.
- **Ciprian Nemes,** Nicu Costandache, Florin Munteanu, *Probabilistic approach of generation system considering the power station reliability,* Proceedings of the 4th International Conference on Modern Power Systems – MPS **2011** Cluj-Napoca, Published in Acta Electrotehnica, vol 52, no. 5, ISSN 1841-3323, 2011, pp. 327-330, 4 pg., 2011.
- **Ciprian Nemeş,** Florin Munteanu, *Potential Solar Irradiance Assessment based on a Digital Elevation Model*, Advances in Electrical and Computer Engineering, vol. 11, no. 4, ISSN: 1582-7445, e-ISSN: 1844-7600, Impact Factor 2011: 0.555, pp. 89-92, 4 pg., **2011**. DOI: 10.4316/AECE.2011.04014, WOS:000297764500014
- **Ciprian Nemeş,** Florin Munteanu. *A Probabilistic Model for Power Generation Adequacy Evaluation.* Revue Roumaine des Sciences Techniques - Rev. Roum. Sci. Techn.– Électrotechn. et Énerg., 56, 1/2011, Bucharest, ISSN: 0035-4066, Impact Factor 2011: 0.136, pp. 36–46, 11 pg., **2011**, WOS:000289219900004
- **Ciprian Nemeş,** Florin Munteanu, *Development of Reliability Model for Wind Farm Power Generation*, Advances in Electrical and Computer Engineering, vol. 10, no. 2, ISSN 1582-7445, e- ISSN 1844-7600, Impact Factor 2010: 0.688, pp. 24-29, 6 pg., **2010**. DOI: 10.4316/AECE.2010.02004, WOS:000280312600004

- Florin Munteanu, **Ciprian Nemeş**, *Fast Method for accutare faul type detection in high voltage networks*. Bulletin of the Polytechnic Institute of Iaşi, tom LVI(LX), fasc.2, ISSN 1223-8139, pp. 89- 96, 8 pg., 2010.
- **Ciprian Nemeş,** Florin Munteanu, Mbuyamba Tshibanda, *Reliability evaluations of Power Systems including Wind Power Generation*. Bulletin of the Polytechnic Institute of Iaşi, tom LVI(LX), fasc.2, ISSN 1223-8139, pp. 97-106, 10 pg., 2010.

- Florin Munteanu, **Ciprian Nemeş,** *Real efficiency of intelligent switching of high voltage circuitbreakers*, Published in U.P.B. Sci. Bulletin, Series C, vol. 72. iss.1, ISSN1454-234x, pp. 173-182, 10 pg., 2010.
- **Ciprian Nemeş,** Florin Munteanu, *Probabilistic method for circuit breaker maintenance planning,* Revista Electrotehnica, Electronica, Automatica, no. 4, vol. 58, ISSN 1582-5175, pp. 69-73, 2010.
- **Ciprian Nemeş**, Florin Munteanu, *A Wind Power Generation Model for Reliability Evaluation*, Revista Electrotehnica, Electronica, Automatica, no. 1, vol. 58, ISSN 1582-5175, pp. 31-36, 2010.
- Irina Ciornei, **Ciprian Nemeş**, Elias Kyriakides, *The future hybrid renewable power system and its generation dispatch*, Revista Energetica, no. 6, vol. 58, iunie 2010, ISSN 1453-2360, pp. 262-268, 6 pg., 2010.
- Florin Munteanu, **Ciprian Nemeş**, *Reliability optimization of the power system nodes considering the switching components*, Published in Annals of the University of Craiova, Electrical and Engineering Series, no. 34, ISSN:1842-4805, pp. 196-199, 4 pg., 2010.
- Florin Munteanu, **Ciprian Nemeş,** *The high voltage circuit-breaker of intelligent switching. A theoretical background*. Revista Electrotehnica, Electronica, Automatica, no.1, vol 57, ISSN 1582- 5175, pp. 26-30, 5 pg., 2009.
- **Ciprian Nemeş,** *A probabilistic model for circuit breaker adequability,* Bulletin of the Polytechnic Institute of Iaşi, tom LV (LIX), fasc.1, ISSN 1223-8139, pp. 109-116, 8 pg., 2009.
- **Ciprian Nemeş**, Florin Munteanu, *Probabilistic approach of the generated power of a wind turbine*. Bulletin of the Polytechnic Institute of Iaşi, tom LV (LIX), fasc. 3, ISSN 1223-8139, pp. 123-130. 8 pg., 2009.
- **Ciprian Nemeş**, Florin Munteanu, *Optimization of the circuit breaker maintenance using the distribution of the disconnecting number*, Published in Annals of the University of Craiova, Electrical and Engineering Series, no. 32, ISSN 1842-4805, pp. 146-149, 4 pg., 2008.
- Florin Munteanu, **Ciprian Nemeş**, *Methods for maintenance optimization of power system components,* Published in Annals of the University of Craiova, Electrical and Engineering Series, no. 32, ISSN 1842-4805, pp. 142-146, 4 pg., 2008.
- Florin Munteanu, **Ciprian Nemeş,** *Human reliability influence on systems maintenance,* Published in Bulletin of the Polytechnic Institute of Iaşi, tom LIV (LVIIII), fasc. 3, pp. 455-460, 6 pg., 2008.
- **Ciprian Nemeş,** *The strength variables of the elements subjected to the fluctuating stress,* Bulletin of the Polytechnic Institute of Iaşi, tom LIV(LVIII), fasc. 1, pp. 79-83, 5 pg., 2008.
- **Ciprian Nemeş**, Florin Munteanu, *Equipment reliability analysis using the probabilistic design methodology*, Published in Bulletin of the Polytechnic Institute of Iaşi, tom LIV (LVIIII), fasc. 3, pp. 185-192, 8 pg., 2008.
- Florin Munteanu, **Ciprian Nemeş**, Dumitru Ivas, *Comutarea inteligenta – o nouă tehnologie în electroenergetică*, Rev. Energetica no.8, vol. 56, august 2008, ISSN 1453-2360, pp. 310-315, 6 pg., 2008.
- Florin Munteanu, **Ciprian Nemeş**, *Theoretical background of intelligent switching of the high voltage circuit-breakers*, Volum SNET, 5-7 iunie 2008. Univ. Politehnica din Bucuresti, ISBN 978-606-521- 045-5, pp. 359-364, 6 pg., 2008.

- *Dumitru Ivas, Florin Munteanu, Ciprian Nemeş, Methods for power system security management, Published in Bulletin of the Polytechnic Institute of Iaşi, tom L(LIV), fasc. 5A, ISSN-1223-8139, pp. 380 - 385, 6 pg. 2004.*

- *Ciprian Nemeş, Dumitru Ivas, Florin Munteanu, The life time distribution calculation based on wearing process, Published in Bulletin of the Polytechnic Institute of Iaşi, tom L(LIV), fasc. 5A, ISSN- 1223-8139 pp. 411-416, 6 pg., 2004.*
- *Ciprian Nemeş, Dumitru Ivas, Probabilistic approach for the short-circuit stress used in the reliability indicators, Bulletin of the Polytechnic Institute of Iaşi, tom L(LIV), fasc. 1-2 / 2004, pp. 129-137, 9 pg. 2004.*
- *Ciprian Nemeş, Dumitu Ivas, Florin Munteanu, Modelarea distribuţiilor solicitărilor termice şi electrodinamice la scurtcircuit în evaluarea fiabilităţii preliminate a echipamentelor din electroenergetică, Rev. Energetica, vol 52, nr. 6, iunie 2004, ISSN 1453-2360, pp 277-281, 5 pg., 2004.*
- *Dumitru Ivas, Florin Munteanu, Ciprian Nemeş, Modele de risc în managementul sistemului energetic, Rev. Energetica, vol. 51, nr. 11-12, noiembrie-decembrie 2003, ISSN 1453-2360, pp. 477- 482, 6 pg., 2003.*
- *Dumitru Ivas, Florin Munteanu, Ciprian Nemeş, Selectivitatea statistică, criteriu de optimizare a dezvoltării şi exploatării reţelelor de distribuţie a energiei electrice, Rev. Energetica, vol. 51, nr. 10, octombrie 2003, ISSN 1453-2360, pp. 433-436, 4 pg., 2003.*
- *Dumitru Ivas, Florin Munteanu, Ciprian Nemeş, Ionuţ Mălăescu, Systemicaly connections in theorethical and practical reliability, Bulletin of the Polytechnic Institute of Iaşi, tom XLVIII(LII), fasc. 5A, 2002, ISSN 0258-9109, pp. 137-142, 6 pg., 2002.8. Ciprian Nemeş, Dumitru Ivas, Models for estimations of strength distributions parameters using the stress-strength interference, Bulletin of the Polytechnic Institute of Iaşi, tom XLVIII(LII), fasc. 5A, 2002, ISSN 0258-9109, pg. 143-146, 4 pg., 2002.*
- *Dumitru Ivas, Muntenu, Ciprian Nemeş, Contribuţii la modelarea fiabilităţii sistemelor cu structură dinamică cu aplicaţii la schemele cu întrerupătoare, Rev. Energetica, anul 48, nr. 2, ISSN 1220- 5133, pp. 76-80, 5 pg., 2000.*
- *Dumitru Ivas, Mugurel Rotariu, Florin Munteanu, Ciprian Nemeş, A optimization criterions for the distribution networks selectivity, Bulletin of the Polytechnic Institute of Iaşi, tom XLV (IL), fasc. 5C, SSN 0258-9109, pp. 94-98, 5 pg., 1999.*
- *Dumitru Ivas, Florin Munteanu, Ciprian Nemeş, Mutaţii posibile în conceperea şi exploatarea reţelelor de distribuţie datorate noilor tehnici de conducere (NTC), Rev. Energetica nr. august 1999*
- *Dumitru Ivas, Florin Munteanu, Ciprian Nemeş, Indices to evaluate the network nodes structure,Revue Roumaine des Sciences Techniques, Serie Electrotechnique et Energetique, tome 45, octobre-decembre 2000, Academie Roumaine, pp 649-655, 7 pg., 2000*

G. Lucrări ştiinţifice publicate în reviste din străinătate.

1. Ciprian Nemeş, Florin Munteanu, Probabilistic approach for thermal and electrodynamics stresses distribution functions, Journal Elektrotechnika i elektronika E+E (Електротехника и електроника Sofia), no 11-12, 2008, ISSN 0861-4717, pp. 46-50, 5 pg., 2008.

H. Lucrări ştiinţifice publicate în volumele conferinţelor.

- Alexandru-Cosmin Ciocea, Florin Munteanu, Ciprian Nemeș, Experimental Investigation and Results on the Wear of Photovoltaic Panels, 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi), 17-19 October 2024, DOI: 10.1109/EPEi63510.2024.10758115

- Ilişescu, C. M. Nemes and F. C. Băiceanu, "Availability of Hydroelectric Generating Units based on the Maintenance Schedule," 2023 International Conference on Electromechanical and Energy Systems (SIELMEN), Craiova, Romania, 2023, pp. 1-7, doi: 10.1109/SIELMEN59038.2023.10290836.

- Ilisescu Ionut, Nemes Ciprian-Mircea, Adequacy evaluation of power generating systems taking into account the power reserves requirements, 2022 International Conference and Exposition on Electrical And Power Engineering (EPE), DOI: 10.1109/EPE56121.2022.9959840

- F. C. Baiceanu, C. F. Acsinte, O. Ivanov, C. M. Nemes, B. C. Neagu, A Load Shedding Approach for Islanded Operation in Industrial Electrical Systems, 2022 14th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), DOI: 10.1109/ECAI54874.2022.9847448

- C-F. Acsinte, C. -M. Nemes and F. C. Baiceanu, "Impact of Distributed Generation on the Performance of Electrical Networks," 2022 International Conference and Exposition on Electrical And Power Engineering (EPE), Iasi, Romania, 2022, pp. 601-604, doi: 10.1109/EPE56121.2022.9959757.

- F. C. Baiceanu, C. Nemes, F. Munteanu and C. F. Acsinte, "Controlled Switching Taking Into Account the Standard Deviation of Switching Time," 2022 International Conference and Exposition on Electrical And Power Engineering (EPE), Iasi, Romania, 2022, pp. 617-621, doi: 10.1109/EPE56121.2022.9959770.

- F. C. Baiceanu, C. F. Acsinte, O. Ivanov, C. M. Nemes, B. C. Neagu, A Load Shedding Approach for Islanded Operation in Industrial Electrical Systems, 2022 14th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), DOI: 10.1109/ECAI54874.2022.9847448

- M. Ghidu, C. Nemes, "Reliability Assessment of Auxiliary Power Supply Systems for a Nuclear Power Plant (NPP)," 2021 9th International Conference on Modern Power Systems (MPS), 2021, pp. 1-7, doi: 10.1109/MPS52805.2021.9492657.

- Cosmin-Florin Acsinte, Ciprian-Mircea Nemes, Florin Constantin Baiceanu, Impact of Distributed Generation on the Performance of Electrical Networks, 2022 International Conference and Exposition on Electrical And Power Engineering (EPE), DOI: 10.1109/EPE56121.2022.9959757

- Ilisescu Ionut, Nemes Ciprian-Mircea, Adequacy evaluation of power generating systems taking into account the power reserves requirements, 2022 International Conference and Exposition on Electrical And Power Engineering (EPE), DOI: 10.1109/EPE56121.2022.9959840

- Tiganasu Cosmin, Cercel George, Nemes Ciprian The influence of battery state of charge on self consumption indices, 2021 International Conference on Electromechanical and Energy Systems (SIELMEN), 6-8 Oct. 2021, Iasi, Romania, DOI: 10.1109/SIELMEN53755.2021.9600406, ISBN: 978-1-6654-0078-7

- Cercel George, Tiganasu Cosmin, Nemes Ciprian Power Quality Requirements for Grid-Connected Photovoltaic Systems, 2021 International Conference on Electromechanical and Energy Systems (SIELMEN), 6-8 Oct. 2021, Iasi, Romania, pp.019-024, DOI: 10.1109/SIELMEN53755.2021.9600364, ISBN: 978-1-6654-0078-7

- M Ghidu, C Scinteie, C Nemes, Effect of wear process on the security of Nuclear Power Plants, 2021 International Conference on Electromechanical and Energy Systems (SIELMEN), 6-8 Oct. 2021, Iasi, Romania, pp. 169-174, DOI: 10.1109/SIELMEN53755.2021.9600406, ISBN: 978-1-6654-0078-7

- Florin Baiceanu, Florin Munteanu, Ciprian Neme, Transient Power Quality Mitigation by Synchronized Capacitor Banks Switching, 2020 International Conference and Exposition on Electrical And Power Engineering (EPE), 22-23 Oct. 2020, Iasi, Romania. DOI: 10.1109/EPE50722.2020.9305559

- Alexandru Ciocea, Florin Munteanu, Ciprian Nemes, Methods and Techniques for Photovoltaic Solar Power Plant Monitoring and Wearing State Evaluation, 2020 International Conference and Exposition on Electrical And Power Engineering (EPE), 22-23 Oct. 2020, Iasi, Romania. DOI: 10.1109/EPE50722.2020.9305559

- Cercel George, Tiganasu Cosmin, Nemes Ciprian, Photovoltaic panels analysis based on Simulink tools, 2020 International Conference and Exposition on Electrical And Power Engineering (EPE), 22-23 Oct. 2020, Iasi, Romania. DOI: 10.1109/EPE50722.2020.9305559

- Tiganasu Cosmin, Cercel George, Nemes Ciprian, Self-Consumption Indices Evaluation for a Residential Load Profile, 2020 International Conference and Exposition on Electrical And Power Engineering (EPE), 22-23 Oct. 2020, Iasi, Romania. DOI: 10.1109/EPE50722.2020.9305559

- F. C. Baiceanu, F. Munteanu, C. Nemes, “Influence of Multi-Pulse Rectifier on Power Quality in an Industrial Environment”- *8th International Conference on Modern Power Systems (MPS), 21-23* May 2019, Cluj-Napoca, Romania. **DOI:** 10.1109/MPS.2019.8759775

- C. Mihalcea, F. Munteanu, C.Nemes, F. Baiceanu “ Lifetime Availability Analysis of High Voltage Circuit Breakers for Maintenance Optimization” *8th International Conference on Modern Power Systems (MPS), 21-23* May 2019, Cluj-Napoca, Romania. **DOI:** 10.1109/MPS.2019.8759677

- Nemes C., Baiceanu F., Tiganasu C “Assessment of Photovoltaic Modules’ Parameters Using the On-Site Measurements”- *8th International Conference on Modern Power Systems (MPS), 21-23* May 2019, Cluj-Napoca, Romania. **DOI:** 10.1109/MPS.2019.8759777 , ISBN: 978-1-7281-0750-9.

- Cosmin Tiganasu, Ciprian Nemes , Florin Munteanu , Daniel Muneanu, Cezar Scinteie *The load management concept applied on the residential sector* , 12th International Conference on Electromechanical and Energy Systems (SIELMEN 2019), October 9-11, 2019, Chişinău, Republic of Moldova, **DOI:** 10.1109/SIELMEN.2019.8905817, ISBN: 978-1-7281-4011-7.

- Ciprian Nemes, Mihaela Adochitei, Florin Munteanu, Alexandra Ciobanu, Octav Neagu, Self-consumption enhancement on a low-voltage grid-connected photovoltaic system, 5th IEEE International Energy Conference ENERGYCON 2018, 3-7 Jun 2018, Cyprus DOI: 10.1109/ENERGYCON.2018.8398839, WOS:000465417100106

- Ciprian M. Nemeş ; Cezar G. Scînteie ; Romeo Ciobanu, Enhancement of Annual Energy Production Based on Optimal Adjustment of PV Panels Orientation, 5th IEEE International Energy Conference ENERGYCON 2018, 3-7 Jun 2018, Cyprus DOI: 10.1109/ENERGYCON.2018.8398835, WOS:000465417100102
- Ciprian Nemes; Romeo Ciobanu; Calin Rugina; Probabilistic Analysis of Sky Clearness Index for Solar Energy Systems Planning, 2018 Smart City Symposium Prague (SCSP), 24-25 May 2018, Prague, Czech Republic, DOI:10.1109/SCSP.2018.8402677, WOS:000443451800032
- Alexandru Ciocea, Florin Munteanu, Ciprian Nemes, *Method to Assess the Degradation Risk of Photovoltaic Systems*, 10th International Conference and Exposition on Electrical Power Engineering, 18-19 October 2018, Iasi, Romania. pp. 0159 – 0164, **DOI:** 10.1109/ICEPE.2018.8559803 , WOS:00045875220003
- Florin Munteanu, Alexandra Ciobanu, Ciprian Nemes, *A Bayesian Approach of the Availability Complementarity of Renewable Resources*, 10th International Conference and Exposition on Electrical Power Engineering, 18-19 October 2018, Iasi, Romania, pp. 0731 – 0736, **DOI:** 10.1109/ICEPE.2018.8559738 , WOS:000458752200143
- Ciprian Nemes, Florin Munteanu, An IoT Load Management System for Residential Photovoltaic Prosumers, 10th International Conference and Exposition on Electrical Power Engineering, 18-19 October 2018, Iasi, Romania, pp. 0037 – 0041, **DOI:** 10.1109/ICEPE.2018.8559854 , WOS:000458752200007
- Ciprian Nemes, Florin Munteanu, Dragos Astanei, Mihaela Larion, Mihaela Adochitei, Voltage dips analysis for grid connections of dispatchable photovoltaic systems, 2017 International Conference on Optimization of Electrical and Electronic Equipment (OPTIM) & 2017 Intl Aegean Conference on Electrical Machines and Power Electronics (ACEMP), 25-27 May 2017 , Brasov, Romania, pp. 783-788, DOI: 10.1109/OPTIM.2017.7975064 , WOS:000426909600120
- A.Ciobanu; F. Munteanu; C. Nemes; D. Astanei, Data - driven Bayesian networks for reliability of supply from renewable sources, 2017 International Conference on Optimization of Electrical and Electronic Equipment (OPTIM) & 2017 Intl Aegean Conference on Electrical Machines and Power Electronics (ACEMP), 25-27 May 2017, Brasov, Romania, pp. 84-89, DOI: 10.1109/OPTIM.2017.7974952, WOS:000426909600012
- Ciprian Nemes; Florin Munteanu; Dragos Astanei; Alexandra Ciobanu; Mihaela Adochitei; Mihaela Larion, A correlation between photovoltaic system production and local solar resources, 14th International Conference on Engineering of Modern Electric Systems (EMES 2017), 1-2 June 2017, Oradea, Romania, pp. 47-50, DOI: 10.1109/EMES.2017.7980378 WOS:000427085200011
- D. Astanei; F. Munteanu; C. Nemes; A. Ciobanu; M. Ionescu; M. Adochitei, Light flicker detection using high-speed imaging, 7th International Conference on Modern Power Systems (MPS), 6-9 June 2017, Cluj-Napoca, Romania DOI:10.1109/MPS.2017.7974448 , WOS:000428462600076
- Alexandra Ciobanu, F.Munteanu, C. Nemes, D.Astanei, Availability Model of Wind and Solution to Immunize the Generators Against Short Time Perturbations , International Symposium on Fundamentals of Electrical Engineering, University Politehnica of Bucharest, Romania, June 30 - July 2, 2016, DOI: 10.1109/ISFEE.2016.7803166, WOS:000392434400018
- F. Munteanu; Alexandra Ciobanu; C. Nemes, From technical design structures to Bayesian networks in power engineering, 2016 International Conference on Applied and Theoretical

Electricity (ICATE), 6-8 Oct. 2016, Craiova, Romania, pp: 1 – 6, DOI: 10.1109/ICATE.2016.7754625 , WOS:000390767500025

- A. Ciobanu; F. Munteanu; C. Nemes, Bayesian networks utilization for reliability evaluation of power systems, 2016 International Conference and Exposition on Electrical and Power Engineering (EPE), 20-22 Oct. 2016, Page(s):837 – 841, DOI: 10.1109/ICEPE.2016.7781454 , WOS:000390706300164

- D. Astanei ; C. Nemes ; F. Munteanu ; A. Ciobanu, Annual energy production estimation based on wind speed distribution, 2016 International Conference and Exposition on Electrical and Power Engineering (EPE), 20-22 Oct. 2016, Page(s): 862 – 867, DOI: 10.1109/ICEPE.2016.7781454 , WOS:000390706300169

- Ciprian Nemes; Florin Munteanu; Mugurel Rotariu; Dragos Astanei, Availability assessment for grid-connected photovoltaic systems with energy storage, 2016 International Conference and Exposition on Electrical and Power Engineering (EPE), 20-22 Oct. 2016, Page(s): 908 – 911, DOI: 10.1109/ICEPE.2016.7781454 , WOS:000390706300177

- Astanei Dragos, Munteanu Florin, Nemeș Ciprian, Pellerin Stephane, Hnatiuc Bogdan, Electrical diagnostic of high voltage discharges produced by a new spark-plug, 13th International Conference on Engineering of Modern Electric Systems (EMES), 11-12 June 2015, Oradea, Romania, pp. 1-4, DOI:10.1109/EMES.2015.7158388, WOS:000363815100001

- Ciprian Nemeş, Florin Munteanu, Dragoș Astanei, Annual energy harvest of LACARP photovoltaic system, 6th International Conference on Modern Power Systems MPS2015, 18-21 May 2015, Cluj-Napoca, Romania, Published in Acta Electrotehnica, vol. 2015, nr. 3, pp. 213-219, 2015

- Munteanu Florin, Nemes Ciprian, Astanei Dragos, Ciobanu Alexandra, „DATA MINING FOR WIND AVAILABILITY MODELING", proceedings of 7th International Conference on ENERGY and ENVIRONMENT (CIEM), octombrie 2015, Iaşi, România.

- **Ciprian Nemeș,** Romeo Ciobanu, Calin Rugina, *Probabilistic Analysis of Sky Clearness Index for Solar Energy Systems Planning*, 2018 Smart City Symposium Prague (SCSP), 24-25 May **2018**, Prague, Czech Republic, DOI:10.1109/SCSP.2018.8402677, WOS:000443451800032
-
- Dragos Astanei, Florin Munteanu, **Ciprian Nemeş**, A. Ciobanu; M. Ionescu; M. Adochitei, *Light flicker detection using high-speed imaging*, 7th International Conference on Modern Power Systems (MPS), 6-9 June **2017**, Cluj-Napoca, Romania, DOI:10.1109/MPS.2017.7974448 , WOS:000428462600076
-
- **Ciprian Nemeș**; Florin Munteanu; Dragos Astanei; Alexandra Ciobanu; Mihaela Adochitei; Mihaela Larion, *A correlation between photovoltaic system production and local solar resources*, 14th International Conference on Engineering of Modern Electric Systems (EMES 2017), 1-2 June **2017**, Oradea, Romania, pp. 47-50, DOI: 10.1109/EMES.2017.7980378, WOS:000427085200011
-
- AlexandraCiobanu, Florin Munteanu, **Ciprian Nemeş**, Dragos Astanei, *Data - driven Bayesian networks for reliability of supply from renewable sources*, 2017 International Conference on Optimization of Electrical and Electronic Equipment (OPTIM) & 2017 Intl Aegean Conference on Electrical Machines and Power Electronics (ACEMP), 25-27 May **2017**, Brasov, Romania, pp. 84-89, DOI: 10.1109/OPTIM.2017.7974952, WOS:000426909600012

- **Ciprian Nemeș,** Florin Munteanu, Dragos Astanei, Mihaela Larion, Mihaela Adochitei, *Voltage dips analysis for grid connections of dispatchable photovoltaic systems*, 2017 International Conference on Optimization of Electrical and Electronic Equipment (OPTIM) & 2017 Intl Aegean Conference on Electrical Machines and Power Electronics (ACEMP), 25-27 May **2017** , Brasov, Romania, pp. 783- 788, DOI: 10.1109/OPTIM.2017.7975064 , WOS:000426909600120

- Alexandra Ciobanu, F.Munteanu, C. Nemes, D.Astanei, *Availability Model of Wind and Solution to Immunize the Generators Against Short Time Perturbations* , International Symposium on Fundamentals of Electrical Engineering, University Politehnica of Bucharest, Romania, June 30 – July 2, **2016**, DOI: 10.1109/ISFEE.2016.7803166, WOS:000392434400018

- Florin Munteanu, Alexandra Ciobanu, **Ciprian Nemeş**, *From technical design structures to Bayesian networks in power engineering*, 2016 International Conference on Applied and Theoretical Electricity (ICATE), 6-8 Oct. **2016**, Craiova, Romania, pp: 1 – 6, DOI: 10.1109/ICATE.2016.7754625 , WOS:000390767500025

- Alexandra Ciobanu, Florin Munteanu, **Ciprian Nemeş**, *Bayesian networks utilization for reliability evaluation of power systems*, 2016 International Conference and Exposition on Electrical and Power Engineering (EPE), 20-22 Oct. **2016**, Page(s):837 – 841, DOI: 10.1109/ICEPE.2016.7781454 , WOS:000390706300164

- Dragos Astanei, **Ciprian Nemeş** Florin Munteanu, Alexandra. Ciobanu, *Annual energy production estimation based on wind speed distribution*, 2016 International Conference and Exposition on Electrical and Power Engineering (EPE), 20-22 Oct. **2016**, Page(s): 862 – 867, DOI: 10.1109/ICEPE.2016.7781454 , WOS:000390706300169

- **Ciprian Nemeș,** Florin Munteanu, Mugurel Rotariu, Dragos Astanei, *Availability assessment for grid-connected photovoltaic systems with energy storage*, 2016 International Conference and Exposition on Electrical and Power Engineering (EPE), 20-22 Oct. **2016**, Page(s): 908 – 911, DOI: 10.1109/ICEPE.2016.7781454 , WOS:000390706300177
- **Ciprian Nemeș**, Sorina Costinas, *Yield and availability analysis of grid-connected photovoltaic systems – a case study for Iasi region, Romania*, 2015 Intl Aegean Conference on Electrical Machines & Power Electronics (ACEMP), 2015 Intl Conference on Optimization of Electrical & Electronic Equipment (OPTIM) & 2015 Intl Symposium on Advanced Electromechanical Motion Systems (Electromotion), 2-4 September **2015**, Side – Turkey, pp. 135-140, DOI: 10.1109/OPTIM.2015.7426955, WOS:000382957000026

- Astanei Dragos, Munteanu Florin, **Nemeș Ciprian**, Pellerin Stephane, Hnatiuc Bogdan, *Electrical diagnostic of high voltage discharges produced by a new spark-plug*, 13th International Conference on Engineering of Modern Electric Systems (EMES), 11-12 June **2015**, Oradea, Romania, pp. 1-4, DOI:10.1109/EMES.2015.7158388, WOS:000363815100001

- Sorina Costinas, **Ciprian Nemeș**, Ion Tristiu, Gabriela Nicoleta Sava*, Quality Cost of Power Supply and Pay-Back Capital of This*, 14th International Conference on Optimization of Electrical and Electronic Equipment (OPTIM 2014), May 22-24, **2014**, Brasov, Romania, pp. 124 – 129, DOI: 10.1109/OPTIM.2014.6850969, WOS:000343551300019

- Florin Munteanu, **Ciprian Nemeș,** *Availability Evaluation of Wind as a Repairable System*, 14th International Conference on Optimization of Electrical and Electronic Equipment (OPTIM

2014), May 22-24, **2014**, Brasov, Romania, ISSN: 978-1-4799-5183-3, pp. 756-761, WOS:000343551300111

- Florin Munteanu, **Ciprian Nemeş**, D. Astanei, *Power Quality Indices Proposal for Networks Operating in Sinusoidal and Unbalanced Conditions*, 2014 International Symposium on Fundamentals of Electrical Engineering (ISFEE), University Politehnica of Bucharest, Romania, November 28-29, **2014**, pp. 1 – 6, DOI: 10.1109/ISFEE.2014.7050553, WOS:000380570500021

- Florin Munteanu, **Ciprian Nemeş**, Monica Atudori, Loredana Galca, *Reliability model to estimate power quality and reliability of supply*, 12th International Conference on Environment and Electrical Engineering, Wroclaw, Poland, 5– 8 May **2013**, pp. 94-99, DOI:10.1109/EEEIC.2013.6549597, WOS:000395539900017

- **Ciprian Nemeş**, Munteanu, F., *A parametrical analysis of wind turbine energy performance*, 2013 Integration of Stochastic Energy in Power Systems (ISEPS), University Politehnica of Bucharest, Romania, November 07, **2013**, pp. 8 –13, DOI: 10.1109/ISEPS.2013.6707944, WOS:000349473300002

- Florin Munteanu, **Ciprian Nemeş**, Mariana Munteanu, *New Trends on Power Quality – Light Sensitivity Relationship and its Influence on Human Health*, 2012 International Conference and Exposition on Electrical and Power Engineering, October 25-27, **2012**, Iasi, Romania (EPE 2012), pp. 928-933, 6 pg., DOI:10.1109/ICEPE.2012.6463813, WOS:000324685300170

- **Ciprian Nemeş**, Florin Munteanu, *An Analysis of a Photovoltaic Panel Model Comparison Between Measurements and Analytical Models*, 2012 International Conference and Exposition on Electrical and Power Engineering, October 25-27, **2012**, Iasi, Romania (EPE 2012), pp. 939-944, DOI:10.1109/ICEPE.2012.6463811, WOS:000324685300172

- Giuseppe Marco Tina, Carmelo Brunetto, **Ciprian Nemeş**, *Adequacy Indices to Evaluate the Impact of Photovoltaic Generation on Balancing and Reserve Ancillary Service Markets,* 2012 International Conference and Exposition on Electrical and Power Engineering, October 25-27, **2012**, Iasi, Romania(EPE 2012), pp. 945-950, DOI:10.1109/ICEPE.2012.6463810 , WOS:000324685300173

- Florin Munteanu; **Ciprian Nemeș**; *The Maintenance Strategies Influence on the Reliability of Power Plant Generating Units*, 13th International Conference on Optimization of Electrical and Electronic Equipment (OPTIM 2012), 24- 26 May **2012**, Brasov, Romania, pp. 103-108, DOI:10.1109/OPTIM.2012.6231761, WOS:000398866700015

- **Ciprian Nemeş**, Florin Munteanu, *Reliability Consideration on Wind Farms Energy Production*, 13th International Conference on Optimization of Electrical and Electronic Equipment (OPTIM 2012), 24- 26 May **2012**, Brasov, Romania, pp. 183-187, DOI: 10.1109/OPTIM.2012.6231759, WOS:000398866700027

- **Ciprian Nemeş**; Costandache, N.; Munteanu, F., *Probabilistic Approach for Circuit-Breaker Availability,* 19th Symposium on Physics of Switching Arc Location: Brno, Czech Republic September 05-09, **2011**, pp. 287-290, WOS:000393239500058

- **Ciprian Nemeş**, Florin Munteanu, *Optimal Selection* of Wind Turbine for a Specific Area, 12th International Conference on Optimization of Electrical and Electronic Equipment, May 20-22,

2010, Brasov, Romania, (OPTIM 2010), pp. 1224-1229, OI:10.1109/OPTIM.2010.5510577, WOS:000291967300183

- Munteanu Florin, **Nemes Ciprian**, Astanei Dragos, Ciobanu Alexandra, *Data mining for wind availability modeling*, proceedings of 7th International Conference on Energy and Environment (CIEM 2015), octombrie **2015**, Iaşi, România.

- **Ciprian Nemes,** Marcel Istrate, *Probabilistic assessment of annual energy production from wind farms*, Proceedings of 35th International Conference on Fundamentals of Electrotechnics and Circuit Theory (35th IC-SPETO), Gliwice-Ustron, Poland, 23-26 may 2012, ISBN 978-83-85940-34-0, pp. 71- 72, 2 pg., 2012.

- **Ciprian Nemeş**, Mbuyamba Tshibanda, *Stochastic Analysis for Wind Speed Forecasting*, The International Conference INnovation and Collaboration in Engineering Research (INCER), 2–4 July 2012, Bucharest, Romania, CD format, 5 pg., 2012.

- Florin Munteanu, **Ciprian Nemeş,** *Statistical inference for Energy Consumption and Productivity Indices Evaluation in a Steelmaking Plant*, Proceedings of the 8th edition of International Conference on Industrial Power Engineering, CIEI 2011 Bacău, Romania, ISSN - 2069-9905, paper presented in Plenary Session, 2011.

- **Ciprian Nemeş,** Marcel Istrate, *Effects of wind profile in the wind energy systems performance*, International Workshop on Deregulated Electricity Market Issues in South-Eastern Europe, Bled, Slovenia. 20-21 September, ISBN 978-961-243-183-9, paper 95, 6 pg., 2011.

- Florin Munteanu, **Ciprian Nemes**, *Wide Area Power Quality Monitoring,* Proceedings on the 6th International Conference on Electrical & Power Engineering. EPE 2010, October 28-30, Iasi, Romania, ISBN 978-606-13-007-8, pp. 241-244, 4 pg., 2010.

- Florin Munteanu, **Ciprian Nemeş**, *New Method For Steady State Security Assessment of Power Networks*, Proceedings on the 6th International Conference on Electrical & Power Engineering. EPE 2010, October 28-30, Iaşi, Romania, ISBN 978-606-13-0077-82010, pp 245-248, 4 pg., 2010

- **Ciprian Nemeş,** Florin Munteanu, *Wind generation forecasting using time series techniques*, Proceedings of the 7th National Conference on Industrial Energetics with International Participation, CNEI 2009 Bacău, 5-7 November, ISBN 978-606-527-050-3, pp. 493-499, 2009.

- **Ciprian Nemeş,** Florin Munteanu, *A reliability-based equivalence between conventional power and wind power generation*, 7th International Conference of Electromechanical and Power Systems, SIELMEN 2009, Iaşi, Romania, vol I, ISBN 978-606-520-618-2, ISBN_vol I 978-606-520-617-5., pp. 375-379, 5 pg., 2009.

- Mbuyamba Tshibanda, **Ciprian Nemeş**, Prof Jan-Harm C Pretorius, *Negative Effects of Energy- Saving, Non-Linear Loads on LV Systems: Causes and Recommendations,* 4th International Conference on Energy and Environment CIEM'09 12-14 November 2009, Conference CD ISSN 2067-0893, Bucharest, paper 3, sect. 9, 2009.

- Catalin Pancu, **Ciprian Nemeş**, Adrian Baraboi, Maricel Adam, *The using of artificial intelligence in the reliability indices optimisation of electrical equipment,* The National

Conference of Industrial Energetics CNEI 2007 Bacau, University of Bacău, Engineering Faculty, 1-3 November 2007, Ed. Alma Mater, ISSN 1224-7480, pp. 179-184, 6 pg., 2008.

- **Ciprian Nemeş**, Florin Munteanu, Dumitru Ivas, *Evaluation of the electric power equipment reliability*, 2008 International World Energy System Conference. Technical University ”Gh. Asachi” Iaşi, Romania June 30-July 2, 2008, ISSN 1198-0729, Format CD, paper B021-II1 Session, 2008.
- **Ciprian Nemeş**, Florin Munteanu, Irina Ciornei, *Optimal relationship between operation and maintenance intervals*, 2008 International World Energy System Conference, Technical University ”Gh. Asachi” Iaşi, Romania June 30-July 2, 2008, ISSN 1198-0729, Format CD, paper B022-II1 Session, 2008.
- Florin Munteanu, **Ciprian Nemeş**, Monica Rotariu, *Intelligent controlled switching influence on power quality*, 2008 International World Energy System Conference, Technical University ”Gh. Asachi” Iaşi, Romania June 30-July 2, 2008, ISSN 1198-0729, Format CD, Plen Session, 2008.
- Florin Munteanu, **Ciprian Nemeş**, Dumitru Ivas, *The IEEE RTS utilization in Romania for reliability analysis of power systems: opportunity and difficulties*, 2008 International World Energy System Conference*,* Technical University ”Gh. Asachi” Iaşi, Romania June 30-July 2, 2008, ISSN 1198-0729, Format CD, paper B037-II1 Session, 2008.
- Dumitru Ivas, **Ciprian Nemeş**, Florin Munteanu, Constantin Darzan, *The models for security and risk indices evaluation in the electric power systems develops*, 2008 International World Energy System Conference, Technical University ”Gh. Asachi” Iaşi, Romania June 30-July 2, 2008, ISSN 1198-0729, Format CD, paper B035-II1 Session, 2008.
- Dumitru Ivas, **Ciprian Nemeş**, Florin Munteanu, Constantin Darzan, *The Models of Reliability Evaluation for Systems with Dependent Elements and Variable Structure*, 2008 International World Energy System Conference, Technical University ”Gh. Asachi” Iaşi, Romania, June 30-July 2, 2008, ISSN 1198-0729, Format CD, paper B036-II1 Session, 2008.
- 4**Ciprian Nemeş**, Florin Munteanu *Probabilistic approach for thermal and electrodynamics stresses distribution functions,* Twelfth International Conference on Electrical Machines, Drive s and Power Systems ELMA2008, Technical University of Sofia Bulgaria, ISSN 1313-4965, pp. 164-168, 5 pg., 2008.
- Irina Ciornei, **Ciprian Nemeş**, *The future hybrid renewable power system and its generation dispatch,* 2008 International World Energy System Conference, Technical University ”Gh. Asachi” Iaşi, Romania June 30-July 2, 2008, ISSN 1198-0729, Format CD, paper A41-III Session, 2008.
- **Ciprian Nemeş**, C-tin Darzan, Florin Munteanu, Elena Istrate, Dumitru Ivas, *The influence of controlled switching on the circuit breaker reliability,* Conferinta Nationala si Expozitia Energetica CNEE 2007 Sinaia, 7-9 Noiembrie 2007, Editura SIER Bucuresti, ISSN: 1843-6005, pp. 699-702, 4 pg., 2007.
- Florin Munteanu, Dumitru Ivas, **Ciprian Nemeş**, C-tin Darzan Elena Istrate, Bogdan Luminariu, *Intelligent apparatus and switching in power systems – principles and practical solutions*. Conferinta Nationala si Expozitia Energetica CNEE 2007 Sinaia, 7-9 Noiembrie 2007, Editura SIER Bucuresti, ISSN: 1843-6005, pp. 1015-1019, 5 pg. 2007.
- **Ciprian Nemeş**, Cătălin Pancu, *The reliability prediction using simulations and neuronal networks*, International Symposium on Electrical Engineering and Energy Converters, ELS 2007 Suceava, 27- 28 September 2007, ISBN: 978-973-666-259-1, pp. 196-199, 4 pg., 2007.
- Dumitru Ivas, Florin Munteanu, **Ciprian Nemeş,** *Interferentele eficientei energetice optime,* Simpozionul International de Eficienta Energetica, ed. a V-a SIEE2006, Cluj-Napoca, 03-05 octombrie 2006, ISBN 973-686-928-8, 978-973-686-928-0, pp. 45-50, 6 pg., 2006.
- Dumitru Ivas, Florin Munteanu, **Ciprian Nemeş**, *The models of risk in the developing and working of the electrical power system,* 4-th International Conference on Electrical and Power Engineering EPE 2006, Iaşi, Romania, October 12-14, 2006, Published in Bulletin of the Polytechnic Institute of Iaşi, tomul LII (LVI), fasc. 5C, pp. 1139-1144, 6 pg., 2006.

- **Ciprian Nemeş**, Florin Munteanu, Dumitu Ivas, *Probabilistic approach of controlled switching,* 4-th International Conference on Electrical and Power Engineering EPE 2006, Iaşi, Romania, October 12- 14, 2006, Published in Bulletin of the Polytechnic Institute of Iaşi, tomul LII (LVI), fasc. 5C, pp. 1151- 1154, 4 pg., 2006.
- Dumitru Ivas, Florin Munteanu, **Ciprian Nemeş,** *The impact of the new based-on-intelligentequipment management methods on the structure of the distribution power networks nodes,* Second Regional Conference and Exhibition on Electricity Distribution, organized by CIRED Committee of the states of Serbia and Montenegro, 17-20 October 2006, Zlatibor, Serbia, CD format, paper: 054-2006, Book of abstracts: ISBN 86-83171-13-2, pp. 7, 2006.
- **Ciprian Nemeş**, Dumitu Ivas, Florin Munteanu, *Probabilistic approach for thermal and electrodynamic stresses distribution functions,* Second Regional Conference and Exhibition on Electricity Distribution, organized by CIRED Committee of the states of Serbia and Montenegro, 17-20 October 2006, Zlatibor, Serbia, CD format, paper: 160-2006, Book of abstracts: ISBN 86-83171-13-2, pp. 11, 2006.
- Florin Munteanu, Dumitru Ivas, **Ciprian Nemeş**, *From controlled switching to intelligent switching,* Second Regional Conference and Exhibition on Electricity Distribution, organized by CIRED Committee of the states of Serbia and Montenegro, 17-20 October 2006, Zlatibor, Serbia, CD format, paper: 185-2006, Book of abstracts: ISBN 86-83171-13-2, pp.47, 2006
- **Ciprian Nemeş**, Dumitru Ivas, *Aspecte privind influenţa sistemului electroenergetic asupra fiabilităţii întreruptoarelor*, Al XIX-lea Simpozion Naţional "Siguranţă în Funcţionare a Sistemului Energetic" Sinaia, 28 - 30 septembrie 2005, ISBN 973-87456-0-8, pp. 165-169, 5 pg., 2005.
- Dumitru Ivas, Florin Munteanu, **Ciprian Nemeş**, *Asupra fiabilităţii sistemelor multivalente, de producţie şi deservire,* Al XIX-lea Simpozion Naţional "Siguranţă în Funcţionare a Sistemului Energetic" Sinaia, 28 - 30 septembrie 2005, ISBN 973-87456-0-8, pp. 191-195, 5 pg., 2005.
- Dumitru Ivas, Florin Munteanu, **Ciprian Nemeş**, Lucian Baron, *Limits of independent elements assumption in reliability system analysis and exceeding possibility,* 5th International Conference on Electromechanical and Power Systems, October 6-8, 2005, Chisinau, vol I, ISBN:973-716-208-0, pp. 395-398, 4 pg., 2005.
- **Ciprian Nemeş**, Dumitru Ivas, *Model for estimation of the strength distributions using the stressstrength interference*, 5th International Conference on Electromechanical and Power Systems, October 6-8, 2005, Chisinau, vol I, ISBN:973-716-208-0, pp. 173-174, 2 pg., 2005.
- **Ciprian Nemeş,** Dumitru Ivas, Florin Munteanu, *A method to establish the mean of number of operations for the IO 110 kV circuit breaker,* The International Conference on Energy and Environment, Bucharest 20 - 22 October 2005, Section 2 Reliability, Risk, Maintenance, pp. 2.47- 2.51, 5 pg., 2005
- Dumitru Ivas, Florin Munteanu, **Ciprian Nemeş**, *The models of risk in the management of the electric power system,* The International Conference on Energy and Environment, Bucharest 20 - 22 October 2005, Section 2 Reliability, Risk, Maintenance, pp 2.52- 2.59, 8 pg, 2005.
- **Ciprian Nemeş**, Dumitru Ivas, *The statistic character of the short-circuit currents stresses*. Ediţia a V-a Conferinţa Naţională de Energetică Industrială cu participare internaţională CNEI 2005, Bacău 10–12 Noiembrie 2005, ISSN 1224-7480, pg 109-133, 5 pg., 2005.
- Dumitru Ivas, Florin Munteanu, **Ciprian Nemeş**, *Systemically connections in theoretical and practical reliability,* Ediţia a V-a Conferinţa Naţională de Energetică Industrială cu participare internaţională CNEI 2005, Bacău 10–12 Noiembrie 2005, ISSN 1224-7480, pp. 184-188, pg. 5 pg. 2005.
- Dumitru Ivas, Florin Munteanu, **Ciprian Nemeş**, *The dynamic relations inside the state vector components - a criterion for technical systems reliability and risk evaluation,* The International World Energy System Conference WESC 2004, Oradea, ISSN 1198-0729, pg. 12-15, 4 pg., 2004.
- Dumitru Ivas, Florin Munteanu, Ciprian Nemeş, *New criterions for optimal development and exploitation network the statistical selectivity and relative sensitivity*, Regional Conference

and Exhibition on electricity distribution, Conference organized by CIRED Herceg Novi, Montenegro, 5-8 October 2004, pp. 76-82, 7 pp, 2004.

- Dumitru Ivas, Florin Munteanu, **Ciprian Nemeş**, *The models of risk in the management of the electrical power system,* WEC Regional Energy Forum – FOREN 2004, 13-17 June 2004, Neptun Olimp - Romania (format electronic - CD), paper no: S2_20, 8 pg., 2004.
- Dumitru Ivas, Florin Munteanu, Ciprian Nemeş, Gheorghe Chiriac, *Binomul scop-mijloc instrument de evaluare şi planificare a eficienţei energetice,* Simpozionul Internaţional de Eficienţă Energetică, ed. a IV-a, 18-20 octombrie 2004, Cluj-Napoca, pp. 103-108, 6 pg., 2004.
- Dumitru Ivas, Florin Munteanu, **Ciprian Nemeş**, *Une Generalisation de la notion de fiabilite pour les systemes multivalentes, de production et d'offre,* 4th international Conference on Electromechanical and Power Systems SIELMEN 2003, Chişinău 26-27 September 2003, vol. II, .ISBN 9975-9704-9-4, pp. 51-54, 4 pg., 2003.
- Ciprian Nemeş, Dumitru Ivas, *Modelarea solicitării la scurtcircuit a echipamentelor din staţiile electrice în calculul indicatorilor de fiabilitatea a acestora,* Al XVIII-lea Simpozion Naţional "Siguranţa în funcţionare a sistemului energetic" SIG 2003, 24-26 septembrie 2003 Oradea, Secţia1 Siguranţa în funcţionare a instalaţiilor de transport a energiei electrice, lucrarea 1.33, 6 pg., 2003.
- *Ciprian Nemeş, Dumitru Ivas, Florin Munteanu,* Modelarea fiabilităţii contactelor întreruptoarelor electrice bazată pe fizica electroeroziunii, *Conferinţa Internaţională Energie - Mediu CIEM 2003, 22-25 octombrie 2003, Bucureşti, vol.I. Sesiunea Fiabilitate, Risc, Mentenanţă, Ed. Academiei Române, ISBN 973-27-1032-2, pp. 2.16–2.20, 5 pg. 2003.*
- *Dumitru Ivas, Florin Munteanu, **Ciprian Nemeş**, Ioan Mălăescu,* Asupra modelării fiabilităţii sistemelor cu elemente dependente*, Conferinţa Internaţională Energie - Mediu CIEM 2003, 22-25 octombrie 2003, Bucureşti, vol.I. Sesiunea Fiabilitate, Risc, Mentenanţă, Ed. Academiei Române, ISBN 973-27-1032-2, pp. 2.21 - 2.27, 7 pg., 2003*
- **Ciprian Nemeş**, Dumitru Ivas, *Asupra metodelor de calcul al fiabilităţii echipamentelor electrice, folosind modelele solicitate-rezistenţă-timp*, Simpozionului Naţional de Reţele Electrice SNRE 2002, Oradea, lucrare I.5, 6 pg., 2002.
- Dumitru Ivas, Florin Munteanu, Ciprian Nemeş, Riscul producătorilor în relaţiile dintre parteneri pe piaţa de energie, Conferinţa Naţională a Energiei, FOREN 2002, June 09-13, 2002, Neptun Olimp - Romania (format electronic - CD), 2002.
- Dumitru Ivas, Florin Munteanu, Ciprian Nemeş, Managementul riscului între relaţiile dintre partenerii de pe piaţa de energie, Simpozionul Naţional Siguranţă în Funcţionare a Sistemului Energetic, Ediţia a XVII-a, vol 1, Deva 26-28 sept. 2001, pp. 12-18, 7 pg., 2001.
- Ciprian Nemeş, Dumitru Ivas, Florin Munteanu, B. Bagen, Modelarea intensităţii de defectare în perioada de rodaj a elementelor, Simpozionul Naţional Siguranţă în Funcţionare a Sistemului Energetic, Ediţia a XVII-a, vol 1, Deva 26-28 sept. 2001, pp. 56-62, 7 pg., 2001.
- Ciprian Nemeş, Dumitru Ivas, Florin Munteanu, Estimarea defecţiunilor folosind modelul static solicitare – rezistenţă, A treia Conferinţă Internaţională de Sisteme Electromecanice şi Energetice, SIELMEN 2001, Chişinău, 4-6 octombrie 2001, vol II, Secţiunea Fiabilitate şi Diagnoză, ISBN 9975 – 9638 – 7 – 0, pp. 149-152, 4. pg., 2001.
- Dumitru Ivas, Florin Munteanu, Ciprian Nemeş, Privire critică asupra metodelor de influenţare a fiabilităţii, A treia Conferinţă Internaţională de Sisteme Electromecanice şi Energetice, SIELMEN 2001, Chişinău, 4-6 octombrie 2001, vol II, Secţiunea Fiabilitate şi Diagnoză, ISBN 9975 – 9638 – 7 – 0, pp. 161-164, 4. pg., 2001.
- Dumitru Ivas, Florin Munteanu, Ciprian Nemeş, Nicolae Brumă, Coculeana Popa, Trecerea la noile tehnologii de dezvoltare şi exploatare a reţelelor electrice, evoluţia sau revoluţie?, Simpozionul Naţional de Reţele Electrice, ediţia a X-a, vol. I, SNRE 25-26 mai 2000, Iaşi, pp. 39-45, 7 pg., 2000.
- Florin Munteanu, Dumitru Ivas, Ciprian Nemeş, Nicolae Brumă, Coculeana Popa, Tehnici de ameliorare a calităţii serviciului de alimentare cu energie electrică, Simpozionul Naţional de Reţele Electrice, ediţia a X-a, vol. I, SNRE 25-26 mai 2000, Iaşi, pp. 254-263, 7 pg., 2000.

- Dumitru Ivas, Florin Munteanu, Ciprian Nemeş, Privire critică asupra modelelor şi metodelor de calcul a fiabilităţii sistemelor, limitele acestora in domeniul energetic necesitaţi şi perspective, Al XVI-lea Simpozion Naţional “Siguranţa în Funcţionare a Sistemului Energetic” Bacău, 22-23 Septembrie 1999, pp. 5-14, 10 pg., 1999.
- Florin Munteanu, Dumitru Ivas, Ciprian Nemeş, Tudor Mocanu, Calitate şi fiabilitate in condiţiile reglementarii pieţei de energie, Al XVI-lea Simpozion Naţional “Siguranţa în Funcţionare a Sistemului Energetic” Bacău, 22-23 Septembrie 1999, pp. 57-65, 9 pg., 1999.
- Dumitru Ivas, Florin Munteanu, Ciprian Nemeş, Criterii sistemice de eficienţă energetică, Simpozionul Internaţional de Eficienţă Energetică, Cluj-Napoca, 12-14 Octombrie, 1999.
- Dumitru Ivas, Florin Munteanu, Ciprian Nemeş, Energia electrică, Marfă sau serviciu? Criterii sistemice de apreciere a calităţii energiei electrice, Al III-lea Simpozion “Calitatea Energiei Electrice”, Targovişte, 8-9 decembrie 1999, pp. 100-104, 5 pg., 1999.
- Dumitru Ivas, Florin Munteanu, Ciprian Nemeş, Indices to Evaluate the Network Nodes Structure, Proceedings of the Third International Power System Conference, november 18-20,1999, Timişoara, România, published in Bulletin of Politehnica University, vol. III, tom 44(58), fasc. 2, ISSN 1224-6034. pp. 80-84, 5 pg., 1999.
- Florin Munteanu, Dumitru Ivas, Ciprian Nemeş, Tudor Mocanu, A combined criterion for electricity distribution networks restructuring, Proceedings of the Third International Power System Conference, november 18-20,1999, Timişoara, România, published in Bulletin of Politehnica University, vol. III, tom 44(58), fasc. 2, ISSN 1224-6034. pp. 85-90, 6 pg., 1999.

J. Invenţii.

1. 1. Ciprian Nemes, Florin Munteanu.“Metodă pentru managementul receptoarelor consumatorilor rezidențiali alimentați din surse fotovoltaice proprii” Cerere brevet nr. A00161/08.03.2018__

K. Contracte de cercetare.

Granturi de cercetare-dezvoltare câştigate prin competiţie naţională

1. Sistem de majorare a indicatorilor de autoconsum din surse fotovotaice, folosind conversia si stocarea sub forma de energie termica, Proiect tip PN-III-P3-3.1-PM-ROCN-2018-0093 / 02.07.2018-31.12.2018. Valoare 49.500 ron. Director proiect: CiprianNemeş

2. Sistem inteligent pentru managementul sarcinii consumatorilor rezidentiali alimentati din surse fotovoltaice, Proiect tip PN-III-P2-2.1-CI-2017-0823 nr. 145 CI / 10.10.2017-11.04.2018. Valoare 44990 ron. Director proiect: Ciprian Nemeş

3. Utilizarea modelelor analitice si a tehnicilor de inteligenta artificiala in optimizarea indicatorilor de fiabilitate a echipamentelor electroenergetice, prin monitorizarea solicitărilor. CNCSIC-AT/2007-2008, Cod CNCSIS – 29, Contract nr. : 33 GR /23.05.2007, 77 GR /11.06.2008.Valoare: 17000/2007; 18000/2008, Director proiect: Ciprian Nemeş

4. Zone urbane bioclimatice inteligente cu emisii reduse de carbon ca insule inovatoare energetic într-un oraș durabil, Proiect international - ERA NET Cofund-83/2016-2017 (SMART URBAN ISLE). Membru: Ciprian Nemeş

5. Construire platformă de cercetare pentru integrarea resurselor regenerabile in instalatii autonome-COPRESA, Proiect finanţat prin programul operaţional sectorial creşterea competitivităţii economice, axa prioritară 2 – Competitivitate prin CDI, operatiunea 2.3.2: Dezvoltarea infrastructurii de C-D a întreprinderilor, cu crearea de noi locuri de munca pentru C-D.

Proiect nr. 608/10.12.2013 coordonat de S.C. DAS S.R.L. Iaşi. Valoarea totală de 6.126.355,31 RON, din care asistenţa financiară nerambursabilă este de 2.443.129 RON. Membru UTI: Ciprian Nemeş

6. Cercetări privind integrarea surselor regenerabile de energie: studii în direcţia dezvoltării serviciului de alimentare cu energie electrică. Domeniul de cercetare: Mediu dezvoltare durabilă, Proiect: Performanţă prin postdoctorat pentru integrarea in aria europeană de cercetare, PERFORM-ERA, ID – 57649, 2010 - 2013, POSDRU/89/1.5/S/57649 Proiect finanţat prin Programul Operaţional Sectorial pentru Dezvoltarea Resurselor Umane 2007 – 2013. Buget total proiect: 20.813.320 RON, din care finanţare nerambursabilă 20.016.735 RON. Proiect coordonat de Prorectoratul Ştiinţific al Universtităţii Tehnice "Gheorghe Asachi" din Iaşi. Membru / cercetător postdoc: Ciprian Nemeş

7. Aparate si comutari inteligente in sistemele electroenergetice, Proiect CEEX – MENER nr. 607/2005-2007, Valoare: 48936.21/2005; 168000/2006; 50000/2007, Membru: Ciprian Nemeş

8. Dezvoltarea parteneriatelor C/D in vederea promovării unor proiecte europene în domeniul sistemelor distribuite de monitorizare a mediului, CEEX Modul 3, contract 201/2006, 2006 – 2008, Membru: Ciprian Nemeş.

Contracte încheiate cu institute de cercetare, companii, regii, societăţi comerciale

1. Cercetari privind dezvoltarea uniu sistem pentru monitorizarea si optimizarea indicatorilor de autoconsum din surse distribuite Contract nr. 16052P\07.09.2017 - 15.10.2018, Beneficiar: SC DAS SRL Iasi. Valoare: 45000 RON + TVA, Responsabil temã: Ciprian Nemes.

2. Cercetari experimentale privind calitatea energiei electrice si solutii de ameliorare in cadrul Arcelor Mittal Galati. Contract nr. 141P\26.01.2017, Beneficiar: SC Arcelor Mittal Galati. Valoare: 33750 RON + TVA, Membru: Ciprian Nemes

3. Masuratori privind calitatea energiei electrice si solutii de ameliorare in cadrul Arcelor Mittal Galati. Contract nr. 2016P\15.12.2015 - 19.09.2016 , Beneficiar: SC Arcelor Mittal Galati. Valoare: 30000 RON + TVA. Membru: Ciprian Nemes

4. Estimarea productiei de energie electrica si dimensionarea parcului fotovoltaic de 132,6 kWp – Letcani, Contract nr. 3872P / 04.03.2013, Beneficiar: SC Consult Finance SRL Iasi. Valoare: 3500+ TVA= 4340 RON, Responsabil temã: Ciprian Nemes.

5. Cercetări experimentale privind proiectarea, functionarea si exploatarea panourilor fotovoltaice si optimizarea sistemelor inteligente de orientare biaxialã. Contract nr. 2274P / 17.12.2012 - 15.06.2014, Beneficiar: SC DAS SRL Iasi. Valoare: 20.000 euro+TVA. Membru: Ciprian Nemes

6. Evaluarea prin calcul a câmpurilor electrice şi magnetice de 50Hz în zona traversărilor variantei de ocolire a mun. Iaşi, de către LEA 220 kV Gutinaş-Munteni-FAI, Contract nr. 2874P / 31.08.2011, Beneficiar: SC Electromontaj SA, Sucursala Iaşi. Valoare: 2000 RON. Responsabil temă: Ciprian Nemeş

7. Substaţiile de tracţiune la Regionala CFR Iaşi şi siguranţa circulaţiei pe căile ferate, Contract nr. 7680P/2007 Beneficiar: E-on Energie Iasi. Valoare: 12.500+TVA=14.875RON, Membru: Ciprian Nemes

8. Studiul şi determinarea prin calcul a tensiunilor induse în LEA 220-400 kV din gestiunea ST. Bacău, în condiţii speciale de paralelism, în vederea respectării valorilor limită admise, Contract nr. 3274P/17.10.2005, Beneficiar: C.N. Transelectrica S.A. Sucursala de Transport Bacău. Valoare 99000+TVA=11781 RON, Membru: Ciprian Nemeş

9. Măsurarea tensiunii de atingere şi de pas la staţia 110/20/6 kV Comăneşti, Contract nr. 321P/13.02.2004, Beneficiar: S.C. ELCO SA Botosani, Valoare 2000+TVA=2.380 RON, Responsabil temă: Ciprian Nemeş

10. Instrumente matematice de modelare a comportării construcţiilor hidrotehnice bazate pe metoda seriilor de timp, Contract nr. 1910P/23.09.2004, Beneficiar: Universitatea Tehnicã Cluj Napoca, Valoare 15.000+TVA=17.850 RON, Responsabil temă: Ciprian Nemeş

11. Modelarea fiabilităţii sistemelor cu structură dinamică aplicată sistemelor de transport al energiei electrice, Contract nr. 1579P/24.07.2004, Beneficiar: C.N. Transelectrica S.A. Sucursala de Transport Bacău, Valoare 6.500+TVA=7.735 RON, Responsabil temă: Ciprian Nemeş
12. Verificarea SUUCE pentru optimizarea exploatării şi dezvoltării instalaţiilor la SH Rm. Vâlcea, Contract nr. 894P/2001-2002 Beneficiar: SH Râmnicu Vâlcea. Valoare 9.146+TVA=10.884 RON, Membru: Ciprian Nemeş

13. Criterii, metode şi instrumente de decizie în dezvoltarea şi exploatarea reţelelor de transport în condiţiile create de reforma sectorului energetic, Contract nr. 1135P/2001, Beneficiar: C.N. Transelectrica S.A. Sucursala de Transport Bacău. Valoare 4.000+TVA=4.760 RON, Membru: Ciprian Nemeş

14. Optimizarea structurii reţelelor de MT ale SDEE Bacău pe baza analizei combinate CPT-fiabilitate, Contract nr. 1262/1999 Beneficiar: CONEL Bacău. Valoare 2.500 RON, Membru: Ciprian Nemeş

15. Principii tehnice şi economice moderne în exploatarea sistemelor de alimentare cu energie electrică, Contract nr. 1263/1999 Beneficiar: CONEL Bacău. Valoare 2.500 RON, Membru: Ciprian Nemeş

16. Evaluarea instrumentelor necesare pentru licitarea energiei electrice pe intervale, Contract nr. 412P/1999, Beneficiar: CONEL Bacău. Valoare 4.500 RON, Membru:Ciprian Nemeş

17. Analiza pierderilor este energie electrică în reţeaua de distribuţie a SDEE Târgovişte, Contract nr. 16709/1998, Beneficiar: SC Electrica SA. Valoare 6.000 RON, Membru: Ciprian Nemeş

7. Dezvoltarea parteneriatelor C/D in vederea promovării unor proiecte

L. Premii, distincţii.

M. Alte realizări semnificative.

Data,
20.04.2025

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Lista de lucrări în domeniul de studii universitare de masterat Inginerie Energetică

Numele şi prenumele: Gheorghe Grigoraș

N. Teza de doctorat.

„Tehnici noi de supraveghere si conducere a sistemelor electroenergetice", 2005, Domeniul „Inginerie Energetică", Universitatea Tehnică „Gheorghe Asachi" din Iași, conducător doctorat: prof. dr. ing. Cârțină Gheorghe

O. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

1. **Gheorghe Grigoraş**, Bogdan Neagu, Florina Scarlatache, Data Mining-Based Approaches in the Power Quality Analysis, Capitolul 5 in cartea Smart Grids 3.0, Editori: Bhargav Appasani si Nicu Bizon, Springer International Publishing, Switzerland, 2023,ISBN: ISBN-13: 9783031385056
2. Bogdan Neagu, **Gheorghe Grigoraş**, Florina Scarlatache, Engineering Applications of Crowdsourcing Concept in Active Distribution Grids, Capitolul 3 in cartea Smart Grids 3.0, Editori: Bhargav Appasani si Nicu Bizon, Springer International Publishing, Switzerland, 2023,ISBN: ISBN-13: 9783031385056
3. **Gheorghe Grigoras**, Bogdan-Constantin Neagu Livia Noroc, Ecaterina Chelaru, New Smart Devices-Based Strategies for Optimal Planning and Operation of Active Electric Distribution Networks, Capitolul 10 in cartea Power System Strength Evaluation methods, best practice, case studies, and applications, Edtori: Hassan Haes Alhelou, Nasser Hosseinzadeh, Behrooz Bahrani, The Institution of Engineering and Technology (IET), UK, 2023, ISBN-13: 978-1-83953-807-0
4. Bogdan Neagu, Mihai Gavrilas, Ovidiu Ivanov, **Gheorghe Grigoraş**, The Crowdsourcing Concept-Based Data Mining Approach Applied in Prosumer Microgrids, Capitol in cartea The Future of Data Mining, Editor: Cem Ufuk Baytar, Nova Science Publishers, USA, 2022, 77–94 ISBN: 979-8-88697-315-0
5. **Gheorghe Grigoraş**, Bogdan Neagu, Regression Analysis-Based Load Modelling for Electric Distribution Networks, Capitol in cartea Numerical Methods for Energy Applications, Editori: Naser Mahdavi Tabatabaei, Nicu Bizon, Springer International Publishing, Switzerland, 2021,ISBN: 978-3-030-62190-2
6. Bogdan Neagu, **Gheorghe Grigoraş**, Decision-Making Strategies with Clustering Based Unsupervised Learning for Smart Grids Planning, Capitol in cartea An Introduction to Approaches and Modern Applications with Ensemble Learning, Editor: Yi-Tung Chan, Nova Science Publishers, USA, 2020, ISBN: 978-1-53618-680-2
7. Scarlatache Florina, **Gheorghe Grigoras**, Using Unsupervised Learning Techniques in Optimal Power System Operation, Capitolul 3 in cartea Advances in Engineering Research, Editor Victoria M. Petrova, Nova Science Publishers, USA, 2020, pp. 117 – 156, ISBN: 978-1-53618-508-9
8. **Gheorghe Grigoraş**, Ovidiu Ivanov, Bogdan Neagu, Pragma Kar, Smart Metering Based Strategies for Improving Energy Efficiency in Microgrid, Capitol in cartea Microgrid Architectures, Control and Protection Methods, Editori: Naser Mahdavi Tabatabaei, Ersan Kabalci, Nicu Bizon, Springer International Publishing, Switzerland, pp. 463 – 490, 2020,ISBN: 978-3-030-23722-6.
9. **Gheorghe Grigoraş**, Bogdan Neagu, Ovidiu Ivanov, Mihai Gavrilas, Florina Scarlatache, Smart Meter Data-based Strategies in the Optimal Operation of Electric Distribution Systems, Lambert Academic Publishing, Riga, Lituania, 264 pg. (110 pg. Grigoraș), 2019, 978-620-0-50306-0

10. Bogdan Neagu, **Gheorghe Grigoraş**, Ovidiu Ivanov, The Optimal Operation of Active Distribution Networks based on Smart Metering, Capitol in cartea Advanced Communication and Control Methods for Future Smartgrid, Editor: Taha Selim Ustun, IntechOpen, Londra, UK, 2019, ISBN: 978-1-78984-105-3
11. **Gheorghe Grigoraş**, Impact of smart meter implementation on saving electricity in distribution networks in Romania, Capitol in cartea Application of Smart Grid Technologies. Case Studies in Saving Electricity in Different Parts of the World, Editori: Lisa Ann Lamont Ali Sayigh, Elsevier, Academic Press, Londra, UK, pp. 313 – 346, 2018, ISBN: ISBN 978-0-12-803128-5.
12. **Gheorghe Grigoraş**, Electrical Energy Consumption Forecasting to Improve Energy Efficiency of Water Distribution Systems, Capitol in cartea Energy Harvesting and Energy Efficiency. Technology, Methods, and Applications, Editori: Nicu Bizon, Naser Mahdavi Tabatabaei, Frede Blaabjerg, Erol Kurt, Springer International Publishing, Switzerland, pp. 599 – 628, 2017, ISBN: 978-3-319-49874-4.
13. Florina Scarlatache, **Gheorghe Grigoraş**, Impact of the Distributed Generation on Optimal Operation and Planning of the Electrical Networks, capitol in cartea Distributed Generation. Systems, Performance and Emerging Technologies, Editor Tao, Lin, Nova Science Publishers, USA, pp. 127 – 160, 2017, ISBN: 978 -1 – 53611-074-6.
14. Bogdan-Constantin Neagu, **Gheorghe Grigoraş**, The Assessment of Power Quality in Electric Distribution Systems from Romania, capitol in cartea Advances in Energy Research, Editor Morena J. Acosta, Nova Science Publishers, USA, pp. 157 – 211, 55 pg., 2017, ISBN: 978-1-53612-699-0.
15. **Gheorghe Grigoraş**, Florina Scarlatache, Bogdan-Constantin Neagu, Clustering in Power Systems. Applications, Lambert Academic Publishing, Germania, 264 pg. (210 pg. Grigoraş), 2016, ISBN: 978-3-330-01545-6.
16. **Gheorghe Grigoraş**, Gheorghe Cartina, Elena-Crenguta Bobric, Trends and Directions for Energy Saving in Electric Networks – capitol in cartea Management of Technological Innovation in Developing and Developed Countries, Editor : HongYI Sun, Editura Intech, Croatia, pp. 3 – 27, 2012, ISBN : 978-953-51-0365-3
17. **Gheorghe Grigoraş**, Gheorghe Cartina, The impact of the Fuzzy Modeling in Electric Distribution Systems. Applications, Lambert Academic Publishing, Germania, 168 pg., 2011, ISBN: 978-3-8473-2793-6.

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS.

1. Florina Scarlatache, **Gheorghe Grigoras**, Metode numerice în inginerie. Volumul I, Editura PIM, Iasi, 280 pg., 2022, ISBN: 978-606-13-7122-8.
2. Florina Scarlatache, **Gheorghe Grigoraş**, Conducerea și supravegherea sistemelor electroenergetice. Simulatoare software și fizice, Editura PIM, Iași 2021, 150 pag. ISBN: 978-606-13-6614-9
3. **Gheorghe Grigoraş**, Conducerea sistemelor electroenergetice folosind tehnici de Inteligență Artificială, Editura PIM, Iasi, 210 pag., 2019, ISBN: 978-606-13-7121-1.
4. **Gheorghe Grigoraş**, Optimizări în sistemele energetice. Aplicații practice, Editura PIM, Iași 2017, 106 pg. ISBN :978-606-13-4053-8
5. **Gheorghe Grigoraş**, Scarlatache Florina, Metode numerice. Aplicații practice, Editura PIM, Iași, 176 pg., 2014, ISBN: 978-606-13-2143-8.
6. **Gheorghe Grigoraş**, Metode numerice. Aplicatii in Matlab. Vol. II, Editura PIM, Iasi, 124 pg., 2012, ISBN: 978-606-13-0770-8.
7. **Gheorghe Grigoraş**, Metode numerice. Aplicatii in Matlab, Vol. I, Editura PIM, 230 pg., 2010, ISBN: 978-606-13-0177-5.

8. **Gheorghe Grigoraş**, Gheorghe Cartina, Elena Crenguta Bobric, Sisteme de supraveghere, conducere şi achiziţii de date, Editura SETIS, Iasi, 220 pg., 2009, ISBN:978-606-92041-3-9.
9. Mihai Gavrilas, Gheorghe Cartina, Virgil Alexandrescu, Ovidiu Ivanov, **Gheorghe Grigoraş**, Modelarea sarcinilor din retelele electrice. Vol. I, Editura PIM, Iasi, 2007, 124 pagini, ISBN: 978-973-716-433-4.
10. Mihai Gavrilas, Gheorghe Cartina, Virgil Alexandrescu, Ovidiu Ivanov, **Gheorghe Grigoraş** Modelarea sarcinilor din retelele electrice. Vol. II, Editura Cermi, Iasi, 116 pg., 2007, ISBN 978-973-667-315-3.
11. Elena Crenguta Bobric, **Gheorghe Cartina**, Gheorghe Grigoraş, Tehnici de optimizare în energetică, Editura Didactică şi pedagogică, Bucuresti, 158 pg., 2008, ISBN 978-973-30-2425-5.
12. Mircea Eremia, Gheorghe Cârțină, Dragoș Petricică, Ion Bulac, Constantin Bulac, Ion Triştiu, **Gheorghe Grigoraș**, Tehnici de inteligenţă artificială în conducerea sistemelor electroenergetice, Editura AGIR, Bucureşti, 356 pg. 2006, ISBN: 973-160-106-X.
13. Gheorghe Cartina, **Gheorghe Grigoraș**, Tehici de Inteligență Artificială în Electroenergetică, Editura SETIS, Iaşi, 212 pg., 2004, ISBN: 973-86764-4-4.
14. Gheorghe Cârţină G., Yong-Hua Song, **Gheorghe Grigoraş**, Optimal Operation and Planning of Power Systems, Casa de Editură VENUS, Iaşi, 156 pg., 2003, ISBN: 973-7960-09-2.
15. Gheorghe Cârțină, Gheorghe Grigoraş, Elena Crenguta Bobric, Tehici de clustering în modelarea fuzzy. Aplicaţii în energetică, Casa de Editură VENUS, Iaşi, 230 pg. 2005, ISBN: 973-7960-86-6
16. Gheorghe Cârţină, **Gheorghe Grigoraş**, Tehnici moderne de optimizare. Aplicaţii în energetică, Casa de Editură Venus, Iaşi, 210 pg., 2002, ISBN: 973-8174-80-5.
17. Gheorghe Cartina, **Gheorghe Grigoraș**, Inteligența Artificială. Optimizări în energetică, Casa de Editură VENUS, Iaşi, 200 pg., 2001, ISBN: 973-8174-22-8.

D. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

D1. Lucrări ştiinţifice publicate în reviste cotate ISI

1. **Grigoras Gheorghe**, Bogdan Livadariu, Bogdan-Constantin Neagu, Data Clustering-Driven Fuzzy Inference System-Based Optimal Power Flow Analysis in Electric Networks Integrating Wind Energy, Processes 13, no. 3, 676, 2025, WOS:001452140000001 (Q2)
2. Dandea Vasilica, Stefania Galbau, Mihai-Alexandru Baciu, **Gheorghe Grigoras**, Three-Layer Framework Integrating Optimal Placement of Supervisory, Control, and Acquisition System Measurements with Clustering-Based Electric Substations Selection for State Estimation of Medium-Voltage Distribution Networks, Applied Sciences, 15, no. 4, 1942, 2025, WOS:001429918800001 (Q1)
3. **Grigoras Gheorghe**, Gârbea Răzvan, Neagu Bogdan Constantin, Toward Smart SCADA Systems in the Hydropower Plants through Integrating Data Mining-Based Knowledge Discovery Modules. Applied Sciences. 2024; 14(18):8228. WOS:001323830500001 (Q1)
4. Ovidiu Ivanov, Mihai-Andrei Luca, Bogdan-Constantin Neagu, **Gheorghe Grigoras**, Mihai Gavrilas. Flexible Energy Storage for Sustainable Load Leveling in Low-Voltage Electricity Distribution Grids with Prosumers, Sustainability, Vol. 16, Nr. 10, 3905. WOS:001231408300001
5. Vasilica Dandea, **Gheorghe Grigoras**, Expert System Integrating Rule-Based Reasoning to Voltage Control in Photovoltaic-Systems-Rich Low Voltage Electric Distribution Networks: A Review and Results of a Case Study. Applied Sciences. 2023; 13(10):615, https://doi.org/10.3390/app13106158 (Q2) Accession Number: WOS:000995609600001
6. **Gheorghe Grigoraș**, Maria Simona Raboaca, Catalin Dumitrescu, Daniela Lucia Manea, Traian Candin Mihaltan, Violeta-Carolina Niculescu, and Bogdan Constantin Neagu. Contributions to

Power Grid System Analysis Based on Clustering Techniques, Sensors, vol. 23, nr. 4: 1895. 2023, WOS:000942301200001 Q2)

7. **Gheorghe Grigoraș**, Bogdan-Constantin Neagu, Ovidiu Ivanov, Bogdan Livadariu, Florina Scarlatache, A New SQP Methodology for Coordinated Transformer Tap Control Optimization in Electric Networks Integrating Wind Farms, Applied Sciences, vol. 12, nr. 3, 1129, 2022, Accession NumberWOS:000754870900001 (Q2)
8. Mudita Sandesara, Umesh Bodkhe, Sudeep Tanwar, Mohammad Alshehri, Ravi Sharma, Bogda-Constantin Neagu, **Gheorghe Grigoras**, Simona Raboaca, Design and Experience of Mobile Applications: A Pilot Survey. Mathematics. 2022; 10(14):2380. https://doi.org/10.3390/math10142380 (Q1)
9. Harsh Mankodiya, Priyal Palkhiwala, Rajesh Gupta, Nilesh Kumar Jadav, Sudeep Tanwar, Bogdan-Constantin Neagu, **Gheorghe Grigoras**, Fayez Alqahtani, Ahmed M. Shehata, A Real-Time Crowdsensing Framework for Potential Covid Carrier Detection using Wearable Sensors, Mathematics. 2022, (Q1)
10. **Gheorghe Grigoraș**, Livia Noroc, Ecaterina Chelaru, Florina Scarlatache, Bogdan-Constantin Neagu, Ovidiu Ivanov, Mihai Gavrilaș, Coordinated Control of Single-Phase End-Users for Phase Load Balancing in Active Electric Distribution Networks, Mathematics, vol. 9, nr. 21, 2662, 2021, Accession Number: WOS:000719474900001 (Q1)
11. **Gherghe Grigoraș**, Bogdan Neagu, Florina Scarlatache, Livia Noroc, Ecaterina Chelaru, Bi-Level Phase Load Balancing Methodology with Clustering-Based Consumers' Selection Criterion for Switching Device Placement in Low Voltage Distribution Networks, Mathematics, vol. 9, nr. 5, 542, 2021, Accession Number: WOS:000628360100001 (Q1)
12. Alexandru Kriukov, Mihai Gavrilaș, Ovidiu Ivanov, **Gherghe Grigoraș**, Bogdan Neagu, Florina Scarlatache, Novel Decentralized Voltage-Centered EV Charging Control Algorithm Using DSRC System in Low Voltage Distribution Networks, IEEE Access, vol. 9, pp. 164779 - 164800, Accession Number: WOS:000734431000001 (Q2)
13. Ovidiu Ivanov, Bogdan Neagu, Mihai Gavrilas, **Gheorghe Grigoraș**, A Phase Generation Shifting Algorithm for Prosumer Surplus Management in Microgrids using Inverter Automated Control, Electronics, vol. 10, nr. 22, 2740, 2021, Accession Number: WOS:000727513800001 (Q2)
14. Avishek Banerjee, Samiran Chattopadhyay, Mihai Gavrilas, **Gheorghe Grigoraș**, Optimization and Estimation of Reliability Indices and Cost of Power Distribution System of an Urban Area by a Noble Fuzzy-Hybrid Algorithm, Applied Soft Computing, vol. 102, Aprilie, 107078, 2021 Accession Number: WOS:000632598600011 (Q1)
15. Ovidiu Ivanov, Bogdan-Constantin Neagu, **Gheorghe Grigoraș**, Florina Scarlatache, Mihai Gavrilas, A Metaheuristic Algorithm for Flexible Energy Storage Management in Residential Electricity Distribution Grids, Mathematics, vol. 9, nr. 19, 2375, 2021, Accession NumberWOS:000746426300001 (Q1)
16. Florina Scarlatache, **Gheorghe Grigoraș**, Vlad-Andrei Scarlatache, Bogdan-Constantin Neagu, Ovidiu Ivanov, A Hybrid Methodology Based on Smart Management Energy Consumption in Irrigation Systems, Electronics, vol. 10, nr. 22, 2864, 2021, Accession NumberWOS:000727225500001 (Q3)
17. Alin Dragomir, Maricel Adam, Mihai Andrusca, **Gheorghe Grigoraș**, Marian Dragomir, Seeram Ramakrishna, Simulation and Monitoring of Electrical Contacts Thermal Stresses in Railway Electric Traction, Mathematics, vol. 9, nr. 24, 3191, 2021, Accession NumberWOS:000741491500001 (Q1)
18. **Gheorghe Grigoraș**, Bogdan Neagu, An Advanced Decision Support Platform in Energy Management to Increase Energy Efficiency for Small and Medium Enterprises, Applied Sciences, vol. 10, 3505, 2020, Accession Number: WOS:000541440000166 (Q2)

19. **Gheorghe Grigoraș**, Bogdan Neagu, Mihai Gavrilas, Ion Triștiu, Constantin Bulac, Optimal Phase Load Balancing in Low Voltage Distribution Networks using a Smart Meter Data-based Algorithm, Mathematics, vol. 8, 549, 2020, Accession Number: WOS:000531824100089 (Q1)
20. Bogdan Neagu, Ovidiu Ivanov, **Gheorghe Grigoraș**, Mihai Gavrilas; Marcel Istrate, New Market Model with Social and Commercial Tiers for Improved Prosumer Trading in Microgrids, Sustainability, vol. 12, 7265, 2020, WOS:000584284700001. (Q2)
21. Bogdan Neagu, Ovidiu Ivanov, **Gheorghe Grigoraș**, Mihai Gavrilas, A New Vision on the Prosumers Energy Surplus Trading Considering Smart Peer-to-Peer Contracts, Mathematics, 2020, 8, 235. Accession Number: WOS:000519234000090 (Q1)
22. Ovidiu Ivanov, Samiran Chattopadhyay, Soumya Banerjee, Bogdan Neagu, **Gheorghe Grigoraș**, Mihai Gavrilas, A Novel Algorithm with Multiple Consumer Demand Response Priorities in Residential Unbalanced LV Electricity Distribution Networks, Mathematics, 2020, 8, 1220. Accession Number: WOS:000567310900001 (Q1)
23. **Gheorghe Grigoraș**, Bogdan Neagu, Smart Meter Data-Based Three-Stage Algorithm to Calculate Power and Energy Losses in Low Voltage Distribution Networks. Energies 2019, 12, 3008, Accession Number: WOS:000482174800167 (Q3)
24. Ovidiu Ivanov, Bogdan Neagu, **Gheorghe Grigoraș**, Mihai Gavrilas, Optimal Capacitor Bank Allocation in Electricity Distribution Networks Using Metaheuristic Algorithms, Energies 2019, 12, 4239, Accession Number: WOS:000504898500017 (Q3)
25. Avishek Banerjee, Samiran Chattopadhyay, **Gheorghe Grigoraș**, Mihai Gavrilaș, Minimization of reliability indices and cost of power distribution systems in urban areas using an efficient hybrid meta-heuristic algorithm, Soft Computing, vol. 23, nr. 4, pp. 1257 – 1281, 2019, DOI 10.1007/s00500-017-2846-6, ISSN: 1432-7643, WOS:000457882400013. (Q2)
26. V. Postolaty, V. Berzan, E. Bykova,V. Bosneaga., V. Suslov, I. Ermurachi, **Gheorghe Grigoras**, M. Gavrilas, M. Istrate, Estimation of Power Exchange through 110 kV OverheadPower Lines at the Interface of the Romanian and Moldovan Power Systems, PROBLEMELE ENERGETICII REGIONALE, vol 2 (37), pp. 46 – 61, 2018, Accession Number: WOS:000441795300006
27. **Gheorghe Grigoraș**, Florina Scarlatache, An assessment of the renewable energy potential using a clustering based data mining method. Case study in Romania, Energy, Volume 81, pp. 416–429, 2015, ISSN: 0360-5442, WOS:000351248200041 (Q1)
28. **Gheorghe Grigoraș**, Elena-Crenguța Bobric, Clustering Based Approach for Customers' Classification from Electrical Distribution Systems, U.P.B. Sci. Bulletin, Series C, Vol. 77, Nr. 2, pp. 219-226, 2015, ISSN : 2286-3540, WOS:000421799900018
29. **Gheorghe Grigoraș**, Cecilia Barbulescu, Human errors monitoring in electrical transmission networks based on a partitioning algorithm, International Journal of Electrical Power and Energy Systems, vol. 49, pp. 128–136, 2013, ISSN: 0142-0615, WOS:000317546900015 (Q1)
30. **Gheorghe Grigoraș**, Gheorghe Cârțină, The fuzzy correlation approach in operation of electrical distribution systems, The International Journal for Computation and Mathematics in Electrical and Electronic Engineering, Vol. 32, Nr. 3, pp. 1044-1066, 2013, ISSN: 0332-1649, WOS:000317546900015 (Q3)
31. Florina Rotaru, Gianfranco Chicco, **Gheorghe Grigoraș**, Gheorghe Cârțină, Two-stage distributed generation optimal sizing with clustering-based node selection, International Journal of Electrical Power & Energy Systems, Vol. 40, Nr. 1, pp. 120–129, 2012, ISSN: 0142-0615, WOS:000304637300013 (Q1)
32. **Gheorghe Grigoraș**, Gheorghe Cârţină, Elena Crenguța Bobric, Strategies for Power/Energy Saving in Distribution Networks, Advances in Electrical and Computer Engineering, Vol. 10, Nr. 2, pp. 63 - 66, 2010, ISSN: 1582 – 7445, WOS:000280312600010 (Q3)
33. Marcel Istrate, **Gheorghe Grigoraș**, Energy Consumption Estimation in Water Distribution Systems using Fuzzy Techniques, Environmental Engineering and Management Journal, Vol. 9, Nr. 2, pp. 249 – 256, 2010, ISSN: 1582 – 9596, WOS:000276559000010 (Q3)

34. Elena Crenguța Bobric, Gheorghe Cârţină, **Gheorghe Grigoraş**, Clustering Techniques in Load Profile Analyze for Distribution Stations, Journal of Advances in Electrical and Computer Engineering, Nr.1, pp. 63 – 66, 2009, ISSN: 1582 – 7445, WOS:000264815300011 (Q3)
35. Elena Crenguța Bobric, Gheorghe Cârţină, **Gheorghe Grigoraş**, Fuzzy Techniques used for Energy Losses Determination in Medium and Low Voltage Networks, Journal of Electronics and Electrical Engineering, Nr. 2, pp. 95 – 98, 2009, ISSN: 1392 – 1215 - Accession Number: WOS:000263760900021

D2. Lucrări ştiinţifice publicate în reviste indexate în baze de date internaționale

1. Mihai Gavrilaș, **Gheorghe Grigoraș**, Mihaela Cazacu, Ovidiu Carp, Ioan Andrei, Reducing Active Energy Losses in Low Voltage Distribution Grids, Journal of Sustainable Energy Vol. 8, No. 3, pp. 113 – 120, 2017, ISSN 2067-5534 (EBSCO, Index Copernicus) - cod CNCSIS : 817.
2. Bogdan-Constantin Neagu, **Gheorghe Grigoraș**, The Assessment of Power Quality in Electric Distribution Systems from Romania, Advances in Energy Research, vol. 28, pp. 157 – 211, 2017, ISBN: 978-1-53612-699-0 (Scopus).
3. **Gheorghe Grigoraș**, Assessment of Electrical Load in Water Distribution Systems Using Representative Load Profiles-Based Method, Advances in Electrical Engineering, vol. 2014, Article ID 865621, 10 pages, 2014. doi:10.1155/2014/865621, ISSN: 2356-6655, ISSN: 2314-7636 (Online) (http://www.hindawi.com/journals/aee/2014/865621/), (DOAJ)
4. **Gheorghe Grigoraș**, Virgil Alexandrescu, Gheorghe Cârțină, Florina Scarlatache, Estimation of Power/Energy Losses in Electric Distribution Systems based on an Efficient Method, TELKOMNIKA Indonesian Journal of Electrical Engineering, vol. 11, No. 9, pp. 4854-4860, 2013, ISSN: 2302-4046, e-ISSN: 2087-278X (SCOPUS)
5. **Gheorghe Grigoraș**, Gheorghe Cârțină, Impact of the fuzzy modeling in operation of electric distribution systems, WSEAS Transactions on Circuits and Systems, vol. 11, no. 4, pp. 105 – 114, 2012, E-ISSN: 2224-266X (SCOPUS)
6. **Gheorghe Grigoraș**, Cecilia Bărbulescu, Gheorghe Cârțină, Daniela Comănescu, Human Errors Monitoring in Electrical Transmission Networks, Journal of Energy and Power Engineering, vol. 6, no. 3, pp. 425 – 428, 2012, ISSN: 1934-8975 (CSA)
7. **Gheorghe Grigoraș**, Gheorghe Cârțină, Impact of the Fuzzy Typical Load Profiles in Distribution Network Control, Journal of Electrical and Control Engineering, vol. 2, no. 1, pp. 8 – 14, 2012, ISSN : 2223-2036 (DOAJ)
8. **Gheorghe Grigoraș**, Gheorghe Cârțină, Improved Fuzzy Load Models by Clustering Techniques in Distribution Network Control, International Journal on Electrical Engineering and Informatics, Vol. 3, no. 2, pp. 207 – 216, 2011, ISSN 2085-6830, (SCOPUS)
9. **Gheorghe Grigoraș**, Daniela Comanescu, Gheorghe Cârțină, Cecilia Barbulescu, Optimal Operation of a Hydro Cascade using Typical Loading Profiles, International Journal of Academic Research, vol. 3, no. 2, pp. 58 – 63, 2011, ISSN: 2075-4124, (IndexCopernicus)
10. **Gheorghe Grigoraș**, Istrate Marcel, An Efficient Clustering Method in Evaluation of the Electric Energy Consumption from Water Hydrophore Stations, International Review on Modelling and Simulations, Vol. 4, no. 2, 2011, pp. 813–818, ISSN: 1974-9821 (SCOPUS)
11. **Gheorghe Grigoraș**, Gheorghe Cârțină, Marcel Istrate, Florina Rotaru, The Efficiency of the Clustering Techniques in the Energy Losses Evaluation from Distribution Networks, International Journal of Mathematical Models and Methods in Applied Sciences, vol. 5, no. 1, pp. 133 – 140, 2011, ISSN: 1998-0140 (SCOPUS)
12. **Gheorghe Grigoraș**, Gheorghe Cârțină, Strategies Regarding Operating Voltage Levels in Distribution Networks, Journal of Energy and Power Engineering, vol. 4, No.6, pp. 60 – 63, 2010, ISSN: 1934-8975 (CSA).

13. Gheorghe Cârţină, **Gheorghe Grigoraş**, Elena-Crenguța Bobric, Opportunities to conserve energy right from distribution installations, Buletinul U.P.B, Series C, Vol. 72, No. 1, pp. 81 – 90, 2010, ISSN (print): 2286-3540 (SCOPUS).
14. Gheorghe Cârţină, Gheorghe Grigoraş, Optimal Reconfiguration of Distribution Networks in Uncertainty Conditions, Buletinul Stiintific al UPB, Seria: Inginerie Electrica, nr. 4, pp. 247 – 254, 2007, ISSN (print): 2286-3540 (SCOPUS)
15. **Gheorghe Grigoraş**, Gheorghe Cârţină, Virgil Alexandrescu, Geographic Information System (GIS) – An Integrated Technology for Distribution Systems, Buletinul Stiintific al UPB, Seria: Inginerie Electrica, nr. 4, pp. 255 – 262, 2007, ISSN (print): 2286-3540 (SCOPUS).

E. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

1. Livia Noroc, **Gheorghe Grigoraş**, A Clustering-Based Methodology for Phase Load Balancing in Low Voltage Distribution Networks, Buletinul Institutului Politehnic din Iasi, Secţia: Electrotehnică, Energetică, Electronică, Volumul 66 (70), Nr. 3, pp. 25-44, 220, ISSN 1223-8139 (Index Copernicus, getCITED, Ulrich's), cod CNCSIS: 87.
2. Ecaterina Chelaru, **Gheorghe Grigoraş**, An Improved Strategy Based on a Multi-Criteria Analyse to Replace Transformers in Electric Distribution Networks, Buletinul Institutului Politehnic din Iasi, Secţia: Electrotehnică, Energetică, Electronică, Volumul 66 (70), Nr. 3, pp. 45-62, 220, ISSN 1223-8139 (Index Copernicus, getCITED, Ulrich's), cod CNCSIS: 87.
3. Neagu B., Ivanov O., **Grigoraș G.**, Gavrilaș M., Short-term Load Forecast Approach Based on Artificial Neural Networks, Buletinul Institutului Politehnic din Iasi, Secția: Electrotehnica, Energetica, Electronica, Volumul 65 (69), Fasc. 2, pp. 9-22, 2019, ISSN 1223-8139 (Index Copernicus, getCITED, Ulrich's), cod CNCSIS: 87.
4. Gavrilaș M., **Grigoraș G.,** Cazacu M., Carp C.O., Andrei I., Reducing active energy losses in low voltage distribution grids, Journal of Sustainable Energy, Vol.. 8, No. 3, 2017, pag. 113 – 120, ISSN 2067-5534 (cod CNCSIS 817).
5. **Grigoraș G.**, Gavrilaș M., Scarlatache Fl., Cazacu M., Cosarca M., Assessing energy losses in unbalanced low voltage electric distribution networks, Energetica, Vol. 64, Nr. 2, 2016, pag. 53 – 59, ISSN: 1453-2360 (cod CNCSIS 512)
6. **Grigoraș G.**, Gavrilaș M., Buliga S., Strugaru C., Solutions regarding the efficient use of transformers in electric distribution networks, Energetica, Vol. 63, Nr. 4, 2015, pag. 145 – 149, ISSN: 1453-2360 (cod CNCSIS 512).
7. Gavrilaș M., **Grigoraș G.**, Buliga S., Strugaru C., Influence of renewable sources integration on technical energy losses in high voltage distribution networks, Energetica, Vol. 63, Nr. 4, 2015, pag. 139 – 144, ISSN: 1453-2360 (cod CNCSIS 512).
8. Neagu B.C., **Grigoraș G.**, Scarlatache Fl., Load management in distribution systems with smart metering, Energetica, Vol. 63, Nr. 4, 2015, pag. 150 – 156, ISSN: 1453-2360 (cod CNCSIS 512).
9. **Grigoraș G.**, Neagu B.C., Market clearing price forecasting in deregulated electricity markets using a fuzzy approach, Acta Electrotehnica, Vol. 56, Nr. 3, 2015, pag. 113-116, ISSN : 1841-3323, (cod CNCSIS 576).
10. Neagu B.C., **Grigoraș G.,** Data mining tools in electricity distribution systems, Acta Electrotehnica, Vol. 56, Nr. 3, 2015, pag. 209-212, ISSN : 1841-3323, (cod CNCSIS 576).
11. Scarlatache Fl., **Grigoraş G.,** Neagu B.C., The impact of distributed generation on the voltage control in electrical distribution networks, Energetica, Vol. 62, nr. 3, 2014, pag. 105 – 110, ISSN: 1453-2360 (cod CNCSIS 512).
12. **Grigoraș G.**, Gavrilaș M., maximum load estimation of consumers in low voltage networks using a clustering techniques based method, Energetica, Vol. 62, Nr. 3, 2014, pag. 90 – 94, ISSN: 1453-2360 (cod CNCSIS 512).

13. Scarlatache Fl., **Grigoraş G**., A wind energy profiling method based on unsupervised learning techniques, Buletinul Institutului Politehnic din Iasi, Secţia: Electrotehnică, Energetică, Electronică, Tomul LX (LXIV), Fasc. 2, 2014, pag. 9-17, ISSN 1223-8139 (cod CNCSIS 87).
14. **Grigoraș G.,** Scarlatache Fl., Bărbulescu C., Optimal power flow analysis using the correlation method for estimation of nodal loads, Acta Electrotehnica, Vol. 54, No. 5, 2013, pag. 208 – 2012, ISSN : 1841-3323 (cod CNCSIS 576).
15. **Grigoraș G.,** Scarlatache Fl., Bărbulescu C., Analysis of incidents caused by human factor in transmission power grids, Acta Electrotehnica, Vol. 54, No. 5, 2013, pag. 204 – 2007, ISSN : 1841-3323, (cod CNCSIS 576).
16. **Grigoraş G.,** Scarlatache Fl., Clustering to peak load estimation in transformer substations from electric distribution systems, Buletinul Institutului Politehnic din Iasi, Secţia: Electrotehnică, Energetică, Electronică, Tomul LIX (LXIII), Fasc. 3, 2013, ISSN 1223-8139 (cod CNCSIS 87).
17. **Grigoraș G**., Scarlatache Fl., Estimation of power/energy losses in electric networks using Artificial Intelligence techniques, Energetica, Vol. 61, Nr. 5, 2013, pag. 189 – 193, ISSN: 1453-2360 (cod CNCSIS 512).
18. Scarlatache Fl., **Grigoraş G**., An approach regarding the placement of distributed generation sources in electric distribution systems using Hurwitz criterion, Buletinul Institului Politehnic din Iasi, Seria Electrotehnica, Energetica, Tomul LVIII(LXII), No. 4, 2012, pag. 109 - 117, ISSN: 1223-8139 (cod CNCSIS 87).
19. Scarlatache Fl., **Grigoraș G.,** Cârțină G., Using of clustering techniques for placement of distributed generation sources in electrical distribution systems, Buletinul AGIR, No. 3, 2012, pag. 1 - 6, ISSN: 2247-3548, (cod CNCSIS 415).
20. Scarlatache Fl., **Grigoraș G**., Cârțină G., An algorithm based on the clustering techniques for the optimal placement of the distributed generation sources in distribution systems, Buletinul Institului Politehnic din Iasi, Seria Electrotehncica, Energetica, Tomul LVIII(LXII), No. 1, 2012, pag. 115 – 124, ISSN 1223-8139, (cod CNCSIS 87).
21. Alexandrescu V., Cârțină G., **Grigoraș G**., On distribution network operation analysis, Buletinul Institului Politehnic din Iasi, Seria Electrotehnica, Energetica, Tomul LVIII(LXII), No. 1, 2012, pag. 105 – 114, ISSN : 1223-8139, (cod CNCSIS 87).
22. **Grigoraș G**., Comanescu D., Cârțină G., Solutions regarding to reducing of electrical consumptions in hydropower plants, Buletinul Institului Politehnic din Iasi, Seria Electrotehncica, Energetica, Tomul LVI(LX), No. 1, 2011, pag. 133 – 140, ISSN: 1223-8139, (cod CNCSIS 87).
23. **Grigoraș G.,** Barbulescu C., Cârțină G., Comanescu D., A comparative study regarding efficiency of the hierarchical clustering techniques in typical load profiles determination, Acta Electrotehnica, Vol. 52, Nr. 5, 2011, pag. 184 – 188, ISSN 2344–5637 (cod CNCSIS 576).
24. Bărbulescu C., Grigoraș G., Cârțină G., Rotaru Fl., Study based on clustering techniques regarding accidental events from the south-east of the transport system from Romania, Acta Electrotehnica, Vol. 52, Nr. 5, 2011, pag. 46 – 49, ISSN 2344–5637, (cod CNCSIS 576).
25. **Grigoraș G**., Comanescu D., Rotaru Fl., Cârțină G., Using of a hybrid method in the loading profiles determination of a hydropower cascade, Buletinul Institului Politehnic din Iasi, Seria Electrotehncica, Energetica, Tomul LVII(LXI), Nr. 2, 2011, pag. 117 – 128, ISSN 1223-8139, (cod CNCSIS 87).
26. **Grigoraş G**., Bărbulescu C., Cârţină G., Rotaru Fl., Accidental incidents duration analysis in power transmission grids, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Electronică Tomul LVI (LX), Fasc. 2, 2010, pag. 107 – 115, ISSN 1223-8139, (cod CNCSIS 87).
27. Cârţină G., **Grigoraş G.,** Bobric E.C., Opportunities to conserve energy right from distribution installations, Buletinul U.P.B, Series C, Vol. 72, No. 1, 2010, pag. 81 – 90, ISSN (print): 2286-3540, (cod CNCSIS 101).

28. **Grigoraş G**., Cârţină G., Energy losses evaluation using a method based on clustering and fuzzy techniques, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Electronică, Tomul LVI (LX), Fasc. 3, 2010, pag. 95 – 100, ISSN 1223-8139, (cod CNCSIS 87).
29. **Grigoraş G**., Bobric E.C., Cârţină G., Rotaru Fl., Strategies for minimization of power losses in electric distribution networks, Energetica, Nr. 7, 2010, pag. 314 - 318, ISSN: 1453-2360, (cod CNCSIS 512).
30. Alexandrescu V., Cârţină G., **Grigoraş G**., On power flow problem of distribution networks under condition of lack of information, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Electronică, Tomul LVI (LX), Fasc. 2, 2010, pag. 77 – 87, ISSN 1223-8139, (cod CNCSIS 87).
31. **Grigoraş G.,** Bărbulescu C., Cârţină G., Incident duration analysis in power transmission grids by clustering techniques, Energetica, Nr. 10, 2010, pag. 474 – 478, ISSN: 1453-2360, (cod CNCSIS 512).
32. **Grigoraş G**., Cârţină G., Alexandrescu V., An improved method for power losses determination in rural distribution networks, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Tomul LIV (LVIII), Fasc. 3, 2008, pag. 23 – 30, ISSN 1223-8139, (cod CNCSIS 87).
33. **Grigoraş G**., Cârţină G., Bobric E.C., Possibilities for energy saving in electric distribution networks, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Tomul LIV (LVIII), Fasc. 3, pag. 211 – 220, 2008, pag. 211 – 220, ISSN 1223-8139, (cod CNCSIS 87).
34. **Grigoraş G**., Cârţină G., Energy saving by efficient transformers in distribution networks, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Tomul LIV (LVIII), Fasc. 2, , 2008, pag. 83 – 88, ISSN 1223-8139, (cod CNCSIS 87).
35. Cârţină G., **Grigoraş G**., Optimal reconfiguration of distribution networks in uncertainty conditions, Buletinul Stiintific al UPB, Seria: Inginerie Electrica, nr. 4, 2007, pag. 247 – 254, ISSN (print): 2286-3540, (cod CNCSIS 101).
36. **Grigoraş G**., Cârţină G., Alexandrescu V., Geographic Information System (GIS) – An Integrated technology for distribution systems, Buletinul Stiintific al UPB, Seria: Inginerie Electrica, nr. 4, 2007, pag. 255 – 262, ISSN (print): 2286-3540, (cod CNCSIS 101).
37. Mihaescu A., Cârţină G., **Grigoraş G**., Next generation networks in communications trends, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Tomul LIV (LVIII), Fascicula 3-4, 2007, pag. 111-120, ISSN 1223-8139, (cod CNCSIS 87).
38. Alexandrescu V., Cârţină G., **Grigoraş G**., Nouvelle Méthodologie d'Application des Modèles Statique de la Charge Asynchrone á l'étude de la Stabilité de Tension des Réseaux électriques, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Tomul LIII (LVII), Fasc. 1 - 2, 2007, pag. 127 – 132, ISSN 1223-8139, (cod CNCSIS 87).
39. Alexandrescu V., Cârţină G., **Grigoraş G.,** Integrated software application for the management of databases containing static and dynamic models of the aggregated loads from distribution network and their use in static and dynamic networks, Analele Universităţii din Craiova, Seria: Inginerie Electrica, Vol. II, 2007, pag. 323 – 326, ISSN: 1842-4805, (cod CNCSIS 174).
40. Cârţină G., **Grigoraş G**., Bobric E.C., Power system analysis using Matlab toolboxes, Analele Universitatii din Craiova, Seria: Inginerie Electrica, Vol. II, 2007, pag. 305 – 308, ISSN :1842-4805, (cod CNCSIS 174).
41. Cârţină G., **Grigoraş G**., Lupaşcu C., Modeling of the customers' consumption categories in electric distribution systems, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Fasc. 5C, 2006, pag. 1175 – 1180, ISSN : 1223-8139, (cod CNCSIS 87).
42. **Grigoraş G**., Cârţină G., Alexandrescu V., Lupaşcu C., Fuzzy load models and GIS documents in distribution networks analysis, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Fasc. 5C, 2006, pag. 1199 – 1204, ISSN : 1223-8139, (cod CNCSIS 87).
43. Lupaşcu C., Cârţină G., **Grigoraş G.,** Optimal reconfiguration of the distribution networks using clustering techniques and fuzzy load models, Buletinul Institutului Politehnic Iaşi, Seria:

Electrotehnică, Energetică, Fasc. 5C, , 2006, pag. 1205 – 1210, ISSN : 1223-8139, (cod CNCSIS 87).

44. Alexandrescu V., Cârţină G., **Grigoraş G**., Static load models of the induction motors, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Fasc. 5C, pp. 1579 – 1583, 2006, ISSN : 1223-8139, (cod CNCSIS 87).
45. Gavrilaş M., Cârţină G., **Grigoraş G**., Ivanov O., Lupaşcu C., Integrated model for electric load profiling, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Fasc. 5C, 2006, pag. 1193 – 1198, ISSN: 1223-8139, (cod CNCSIS 87).
46. **Grigoraş G**., Cârţină G., Using of fuzzy typical load profiles in missing data treatment, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Tomul LII (LVI), Fasc. 3-4, 2006, pag. 139 – 145, ISSN : 1223-8139, (cod CNCSIS 87).
47. Alexandrescu V., Cârţină G., **Grigoraş G**., Nouvelle méthode pour déterminer les modeles statiques de la charge asynchrone agrégé, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Electronică, Tomul LII (LVI), Fasc. 3-4, 2006, pag. 119 – 128,ISSN : 1223-8139, (cod CNCSIS 87).
48. Alexandrescu V., Cârţină G., **Grigoraş G**., Analiza nodală Dimo în pregătirea viitorilor ingineri electroenergeticieni, Energetica, Nr. 9, 2005, pag. 354 – 358, ISSN: 1453-2360, (cod CNCSIS 512).
49. **Grigoraş G**., Cârţină G., Improvement of the loads estimation with the clustering techniques, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Electronică, Tomul LI (LV), Fasc. 1 - 2, 2005, pag. 131 – 136, ISSN: 1223-8139, (cod CNCSIS 87).
50. Cârţină G., **Grigoraş G.,** Determinarea benzilor optimale de reglare a tensiunii în reţelele electrice, Energetica, Vol. 52, Nr. 11, 2004, pp. 487 -491, ISSN: 1453-2360, (cod CNCSIS 512).
51. **Grigoraş G.,** Cârţină G., Alexandrescu V., Pay as Bid approach in energy market, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Electronică, Tomul LI (LV), Fasc. 3 - 4, 2005, pag. 125 – 130, ISSN : 1223-8139, (cod CNCSIS 87).
52. **Grigoraş G**., Cârţină G., Alexandrescu V., Using fuzzy logic in distribution network power loss estimation, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Electronică, Tomul L(LIV), Fasc. 5A, 2004, pag.157 – 162, ISSN : 1223-8139 (cod CNCSIS 87).
53. **Grigoraş G**., Cârţină G., Using of the clustering techniques in load profiles determination, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Electronică, Tomul L(LIV), Fasc. 3 - 4, 2004, pag. 121 -127, ISSN: 1223-8139, (cod CNCSIS 87).
54. **Grigoraş G**., Cârţină G., Load uncertainties introduction in power flow analysis, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Electronică, Tomul XLIX (LIII), Fasc. 1-2, 2003, pag. 121 – 126, ISSN: 1223-8139, (cod CNCSIS 87).
55. Cârţină G., **Grigoraş G**., Bidding strategies in deregulated markets, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Electronică, Tomul XLIX(LIII), Fasc. 3/4, 2003, pag. 133 – 141, ISSN 1223-8139, (cod CNCSIS 87).
56. Cârţină G., Alexandrescu V., **Grigoraş G**., Utilizarea tehnicilor GIS (Geographic Information Systems) în planificarea reţelelor electrice, Energetica, Vol, 51, Nr. 8, 2003, pag. 346-349, ISSN: 1453-2360, (cod CNCSIS 512).
57. Alexandrescu V., Cârţină G., **Grigoraş G**., On the local voltage stability static analysis, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Electronică, Tomul XLIX(LIII), Fasc. 3/4, 2003, pp. 127-131, ISSN: 1223-8139, (cod CNCSIS 87).
58. **Grigoraş G**., Cârţină G., Moshe M., Using of the increasing factors method in distribution networks planning, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Electronică, Tomul XLVIII LII), Fasc. 3-4, 2002, pag. 173 – 179, ISSN 1223-8139, (cod CNCSIS 87).

59. Alexandrescu V., Grigoraș G., Alocarea costurilor serviciului de transport de energie pe noduri de rețea, ținând seama de circulația puterilor reactive, Energetica, Vol. 50, Nr. 10, 2002, pag. 438-446, ISSN: 1453-2360, (cod CNCSIS 512).
60. Cârţină G., **Grigoraş G**., Moshe M., Using of the power correlation in distribution networks planning, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Electronică, Tomul XLVIII(LII), Fasc. 1-2, 2002, pag. 149-157, ISSN: 1223-8139, (cod CNCSIS 87).
61. Cârţină G., Alexandrescu V., **Grigoraş G**., Application of the powers correlation in fuzzy modeling, Bul. Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Fascicula 5A, 2002, pag. 297 – 302, ISSN 1223-8139, (cod CNCSIS 87).
62. Grigoraş G., Cârţină G., Electric network planning aspects with special regard to reliability, Bul. Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Electronică, Tomul XLVII(LI), Fasc. 3-4, , 2001, pag. 127-134, ISSN: 1223-8139, (cod CNCSIS 87).

F. Lucrări ştiinţifice publicate în volumele conferinţelor.

F1. Conferințe indexate WoS

1. Stefania Galbau, **Gheorghe Grigoras**, Bogdan Constantin Neagu, Florina Scarlatache, Dorin Lucache and Vlad Hustiuc, Characterization of the Power Quality in the Electric Distribution Networks Using Data Mining with K-Means Clustering, 10th International Conference on Systems and Control (ICSC), Marseille, France, 2022, pp. 131-136, WOS:000927654200023
2. Razan Garbea, Florina Scarlatache, **Gheorghe Grigoras**, Bogdan Constantin Neagu, Extracting the Operating Characteristics of Hydropower Plants Using a Clustering-based Efficient Methodology, 9th International Conference on Modern Power Systems (MPS2021), Cluj-Napoca, Romania, 16-17 Iunie, 2021, WOS:000941563300045
3. Constantin Zetu, Bogdan Constantin Neagu, **Gheorghe Grigoras**, Florina Scarlatache, The Risk Analisys for the Coexistence of Overhead Lines and Urban Green Areas, 9th International Conference on Modern Power Systems (MPS2021), Cluj-Napoca, Romania, 16-17 Iunie, 2021, WOS:000941563300035
4. Vasilica Dandea, **Gheorghe Grigoraș**, Bogdan-Constantin Neagu, Florina Scarlatache, K-means Clustering-based Data Mining Methodology to Discover the Prosumers' Energy Features, 12th International Symposium on Advanced Topics in Electrical Engineering (ATEE2021), 25-27 Martie, 2021, Bucuresti, Romania, WOS: 000676164800102
5. Ecaterina Chelaru, Livia Noroc, **Gheorghe Grigoras**, Bogdan-Constantin Neagu, Energy Losses Estimation in the Electric Distribution Networks Using Clustering-Based Selection of the Representative Feeders, International Conference Interdisciplinarity in Engineering (INTER-ENG 2021), Targu Mures, Romania, 7 - 8 October 2021. WOS:000773080200047
6. Bogdan-Constantin Neagu, Mihai Gavrilas, **Gheorghe Grigoras**, Ovidiu Ivanov, Load Modeling Approaches in Smart Grids: An Overview, International Conference Interdisciplinarity in Engineering (INTER-ENG 2021), Targu Mures, Romania, 7 - 8 October 2021. WOS:000773080200049
7. Ecaterina Chelaru, **Gheorghe Grigoras**, Decision Support System to Determine the Replacement Ranking of the Aged Transformers in Electric Distribution Networks, 12th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), 25-27 Iunie, Bucuresti, 2020, Accession Number: WOS:000627393500004
8. Livia Noroc, **Gheorghe Grigoras**, Performance Assessment of the Hierarchical Clustering Methods in Classification of Electric Distribution Networks Considering Unbalance Degree, 12th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), 25-27 Iunie, Bucuresti, 2020, Accession Number: WOS:000627393500098

9. Bogdan Constantin Neagu, **Gheorghe Grigoraș**, A data-mining-based methodology to identify the behavioural characteristics of prosumers within active distribution networks, International Symposium on Fundamentals of Electrical Engineering (ISFEE), 2020, Bucharest, Romania, November 5–7, Accession NumberWOS:000812321500035
10. Bogdan-Constantin Neagu, **Gheorghe Grigoras**, A Fair Load Sharing Approach Based on Microgrid Clusters and Transactive Energy Concept, 12th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), 25-27 Iunie, Bucuresti, 2020, Accession Number: WOS:000627393500104
11. **Gheorghe Grigoraş**, Ovidiu Ivanov, Bogdan Neagu, Pragma Kar, Smart Metering Based Strategies for Improving Energy Efficiency in Microgrid, Capitol in cartea Microgrid Architectures, Control and Protection Methods, Editori: Naser Mahdavi Tabatabaei, Ersan Kabalci, Nicu Bizon, Springer International Publishing, Switzerland, pp. 463 – 490, 2020, Accession Number: WOS:000672412900021
12. **Gheorghe Grigoras**, Bogdan Neagu, Ovidiu Ivanov, Aggregate Method based on Expert System for Electricity Consumption Forecasting of Small and Medium Enterprises, 2019 11th International Symposium on Advanced Topics in Electrical Engineering (ATEE), Bucureti, Romania, 23 – 28 Mai, 2019, Accession Number: WOS:000475904500123
13. Bogdan Neagu, **Gheorghe Grigoras**, Ovidiu Ivanov, The Influence of Harmonics on Additional Power Losses at Large Enterprises, 2019 11th International Symposium on Advanced Topics in Electrical Engineering (ATEE), Bucureti, Romania, 23 – 28 Mai, 2019, Accession Number: WOS:000475904500097
14. Ovidiu Ivanov, Bogdan Neagu, **Gheorghe Grigoraș**, Mihai Gavrilaș, Capacitor Banks Placement Optimization Improvement Using the Sperm Whale Algorithm, 11th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), 27-29 Iunie, 2019, WOS:000569985400130
15. Bogdan Neagu, **Gheorghe Grigoraș**, Uncertainty-Based Decision Making in the Planning of Electric Transmission Networks, 11th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), 27-29 Iunie, 2019, WOS:000569985400085
16. Bogdan Neagu, **Gheorghe Grigoraș**, Ovidiu Ivanov, An Efficient Peer-to-Peer Based Blokchain Approach for Prosumers Energy Trading in Microgrids, 8th International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 21-23 Mai, 2019, WOS:000612401900090
17. **Gheorghe Grigoraș**, Bogdan Neagu, Ovidiu Ivanov, An Efficient Approach for Flattening the Electricity Consumption Profile at Small and Medium Enterprises, 8th International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 21-23 Mai, 2019, WOS:000612401900021
18. Bogdan Neagu, **Gheorghe Grigoraș**, Decision-Making Approach for Choosing of Electricity Supplier to Improve the Energy Efficiency, 2019 International Conference on ENERGY and ENVIRONMENT (CIEM), Timisoara, Romania, 17-18 Octombrie, 2019, Accession Number: WOS:000630902700072
19. **Gheorghe Grigoraș**, Mihai Gavrilaș, Bogdan Neagu, Ovidiu Ivanov, Ion Triștiu, Constantin Bulac, An Efficient Method to Optimal Phase Load Balancing in Low Voltage Distribution Network, 2019 International Conference on ENERGY and ENVIRONMENT (CIEM), Timisoara, Romania, 17-18 Octombrie, 2019, Accession Number: WOS:000630902700068
20. Bogdan Neagu, Mihai Gavrilaș, **Gheorghe Grigoraș**, Ovidiu Ivanov, Voltage Control in Microgrids in the Presence of Small-Scale Renewable Energy Source, 2019 International Conference on Electromechanical and Energy Systems (SIELMEN), Chisinau, Republica Moldova, 9-11 Octombrie, 2019, Accession Number: WOS:000630287500022
21. Ovidiu Ivanov, Bogdan Neagu, Mihai Gavrilaș, **Gheorghe Grigoraș**, Calin-Viorel Sfintes, Phase Load Balancing in Low Voltage Distribution Networks Using Metaheuristic Algorithms,

International Conference on Electromechanical and Energy Systems (SIELMEN), Chisinau, Republica Moldova, 9-11 Octombrie, 2019, WOS:000630287500107

22. Bogdan Neagu, **Gheorghe Grigoraș**, Optimal Voltage Control in Power Distribution Networks Using an Adaptive On-Load Tap Changer Transformers Techniques, International Conference on Electromechanical and Energy Systems (SIELMEN), Chisinau, Republica Moldova, 9-11 Octombrie, 2019, Accession Number: WOS:000630287500111
23. **Gheorghe Grigoras**, Bogdan Neagu, Energy Consumption Forecasting to Small and Medium Enterprises Using a Hybrid Method, 2018 International Symposium on Fundamentals of Electrical Engineering (ISFEE), Bucureti, Romania, 1 – 3 Noiembrie, 2018, Accession Number: WOS:000480396400064
24. Ovidiu Ivanov, **Gheorghe Grigoras**, Bogdan Neagu, Smart Metering based Approaches to Solve the Load Phase Balancing Problem in Low Voltage Distribution Networks, 2018 International Symposium on Fundamentals of Electrical Engineering (ISFEE), Bucureti, Romania, 1 – 3 Noiembrie, 2018, Accession Number: WOS:000480396400007
25. Florina Scarlatache, **Gheorghe Grigoraş**, Bogdan-Constantin Neagu, Romeo Ciobanu, Aided decision making for hybrid energy systems planning in micro-grids, 2018 Smart City Symposium Prague (SCSP), Praga, Republica Cehă, 24 – 25 Mai, 2018. Accession Number: WOS:000443451800033
26. **Gheorghe Grigoraş**, Nicu Bizon, Florentina Enescu, Jose Manuel Lopez Guede, Guadalupe Flores Salado, Raymond Brennan, Connie O'Driscoll, Mergersa Dinka, Mohamed Gar Alalm, ICT based Smart Management Solution to Realize Water and Energy Savings through Energy Efficiency Measures in Water Distribution Systems, 10th Edition Electronics, Computers and Artificial Intelligence (ECAI 2018), 28 June -30 June, 2018, Iasi, Romania WOS:000467734100082
27. Bogdan Constantin Neagu, **Gheorghe Grigoras**, Florina Scarlatache, Influence of Outliers on Transformer Power Losses Estimation Using a Statistical Based Data Mining Approach, 10th Edition Electronics, Computers and Artificial Intelligence (ECAI 2018), 28 June -30 June, 2018, Iasi, Romania, Accession Number: WOS:000467734100072
28. **Gheorghe Grigoraş**, Bogdan-Constantin Neagu, Florina Scarlatache, Influence of Sampling Size in Profiling Process of Electricity Consumption at Small and Medium Enterprises, 10th International Conference and Exposition on Electrical and Power Engineering (EPE2018), Iasi, Romania, pp. 743 – 748, 2018, Accession Number: WOS:000458752200145
29. **Gheorghe Grigoraș**, Mihai Gavrilaș, An Improved Approach for Energy Losses Calculation in Low Voltage Distribution Networks based on the Smart Meter Data, 10th International Conference and Exposition on Electrical and Power Engineering (EPE2018), Iasi, Romania, pp. 749 – 754, 2018, Accession Number: WOS:000458752200146
30. **Gheorghe Grigoraș**, Florina Scarlatache, Bogdan-Constantin Neagu, Analysis of energy saving solutions based on replacement of distribution transformers, 2017 International Conference on Optimization of Electrical and Electronic Equipment (OPTIM) & 2017 Intl Aegean Conference on Electrical Machines and Power Electronics (ACEMP), Brasov, Romania, pp. 66 – 71, 2017 Accession Number: WOS:000426909600009
31. **Gheorghe Grigoraș**, Florina Scarlatache, Daniela Comanescu, Bogdan-Constantin Neagu, Expert system for optimal power allocation in hydropower dispatchable units, 2017 International Conference on Optimization of Electrical and Electronic Equipment (OPTIM) & 2017 Intl Aegean Conference on Electrical Machines and Power Electronics (ACEMP), Brasov, Romania, pp. 605 – 610, 2017 Accession Number: WOS:000426909600091
32. Bogdan-Constantin Neagu, **Gheorghe Grigoraș**, Florina Scarlatache, Effects of outliers on calculation of load profile factors, 2017 International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 6 – 9 Iunie, 2017 Accession Number: WOS:000428462600009

33. **Gheorghe Grigoraş**, Bogdan-Constantin Neagu, Florina Scarlatache, Cristina Schreiner, Romeo Ciobanu, Identification of pilot nodes for secondary voltage control using K-means clustering algorithm, 2017 IEEE 26th International Symposium on Industrial Electronics (ISIE), Edinburgh, UK, pp. 106 – 110, 2017 Accession Number: WOS:000426794000015
34. **Gheorghe Grigoraş**, Electrical Energy Consumption Forecasting to Improve Energy Efficiency of Water Distribution Systems, Capitol in cartea Energy Harvesting and Energy Efficiency. Technology, Methods, and Applications, Editori: Nicu Bizon, Naser Mahdavi Tabatabaei, Frede Blaabjerg, Erol Kurt, Colecția Lectures Notes in Energy, vol. 37, Springer International Publishing, Switzerland, pp. 599 – 628, 2017, ISBN: 978-3-319-49874-4. Accession Number: WOS:000412159000022
35. Bogdan-Constantin Neagu, **Gheorghe Grigoraş**, Florina Scarlatache, Cristina Schreiner, Romeo Ciobanu, Patterns discovery of load curves characteristics using clustering based data mining, 2017 11th IEEE International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG), Cadiz, Spain, pp. 83 – 87, 2017 WOS:000406491800013
36. Florina Scarlatache, **Gheorghe Grigoraş**, Bogdan-Constantin Neagu, Cristina Schreiner, Romeo Ciobanu, Influence of hybrid energy systems on micro-grids control, 2017 11th IEEE International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG), Cadiz, Spain, pp. 313 – 317, 2017 WOS:000406491800050
37. Bogdan-Constantin Neagu, **Gheorghe Grigoraş**, Florina Scarlatache, Outliers discovery from Smart Meters data using a statistical based data mining approach, 2017 10th International Symposium on Advanced Topics in Electrical Engineering (ATEE), București, Romania, pp. 555 -558, 2017, WOS:000403399400108
38. **Gheorghe Grigoraş**, Bogdan-Constantin Neagu, Florina Scarlatache, Smart metering based approach for phase balancing in low voltage distribution systems, 2017 10th International Symposium on Advanced Topics in Electrical Engineering (ATEE), București, Romania, pp. 551 -554, 2017, WOS:000403399400107
39. Avishek Banerje, Samiran Chattopadhyay, Anup Kumar Mukhopadhyay, **Gheorghe Grigoraș**, A fuzzy-ACO algorithm to enhance reliability optimization through energy harvesting in WSN, 2016 International Conference on Electrical, Electronics, and Optimization Techniques (ICEEOT), Chennai, India, pp. 584 – 589, 2016, WOS:000391380900108
40. Florina Scarlatache, **Gheorghe Grigoraș**, Bogdan-Constantin Neagu, Clustering Based Data Mining in Wind Power Production, ECAI 2017 - International Conference – 9th Edition Electronics, Computers and Artificial Intelligence, 29 June -01 July, 2017, Targoviste, Romania, Accession Number: WOS:000425865900119.
41. Bogdan-Constantin Neagu, **Gheorghe Grigoraș**, Florina Scarlatache, Power losses estimation in harmonic polluted LV distribution networks with a fuzzy approach, 2016 8th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Ploiesti, Romania, 2016, WOS:000402541200042
42. Florina Scarlatache, **Gheorghe Grigoraș**, Bogdan-Constantin Neagu, Decision making methodology based on fuzzy logic in optimal DG location, 2016 8th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Ploiesti, Romania, 2016, WOS:000402541200117
43. **Gheorghe Grigoraș**, Bogdan Constantin Neagu, Florina Scarlatache, Estimation of energy losses in distribution transformers using a fuzzy approach, 2016 International Symposium on Fundamentals of Electrical Engineering (ISFEE), București, Romania, 2016, WOS:000392434400035
44. Bogdan-Constantin Neagu, **Gheorghe Grigoraș**, Florina Scarlatache, The influence of harmonics on power losses in urban distribution networks, 016 International Symposium on Fundamentals of Electrical Engineering (ISFEE), București, Romania, 2016, WOS:000392434400036

45. **Gheorghe Grigoraș**, Mihai Gavrilaș, Phase swapping of lateral branches from low-voltage distribution networks for load balancing, 2016 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, pp. 715 – 718, 2016, WOS:000390706300142
46. Avishek Banerjee, Mihai Gavrilaș, **Gheorghe Grigoraș**, Samiran Chattopadhyay, A fuzzy hybrid approach for reliability optimization problem in power distribution systems, 2016 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, pp. 809 – 814, 2016, WOS:000390706300159
47. Florina Scarlatache, **Gheorghe Grigoraș**, A fuzzy approach in optimal DG planning, 2016 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, pp. 738 – 742, 2016, WOS:000390706300147
48. Avishek Banerjee, Mihai Gavrilaș, **Gheorghe Grigoraș**, Samiran Chattopadhyay, Decision making in assessment of RRAP of WSN using fuzzy-hybrid approach, 2015 IEEE International Conference on Advanced Networks and Telecommuncations Systems (ANTS), Kolkata, India, 2015, WOS:000375678600053
49. Bogdan-Constantin Neagu, **Gheorghe Grigoraș**, Assessment of slow voltage variations from the electric distribution systems with fuzzy techniques, 2015 7th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), București, Romania, pp. 61 – 66, 2015, WOS:000370971100118
50. Florina Scarlatache, **Gheorghe Grigoraș**, Placement of DG sources using a clustering based partitioning method in distribution systems, 2015 9th International Symposium on Advanced Topics in Electrical Engineering (ATEE), București, Romania, pp. 868 – 872, 2015, WOS:000368159800160
51. **Gheorghe Grigoraș**, Florina Scarlatache, Processing of smart meters data for peak load estimation of consumers, 2015 9th International Symposium on Advanced Topics in Electrical Engineering (ATEE), București, Romania, pp. 864 – 867, 2015, WOS:000368159800159
52. **Gheorghe Grigoraș**, Ovidiu Ivanov; Mihai Gavrilas, Customer classification and load profiling using data from Smart Meters, 12th Symposium on Neural Network Applications in Electrical Engineering (NEUREL), Belgrad, Serbia, pp. 73-78, 2014, WOS:000380554900017
53. Florina Scarlatache, Gheorghe Grigoraș, Influence of wind power plants on power systems operation, 2014 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, pp. 1010-1014, 2014, WOS:000353565300184
54. Gheorghe Grigoraș, Florina Scarlatache, Knowlegde extraction from Smart Meters for consumer classification, 2014 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, pp. 978-982, 2014, WOS:000353565300179
55. Gheorghe Grigoraş, **Florina Scarlatache**, Use of data from smart meters in optimal operation of distribution systems, 2014 International Conference on Optimization of Electrical and Electronic Equipment (OPTIM), Brasov, Romania, pp. 179 – 184, 2014, WOS:000343551300026
56. Florina Scarlatache, **Gheorghe Grigoraş**, Optimal coordination of wind and hydro power plants in power systems, 2014 International Conference on Optimization of Electrical and Electronic Equipment (OPTIM), Brasov, Romania, pp. 689 – 694, 2014, WOS:000343551300102
57. Alexandru Kriukov, **Gheorghe Grigoraș**, Mihai Gavrilaș, Florina Scarlatache, Bogdan-Constantin Neagu, An analyze of slow voltage variations from the electric distribution systems with a clustering based approach, 2014 16th International Conference on Harmonics and Quality of Power (ICHQP), București, Romania, pp. 689 – 693, 2014, WOS:000343776100142
58. Alexandru Kriukov, **Gheorghe Grigoraș**, Florina Scarlatache, Ovidiu Ivanov, Bogdan Vicol, Use of fuzzy techniques in reliability assessment of electric distribution systems, 2014 16th International Conference on Harmonics and Quality of Power (ICHQP), București, Romania, pp. 29 – 33, 2014, WOS:000343776100007

59. Bogdan Vicol, Mihai Gavrilaş, Ovidiu Ivanov, Bogdan-Constantin Neagu, **Gheorghe Grigoraş**, Synchrophasor measurement method for overhead line parameters estimation in MV distribution networks, 2014 16th International Conference on Harmonics and Quality of Power (ICHQP), București, Romania, pp. 862 – 865, 2014, WOS:000343776100177
60. **Gheorghe Grigoraş**, Marcel Istrate, Florina Scarlatache, Electrical energy consumption estimation in water distribution systems using a clustering based method, International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Pitești, Romania, pp. 1 -6, 2013, WOS:000343672500023
61. Florina Scarlatache, **Gheorghe Grigoraş**, The influence of the DG sources in the optimal operation of the electrical distribution systems, 2013 8th International Symposium on Advanced Topics in Electrical Engineering (ATEE), București, Romania, pp. 1 -4, 2013, WOS:000332928500175
62. **Gheorghe Grigoraş**, Florina Scarlatache, Energy losses estimation in electrical distribution networks with a decision trees-based algorithm, 2013 8th International Symposium on Advanced Topics in Electrical Engineering (ATEE), București, Romania, pp. 1 -4, 2013, WOS:000332928500176
63. Florina Scarlatache, **Gheorghe Grigoraş**, Gheorghe Cârţină, Gianfranco Chicco, A comparative study regarding the optimal placement of the DG sources, 2012 International Conference and Exposition on Electrical and Power Engineering, Iasi, Romania, pp. 231 – 236, 2012, WOS:000324685300046
64. **Gheorghe Grigoraș**, Virgil Alexandrescu, Gheorghe Cârțină, A calculation method of power and energy losses in distribution networks, 2012 International Conference and Exposition on Electrical and Power Engineering, Iasi, Romania, pp. 197 – 200, 2012, WOS:000324685300040
65. **Gheorghe Grigoraş**, Florina Scarlatache, Gheorghe Cârţină, Load estimation for distribution systems using clustering techniques, 2012 13th International Conference on Optimization of Electrical and Electronic Equipment (OPTIM), Brașov, Romania, pp. 301 – 306, 2012, WOS:000398866700045
66. Florina Scarlatache, **Gheorghe Grigoraş**, Gianfranco Chicco, Gheorghe Cârţină, Using k-means clustering method in determination of the optimal placement of distributed generation sources in electrical distribution systems, 2012 13th International Conference on Optimization of Electrical and Electronic Equipment (OPTIM), Brașov, Romania, pp. 953 – 958, 2012, WOS:000398866700143
67. Daniela Comanescu, **Gheorghe Grigoraș**, Gheorghe Cârțină, Florina Rotaru, Determination of typical load profiles in hydro-power plant by clustering techniques, 2010 12th International Conference on Optimization of Electrical and Electronic Equipment, Brașov, Romania, pp. 1294 – 1297, 2010, WOS:000291967300194
68. **Gheorghe Grigoraș**, Gheorghe Cârțină, Elena-Crenguta Bobric, Florina Rotaru, Evaluation of the performances of efficient transformers in distribution networks by fuzzy techniques, 2010 12th International Conference on Optimization of Electrical and Electronic Equipment, Brașov, Romania, pp. 1281 – 1284, 2010, WOS:000291967300192
69. **Gheorghe Grigoraș**, Gheorghe Cârțină, Elena Crenguța Bobric, An improved fuzzy method for energy losses evaluation in distribution networks, 15th IEEE Mediterranean Electrotechnical Conference (MELECON), Valletta, Malta, pp. 131 – 135, 2010, WOS:000286988200025
70. **Gheorghe Cârțină**, Gheorghe Grigoraș, Elena Crenguța Bobric, Daniela Comanescu, Improved fuzzy load models by clustering techniques in optimal planning of distribution networks, 2009 IEEE Bucharest PowerTech, București, Romania, pp. 1 – 6, 2009, WOS:000276834600280
71. **Gheorghe Cârțină**, Gheorghe Grigoraș, Elena Crenguța Bobric, Clustering techniques for energy losses evaluation in distribution networks, 2009 IEEE Bucharest PowerTech, București, Romania, pp. 1 – 5, 2009, WOS:000276834600281

72. **Gheorghe Grigoraş**, Gheorghe Cârțină, Elena Crenguța Bobric, Cecilia Barbulescu, Missing data treatment of the load profiles in distribution networks, 2009 IEEE Bucharest PowerTech, București, Romania, pp. 1 – 5, 2009, WOS:000276834600189
73. **Gheorghe Grigoraş**, Cârțină Gheorghe, Mihai Gavrilaș, Using of Clustering Techniques in Optimal Placement of Phasor Measurements Units, Conference: 9th WSEAS/IASME International Conference on Electric Power Systems, High Voltages, Electric Machines (POWER '09), Genoa, Italia, pp. 104-108, 2009, WOS:000276614400015
74. Gheorghe Cârțină, Virgil Alexandrescu, **Gheorghe Grigoraş**, Mariana Moshe, Peak load estimation in distribution networks by fuzzy regression approach, 2000 10th Mediterranean Electrotechnical Conference. Information Technology and Electrotechnology for the Mediterranean Countries (MeleCon 2000) vol. 3, pp. 907 – 910, 2000, WOS:000166106500221

F3. Conferințe indexate în baze de date internaționale

1. Ștefania Gălbău, **Gheorghe Grigoraş** and Bogdan Neagu, "Voltage Quality Pattern Recognition in Microgrids Using a Data-Driven Machine Learning-Based Methodology," 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi), Iasi, Romania, 2024, pp. 450-455, (IEEE Xplore)
2. Bogdan Livadariu, **Gheorghe Grigoraş**, Bogdan Neagu, Ovidiu Ivanov, Florina Scarlatache Mihai Gavrilas, "Optimal Power Flow with the Clustering-Improved Fuzzy Models for Uncertainty Sources of Wind Power and Nodal Loads," 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi), Iasi, Romania, 2024, pp. 484-489 (IEEE Xplore)
3. Florina Scarlatache, **Gheorghe Grigoraş**, Vlad Scarlatache, Bogdan Neagu and Mihai Baciu, "Using Hybrid PV-Hydrogen Storage Systems in Optimal Planning of Microgrids," 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi), Iasi, Romania, 2024, pp. 556-559 (IEEE Xplore)
4. Claudia Bondar, Bogdan Neagu, **Gheorghe Grigoras**, Attila Simo, "Optimal Recloser Placement in Distribution Networks to Improve Power Quality Indicators," 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi), Iasi, Romania, 2024, pp. 456-461 (IEEE Xplore)
5. Bogdan Neagu, Mihai Luca, Mihai Gavrilas, **Gheorghe Grigoras**, Ovidiu Ivanov, Florina Scarlatache, "Leveraging Energy Storage Systems and Virtual Power Lines to Minimize Curtailment in Future Distribution Grids," 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi), Iasi, Romania, 2024, pp. 495-500 (IEEE Xplore)
6. Răzvan Livadariu, **Gheorghe Grigoraş**, Florina Scarlatache, Bogdan Neagu, "Robust Methodology to Extract the Electricity Consumption Patterns of End-Users Using Data Mining Techniques," 2024 16th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Iasi, Romania, 2024, pp. 1-6, doi: 10.1109/ECAI61503.2024.10607397 (IEEE Xplore)
7. Cosmin Despa, Adi Gugiuman, Bogdan Neagu, **Gheorghe Grigoras**, Impact of Electrical Vehicle Charging on Developing Cities Power System in Near-Future Scenarios, The 18th International Conference Interdisciplinarity in Engineering. Inter-Eng 2024, Tg. Murs, Romania, (Springer)
8. Răzvan Livadariu, **Gheorghe Grigoras**, Bogdan Neagu, Internet of Things and Data Mining: A Comprehensive Analysis of Applications in Energy Consumption ManagementThe 18th International Conference Interdisciplinarity in Engineering. Inter-Eng 2024., Tg. Mures Romania (Springer)
9. Bogdan Livadariu, **Gheorghe Grigoras**, Bogdan-Constantin Neagu, Assessing the Trend of Power Quality Indicators in the Electric Distribution Networks Using a Regression Models-

Based Approach. Case Study in Romania, The 17th International Conference Interdisciplinarity in Engineering (INTER-ENG 2022), Tg. Mures, Romania, 6 -7 octombrie, 2023, DOI: 10.1007/978-3-031-54671-6_42 (Springer)

10. Bogdan Neagu, **Gheorghe Grigoras**, Mihai Gavrilas, Radu Porumb, Ion Tristiu, Technical Losses Estimation in Low Voltage Distribution Network Using Deterministic Methods, The 17th International Conference Interdisciplinarity in Engineering (INTER-ENG 2022), Tg. Mures, Romania, 6 -7 octombrie, 2023, DOI: 10.1007/978-3-031-54671-6_41 (Springer)
11. Bogdan Neagu, **Gheorghe Grigoras**; Florina Scarlatache; Stefania Galbau, An Efficient Distribution Transformer Fleet Modernization Strategy for a Rapid Transition toward the Active Electric Networks, 13th International Symposium on Advanced Topics in Electrical Engineering (ATEE), Bucharest, Romania, 23-25 March 2023, DOI: 10.1109/ATEE58038.2023.10108311 (IEEE Xplore)
12. Florina Scarlatache, **Gheorghe Grigoraş**, Vlad Scarlatache, Vasilica Dandea, "Digital Twin-based Decision-Making Methodology for the Optimal Operation of Microgrids," 2023 10th International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 2023, pp. 1-5, doi: 10.1109/MPS58874.2023.10187426. (IEEE Xplore)
13. Bogdan Livadariu, **Gheorghe Grigoras**, Florina Scarlatache, Bogdan Neagu, "Voltage Control in Electric Networks with Wind Farms Connected Using a Scenario-Based Optimization Framework," 2023 10th International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 2023, pp. 1-6, doi: 10.1109/MPS58874.2023.10187415. (IEEE Xplore)
14. **Gheorghe Grigoras**, Bogdan-Constantin Neagu, Vasilica Dandea, Two-Stage Framework for Steady-State Analysis of Low Voltage Electric Distribution Networks Integrating Photovoltaic Prosumers, 15 th INTERNATIONAL CONFERENCE on ELECTRONICS, COMPUTERS and ARTIFICIAL INTELLIGENCE (ECAI 2023), June 29– June 30, 2023, doi: 10.1109/ECAI58194.2023.10194116 (IEEE Xplore)
15. Bogdan Constantin Neagu, **Grigoras Gheorghe**, Razvan-Petru Livadariu, Additional Power Losses Estimation in Harmonic Polluted LV Distribution Grid using a Ward's Hierarchical Clustering Method, 15 th INTERNATIONAL CONFERENCE on ELECTRONICS, COMPUTERS and ARTIFICIAL INTELLIGENCE (ECAI 2023), June 29– June 30, 2023, doi: 10.1109/ECAI58194.2023.10193906 (IEEE Xplore)
16. **Gheorghe Grigoraş**, Stefania Gălbău, Bogdan Neagu, "Phase Load Balancing in Active Electric Distribution Networks Using the Phase Swapping Smart Devices on Lateral Branches," 2023 11th International Conference on ENERGY and ENVIRONMENT (CIEM), Bucharest, Romania, 2023, pp. 1-5, doi: 10.1109/CIEM58573.2023.10349358. (IEEE Xplore)
17. Ecaterina Chelaru, Vasilica Dandea, Livia Noroc, **Gheorghe Grigoras**, "Determining the Occupancy Patterns and Typical Power Demand Profiles of the Electric Vehicle Charging Stations Using a Flexible Clustering-based Data Mining Framework," 2023 International Conference on Electromechanical and Energy Systems (SIELMEN), Craiova, Romania, 2023, pp. 1-6, doi: 10.1109/SIELMEN59038.2023.10290841. (IEEE Xplore)
18. Ecaterina Chelaru, **Gheorghe Grigoras**, Livia Noroc, Bogdan-Constantin Neagu and Ovidiu Ivanov, An Efficient Integration Strategy of the Prosumers in the Active Electric Distribution Networks, 14th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Ploiesti, Romania, 30 iunie – 1 iulie 2022, pp. 1-6, doi: 10.1109/ECAI54874.2022.9847516 (IEEE Xplore)
19. Livia Noroc, **Gheorghe Grigoras**, Vasilica Dandea, Ecaterina Chelaru, Bogdan-Constantin Neagu, An Efficient Voltage Control Methodology in LV Networks Integrating PV Prosumers Using Distribution Transformers with OLTC, 2022 IEEE 20th International Power Electronics and Motion Control Conference, Brasov, Romania, 25-29 septembrie, 2022. (IEEE Xplore)
20. Ecaterina Chelaru, **Gheorghe Grigoras**, Livia Noroc, Stefania Galbau, Bogdan-Constantin, Neagu, Ovidiu Ivanov, Assessing The Modernization Process of A Transformer Fleet In The

Electric Distribution Networks. Case Study In Romania, The 16th International Conference Interdisciplinarity in Engineering (INTER-ENG 2022), Tg. Mures, Romania, 6 -7 octombrie, 2022. (Springer)

21. Constantin Zetu, Bogdan-Constantin Neagu, **Gheorghe Grigoras**, Ovidiu Ivanov, Mihai Gavrilas, Overhead Transmission Lines Capacity Management Based On Different Weather Conditions, The 16th International Conference Interdisciplinarity in Engineering(INTER-ENG 2022), Tg. Mures, Romania, 6 -7 octombrie, 2022. (Springer)
22. Livia Noroc, **Gheorghe Grigoras**, Chelaru, Ecaterina; Dandea, Vasilica; Neagu, Bogdan Constantin, Voltage Control Strategy Using the Rule-Based Reasoning in LV Distribution Networks with PV Penetration Integrating OLTC-Fitted Transformer, 2022 International Conference on Electrical and Power Engineering (EPE 2022), Iaşi, Romania, 20-22 octombrie 2022. (IEEE Xplore)
23. Razvan Garbea, **Gheorghe Grigoras**, Clustering-Using Data Mining-based Application to Identify the Hourly Loading Patterns of the Generation Units from the Hydropower Plants, 2022 International Conference on Electrical and Power Engineering (EPE 2022), Iaşi, Romania, 20-22 octombrie 2022. (IEEE Xplore)
24. Ovidiu Ivanov, Bogdan Neagu, Nicusor Toma, **Grigoras Gheorghe**; Paul Ghilan, Mihai Gavrilas,, Metaheuristic Approaches for Distributed Generation Placement Optimization in Electrical Grids - A comparison between PSO, Tiki-Taka and Archimedes Optimzation Algorithms, 2022 International Conference on Electrical and Power Engineering (EPE 2022), Iaşi, Romania, 20-22 octombrie 2022. (IEEE Xplore)
25. Bogdan Neagu, Mihai Gavrilas, Ovidiu Ivanov, **Gheorghe Grigoraş**, The Crowdsourcing Concept-Based Data Mining Approach Applied in Prosumer Microgrids, Capitol in cartea The Future of Data Mining, Editor: Cem Ufuk Baytar, Nova Science Publishers, USA, 2022, 77–94 (Scopus)
26. **Gheorghe Grigoras**, Vasilica Dandea, Bogdan-Constantin Neagu, Florina Scarlatache, Load Estimation with the Clustering-Based Selection of the Electric Distribution Substations Integrated in SCADA System, 10th International Conference on ENERGY and ENVIRONMENT (CIEM), 14 – 15 Octombrie, 2021, Bucuresti, Romania. DOI: 10.1109/CIEM52821.2021.9614718 (IEEE Xplore)
27. Constantin Zetu, Bogdan-Constantin Neagu, **Gheorghe Grigoras**, Florina Scarlatache, A New Approach for the Coexistence Study of Urban Buildings Near High Voltage Overhead Lines, 10th International Conference on ENERGY and ENVIRONMENT (CIEM), 14 – 15 Octombrie, 2021, Bucuresti, Romania. DOI: 10.1109/CIEM52821.2021.9614825 (IEEE Xplore)
28. Ecaterina Chelaru, **Gheorghe Grigoraș**, Livia Noroc, Bogdan-Constantin Neagu, and Florina Scarlatache, Influence of the Prosumers on the Replacement Strategies of the Aged Transformers from the Electric Distribution Networks, 13th Interantional Conference on Electromechanical and Energy Systems (SIELMEN), 7-8 Octombrie, 2021, Chisinau, Rep. Moldova. DOI: 10.1109/SIELMEN53755.2021.9600425 (IEEE Xplore)
29. Mihai-Andrei Luca, Bogdan-Constantin Neagu, Ovidiu Ivanov, Mihai Gavrilas, **Gheorghe Grigoras**, A Deeper Analysis about the Impact of Prosumers on Power Losses in Low Voltage Microgrids, 13th Interantional Conference on Electromechanical and Energy Systems (SIELMEN), 7 -8 Octombrie, 2021, Chisinau, Rep. Moldova. DOI: 10.1109/SIELMEN53755.2021.9600366 (IEEE Xplore)
30. Bogdan Constantin Neagu, Constantin Zetu, **Gheorghe Grigoras**, Ovidiu Ivanov, Theories about Mechanical Calculus in the Context of Coexistence between Overhead Power Lines and Buildings from Outskirts of Cities, 13th Interantional Conference on Electromechanical and Energy Systems (SIELMEN), 7-8 Octombrie, 2021, Chisinau, Rep. Moldova. DOI: 10.1109/SIELMEN53755.2021.9600329 (IEEE Xplore)

31. Mihai Sanduleac, Eremia Mircea, Lucian Toma, Catalin Damian, Mihai Gavrilas, **Gheorghe Grigoras**, Ion Stratan, Victor Gropa, Islanded Microgrids control by using Grid Former and Synthetic Slack Bus concept - A preliminary analysis, 13th Interantional Conference on Electromechanical and Energy Systems (SIELMEN), 7 -8 Octombrie, 2021, Chisinau, Rep. Moldova. DOI: 10.1109/SIELMEN53755.2021.9600347 (IEEE Xplore)
32. Vasilica Dandea, **Gheorghe Grigoras**, Bogdan-Constantin Neagu și Florina Scarlatache A Clustering-based Knowledge Extraction Methodology for Prosumers' Classification and Injected Power Profiles Grouping, 13th International Conference on Electronics, Computers and Artificial Intelligence, ECAI 2021, 1 – 3 Julie, 2021, Pitesti, Romania, DOI: 10.1109/ECAI52376.2021.9515042 (IEEE Xplore)
33. Razvan Garbea, Florina Scarlatache, **Gheorghe Grigoras**, Bogdan-Constantin Neagu , Integration of Data Mining Techniques in SCADA System for Optimal Operation of Hydropower Plants, 13th International Conference on Electronics, Computers and Artificial Intelligence, ECAI 2021, 1 – 3 Julie, 2021, Pitesti, Romania, DOI: 10.1109/ECAI52376.2021.9515045 (IEEE Xplore)
34. Livia Noroc, **Gheorghe Grigoras**, Clustering-based consumers' selection to optimal placement of the phase load balancing devices, 11th International Conference and Exposition on Electrical and Power Engineering (EPE2020), Iasi, Romania, 2020. DOI: 10.1109/EPE50722.2020.9305026 (IEEE Xplore)
35. Ecaterina Chelaru, **Gheorghe Grigoras**, Decision Making Strategies to Establish the Replacement Priority of Transformers from Electric Distribution Substations, 11th International Conference and Exposition on Electrical and Power Engineering (EPE2020), Iasi, Romania, 2020. DOI: 10.1109/EPE50722.2020.9305627 (IEEE Xplore)
36. Bogdan-Constantin Neagu, **Gheorghe Grigoraș**, An Efficient Metaheuristic Algorithm for Optimal Capacitor Allocation in Electric Distribution Networks, 2017 2nd International Conference on Software, Multimedia and Communication Engineering (SMCE 2017), Shanghai, China, pp. 327- 332, 2017 (EI Compendex)
37. Gheorghe Cârţină, **Gheorghe Grigoraș**, Determination of the Customers Consumption Categories using Clustering Techniques, 30th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO'07, Gliwice-Ustron, Polonia, pp. 231 – 232, 2007 (INSPEC).
38. **Gheorghe Grigoraş**, Gheorghe Cârţină, Virgil Alexandrescu, Analysis of the Electric Distribution Networks using Geographic Information System (GIS) Technology, 30th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO'07, Gliwice-Ustron, Polonia, pp. 111 – 112, 2007 (INSPEC).
39. Virgil Alexandrescu, Gheorghe Cârţină, **Gheorghe Grigoraş**, Software Application to Elaborate Static and Dynamic Load Models for Different Categories of Electric Consumers, 30th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO'07, 2007, Gliwice-Ustron, Polonia, pp. 225 – 226, 2007 (INSPEC).
40. Gheorghe Cârţină, **Gheorghe Grigoraș**, Elena-Crenguța Bobric, Using of the fuzzy logic for voltage control in distribution networks, 26th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO 2003, Gliwice-Niedzika, Poland, vol. 2, pp. 319 - 322, 2003, (INSPEC).
41. Gheorghe Cârţină, **Gheorghe Grigoraş**, Ovidiu Dumitrescu, Pavel Atanasoae, Optimal commitment of equipments in combined heat and power plants, 26th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO 2003, Gliwice-Niedzika, Poland, vol. 2, pp. 331 - 334, 2003, (INSPEC).
42. **Gheorghe Grigoraş**, Gheorghe Cârţină, Load flow analysis in distribution system using fuzzy powers correlation models, 26th International Conference on Fundamentals of Electrotechnics

and Circuit Theory, IC-SPETO 2003, Gliwice-Niedzika, Poland, vol. 2, pp. 323 - 326, 2003, (INSPEC).

43. Ovidiu Dumitrescu, Pavel Atanasoae, Gheorghe Cârţină, **Gheorghe Grigoraş**, The influence of equipments modernization on the consumption characteristics in power plants, 26th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO 2003, Gliwice-Niedzika, Poland, Vol. 2, pp. 327 - 330, 2003, (INSPEC).
44. Gheorghe Cârţină, **Gheorghe Grigoraş**, Fuzzy Modeling in Distribution Systems, 25th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO 2002, Gliwice-Ustron, Poland, vol. 2, pp. 249 - 252, 2002, (INSPEC).
45. **Gheorghe Grigoraş**, Gheorghe Cârţină, Time Influence in Reliability Factors Evaluation, 25th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO 2002, Gliwice-Ustron, Poland, vol. 2, pp. 353 - 356, 2002 (INSPEC).
46. Elena-Crenguța Bobric, Gheorghe Cârţină, **Gheorghe Grigoraș**, Fuzzy-Based Voltage/Reactive Power Control in Power Systems, 25th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO 2002, Gliwice-Ustron, Poland, vol.2, pp. 431 - 434, 2002 (INSPEC).

F3. Conferințe neidexate

1. Ștefania Loredana Gălbău, **Gheorghe Grigoraș**, Bogdan Neagu, Metodologie bazată pe algoritmi de invățare nesupravegheată pentru analiza calitatii tensiunii in rețelele electrice de distribuție, Simpozionul Național de Calitate a Energiei Electrice, Târgoviște, Romania, 10 – 12 decembrie, 2024.
2. Claudia Bondar, Bogdan Neagu, **Gheorghe Grigoraș**, Radu Porumb, Automatizarea retelelor electrice de distribuție pentru minimizarea întreruperilor neplanificate și creșterea calității energiei electrice, Simpozionul Național de Calitate a Energiei Electrice, Târgoviște, Romania, 10 – 12 decembrie, 2024.
3. Claudia Bondar, Bogdan Neagu, **Gheorghe Grigoraș**, Analiza implentării separatoarelor telecomandate asupra indicatorilor de performanță SAIDI și SAIFI, 10th edition of International Symposium “Brainstorming in Agora Students’ Scientific Circle“ BACStud 2024, Oradea, Romania.
4. Tofan Sebastian-Ionuț, **Gheorghe Grigoraș**, Bogdan Neagu, Estimarea producției de energie electrică a noilor prosumatori integrați în rețelele de joasa tensiune, 10th edition of International Symposium “Brainstorming in Agora Students’ Scientific Circle“ BACStud 2024, Oradea, Romania.
5. Asavei Nicolae, **Gheorghe Grigoraș**, Bogdan Neagu, Planificarea dezvoltării rețelelor electrice de distribuție de joasă tensiune în contextul tranziției de la conceptul “passive grids" către “active grids”, 10th edition of International Symposium “Brainstorming in Agora Students’ Scientific Circle“ BACStud 2024, Oradea, Romania.
6. Livadariu Răzvan, **Gheorghe Grigoraș**, Bogdan Neagu, Identifying Representative Milestones from State-of-The Art of Energy Management Solutions Based on IoT and Data Mining, 10th edition of International Symposium “Brainstorming in Agora Students’ Scientific Circle“ BACStud 2024, Oradea, Romania.
7. Maria Relea, Bogdan Neagu, **Gheorghe Grigoraș**, Metoda statistică bazată pe tehnicile de data mining pentru identificarea datelor aberante utilizate în stadiul de planificare al rețelelor de distribuție, 10th edition of International Symposium “Brainstorming in Agora Students’ Scientific Circle“ BACStud 2024, Oradea, Romania.
8. Todireanu Gheorghiță Andy, Bogdan Neagu, **Gheorghe Grigoraș**, Influența regimului deformat asupra pierderilor suplimentare de putere activă, 10th edition of Internacalctional Symposium “Brainstorming in Agora Students’ Scientific Circle“ BACStud 2024, Oradea, Romania.

9. Asavei Nicolae, Tofan Sebastian-Ionuț, **Gheorghe Grigoraș**, Bogdan Neagu, Estimation of Energy Production From Small-Scale Renewable Sources and Analysis of the Impact on Low-Voltage Distribution Networks, Simpozionul National INOV8ING, Tg. Mures, Romania, 15 decembrie, 2024.
10. Maria Relea, Gheorghiță-Andy Todireanu, Bogdan Neagu, **Gheorghe Grigoraș**, Consumption Management at the Residential Consumer Level Simpozionul National INOV8ING, Tg. Mures, Romania, 15 decembrie, 2024.
11. Asavei Nicolae, Dandea Vasilica, **Gheorghe Grigoraș**, Bogdan Neagu, Strategie de planificare a dezvoltării rețelelor electrice de distribuție în contextul integrării surselor locale de energie regenerabilă de mică putere, Simpozionul Științific Studențesc Internațional ELStudIS, Editia III-a, Iași Romania, 17 – 19 octombrie 2024.
12. Tofan Sebastian-Ionuț, Noroc Livia, **Gheorghe Grigoraș**, Bogdan Neagu, Analiză comparativă privind eficiența variantelor de montare a panourilor fotovoltaice la prosumatori din punct de vedere al producției de energie electrică, Simpozionul Științific Studențesc Internațional ELStudIS, Editia III-a, Iași Romania, 17 – 19 octombrie 2024.
13. Relea Maria, Claudia Bondar, Bogdan Neagu, **Gheorghe Grigoraș**, Identificarea datelor aberante provenite de la contoarele inteligente prinr-o metodă statistică bazată pe "Data Mining", Simpozionul Științific Studențesc Internațional ELStudIS, Editia III-a, Iași Romania, 17 – 19 octombrie 2024.
14. Gheorghiță-Andy Todireanu, Cosmin Despa, Bogdan Neagu, **Gheorghe Grigoraș**, Estimarea piederilor de putere în rețelele electrice de distrbuție de joasă tensiune poluate armonic Simpozionul Științific Studențesc Internațional ELStudIS, Editia III-a, Iași Romania, 17 – 19 octombrie 2024.
15. Nicolae Asavei, **Gheorghe Grigoras**, B.C. Neagu, Integrarea prosumatorilor în rețelele de distribuție de joasă tensiune. analiză și evaluarea impactului, 9th edition of International Symposium "Brainstorming in Agora Students' Scientific Circle" BACStud 2023, Oradea, Romania (5 puncte)
16. S. Munteanu, B.C. Neagu, **Gheorghe Grigoras**, Studiu de coexistență între liniile electrice aeriene și clădiri rezidențiale, 9th edition of International Symposium "Brainstorming in Agora Students' Scientific Circle" BACStud 2023, Oradea, Romania. (5 puncte)
17. Stefania Galbau, **Gheorghe Grigoras**, Voltage Quality Assessment in Microgrids Using Clusterig-Based Unsupervised Learning Techniques, 9th edition of International Symposium "Brainstorming in Agora Students' Scientific Circle" BACStud 2023, Oradea, Romania. (7,5 puncte)
18. Răzvan Livadariu, **Gheorghe Grigoras**, Methodology for identifying electricty consumption patterns of end users using data mining techniques, 9th edition of International Symposium "Brainstorming in Agora Students' Scientific Circle" BACStud 2023, Oradea, Romania. (7,5 puncte)
19. R. Livadariu, **Gheorghe Grigoras**, Data Mining in Advanced Metering Infrastructure to Identify the Consumption Patterns and Behaviors of the Residential End-Users, 6th International Conference of the Doctoral Scool, Iasi, Romania, 17 – 19 mai 2023. (7.5 puncte)
20. S. Galbau, **Gheorghe Grigoraș**, A clustering-based efficient framework for voltage quality pattern recognition in microgids, 6th International Conference of the Doctoral Scool, Iasi, Romania, 17-19 mai, 2023 (7,5 puncte)
21. Nicolae Asavei, **Gheorghe Grigoras**, Bogdan Neagu, Metodologie de estimare a impactului creșterii numărului de prosumatori în rețelele electrice de distribuție de joasă tensiune, Simpozionul National EMING, Resita, Romania, 18 – 20 mai, 2023. (5 puncte)
22. Mihail Cristea, Bogdan Neagu, **Gheorghe Grigoras**, Influența integrării sistemelor fotovoltaice asupra regimurilor de funcționare ale rețelelor electrice de distribuție de medie tensiune, Simpozionul National EMING, Resita, Romania, 18 – 20 mai, 2023. (5 puncte)

23. Nicolae Asavei, **Gheorghe Grigoras**, Bogdan Neagu, O analiză critică cu privire la impactul prosumatorilor asupra rețelelor de distribuție electrică de joasă tensiune bazată pe o platformă de simulare a regimurilor permanente de funcționare, Simpozionul National INOV8ING, Tg. Mures, Romania, 15 decembrie, 2023. (5 puncte)
24. Paul Ploscariu, Bogdan Neagu, **Gheorghe Grigoras**, O nouă abordare pentru studiile de coexistență între liniile electrice aeriene și clădiri rezidențiale, Simpozionul National INOV8ING, Tg. Mures, Romania, 15 decembrie, 2023. (5 puncte)
25. Revenco Teodora, B.C. Neagu, **Gheorghe Grigoras**, Analiza regimurilor de funcționare ale rețelelor electrice de distribuție de joasă tensiune în contextul integrării vehiculelor electrice, 8th edition of International Symposium "Brainstorming in Agora Students' Scientific Circle" BACStud 2022.
26. Vlad Hustiuc, **Gheorghe Grigoras**, B.C. Neagu, Extragerea informațiilor din măsurătorile de sarcină și tensiune folosind tehnici de clustering pentru evaluarea calității tensiunii în rețelele electrice de distribuție, 8th edition of International Symposium "Brainstorming in Agora Students' Scientific Circle" BACStud 2022.
27. Livadariu Bogdan-Pavel, **Gheorghe Grigoras**, B.C. Neagu, Aplicarea modelelor de regresie la studierea trendului indicatorilor de calitate a energiei electrice în rețelele de distribuție din România, 8th edition of International Symposium "Brainstorming in Agora Students' Scientific Circle" BACStud 2022.
28. Vasilica Dandea, **Gheorghe Grigoras**, Scenarios-Based Analysis to Evaluate Impact of Prosumers on the Operation of the Low Voltage Electric Distribution Networks, 5th International Conference of the Doctoral Scool, Iasi, Romania, 2022.
29. Razvan Gârbea, **Gheorghe Grigoraș**, Discovering the Patterns of Operating Regimes by K-Means Clustering-based Data Mining for Hydropower Plants, 5th International Conference of the Doctoral Scool, Iasi, Romania, 2022.
30. Bogdan Livadariu, **Gheorghe Grigoras**, An Optimization-Based Analysis to Evaluate the Impact of the Wind Farms on the Operation of the Electric Networks, 5th International Conference of the Doctoral Scool, Iasi, Romania, 2022.
31. Postolati V. M., Berzan V. P., Bykova E. V., Boșneaga V. A., Suslov V. M., **Gheorghe Grigoraș**, Mihai Gavrilaș, Marcel Istrate, Posibilitățile de utilizare a dispozitivelor de reglare a fazei pentru conectarea la operare paralelă a sistemelor electroenergetice din Moldova și România prin liniile de 110 kV, WEC Central & Eastern Europe Regional Energy Forum – FOREN 2018, Costinești, Romania, 2018.
32. **Gheorghe Grigoraș**, Cecilia Bărbulescu, Decision making under uncertainty in development planning of power grid, International Conference on Condition Monitoring, Diagnosis and Maintenance 2015, CMDM 2015 (3rd edition), București, Romania, 2015.
33. **Gheorghe Grigoraș**, Florina Scarlatache, Posibilități privind estimarea pierderilor de energie în rețelele electrice de distribuție folosind tehnici fuzzy, Simpozionul Național "Sisteme Inteligente în Electroenergetică" – SIE 2014, Galați, Romania, 2014.
34. Cecilia Bărbulescu, **Gheorghe Grigoraș**, Florina Scarlatache, Analysis of the Electricity Generation Potential by Renewable Source in Romanian Power System, WEC Central & Eastern Europe Regional Energy Forum – FOREN 2014, București, Romania, 2014.
35. **Gheorghe Grigoraș**, Cecilia Bărbulescu, Florina Scarlatache, A Data Mining Techniques Based Approach for Identify of Electricity Generation Potential by Renewable Sources in Romanian Power System, CIGRÉ Regional South-East European Conference RSEEC 2014 (2nd edition), Timisoara, Romania, 2014.
36. **Gheorghe Grigoraș**, Elena Crenguța Bobric, Clustering Based Approach for Customers' Classification from Electrical Distribution Systems, 6th International Conference on Energy and Environment, CIEM 2013, București, Romania, 2013.

37. Florina Scarlatache, Cecilia Barbulescu, **Gheorghe Grigoraș**, Gheorghe Cârțină, Influence of Coordination between Distribution Generation Sources on Optimal Voltage Control, International Conference on Condition Monitoring, Diagnosis and Maintenance - CMDM 2013, București, Romania, 2013.
38. **Gheorghe Grigoraș**, Cecilia Bărbulescu, Florina Scarlatache, Clustering-based algorithm for optimal selection of pilot nodes in secondary voltage control, International Conference on Condition Monitoring, Diagnosis and Maintenance - CMDM 2013, București, Romania, 2013.
39. **Gheorghe Grigoraș**, Cecilia Bărbulescu, Gheorghe Cârţină, Florina Rotaru, Power Flow Analysis in Power Systems Using Fuzzy Correlation Models for the Nodal Loads, WEC Central & Eastern Europe Energy Forum- FOREN 2012 , Neptun, România, 2012.
40. Cecilia Bărbulescu, Gheorghe Grigoraș, Gheorghe Cârțină, An Approach based on Zoning of Electric Transmission System for Human Errors Monitoring, WEC Central & Eastern Europe Energy Forum – FOREN, Neptun, România, 2012.
41. Gheorghe Grigoraș, Cecilia Bărbulescu, Clustering-based algorithm in power system partitioning, CIGRÉ Regional South-East European Conference, RSEEC 2012, Sibiu, Romania, 2012.
42. Florina Scarlatache, Gheorghe Grigoraș, Gheorghe Cârțină, Algoritm de amplasare și dimensionare optimă a surselor de generare distribuită bazat pe tehnici de clustering, Simpozion Național "Sisteme inteligente în Electroenergetică" (SIE), Galati, Romania, 2012.
43. Daniela Comănescu, Gheorghe Grigoraș, Florina Scarlatache, Efficient Operation Of The Hydropower Cascade Under Active Networks, CIGRÉ Regional South-East European Conference, RSEEC 2012, Sibiu, Romania, 2012.
44. Gheorghe Grigoraș, Cecilia Barbulescu, Florina Rotaru, Gheorghe Cartina, Using of the Fuzzy Correlation in Load Estimation of Power Stations, 8th International Conference on Industrial Power Engineering, Bacău, Romania, pp. 31 – 35, 2011.
45. Florina Rotaru, Gheorghe Grigoraș, Daniela Comanescu, Gheorghe Cartina, Economic Efficiency of the Solutions for the Renewals/Reinforcements on Distribution Networks, 8th International Conference on Industrial Power Engineering, Bacău, Romania, pp. 103 – 108, 2011.
46. Gheorghe Grigoraș, Cecilia Bărbulescu, Gheorghe Cartina, Power flow analysis in electric networks under conditions of missing data, International Conference on Condition Monitoring, Diagnosis and Maintenance, București, Romania, September 19-23, 2011.
47. Daniela Comănescu, Gheorghe Grigoraș, Florina Rotaru, Creșterea aportului surselor de generare distribuită în SEN şi impactul asupra funcţionării centralelor hidroelectrice, Conferinţa Naţională şi Expoziţia de Energetică, Sinaia, 26-28 Octombrie, 2011.
48. Cecilia Bărbulescu, Gheorghe Grigoraș, Gheorghe Cârţină, Elena-Crenguţa Bobric, Analysis of Accidental Events in Power Transmission Grids by Clustering Techniques, WEC Central & Eastern Europe Energy Forum – FOREN, Neptun, România, 2010.
49. Daniela Comanescu, Constantin Sarsaniuc, Gheorghe Cârţină, Gheorghe Grigoraș, Soluţii de alegere a transformatoarelor. Modalităţi de Reducere a Consumurilor în centralele hidroelectrice, WEC Central & Eastern Europe Energy Forum – FOREN, Neptun, România, 2010.
50. Gheorghe Grigoraș, Gheorghe Cârţină, Elena- Crenguța Bobric, Optimal Placement of Phasor Measurements Units in Power Systems, Simpozionul International de Sisteme Inteligente in Electroenergetica, SIE'10, Galati, Romania, 2010.
51. Florina Rotaru, Gheorghe Grigoraș, Gheorghe Cârţină, Implementing a Development Strategy of Electric Distribution Networks, Simpozionul International de Sisteme Inteligente in Electroenergetica, SIE'10, Galati, Romania, 2010.
52. Cecilia Bărbulescu, Gheorghe Grigoraș, Gheorghe Cârţină, A New Approach Regarding to Analysis of Accidental Events in Electrical Transmission Systems, Simpozionul International de Sisteme Inteligente in Electroenergetica, SIE'10, Galati, Romania, 2010.

53. Gheorghe Grigoraş, Gheorghe Cârţină, Elena-Crenguța Bobric, Comparison of Methods for Filling Missing Data, Proc. of the 32th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO'09, Gliwice-Ustron, Polonia, 2009.
54. Gheorghe Cârţină, Gheorghe Grigoraş, Elena Crenguța Bobric, Smart Grid Challenges in Distribution Systems, Proc. of the 32th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO'09, Gliwice-Ustron, Polonia, 2009.
55. Costea, L.C., Gheorghe Cârţină, Gheorghe Grigoraş, Chosing of the Efficint Investment Solutions in Electrical Networks, Proc. of the 32th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO'09, Gliwice-Ustron, Polonia, 2009.
56. Gheorghe Grigoraş, Gheorghe Cârţină, Elena-Crenguța Bobric, Marginal Clearing Price Auction In Energy Markets, Conferința Internațională de Sisteme Electromecanice și Energetice (SIELMEN 2009), Chisinau, Republica Moldova, 2009.
57. Gheorghe Cârţină, Gheorghe Grigoraş, Energy losses evaluation using an improved fuzzy method, Conferința Internațională de Sisteme Electromecanice și Energetice (SIELMEN 2009), Chisinau, Republica Moldova, 2009.
58. Gheorghe Cârţină, Gheorghe Grigoraş, Bobric E.C., Challenges and Opportunities for Distribution Systems, International Conference on ENERGY and ENVIRONMENT (CIEM 2009), Bucuresti, Romania, 2009.
59. Gheorghe Grigoraş, Gheorghe Cârţină, Costea C., Dragoș Machidon, Strategies regarding operating voltage levels in distribution networks, International Conference on ENERGY and ENVIRONMENT (CIEM 2009), Bucuresti, Romania, 2009.
60. Daniela Comanescu, Gheorghe Cârţină, Gheorghe Grigoraş, Possibility for reducing intern consumption in hydro power plant, International Conference on ENERGY and ENVIRONMENT (CIEM 2009), Bucuresti, Romania, 2009.
61. Gheorghe Cârţină, Gheorghe Grigoraş, Elena-Crenguța Bobric, Power/Energy Saving Potential Evaluation in Distribution Networks by Fuzzy Techniques, International World Energy System Conference, WESC 2008, Iasi, Romania, 2008.
62. Gheorghe Cârţină, Gheorghe Grigoraş, Virgil Alexandrescu, The Clustering Techniques in the Determination of the Power Losses in Radial Networks, International World Energy System Conference, WESC 2008, Iasi, Romania, 2008.
63. Costea L.C., Gheorghe Cârţină, Gheorghe Grigoraş, Optimal Investments in Electric Networks Based on Economic Analysis, International World Energy System Conference, WESC 2008, Iasi, Romania, 2008.
64. Costea, L.C., Gheorghe Cârţină, Gheorghe Grigoraş, Optimal Decisions in the Replacement of Old Distribution Transformers by Efficient Transformers in Distribution Networks, International World Energy System Conference, WESC 2008, Iasi, Romania, 2008.
65. Virgil Alexandrescu, Gheorghe Cârţină, Gheorghe Grigoraş, Software Application to Create and Manage Static Load Models to Improve Electric Network Analysis, International World Energy System Conference, WESC 2008, Iasi, Romania, 2008.
66. Gheorghe Cârţină, Gheorghe Grigoraş., Strategies for Renewal of Electric Distribution Networks, Simpozionul International de Inteligenta Artificiala in Electroenergetica, SIAE'08, Galati, Romania, 2008.
67. Gheorghe Grigoraş, Gheorghe Cârţină, Elena-Crenguța Bobric, Solutions for missing Data Treatment in Electric Distribution Systems, Simpozionul International de Inteligenta Artificiala in Electroenergetica, SIAE'08, Galati, Romania, 2008.
68. Gheorghe Cârţină, Gheorghe Grigoraş, Optimal Reconfiguration of Distribution Networks in Uncertainty Conditions, International Conference on Energy – Environment, CIEM'07, Bucureşti, România, 2007.

69. Gheorghe Grigoraş, Gheorghe Cârţină, Virgil Alexandrescu, Geographic Information System (GIS) – An Integrated Technology for Distribution Systems, International Conference on Energy – Environment, CIEM'07, Bucureşti, România, 2007.
70. Gheorghe Cârţină, Gheorghe Grigoraş, Elena Crenguța Bobric, Power System Analysis using Matlab Toolboxes, Proc. of the 6th International Conference on Electromechanical and Power Systems, SIELMEN'07, Chişinău, Rep. Moldova, 2007.
71. Virgil Alexandrescu, Gheorghe Cârţină, Gheorghe Grigoraş, Integrated Software Application for the management of Databases Containing Static and Dynamic Models of the Aggregated Loads from Distribution Network and Their Use in Static and Dynamic Networks, International Conference on Electromechanical and Power Systems, SIELMEN'07, Chişinău, Rep. Moldova, 2007.
72. Gheorghe Cârţină, Gheorghe Grigoraş, Elena-Crenguța Bobric, Carmen Lupaşcu, Improving of Fuzzy Models by Clustering Techniques in Optimal Reconfiguration of the Distribution Networks, International World Energy System Conference, WESC 2006, Torino, Italia, 2006, CD –ROM, ISBN-10: 88-87380-51-1.
73. Gheorghe Grigoraş, Gheorghe Cârţină, Elena-Crenguța Bobric, Techniques for Treatment of the Missing Data in Load Profiles of the Electric Distribution Systems, International World Energy System Conference, WESC 2006, Torino, Italia, 2006, CD –ROM, ISBN-10: 88-87380-51-1.
74. Gheorghe Cârţină, Gheorghe Grigoraş, Elena-Crenguța Bobric, Carmen Lupaşcu, Improving Techniques for Electric Networks Control, 29th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO 2006, Gliwice-Niedzika, Polonia, vol. II, pp. 581 – 584, 2006.
75. Gheorghe Cârţină, Gheorghe Grigoraş, Carmen Lupaşcu, Using of the Clustering Techniques in GIS Documents Processing for Distribution Systems, WEC Regional Energy Forum – FOREN 2006, Neptun, Romania, 2006.
76. Gheorghe Cârţină, Gheorghe Grigoraş, Carmen Lupaşcu, Le Rôle du GIS Dans la Problèmatique de L'environnement, Colocviul Tehnic L'Amelioration Des Facteurs D'Environnement, Iași, Romania, pp. 17 – 22, 2006.
77. Gheorghe Cârţină, Gheorghe Grigoraş, Elena-Crenguța Bobric, Folosirea modelelor fuzzy a profilurilor de sarcină în supravegherea on-line a reglajului optimal tensiune-putere reactivă în reţelele electrice, Simpozionul Internaţional "Sisteme de Inteligenţă Artificială în Electroenergetică", SIAE06, Galaţi, Romania, pp. 36 – 43, 2006.
78. Gheorghe Cârţină, Yona Schweiter, Gheorghe Grigoraş, Tehnici de IA în conducerea optimală a centralelor electrice, Simpozionul Internaţional "Sisteme de Inteligenţă Artificială în Electroenergetică", SIAE06, Galaţi, Romania, pp. 31 – 35, 2006.
79. Gheorghe Grigoraş, Gheorghe Cârţină, Utilizarea tehnicilor fuzzy şi GIS în planificarea utilităţilor, Al III- lea Simpozion Internaţional "Sisteme de Inteligenţă Artificială în Electroenergetică", SIAE06, Galaţi, Romania, pp. 120 – 128, 2006.
80. Gheorghe Cârţină, Gheorghe Grigoraş, Elena-Crenguța Bobric, Improving Techniques of Fuzzy Models in Power Systems, 5th International Conference on Electromechanical and Power Systems, SIELMEN'05, Chişinău, Rep. Moldova, vol. 1, pp. 460 – 463, 2005.
81. Gheorghe Cârţină, Gheorghe Grigoraș, Virgil Alexandrescu, Pilot Pattern Choosing by Clustering and Fuzzy Techniques, Proc. of the International Conference Energy – Environment, CIEM'05, Bucureşti, România, CD, 2005.
82. Gheorghe Cârţină, Gheorghe Grigoraș, Pay as Bid versus Marginal Clearing Pricing, Proc. of the International Conference Energy – Environment, CIEM'05, Bucureşti, România, CD, 2005.
83. Bobric Elena-Crenguța, Gheorghe Cârţină, Gheorghe Grigoraş, Determination of Energy Losses in Medium and Low Voltage Networks, 5th International Conference on Electromechanical and Power Systems, SIELMEN'05, Chişinău, Rep. Moldova, vol. 1, pp. 450 – 453, 2005.

84. Bobric Elena-Crenguța, Gheorghe Cârţină, Gheorghe Grigoraş, Consumption Modeling for Low Voltage Networks, 5th International Conference on Electromechanical and Power Systems, SIELMEN'05, Chişinău, Rep. Moldova, vol. 1, pp. 454 – 457, 2005.
85. Gheorghe Grigoraş, Gheorghe Cârţină, Intervalele de încredere ale preţului marginal de închidere, International Conference Energy – Environment, CIEM'05, Bucureşti, România, CD, 2005.
86. Gheorghe Cârţină, Gheorghe Grigoraş, Power Flow Optimization using Powers Correlation Fuzzy Models, 27th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO 2004, Gliwice-Niedzika, Poland, vol. 2, pp. 273 - 276, 2004.
87. Gheorghe Cârţină, Gheorghe Grigoraş, Ovidiu Dumitrescu, Pavel Atanasoae, Energy Market Simulation with MatLab Programming, 27th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO 2004, Gliwice-Niedzika, Poland, vol. 1, pp. 187 – 190, 2004.
88. Gheorghe Cârţină, Gheorghe Grigoraş, Optimal Planning by Processing GIS Documents with MatLab, 27th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO 2004, Gliwice-Niedzika, Poland, vol. 1, pp. 183 - 186, 2004.
89. Ovidiu Dumitrescu, Pavel Atanasoae, Gheorghe Cârţină, Gheorghe Grigoraş, Eficiency and Reliability Improving of Combined Heat and Power Generation Units, 27th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO 2004, Gliwice-Niedzika, Poland, vol. 23, pp. 281 - 284, 2004.
90. Gheorghe Grigoraş, Gheorghe Cârţină, Alexandrescu V., Levels of Energy Losses in Distribution Networks, Proc. of the 27th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO 2004, Gliwice-Niedzika, Poland, vol. 2, pp. 277 - 280, 2004.
91. Gheorghe Cârţină, Virgil Alexandrescu, Gheorghe Grigoraş, Variables Correlations in Fuzzy Optimization Models, International World Energy System Conference, (WESC 2004) Oradea,
92. Gheorghe Grigoraş, Virgil Alexandrescu, Gheorghe Cârţină, Energy Losses Computation in Distribution Systems Using Fuzzy Techniques, International World Energy System Conference, (WESC 2004) Oradea, Romania, pp.302 – 305, 2004.
93. Gheorghe Cârţină, Virgil Alexandrescu, Gheorghe Grigoraş, Using of the GIS Techniques in Optimization of Local Distribution Systems, WEC Regional Energy Forum – FOREN 2004, Neptun, Romania, CD, 2004.
94. Gheorghe Cârţină, Virgil Alexandrescu, Gheorghe Grigoraş, Ioan Silvaş, Dumitru Federenciuc, Petru Burlacu, Tehnici IA în analiza contingenţelor în reţelele de 110 kV, Simpozionul Internaţional "Sisteme de Inteligenţă Artificială în Electroenergetică", SIAE04, Galaţi, Romania, pp. 56-60, 2004.
95. Gheorghe Cârţină, Virgil Alexandrescu, Gheorghe Grigoraş, Ioan Silvaş, Dumitru Federenciuc, Sorin Ivan, Tehnici fuzzy în modelarea consumului reţelelor de joasă tensiune, Simpozionul Internaţional "Sisteme de Inteligenţă Artificială în Electroenergetică", SIAE04, Galaţi, Romania, pp. 61-66, 2004.
96. Gheorghe Grigoraş, Virgil Alexandrescu, Gheorghe Cârţină, Folosirea tehnicilor fuzzy în estimarea pierderilor de energie în reţelele de distribuţie, , Simpozionul Internaţional "Sisteme de Inteligenţă Artificială în Electroenergetică", SIAE04, Galaţi, Romania, pp. 148-154, 2004.
97. Gheorghe Cârţină, Gheorghe Grigoraş, Determination of Load Profiles in Power System by Fuzzy Techniques, the 8th International Symposium on Automatic Control and Computer Science, SACCS 2004, Iaşi, Romania, CD, 2004.
98. Gheorghe Cârţină, Virgil Alexandrescu, Gheorghe Grigoraş, Software for competition in deregulated markets, International Conference Energy – Environment, CIEM'05, Bucureşti, România, vol. II, pp.5.49 – 5.54, 2003.

99. Gheorghe Cârţină, Virgil Alexandrescu, Gheorghe Grigoraş, Integrating and processing GIS documents with Matlab programming in networks planning, International Conference Energy – Environment, CIEM'05, Bucureşti, România,, vol. I, pp.1.34 – 1.40, 2003.
100. Gheorghe Cârţină, Gheorghe Grigoraş, Coculeana Popa, Nicolae Brumă, Evaluarea influenţei factorului timp asupra siguranţei în funcţionare a echipamentelor electrice folosind tehnicile fuzzy, Simpozionul National "Siguranţa în funcţionare a sistemului energetic", Oradea, Romania, pp. 204 – 208, 2003.
101. Cârţină Gheorghe, Grigoraş Gheorghe, Brumă Nicolae, Coculeana Popa, Folosirea tehnicilor fuzzy în cadrul modelelor de fiabilitate, Simpozionul National "Siguranţa în funcţionare a sistemului energetic", Simpozionul National "Siguranţa în funcţionare a sistemului energetic", Oradea, Romania, pp. 209 – 214, 2003.
102. Gheorghe Cârţină, Gheorghe Grigoraş, Reliability Indexes Evaluation in Uncertainty Conditions, the 2nd European Conference on Intelligent Systems & Technologies, ECIT'2002, Iasi, Romania, CD, 2002, ISBN: 973-8075-20-3.
103. Gheorghe Cârţină, Gheorghe Grigoraş, Unit Commitment Optimization by Interior-Point Method, the 2nd European Conference on Intelligent Systems & Technologies, ECIT'2002, Iasi, Romania, CD, 2002, ISBN: 973-8075-20-3.
104. Gheorghe Cârţină, Virgil Alexandrescu, Eugen Bîrlădeanu, Gheorghe Grigoraş, Mariana Moshe, Power Distribution System Reliability Planning Using Fuzzy Logic, 24th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO 2001, Gliwice-Ustron, Poland, vol. 2, pp. 353 - 356, 2001.
105. Virgil Alexandrescu, Gheorghe Cârţină, Eugen Bîrlădeanu, Gheorghe Grigoraş, On the Induction Motor Modeling in Static Analysis of the Electric Power Systems Voltage Stability, 24th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO 2001, Gliwice-Ustron, Poland, vol. 2, pp. 345 - 348, 2001, ISBN: 83-85940-23-5.
106. Eugen Bîrlădeanu, Gheorghe Cârţină, Virgil Alexandrescu, Gheorghe Grigoraş, About the Solutions for Operation Security Enhancement of The Power Systems Using the Fuzzy Description of Load, 24th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO 2001, Gliwice-Ustron, Poland, vol.2, pp. 357 - 360, 2001, ISBN: 83-85940-23-5.
107. Gheorghe Cârţină, Gheorghe Grigoraş, Considerarea factorului timp în determinarea indicatorilor de fiabilitate, a-III-a Conf. Intern. de Sisteme Electromecanice şi Energetice (SIELMEN 2001), Chişinău, Rep. Moldova, vol.II, pp. 157 - 160, 2001, ISBN: 9975-9638-7-0 .
108. Gheorghe Cârţină, Gheorghe Grigoraş, Using Fuzzy Reliability Indices in Planning of the Distribution Networks, 7th Intern. Symposium on Automatic Control and Computer Science, SACCS 2001, Iaşi, Romania, CD, 2001.
109. Gheorghe Cârţină, Gheorghe Grigoraş, Estimation of Diversity Factors by Fuzzy Techniques, 7th Intern. Symposium on Automatic Control and Computer Science, SACCS 2001, Iaşi, Romania, CD, 2001.
110. Virgil Alexandrescu, Gheorghe Cârtină, Eugen Bîrladeanu, Claudia Bonciu, Gheorghe Grigoraş, A new view-point regarding the static caracteristics study of the induction motors, 23nd International Conference on Fundamentals of Electrotechnics and Circuit Theory, SPETO 2000, Gliwice-Ustron, Poland, pp. 325-328, 2000.
111. Gheorghe Cârtină, Virgil Alexandrescu, Gheorghe Grigoraş, Mariana Moshe, Peak load estimation in distribution networks, 23nd International Conference on Fundamentals of Electrotechnics and Circuit Theory, SPETO 2000, Gliwice-Ustron, Poland, pp. 423-426, 2000.
112. Virgil Alexandrescu, Eugen Bîrlădeanu, Gheorghe Cârţină, Claudia Bonciu, Gheorghe Grigoraş, Alocarea costurilor serviciului de transport de energie electrică pe noduri de reţea, Conferinţa Naţională de Energetică, CNE-M-2000, Chişinău, Rep. Moldova, vol.I, pp. 153-157, 2000, ISBN: 9975-63-024-3.

113. Eugen Bîrlădeanu, Gheorghe Cârţină, Virgil Alexandrescu, Claudia Bonciu, Gheorghe Grigoraş, Considerarea costurilor marginale în tariful de transport al energiei electrice, Conferinţa Naţională de Energetică, CNE-M-2000, Chişinău, Rep. Moldova, pp. 149-152, 2000, ISBN: 9975-63-024-3.
114. Claudia Bonciu, Gheorghe Cârtina, Virgil Alexandrescu, Gheorghe Grigoraș, Mihai Caba, Abordari multicriteriale in modernizarea liniilor de MT, Simpozionul National de Retele Electrice, 25, Iasi, Romania, vol.II, pp. 305-309, 2000.
115. Virgil Alexandrescu, Gheorghe Cârtină, Eugen Bîrladeanu, Cludia Bonciu, Gheorghe Grigoraș, Ioan Ciutea, Coculeana Popa, Tehnici fuzzy in analiza retelelor electrice de distributie de medie tensiune, Simpozion National de Retele Electrice, 25 – 26 Mai 2000, Iasi, Romania, Vol.II, pp.284-289.
116. Gheorghe Cârţină, Virgil Alexandrescu, Eugen Bîrlădeanu, Gheorghe Grigoraş, Mariana Moise, Optimizarea multicriterială a deciziilor privind lucrările de modernizare in energetică, Sesiunea jubiliara a Facultăţii de Energetică, UTB, vol.I, pp.25-30, 2000.

G. Cereri de brevet.

1. Grigoraș G., Ivanov O., Neagu B.C., Gavrilaș M., Scarlatache Fl., Platformă software de management și control integrat al consumurilor de energie electrică și gaze naturale în scopul creșterii eficienței energetice la întreprinderile mici și mijlocii, A/00922-13.11.2017 (cerere brevet).
2. Grigoraș G., Ivanov O., Neagu B.C., Scarlatache Fl., Gavrilaș M., Platforma software de asistare a deciziilor în proiectarea ecologică optimă a instalațiilor electrice cu producere si stocare locală a energiei în scopul creșterii eficienței energetice la toate categoriile de consumatori, A/00923-21.11.2018 (cerere brevet).

H. Contracte de cercetare/granturi.

1. Granturi interne – PUBLICAŢII, Universitatea Tehnică „Gheorghe Asachi”din Iaşi“, contract nr. GI /P19 /2021 (Director)
2. Platforma software de asistare a deciziilor în proiectarea ecologică optimă a instalațiilor electrice cu producere si stocare locală a energiei, în contextul creșterii eficienței energetice, Grant PN-III-P2-2.1-CI-2018-1128, Contract 192CI/25.07.2018, Beneficiar: UEFISCDI, Valoare: 50.000 lei, 2018, Grigoraș G. (director)
3. Platforma de management si control integrat al fluxurilor purtatorilor de energie in scopul cresterii eficientei energetice la IMM-uri, Grant PN-III-P2-2.1-CI-2017-0190, Contract 105CI/25.07.2017, Beneficiar: UEFISCDI, Valoare: 50.000 lei, 2017, Grigoraș G. (director)
4. Platformă software inovativa pentru managementul energetic al consumatorilor finali in vederea cresterii eficientei energetice și a reducerii emisiilor de carbon, Grant PN-III-P2-2.1-CI-2018-1017, Contract nr. 174CI din 04/07/2018, Beneficiar: UEFISCDI, Valoare: valoare 49990 lei, Grigoraș G. (membru)
5. Management inteligent a centralelor electrice virtuale cu ajutorul platformelor software bazate pe inteligenta artificiala, in contextul competitivitatii energetice Europene, Grant PN-III-P2-2.1-CI-2018-1011, Contract nr. 173CI din 02/07/2018, Valoare: 49750 lei, Grigoraș G. (membru)
6. Prognoza de consum propriu tehnologic pentru reteaua de energie electrica din zona de activitate a Delgaz Grid. S.A. pentru anul 2018., Contract nr. 3105P / 14.02.2018; beneficiar: Delgaz Grid. S.A ,Valoare:9981 euro, Grigoraș G. (membru)
7. Sistem integrat pentru optimizarea consumului de energie a grupurilor de pompare din cadrul sistemelor de irigații, Grant PN-III-P2-2.1-CI-2017-0169, Contract 17CI/25.07.2017, Valoare: 50.000 lei, 2017, Grigoraș G. (membru)

8. Instrument software pentru gestiunea tranzactiilor pe piata de energie electrica, Grant PN-III-P2-2.1-CI-2017-0328, Contract 45CI/25.07.2017, Valoare: 50.000 lei, 2017, Grigoraș G. (membru)
9. Prognoza de consum propriu tehnologic pentru reteaua de energie electrica din zona de activitate a Delgaz Grid. S.A. pentru anul 2018, beneficiar: Delgaz Grid. S.A ,Valoare: 44888 lei, Grigoraș G. (membru)
10. Prognoza de consum propriu tehnologic pentru reaua de energie electrica din zona de activitate a Delgaz Grid. S.A., Contract nr. 448P / 15.03.2017; beneficiar: Delgaz Grid. S.A ,Valoare: 44888 lei, Grigoraș G. (membru)
11. Elaborare studiu - Servicii de consultanță de specialitate în proiectul EON Moldova Distribuție de reducere a pierderilor tehnice în rețelele de distribuție a energiei electrice pentru perioada 2016; Contract nr. 684P / 21.04.2016; beneficiar: EON Distribuție Romania S.A., Valoare: 60000 lei, Grigoraș G. (membru)
12. Servicii de consultanță de specialitate în proiectul EON Moldova Distribuție de reducere a pierderilor tehnice în rețelele de distribuție, Contract nr. 1398P / 08.10.2014, beneficiar: E.ON Moldova Distribuţie S.A., Valoare: 194000 lei, Grigoraș G. (membru)
13. Studiu privind verificarea schemelor de protecţie împotriva loviturilor directe de trăsnet în cazul staţiei 220/110/20 kV Munteni. Analiză comparată a metodei normate şi a metodei electrogeometrice, Contract nr. 8795P/17.05.2013. Beneficiar: CN Transelectrica SA, Sucursala de Transport Bacău, Valoare: 70680 lei, Grigoraș G. (membru)
14. Dezvoltarea platformei de cercetare pentru energie eficientă și durabilă – ENERED, Grant 911/ SMIS-CSNR 13987, Contract de finanţare: 430/21.12.2012, 2012 – 2106, Valoare: 51031879 lei, Grigoraș G. (membru)
15. Studiu de determinare a consumului propriu tehnologic în rețelele de joasă tensiune aferente jud. Bacău, aparținând E.ON Moldova Distribuție S.A, Contract de cercetare nr. 3564P / 01.11.2011, 2011, beneficiar: E.ON Moldova Distribuţie S.A, Valoare: 50000 lei, Grigoraș G. (membru)
16. Sistem inteligent de predictie si control al congestiilor in retelele de transport si distributie la inalta tensiune, Grant PNCDI II – Parteneriate, contract nr. 22126 / 01.10.2008, 2008, beneficiar: CNCSIS,Valoare: 319859 lei, Grigoraș G. (membru)
17. Tehnici de Inteligență artificială și modele noi pentru dezvoltarea studiilor de sarcină în scopul utilizării eficiente a energiei electrice în condițiile impuse de funcționarea pieței de energie electrică, Grant CNCSIS tip A, cod 241, tema 13 / 2006, contract nr. 63GR/19.05.2006 si tema 26 / 2007, contract nr. GR80/23.05.2007, 2006, beneficiar: CNCSIS, Valoare: 90430 lei, Grigoraș G. (membru)
18. Amplasarea surselor de putere în reţelele de distribuţie de 110 kV şi MT ale S.C. E.ON Moldova Distribuţie S.A. după criteriul pierderilor minime de energie şi al apropierii surselor de consumator şi studio privind compensarea şi reglarea puterii reactive în scopul optimizării nivelului de tensiune în reţelele de 110 kV ale S.C. E.ON Moldova Distribuţie S.A, Contract de cerectare nr. 7405 P / 26.10.2007, 2007, beneficiar: E.ON Moldova Distribuţie S.A, Valoare: 145440 lei, Grigoraș G. (membru)
19. Utilizarea tehnicilor de inteligenţă artificială în scopul creşterii performanţelor reţelelor de transport ale energiei electrice, Contract de cerectare nr. 1578P/2003, 2003, beneficiar: Transelectrica SA –ST Bacău, Valoare: 5700 lei, Grigoraș G. (membru)
20. Produs soft pentru planificarea şi analiza reţelelor electrice de distribuţie. Contract de cerectare nr. 967P/2002, 2002, beneficiar: SC. FDFEE Electrica Moldova S.A. Sucursala Iaşi, Valoare: 5000 lei, Grigoraș G. (membru)
21. Model multiobiectiv de optimizare a planificarii retelelor electrice de distributie prin tehnici fuzzy, Contract de cerectare nr. 562P/2000, 2000, beneficiar: SC. FDFEE Electrica Moldova S.A. Sucursala Iaşi, Valoare: 5000 lei, Grigoraș G. (membru)

22. Alocarea costurilor serviciilor de transport pe noduri de retea tinind seama de cerintele si restrictiile specifice retelelor de transport din tara noastra, Contract de cercetare nr. 889P/2000, 2000, beneficiar: STD Bacau, Valoare: 4000 lei, Grigoraș G. (membru)
23. Analiza contingentelor din retelele 400/220/110 kV din zona STD Bacau in vederea optimizarii programului de retrageri din exploatare. Contract de cerectare nr. 890P/2000, 2000, beneficiar: STD Bacau, Valoare: 5000 lei, Grigoraș G. (membru)
24. Calcule utilizind tehnici fuzzy in reteaua de 110 kV a SDEE Galati; vizind simularea sarcinii; calculul regimurilor; optimizarea functionarii retelei. Contract de cerectare nr. 853P/2000, 2000, beneficiar: SDEE Galați, Valoare: 4000 lei, Grigoraș G. (membru)

I. Premii, distincţii.

1. Premiu CNCSIS prin Programul de finanţare > Planul Naţional PN II (2007 - 2013) > RESURSE UMANE > Premierea rezultatelor cercetării, in 2009 pentru lucrarea Clustering Techniques in Load Profile Analyze for Distribution Stations, publicată în jurnalul internaţional indexat ISI Journal of Advances in Electrical and Computer Engineering. http://www.cncsis.ro/articole/1941/Etapa-I_2009.html
2. Premiu CNCSIS prin Programul de finanţare > Planul Naţional PN II (2007 - 2013) > RESURSE UMANE > Premierea rezultatelor cercetării, in 2012 pentru lucrarea Two-stage distributed generation optimal sizing with clustering-based node selection, publicată în jurnalul internaţional indexat ISI International Journal of Electrical Power and Energy Systems.
3. Premiu CNCSIS prin Programul de finanţare > Planul Naţional PN II (2007 - 2013) > RESURSE UMANE > Premierea rezultatelor cercetării, in 2013 pentru lucrarea Human errors monitoring in electrical transmission networks based on a partitioning algorithm publicată în jurnalul internaţional indexat ISI International Journal of Electrical Power and Energy Systems.
4. Premiu CNCSIS prin Programul de finanţare > Planul Naţional PN II (2007 - 2013) > RESURSE UMANE > Premierea rezultatelor cercetării, in 2015 pentru lucrarea An assessment of the renewable energy potential using a clusteringbased data mining method. Case study in Romania publicată în jurnalul internaţional indexat ISI ENERGY,
5. Premiu UEFISCDI prin programul Planul National de Cercetare, Dezvoltare si Inovare pentru perioada 2015-2020, PNCDI III, Programul Dezvoltarea sistemului national de cercetare-dezvoltare, Subprogramul 1.1. – Resurse Umane, Premierea rezultatelor cercetarii – articole, in anul 2019 pentru lucrarea Minimization of reliability indices and cost of power distribution systems in urban areas using an efficient hybrid meta-heuristic algorithm, publicata in jurnalul SOFT COMPUTING,
6. Premiu UEFISCDI prin programul Planul National de Cercetare, Dezvoltare si Inovare pentru perioada 2015-2020, PNCDI III, Programul Dezvoltarea sistemului national de cercetare-dezvoltare, Subprogramul 1.1. – Resurse Umane, Premierea rezultatelor cercetarii – articole, in anul 2020 pentru lucrarea A Novel Algorithm with Multiple Consumer Demand Response Priorities in Residential Unbalanced LV Electricity Distribution Networks publicata in jurnalul MATHEMATICS
7. Premiu UEFISCDI prin programul Planul National de Cercetare, Dezvoltare si Inovare pentru perioada 2015-2020, PNCDI III, Programul Dezvoltarea sistemului national de cercetare-dezvoltare, Subprogramul 1.1. – Resurse Umane, Premierea rezultatelor cercetarii – articole, in anul 2020 pentru lucrarea An Advanced Decision Support Platform in Energy Management to Increase Energy Efficiency for Small and Medium Enterprisespublicata in jurnalul APPLIED SCIENCES
8. Premiu UEFISCDI prin programul Planul National de Cercetare, Dezvoltare si Inovare pentru perioada 2015-2020, PNCDI III, Programul Dezvoltarea sistemului national de cercetare-dezvoltare, Subprogramul 1.1. – Resurse Umane, Premierea rezultatelor cercetarii – articole, in

anul 2020 pentru lucrarea A New Vision on the Prosumers Energy Surplus Trading Considering Smart Peer-to-Peer Contracts publicata in jurnalul MATHEMATICS

9. Premiu UEFISCDI prin programul Planul National de Cercetare, Dezvoltare si Inovare pentru perioada 2015-2020, PNCDI III, Programul Dezvoltarea sistemului national de cercetare-dezvoltare, Subprogramul 1.1. – Resurse Umane, Premierea rezultatelor cercetarii – articole, in anul 2020 pentru lucrarea Optimal Phase Load Balancing in Low Voltage Distribution Networks Using a Smart Meter Data Based Algorithm, publicata in jurnalul MATHEMATICS
10. Premiu UEFISCDI prin programul Planul National de Cercetare, Dezvoltare si Inovare pentru perioada 2015-2020, PNCDI III, Programul Dezvoltarea sistemului national de cercetare-dezvoltare, Subprogramul 1.1. – Resurse Umane, Premierea rezultatelor cercetarii – articole, in anul 2021 pentru lucrarea New Market Model with Social and Commercial Tiers for Improved Prosumer Trading in Microgrids, publicata in jurnalul SUSTAINABILITY https://uefiscdi.gov.ro/resource-868117-precisi2021_lista-2_rezultate-eligibilitate-art-
11. Premiu UEFISCDI prin programul Planul National de Cercetare, Dezvoltare si Inovare pentru perioada 2015-2020, PNCDI III, Programul Dezvoltarea sistemului national de cercetare-dezvoltare, Subprogramul 1.1. – Resurse Umane, Premierea rezultatelor cercetarii – articole, in anul 2021 pentru lucrarea Optimization and estimation of reliability indices and cost of Power Distribution System of an urban area by a noble fuzzy hybrid algorithm, publicata in jurnalul APPLIED SOFT COMPUTING,
12. Premiu UEFISCDI prin programul Planul National de Cercetare, Dezvoltare si Inovare pentru perioada 2015-2020, PNCDI III, Programul Dezvoltarea sistemului national de cercetare-dezvoltare, Subprogramul 1.1. – Resurse Umane, Premierea rezultatelor cercetarii – articole, in anul 2021 pentru lucrarea Bi-Level Phase Load Balancing Methodology with Clustering-Based Consumers' Selection Criterion for Switching Device Placement in Low Voltage Distribution Networks, publicata in jurnalul MATHEMATICS
13. Premiul „TOP Reviewer 2019" decernat de Publons (Web of Science Group) pentru clasarea in top 1% mondial al numarului de recenzii facute in anul 2019 in domeniul „Cross-Field" https://publons.com/awards/peer-review/2019/by-field/
14. Premiu pentru cea mai buna lucrare a sectiunii „Advanced Modelling, Control, and Optimization Methods in Power Hybrid Systems", 12th International Conference on Electronics, Computers and Artificial Intelligence, ECAI 2020, June 25 – June 27, 2020, București, Romania: Livia Noroc și Gheorghe Grigoras, Performance Assessment of the Hierarchical Clustering Methods in Classification of Electric Distribution Networks Considering Unbalance Degree
15. Premiul revistei "Electronics" (indexată WoS) pentru lucrarea prezentată în cadrul Workshop-lui MPDI, 13th International Conference on Electronics, Computers and Artificial Intelligence, ECAI 2021, 1 – 3 Julie, 2021, Pitesti, Romania: Vasilica Dandea, Gheorghe Grigoras, Bogdan-Constantin Neagu și Florina Scarlatache A Clustering-based Knowledge Extraction Methodology for Prosumers' Classification and Injected Power Profiles Grouping.

Data,
07.04.205

Prof. dr. ing. Gheorghe Grigoras

Lista de lucrări în domeniul de studii universitare de masterat Inginerie Energetică

Numele și prenumele:
Costică NIȚUCĂ

A. Teza de doctorat.

1. *"Probleme de captare a curentului electric de la linia de contact pentru vehicule acţionate electric"*, anul susţinerii – 2003, Universitatea Tehnică "Gheorghe Asachi" din Iaşi, Domeniul – Inginerie electrică, conducător doctorat, prof. dr. ing. dr. H.C. Lorin Cantemir.

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate

1. T. Stanciu, **C. Niţucă**, *Didactics of technical subjects,* Editura Tehnica-Info, Chişinău, R. Moldova, 2006, ISBN 9978-9975-910-13-2. (Format B5, 312 pagini, 40 r/pg., în limba engleză, 1,2).

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS.

1. **C. Niţucă,** I. Nucă, A. T. Pleșca, G. Chiriac, V. Cazac, M. Burduniuc, *Improving the cross-border public transportation using electric buses supplied with renewable energy,* Editura Tritonic Books, București, 2022, ISBN 978-606-749-584-3. (Format A5, 220 pagini, 32r/pg., în limba engleză).
2. **C. Niţucă**, *Circuite integrate analogice. Note de curs,* Editura Tehnopress, Iaşi, 2019, ISBN 978-606-687-397-0. (Format B5, 144 pagini, 30r/pg.)
3. **C. Niţucă**, *Tehnica muncii intelectuale,* Editura Tehnopress, Iaşi, 2016, ISBN 978-606-687-292-8. (Format B5,190 pagini, 37r/pg.)
4. **C. Niţucă**, *Alimentarea şi captarea energiei electrice în tracţiunea feroviară,* Editura Performantica, Iaşi, 2009, ISBN 978-973-730-628-9. (Format B5, 260 pagini, 40r/pg.)
5. L. Cantemir, **C. Niţucă**, V. Dulgheru, Maria I. Carcea, Mariana N. Iftimie, *Iniţiere în creativitate tehnică, Vol. I,* Editura Tehnica Info, Chişinău, 2008, ISBN 978-9975-63-066-5. (Format B5, 278 pagini, 37r/pg.)
6. **C. Niţucă**, T. Stanciu, *Didactica disciplinelor tehnice,* Editura Performantica, Iaşi, 2006, ISBN (10): 973-730-311-3, ISBN (13): 978-973-730-311-0. (Format B5, 306 pagini, 40r/pg.)

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

1. C. Niţucă, Bazele creației tehnice. Indrumar, Editura Tehnopress, Iaşi, 2019, ISBN 978-606-687-398-7. Format B5, 146 pagini, 31r/pg)
2. Elena Tiron (coord), Educaţia centrată pe elev/student. Îndrumar, C. Niţucă (Coordonator capitol - formator: Specialitate şi didactica specialităţii centrată pe elev/student, pp. 47-117), Editura Performantica, Iaşi, 2012, ISBN 978-973-730-938-9. (Format B5, 70 pagini, 30r/pg.)
3. C. Niţucă, Maria I. Carcea, Caiet de practică pedagogică desfăşurată, Editura Performantica, Iaşi, 2006, ISBN 973-730-185-4. (Format A4, 104 pagini, 41r/pg.).

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

1. **C. Niţucă,** *Bazele creaţiei tehnice. Suport de curs*, Format electronic/prezentări .ppt – 179 slide-uri; http://www.euedia.tuiasi.ro/wp-content/uploads/Documente_PDF_Staff/Costica_Nituca/BCT_Curs_Nituca.pdf

2. **C. Niţucă,** *Circuite integrate analogice. Suport de curs*, Format electronic/prezentări .ppt– 124 slide-uri; http://www.euedia.tuiasi.ro/wp-content/uploads/Documente_PDF_Staff/Costica_Nituca/CIA_Curs_Nituca.pdf
3. **C. Niţucă,** *Etică şi integritate. Suport de curs*, Format electronic/prezentări .ppt, – 125 slide-uri; http://www.euedia.tuiasi.ro/wp-content/uploads/Documente_PDF_Staff/Costica_Nituca/EI_Curs_Nituca.pdf

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

1. Niţucă, C., Chiriac, G., Gabor, G., Nucă, I., Cazac, V., Burduniuc, M. (2021). Geometry design and analysis of an electric bus for the interior thermal modelling. Journal of Energy Technology, 14(2), 47-55, (Indexat ProQuest).
2. A. Pleşca, C. Niţucă, G. Chiriac, Z. Liu, Y. Geng, PSpice simulations for single-phase rectifiers for testing DC fuse, Journal Energy Technology, JET Vol. 12, Issue 2, 2019. (Indexat ProQuest).
3. C. Niţucă, G. Chiriac, Pantograph driven with a linear induction motor with adaptive fuzzy control, Journal Energy Technology-JET, Volume 12, 2019, pp. 41-54, Issue 1, April 2019. (Indexat ProQuest).
4. C. Niţucă, G. Chiriac, D. Cuciureanu, Guoqiang Zhang, Dong Han, A. Pleşca, Numerical Analysis of a Real Photovoltaic Module with Various Parameters, Modelling and Simulation in Engineering (HINDAWI), Article Number: 7329014, https://doi.org/10.1155/2018/7329014, Published: 2018. Accession Number: WOS: 000429430400001, Document Type: Article. (Indexat WOS, Scopus).
5. C. Niţucă, D. Cuciureanu, G. Chiriac, Switched Reluctance Generator for Low Speed Wind Turbines with Counter-Rotary Drive, Journal: Indian Journal of Science and Technology, Volume 9, Issue 40, 2016, Article number 86733, Source Type: Journal, ISSN: 09746846, DOI: 10.17485/ijst/2016/v9i40/86733, Document Type: Article, Published 2016. (Indexat Scopus).
6. D. Cuciureanu, C. Niţucă, G. Chiriac, Force Estimation of an Asymmetrical Pantograph for Different Damper Positions, Journal: Indian Journal of Science and Technology, Volume 9, Issue 40, 2016, Article number 88878, Source Type: Journal, ISSN: 09746846, DOI: 10.17485/ijst/2016/v9i40/88878, Document Type: Article, Published 2016. (Indexat Scopus).
7. G. Chiriac, D. Cuciureanu, C. Niţucă, Critical Speed Impact over the Pantograph-Catenary System's Behaviour, Journal: Indian Journal of Science and Technology, Volume 9, Issue 40, 2016, Article number 86736, Source Type: Journal, ISSN: 09746846, DOI: 10.17485/ijst/2016/v9i40/86736, Document Type: Article, Published 2016. (Indexat Scopus).
8. C. Niţucă, Thermal analisys for a double sided linear induction motor, European Scientific Journal, March 2013, Edition vol.9, No.9, ISSN: 1857 – 7881 (Print) e - ISSN 1857- 7431, pp. 38-50, Published 2013. Document Type: Article. (Indexat EBSCO, PROQUEST, Copernicus, Urlich's).
9. G. Chiriac, C. Nituca, A. Plesca, Possibilities to supply the railway electric vehicles through the electric arc, Buletinul Institutului Politehnic din Iaşi, Tomul LIX (LXIII), Fasc. 4, Secţia Electrothenică. Energetică. Electronică. 2013. (Index Copernicus, Ulrich's).

G. Lucrări ştiinţifice publicate în reviste din străinătate.

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

1.C. Niţucă, T. Stanciu, Issuses regarding the quality of pedagogical practical training of students in field of manufacturing engineering, Academic Journal of Manufacturing Engineering, Vol. 2, No. 4/2004, pp. 48-52, Editura Politehnica, Timişoara - 2004, ISSN 1583-7904.

I. Lucrări ştiinţifice publicate în volumele conferinţelor.

1. A. Dragomir, M. Adam, G. Chiriac, D. Murgoci, A. Vîlcu, C. Niţucă, Infrared Monitoring of Low Voltage Switch Separator Contact Resistance, 14th INTERNATIONAL CONFERENCE ON ELECTROMECHANICAL AND ENERGY SYSTEMS, 12 – 13 October 2023, Chișinău, R. Moldova, Indexat WOS
2. G. Chiriac, D.D. Lucache, C. Niţucă and G. Gabor, Aspects Regarding the Heating of Electric Buses, 2021 International Conference on Electromechanical and Energy Systems (SIELMEN), 2021, pp. 481-486, doi: 10.1109/SIELMEN53755.2021.9600435, (Indexat IEEE Xplore, Scopus).
3. I. Nuca, Cazac V. Burduniuc M., Niţucă C., Chiriac G., Gabor G., A Hybrid Charging System Design for Electric Vehicles with Autonomous Power Source, 2021 International Conference on Electromechanical and Energy Systems (SIELMEN), 2021, pp. 487-490, doi: 10.1109/SIELMEN53755.2021.9600328. (Indexat IEEE Xplore, Scopus).
4. G. Gabor, A.T. Plesca, F.A. Rusu, C. Niţucă, Analysis of sliding electromagnetic coupling parameters in a PLC automation system, International Conference on Electromechanical and Energy Systems (SIELMEN), Location: Craiova, Romania, Date of Conference: 9-11 Oct. 2019, DOI: 10.1109/SIELMEN.2019.8905912, Electronic ISBN: 978-1-7281-4011-7, USB ISBN: 978-1-7281-4010-0, Print on Demand (PoD) ISBN: 978-1-7281-4012-4, (Indexat IEEE Xplore, Scopus).
5. G. Chiriac, C. Niţucă, D. Sticea, Electric Locomotive Laboratory Test Bench for Research and Educational Purposes, 8th International Conference on Modern Power Systems (MPS), 21-23 may, 2019, paper 172, Cluj Napoca, Romania, 2019. Publisher: IEEE (Institute of Electrical and Electronics Engineers). (Indexat IEEE Xplore).
6. C. Niţucă, G. Chiriac, C. I. Gaţu, D. Cuciureanu, I. Murgescu, Laboratory Off-Grid Photovoltaic System with Two Axes Orientation, 10th International Conference and Exposition on Electrical and Power Engineering (EPE), 2018, Location: Iasi, ROMANIA, Date: OCT 18-19, 2018, Book Series: International Conference and Exposition on Electrical and Power Engineering, Pages: 846-849, Published: 2018. Accession Number: WOS: 000458752200165, Document Type: Proceedings Paper. (Indexat WOS, Scopus, IEEE Xplore).
7. C. Niţucă, G. Chiriac, C. I. Gaţu, D. Cuciureanu, I. Murgescu, Design and Experimental Studies on Laboratory Photovoltaic Concept for Mechatronics System of Solar Electric Application, 10th International Conference and Exposition on Electrical and Power Engineering (EPE), 2018, Location: Iasi, ROMANIA, Date: OCT 18-19, 2018, Book Series: International Conference and Exposition on Electrical and Power Engineering, Pages: 932-936, Published: 2018. Accession Number: WOS: 000458752200182, Document Type: Proceedings Paper. (Indexat WOS, Scopus, IEEE Xplore).
8. C. Pintilie, A. Plești, G. Gabor, C. Niţucă, M. Adam, A. Dragomir, Thermal Analysis of Tankless Heating System Using PLC, 10th International Conference and Exposition on Electrical and Power Engineering (EPE), 2018, Location: Iasi, ROMANIA, Date: OCT 18-19, 2018, Book Series: International Conference and

Exposition on Electrical and Power Engineering, Pages: 454-457, Published: 2018. Accession Number: WOS: 000458752200086, Document Type: Proceedings Paper. (Indexat WOS, Scopus, IEEE Xplore).

9. C. Dumitrescu, A. Plesca, M. Adam, C. Niţucă, A. Dragomir, Methods for Reducing Energy Consumption, Optimization in Operational Data Centers, 10th International Conference and Exposition on Electrical and Power Engineering (EPE), 2018, Location: Iasi, ROMANIA, Date: OCT 18-19, 2018, Book Series: International Conference and Exposition on Electrical and Power Engineering, Pages: 483-486, Published: 2018. Accession Number: WOS: 000458752200092, Document Type: Proceedings Paper. (Indexat WOS, Scopus, IEEE Xplore).
10. C. Dumitrescu, A. Plesca, Laura Dumitrescu, M. Adam, C. Niţucă, A. Dragomir, Assessment of Data Center Energy Efficiency. Methods and Metrics, 10th International Conference and Exposition on Electrical and Power Engineering (EPE), 2018, Location: Iasi, ROMANIA, Date: OCT 18-19, 2018, Book Series: International Conference and Exposition on Electrical and Power Engineering, Pages: 487-492, Published: 2018. Accession Number: WOS: 000458752200093, Document Type: Proceedings Paper. (Indexat WOS, Scopus, IEEE Xplore).
11. G. Gabor, C. Pintilie, C. Dumitrescu, C. Niţucă, A. T. Plesca, Application of Industrial PROFIBUS-DP Protocol, 10th International Conference and Exposition on Electrical and Power Engineering (EPE), 2018, Location: Iasi, ROMANIA, Date: OCT 18-19, 2018, Book Series: International Conference and Exposition on Electrical and Power Engineering, Pages: 614-617, Published: 2018. Accession Number: WOS: 000458752200119, Document Type: Proceedings Paper. (Indexat WOS, Scopus, IEEE Xplore).
12. Șt. Patrichi, C. Niţucă, G. Chiriac, A. Pleșca, Z. Liu, Y. Geng, Simulating Thermal Phenomena Occurring in Fast Electric Fuses Used for Power Electronic Protection, 10th International Conference and Exposition on Electrical and Power Engineering (EPE), 2018, Location: Iasi, ROMANIA, Date: OCT 18-19, 2018, Book Series: International Conference and Exposition on Electrical and Power Engineering, Pages: 910-915, Published: 2018. Accession Number: WOS: 000458752200178, Document Type: Proceedings Paper. (Indexat WOS, Scopus, IEEE Xplore).
13. Șt. Patrichi, A. Pleșca, C. Niţucă, G. Chiriac, J. Wang, X. Huang, Thermal Modeling and Simulations for Fast Electric Fuses, 10th International Conference and Exposition on Electrical and Power Engineering (EPE), 2018, Location: Iasi, ROMANIA, Date: OCT 18-19, 2018, Book Series: International Conference and Exposition on Electrical and Power Engineering, Pages: 920-923, Published: 2018. Accession Number: WOS: 000458752200180, Document Type: Proceedings Paper. (Indexat WOS, Scopus, IEEE Xplore).
14. M. Cardasim, C. Niţucă, A. Pleşca, G. Chiriac, C. Dumitrescu, Reliability Parameters Estimation for a Railway Catenary Power System, 10th International Conference and Exposition on Electrical and Power Engineering (EPE), Location: Iasi, ROMANIA, Date: OCT 18-19, 2018, Book Series: International Conference and Exposition on Electrical and Power Engineering, Pages: 1051-1056, Published: 2018. Accession Number: WOS: 000458752200206, Document Type: Proceedings Paper. (Indexat WOS, Scopus, IEEE Xplore).
15. T. Stanciu, C. Niţucă, G. Chiriac, A. Pleşca, Coherence and Continuity in the Continuing Education of Electrical and Energetic Field Teachers from The Pre-University Environment, 10th International Conference and Exposition on Electrical

and Power Engineering (EPE), 2018, Location: Iasi, ROMANIA, Date: OCT 18-19, 2018, Book Series: International Conference and Exposition on Electrical and Power Engineering, Pages: 1057-1062, Published: 2018. Accession Number: WOS: 000458752200207, Document Type: Proceedings Paper. (Indexat WOS, Scopus, IEEE Xplore).

16. G. Chiriac, C. Niţucă, D. Cuciureanu, I. Murgescu, Analysis of Hot-Spots Effects on the Performances of a Photovoltaic System Used in Romania, Conference: 2017 International Conference on Electromechanical and Power Systems (SIELMEN), Location: Iasi, ROMANIA, Date: OCT 11-13, 2017, Pages: 239-244, Published: 2017. Accession Number: WOS: 000426906000047, Document Type: Proceedings Paper. (Indexat WOS, Scopus, IEEE Xplore).
17. Aparaschivei, G. Chiriac, C. Niţucă, T. A. Plesca, Analysis of a Cable Lug Failure for a Recycle Compressor Trip, Conference: 2017 International Conference on Electromechanical and Power Systems (SIELMEN), Location: Iasi, ROMANIA, Date: OCT 11-13, 2017, Pages: 403-406, Published: 2017. Accession Number: WOS: 000426906000076, Document Type: Proceedings Paper. (Indexat WOS, Scopus, IEEE Xplore).
18. G. Chiriac, C. Niţucă, M. Cardasim, Failures Analysis in the 25 kV/50 Hz Railway Substations, Conference: 2017 International Conference on Electromechanical and Power Systems (SIELMEN), Location: Iasi, ROMANIA, Date: OCT 11-13, 2017. Pages: 407-410, Published: 2017. Accession Number: WOS:000426906000077, Document Type: Proceedings Paper. (Indexat WOS, Scopus, IEEE Xplore).
19. D. Cuciureanu, C. Niţucă, G. Chiriac, D. Sticea, Analysis of the Photovoltaic Panels Currently in Use in Different Locations, Conference: 2017, 9th International Conference and Exposition on Electrical and Power Engineering (EPE), Location: Iasi, ROMANIA, Date: OCT 20-22, 2016, Pages: 888-893, Published: 2016. Accession Number: WOS: 000390706300174, Document Type: Proceedings Paper. (Indexat WOS, Scopus, IEEE Xplore).
20. C. Niţucă, Magdalena Iorga, The Importance of Training Trainers Using Education Soft and Technologies, Conference: 16th International Conference on Modern Technologies, Quality and Innovation, Location: Sinaia, ROMANIA, Date: MAY 24-26, 2012, Book Series: International Conference ModTech Proceedings, Pages: 681-684, Published: 2012. Accession Number: WOS: 000392261800171, Document Type: Proceedings Paper. (Indexat WOS).
21. C. Niţucă, T. Stanciu, Core competencies in a changing educational environment essential in the act of teaching technical and technological subjects, Conference: 5th International Conference on Manufacturing Science and Education on Creative Thinking in Engineering and Academic Education, Location: Sibiu, ROMANIA, Date: JUN 02-05, 2011, VOL II, Book Series: Proceedings of the International Conference on Manufacturing Science and Education, Pages: 47-50, Published: 2011. Accession Number: WOS: 000393733900012, Document Type: Proceedings Paper. (Indexat WOS).
22. C. Niţucă, T. Stanciu, Study case for teaching in a e-learning open source environment, Conference: 5th International Conference on Manufacturing Science and Education on Creative Thinking in Engineering and Academic Education, Location: Sibiu, ROMANIA, Date: JUN 02-05, 2011, VOL II, Book Series: Proceedings of the International Conference on Manufacturing Science and Education, Pages:

101-104, Published: 2011. Accession Number: WOS: 000393733900025, Document Type: Proceedings Paper. (Indexat WOS).
23. L. Cantemir, C. Niţucă, G. Chiriac, A. Rachid, Unconventional Current Collecting of the Electric Energy from a Contact Line for the Electric Traction Vehicles, Conference: PACIFIC 2011 - International Conference on: Pantograph-Catenary Interaction Framework for Intelligent Control, Conference Proceedings, December 8th 2011, Amiens, France, pp. 48-53, Conference Paper, Published 2011, Code 92659. (Indexat Scopus).
24. V52 - L. Cantemir, C. Niţucă, Unde, când şi cum electricitatea a devenit electrotehnică, Revista Tehnocopia, 2015, nr. 1(12), Chişinău, R. Moldova, 2015, pp. 51-67.
25. V51 - C. Niţucă, A.T. Plesca, G. Chiriac, Unele momente din evolutia domeniului electrotehnica in procesul educational, Revista Tehnocopia, Nr.2(9), 2013, Chisinau, ISSN 1857-4904, pp. 55-62.
26. V50 - C. Niţucă, L. Cantemir, G. Chiriac, Aspects on the influence of the environment over the contact line, Railway Pro Science & Technology, Technical scientific colloquium, Railway infrastructure development policies, projects and technologies, 2012, February 22-23, Sibiu, pp. 23-26. ISSN 2284-7057.
27. V49 - G. Chiriac, L. Cantemir, C. Niţucă, I. Stoichescu, D. Demian, I. Gavrila, Some possibilities to reduce the electric energy consumption and the operating cost in the railway transportation, Railway infrastructure development for an efficient & green transport, Technical-scientific Colloquium for SISCE, I Edition, February 23 – 24, 2011, Poiana Braşov, Romania, pp. 30-35.
28. V48 - C. Niţucă, L. Cantemir, G. Chiriac, D. Demian, I. Gavrilă, I. Truica, Possibilities to reduce the electromagnetic pollution by eliminate the detachments of the pantograph from the contact line, Railway infrastructure development for an efficient & green transport, Technical-scientific Colloquium for SISCE, I Edition, February 23 – 24, 2011, Poiana Braşov, Romania, pp. 32-29.
29. V47 - L. Cantemir , C. Niţucă , G. Chiriac , A.P. Alexandrescu, D. Cuciureanu, Using the wind and river low energy with a new type of electric generator with unconventional drive method, European Exhibition of Creativity and Inovation - EURO INVENT 2010, Iaşi, pp. 189-196, ISBN 978-973-702-769-6.
30. V46 - L. Cantemir, Tamilia Elena Marin, C. Niţucă, A.P. Alexandrescu, Pledoarie pentru arheologia creativităţii tehnice, First European Exhibition of Creativity and Inovation - EURO INVENT 2009, Iaşi, pp. 159-166, ISBN 978-973-702-641-5.
31. V45 - C. Niţucă, Maria Ileana Carcea, I. G. Sandu, Proiectarea disciplinei Practica Pedagogică în cadrul programului de studii psihopedagogice - Modul I, Simpozionul Educaţia Azi, Anul I, Nr. 1, Bucureşti, 30 mai 2008, pp.478-486, ISSN 1844-8488.
32. V44 - I. Sandu, F. M. Fluturel, I. G. Sandu, C. Niţucă, A. V. Sandu, Aspecte etice privind valorizarea proprietăţii intelectuale, A XII-A Conferinţă Internaţională de Inventică „Cercetări şi Tehnologii Inovative Performante", INVENTICA 2008, 21-24 Mai, Iaşi, România, pp.453-463, ISBN 978-973-730-491-9.
33. V43 - L. Cantemir, D. Cuciureanu, C. Niţucă, Invenţia invenţiilor – de la buşteanul rostogolitor la roata cu spiţe, A XII-A Conferinţă Internaţională de Inventică „Cercetări şi Tehnologii Inovative Performante" INVENTICA 2008, 21-24 Mai, Iaşi, România, pp. 505-514, ISBN 978-973-730-491-9.

34. V42 - L. Cantemir, D. Cuciureanu, C. Niţucă, A.P. Alexandrescu, Alina Gheorghiu, Dilema invenţiei epocale a umanităţii. Ce a fost la început, osia fixă cu două roţi sau roata singulară?, Simpozionul Cucuteni 6000, Chişinău, Republica Moldova, 2008.
35. V41 - Maria Ileana Carcea, C. Niţucă, Trening of practical teaching capacites, 6the International Conference on Electromechanical and Power Systems, SIELMEN 2007, October 4-6, Chişinău, R. Moldova, pp. 265-268.
36. V40 - C. Niţucă, A. Rachid, L. Cantemir, G. Chiriac, Alina Gheorghiu, Constructive and Experimental Aspects Regarding the Electric Power Collecting for Very High Speed Traction, Analele Universităţii din Craiova, Seria Inginerie electrică, Anul 31, nr.31, 2007, Vol. II, 6the International Conference on Electromechanical and Power Systems, SIELMEN 2007, October 4-6, Cişinău, R. Moldova, pp. 290-293, ISSN 1842-4805.
37. V39 - L. Cantemir, C. Niţucă, Maria Carcea, V. Dulgheru, Metoda asocierii organice a structurilor elementare de sisteme funcţionale metoda logic determinată de creativitate tehnică şi înţelegere a procesului de creaţie intuitivă a unor invenţii deja elaborate, Lucrările Simpozionului Naţional ”Bazele Performanţei şi Inventicii” Institutul Naţional de Inventică, Academia de Ştiinţe Tehncie, Iaşi, 8-10 septembrie 2006, pp. 50-56, ISBN 973-730-244-3
38. V38 - T. Stanciu, C. Niţucă, The ranking of technical higher education institutions, premises for quality and succes, 5th International Conference on Electromechanical and Power Systems, SIELMEN 2005, 6-8 October, Chişinău, Republica Moldova, pp. 97-98, ISBN Vol I, 973-716-209-9.
39. V37 - Nicoleta M. Iftimie, Maria I. Carcea. C. Niţucă, Strategies for developing the study skills of enginnering students, 5th International Conference on Electromechanical and Power Systems, SIELMEN 2005, 6-8 October, Chişinău, Republica Moldova, pp. 107-110, ISBN Vol I, 973-716-209-9.
40. V36 - C. Niţucă, Maria I. Carcea, T. Stanciu, Basic criteria for evaluating teaching practice by mentors, 5th International Conference on Electromechanical and Power Systems, SIELMEN 2005, 6-8 October, Chişinău, R. Moldova, pp. 126-127, ISBN 973-716-209-9.
41. V35 - C. Niţucă, Maria I. Carcea, T. Stanciu, Issues in applying teching objectives during technical and technological lessons, 5th International Conference on Electromechanical and Power Systems, SIELMEN 2005, 6-8 October, Chişinău, Republica Moldova, pp. 128-131, ISBN 973-716-209-9.
42. V34 - C. Niţucă, L. Cantemir, G. Chiriac, Alina Gheorghiu, Aspects regarding the influence of precipitations settlement on the contact line, 5th International Conference on Electromechanical and Power Systems, SIELMEN 2005, 6-8 October, Chişinău, Republica Moldova, pp. 957-959, ISBN Vol II, 973-716-230-7.
43. V33 - C. Niţucă, T. Stanciu, Alina Gheorghiu, Issuses regarding the quality of pedagogical practical training of students for the electrical and mechanical profile, Academia Tehnică Militară, Al VIII_lea Simpozion Ştiinţific cu Participare Internaţională „Management şi Educaţie, Provocări ale Secolului XXI” 15-16 Octombrie 2004, Bucureşti, Secţiunea 2 – Discipline Umaniste, Comunicarea 12, ISBN 973-640-059-X.
44. V32 - T. Stanciu, C. Niţucă, C. Stanciu, Educational management and leadership in schools, Academia Tehnică Militară, Al VIII_lea Simpozion Ştiinţific cu Participare Internaţională „Management şi Educaţie, Provocări ale Secolului XXI” 15-16

Octombrie 2004, Bucureşti, Secţiunea 2 – Discipline Umaniste, Comunicarea 16, ISBN 973-640-059-X.
45. V31 - T. Stanciu, R. Budei, C. Niţucă, Technical Innovation and Innovative Education in Practice, Inventica 2004, pp.151-158.
46. V30 - G. Chiriac, L. Cantemir, M. Ghercă, C. Niţucă, Modeling the movement of a vehicle drived by d. c. series motors in viev energy consumption analysis. The 4th International Conference on Electromechanical and Power Systems, SIELMEN 2003, Vol III, Chişinău, 26-27 september 2003, pp. 35-38, ISBN 9975-9704-9-4.
47. V29 - G. Chiriac, L. Cantemir, C. Niţucă, Mouvement simulation and energy aspects for vehicle drived with d. c. series motors; The 4th International Conference on Electromechanical and Power Systems, SIELMEN 2003, Vol III, Chişinău, 26-27 september 2003, pp. 39-42, ISBN 9975-9704-9-4.
48. V28 - G. Chiriac, L. Cantemir, C. Niţucă, Energy consumption for the air drag for the uncover freight wagons; The 4th International Conference on Electromechanical and Power Systems, SIELMEN 2003, Vol III, Chişinău, 26-27 september 2003, pp. 43-46, ISBN 9975-9704-9-4.
49. V27 - C. Niţucă, L. Cantemir, Alina Gheorhgiu, G. Chiriac, Modeling and simulation of the interaction pantograph-catenary; The 4th International Conference on Electromechanical and Power Systems, SIELMEN 2003, Vol III, Chişinău, 26-27 september 2003, pp. 47-50, ISBN 9975-9704-9-4.
50. V26 - C. Niţucă, L. Cantemir, Alina Gheorhgiu, G. Chiriac, Simulation of the pantograph-catenary interaction; The 4th International Conference on Electromechanical and Power Systems, SIELMEN 2003, Vol III, Chişinău, 26-27 september 2003, pp. 51-54, ISBN 9975-9704-9-4.
51. V25 - C. Niţucă, L. Cantemir, Alina Gheorhgiu, G. Chiriac, Pantograph drived with a linear induction motor controlled with adaptive fuzzy control; The 4th International Conference on Electromechanical and Power Systems, SIELMEN 2003, Vol III, Chişinău, 26-27 sept. 2003, pp. 55-58, ISBN 9975-9704-9-4.
52. V24 - L. Cantemir, E. C. Teodoru, F. Bozianu, A. Aparaschivei, C. Niţucă, Posibilităţi de calcul a reactanţelor de magnetizare la motoarele asincrone cu dublu inductor şi întrefier plan, A Treia Conferinţă Intrenaţională de Sisteme Electromecanice şi Energetice, SIELMEN 2001, Chişinău, 4-6 octombrie, Volumul I, pp. 79-82, ISBN 9975-9638-6-2.
53. V23 - G. Chiriac, L. Cantemir, D. Ionescu, C. Niţucă, The modeling of the acceleration for a vehicle with d.c. series motors, Buletinul Institutului Politehnic Iaşi, Tom. XLVI, Fasc. 5, Electrotehnică, Energetică, Electronică, A X-a Conferinţă Naţională de Acţionări Electrice – CNAE 2000, Iaşi, 12-13 octombrie, 2000, pp. 230-235.
54. V22 - C. Niţucă, T. Stanciu, Aspects of efficient use of active learning methods in the training activity specific to technical and technological disciplines, Buletinul institutului Politehnic din Iaşi, Tomul LVII(LXI), Fasc.1-2, 2011, Secţia Socio-Umane, pp.61-67.
55. V21 - T. Stanciu, C. Niţucă, Research Methodology for Training Needs Analysis in Early Education in Romania, Second National Symposium Education-Profession Education-Creation in the Knowlendge Society, Publicat în Buletinul Institutului Politehnic din Iaşi, Tomul LV(LIX), Fasc. 3-4, Ştiinţe Socio-Umane, Iaşi, 6-7 novembrer, 2009, România, pp. 187-194, ISSN 1011-2855.
56. V20 - L. Cantemir, D. Cuciureanu, C. Niţucă, Technology of Technical Creativity, 12th International Conference, Tehnologii Moderne, Calitate, Restructurare, TMCR –

2008, 29-31 May, 2008, Publicat în Buletinul Institutului Politehnic Iaşi, Tomul LIV(LVIII), Fasc. 1, 2008, Secţia Construcţii de Maşini, pp. 517-526, ISSN 1011-2855.
57. V19 - C. Niţucă, Maria Ileana Carcea, G. I. Sandu, T. Stanciu, The Design Of A New Contents For Pedagogical Internship, Buletinul Institutului Politehnic Iaşi, Tomul LIV (LVIII), Fasc. 4, Ştiinţe Socio-Umane, 2008, pp. 77-82, ISSN 1224-5860.
58. V18 - C. Niţucă, T. Stanciu, G. I. Sandu, The Training Methodology in Vocational and Further Technical Education Through Technologies and Educational Softwares, Buletinul Institutului Politehnic Iaşi, Tomul LIV (LVIII), Fasc. 4, Ştiinţe Socio-Umane, 2008, pp. 83-88, ISSN 1224-5860.
59. V17 - L. Cantemir, A. Rachid, C. Niţucă, Etudde concernant sur le amplacement de ressort entre capteur et la manivelle, 4th International Conference on Electrical and Power Engineering – EPE 2006, Iaşi, România, 12-14 octombrie 2006, Buletinul Institutului Politehnic Iaşi, Tomul LII (LVI), Fasc. 5 A, pp. 531-536, ISSS 1223-8139.
60. V16 - C. Niţucă, L. Cantemir, Alina Gheorghiu, La possibilite de determiner le module d'elasticite equivalent de dilatation thermique equivalent pour la ligne de contact, 4th International Conference on Electrical and Power Engineering – EPE 2006, Iaşi, România, 12-14 octombrie 2006, Buletinul Institutului Politehnic Iaşi, Tomul LII (LVI), Fasc. 5 A pp. 563-566, ISSN 1223-8139.
61. V15 - C. Niţucă, Education par la créqtivité technique, First National Simpozion Education-Professionalization-Creation in the Knowledge Society – EPC 2006, Iaşi, România, 20-21 octombrie 2006, Buletinul Institutului Politehnic Iaşi, Tomul LII (LVI), Fasc. 5 Ştiinţe Socio-Umane, pp. 95-100, ISSN 1224-5860.
62. V14 - C. Niţucă, L. Cantemir, Alina Gheorghiu, Quelques aspects legislatifs concernant l'obtention du brevet d'invention, First National Simpozion Education-Professionalization-Creation in the Knowledge Society – EPC 2006, Iaşi, România, 20-21 octombrie 2006, Buletinul Institutului Politehnic Iaşi, Tomul LII (LVI), Fasc. 5 Ştiinţe Socio-Umane, pp.541-546, ISSN 1224-5860.
63. V13 - T. Stanciu, C. Niţucă, C. Stanciu, Issuses concerning the human resources and educational leadership in schools, Buletinul Institutului Politehnic Iaşi, Tomul L (LIV), Fasc. 5B, 2004, pp. 709-714, ISSN 1223-8139.
64. V59 - T. Stanciu, C. Niţucă, The staff supervision and evaluations policies in Romania and United States Universities, Buletinul Institutului Politehnic Iaşi, Tomul L (LIV), Fasc. 5B, 2004, pp. 715-720, ISSN 1223-8139.
65. V12 - G. Chiriac, L. Cantemir, C. Niţucă, Corection of the calculus for the total runing resistances of the trains, Buletinul Institutului Politehnic Iaşi, Tomul L (LIV), Fasc. 5C, 2004, pp. 1119-1124, ISSN 1223-8139.
66. V11 - C. Niţucă, L. Cantemir, G. Chiriac, Alina Gheorghiu, Aspects regarding the influence of the temperature range over the contact line, Buletinul Institutului Politehnic Iaşi, Tomul L (LIV), Fasc. 5C, 2004, pp. 1165-1170, ISSN 1223-8139.
67. V10 - Nicoleta-Mariana Iftimie, C. Niţucă, Aspects of formative education: developing instruments for inetllectual activity, Buletinul Institutului Politehnic Iaşi, Tomul L (LIV), Fasc. 5B, 2004, pp. 659-664, ISSN 1223-8139.
68. V9 - Mihaela Lupu, C. Niţucă, The implications of the e-laboratory the teacher training processes on the field of electro technical sciences, Buletinul Institutului Politehnic Iaşi, Tomul L (LIV), Fasc. 5B, 2004, pp. 689-694, ISSN 1223-8139.
69. V8 - C. Niţucă, Maria Ileana Carcea, T. Stanciu, Alina Gheorghiu, Working strategies regarding the practical training in pedagogy of students of technology, Buletinul

Institutului Politehnic Iaşi, Tomul L (LIV), Fasc. 5B, 2004, pp. 699-702, ISSN 1223-8139.

70. V7 - C. Niţucă, Maria Ileana Carcea, T. Stanciu, Alina Gheorghiu, Issues regarding the quality of pedagogical practical training of students for the electrical and mechanical profile, Buletinul Institutului Politehnic Iaşi, Tomul L (LIV), Fasc. 5B, 2004, pp. 703-708, ISSN 1223-8139.
71. V6 - L. Cantemir, E. Teodoru, F. Bozianu, A. Aparaschivei, C. Niţucă, On the three-phase double inductor plane air gap induction motor design and test, Buletinul Institutului Politehnic Iaşi, Tom XLVIII, Fasc. 5 C, pp. 131-136, 2002, ISSN 0258-9109.
72. V5 - A. Aparaschivei, L. Cantemir, G. Chiric, C. Niţucă, The dispersion reactances determination of the linear induction motors with ring windings, Buletinul Institutului Politehnic Iaşi, Tom XLVIII, Fasc. 5 C, pp. 137-142, 2002, ISSN 0258-9109.
73. V4 - C. Niţucă, L. Cantemir, G. Chiriac, A. Aparaschivei, Considerations regarding the influence of the inerţia of the pantograph head into the interaction pantograph-catenary, Buletinul Inst. Politehnic Iaşi, Tom XLVIII, Fasc. 5 C, pp. 287-292, 2002, ISSN 0258-9109.
74. V3 - C. Niţucă, L. Cantemir, G. Chiriac, G. Chiric, The modeling and simulation of the pantograph-catenary interaction, Buletinul Institutului Politehnic Iaşi, Tom XLVIII, Fasc. 5 C, pp. 293-298, 2002, ISBN 0258-9109.
75. V2 - G. Chiriac, L. Cantemir, C. Niţucă, Reducerea rezistenţei aerului pentru vagoane de marfă descoperite. Sisteme expert de asigurare a calităţii totale în industria de materiale şi echipamente electrotehnice, coord. A. Baraboi, Cristina Schreiner, R. Ciobanu, Vol I, Seria Qualindser, Editura “Gheorghe Asachi”, Iaşi, 2002, pp. 111-116, ISBN973-8292-29-8.
76. V1 - C. Niţucă, L. Cantemir, G. Chiriac, A. Aparaschivei, Unele aspecte privind viteza critică pentru sistemul de captare pantograf-catenară. Sisteme expert de asigurare a calităţii totale în industria de materiale şi echipamente electrotehnice, coord. A. Baraboi, Cristina Schreiner, R. Ciobanu, Vol I, Seria Qualindser, Editura “Gheorghe Asachi”, Iaşi, 2002, pp. 117-122, ISBN973-8292-29-8

J. Invenţii.

1. L. Cantemir, A. Rachid, C. Niţucă, I.C. Bărbânţă, G. Chiriac, A.P. Alexandrescu, Echipament de acţionare electromagnetică a unui culegător de curent de tip pantograf, Brevet de invenţie Nr. 128199, RO 128199 B1, Data depozit - 23.08.2011, Data eliberării - 28.02.2018.

K. Contracte de cercetare/granturi.

P1 - Improving the cross-border public transportation using electric buses supplied with renewable energy” – ELBUS, Code project 2SOFT/3.1/54, European Neighbourhood Instrument (ENI), Cross Border Cooperation (CBC) from Joint Operational Programme Romania – Republic of Moldova, Priority 3.1 – Development of cross border transport infrastructure and ICT infrastructure.
Volumul finanţării: 97,880.00 Euro. Director proiect, conf.dr.ing. C. Niţucă.
Perioada: 2020-2021.
Director proiect

P2 - The experimental study on overload current arc characteristics of DC electric fuse, DCFUSE, România - China, Contract PN-III-P3-3.1-PM-RO-CN-2018-25BM;. Volumul finanţării: 49.980,00 Lei. Director proiect, s.l.dr.ing. C. Niţucă
Perioada: 2018-2019.

Director proiect.
P3 - Modelling and simulation of the current limiting fuses, Capacities, Module III, Bilateral Research Project China - Romania, Contract no. 610/01.01.2013, Volumul finanţării: 45.500,00 Lei.Director de proiect, prof.dr.ing. T. A. Pleşca.
Perioada: 2013-2014.
Membru proiect.

Anexa A.3.3.c. Lista de lucrari, cadre didactice

Lista de lucrări în domeniul de studii universitare de masterat „Inginerie Energetică”

Numele şi prenumele: **Dragomir Alin**

P. Teza de doctorat.

1. „Contribuții privind managementul echipamentelor electrice. Monitorizarea solicitărilor termice”, 2017, Domeniul „Inginerie Electrică”, Universitatea Tehnică „Gheorghe Asachi” din Iași, conducător doctorat: prof. dr. ing. Adam Maricel.

Q. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

R. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).

1. *Asiminicesei O.M., Beniugă O.C., Dragomir A.,Comșa C.R., Haba C.G., Arădoaei S. T., Dosoftei C. C., Brînzilă M. C., Afaceri Digitale, Editura Performantica, ISBN: 978-606-685-932-5.*

S. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

T. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

U. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

1. Alexandra Bodoga, Andreea Nistorac, Alin Dragomir, Eugen Constantin Ailenei, Arina Seul, Mariana Diaconu, Catalin Dumitrel Balan, Maria Carmen Loghin, Ozone-Vacuum-Based Decontamination: Balancing Environ-2 mental Responsibility and Textile Waste, Journal Sustainability (ISSN 2071-1050), 17 November 2023.
2. A. Manushi Munshi, Manan Patel, Fayez Alqahtani, Amr Tolba, Rajesh Gupta, Nilesh Kumar Jadav, Sudeep Tanwar, Bogdan-Constantin Neagu and Alin Dragomir, Artificial Intelligence and Exploratory-Data-Analysis-Based Initial Public Offering Gain Prediction for Public Investors, Journal Sustainability (ISSN 2071-1050), 18 October 2022.
3. A. Dragomir, M. Andrusca, M. Adam, G. Grigoras, M. Dragomir, R. Seeram, Modeling, Simulation and Monitoring of Electrical Contacts Temperature in Railway Electric Traction, Journal Mathematics (ISSN 2227-7390), 10 December 2021.
4. G. Chiriac, D. D. Lucache, C. Nituca, A. Dragomir, R. Seeram, Electric Bus Indoor Heat Balance in Cold Weather, Journal Applied Sciences (ISSN 2076-3417), 10 December 2021.

5. M. Andrusca, M. Adam, A. Dragomir, E. C. Lunca, Innovative Integrated Solution for Monitoring and Protection of Power Supply System from Railway Infrastructure, Journal Sensors (ISSN 1424-8220), 25 November 2021.
6. Andrusca M., Adam M., Dragomir A., Lunca E., Seeram R., Postolache O., Condition Monitoring System and Faults Detection for Impedance Bonds from Railway Infrastructure, Journal Applied Sciences (ISSN 2076-3417; CODEN: ASPCC7), 4 September 2020.
7. Dragomir A., Adam M., Pancu C., Andruşcă M., Pantelimon R., Monitoring of long term thermal stresses of electrical equipment, Buletinul Ştiinţific, Seria C, Vol. 77, No. 2, 2015, pp. 245-253.

V. Lucrări ştiinţifice publicate în reviste din străinătate.

1. Dragomir A., Adam M., Andruşcă M., Munteanu A., Impact of Long-Term Thermal Stresses of Electrical Equipment on Climate Change, WSEAS Transactions on Environment and Development, volume 13, 2017, ISSN: 1790-5079.
2. Dragomir M., Dragomir A., Influence of The Line Parameters in Transmission Line Fault Location, World Academy of Science, Engineering and Technology-WASET, International Journal of Energy and Power Engineering Vol:11, No:5, 2017, pp 450-454, ISSN: 2326-9574.

W.Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

1. Adrian Vîlcu, Ionuț Nacu, Bogdan Vîrlan, Ionuț-Viorel Herghiligiu, Sandu Lupăcescu, Alin Dragomir, Incremental Innovation Methodology that Combines Computerized Modelling and Simulation with Value Analysis and Engineering Method, Bulletin of the Polytechnic Institute of Iași, Electrical Engineering, Power Engineering, Electronics Section, Vol.68, Iasi, ROMANIA, publicat Februarie 2024.
2. Alin Dragomir, Maricel Adam, Silviu-Marian Antohi, Adrian Vîlcu, Alexandra Bodoga, Considerations Regarding Electrical Equipment Monitoring Through Infrared Thermography, Bulletin of the Polytechnic Institute of Iași, Electrical Engineering, Power Engineering, Electronics Section, Vol.68, Iasi, ROMANIA, publicat Februarie 2024.
3. M. Atanasoaei, M. Adam, M. Andrusca, A. Dragomir, C.N. Deac, Aspects Regarding the Use of Electronic Power Devices in Power Grid, Bulletin of the Polytechnic Institute of Iași. Electrical Engineering, Power Engineering, Electronics Section, vol. 67, nr. 1, pag. 55-63, publicat Octombrie 2023.
4. Dragomir A., Adam M., Andruşcă M., Munteanu A., About thermal stresses monitoring and diagnosis of electrical equipment, Buletinul Institutului Politehnic din Iaşi, Volumul 62 (66), No. 1, Iaşi, România, 2016, ISSN: 1223-8139, CNCSIS: 87.
5. Dragomir A., Adam M., Andruşcă M., Munteanu A., Long term thermal stresses of a withdrawable electrical contact, Acta Electrotehnica, Cluj, România, 2015, ISSN: 1841-3323, CNCSIS: 576.

X. Lucrări ştiinţifice publicate în volumele conferinţelor.

1. Silviu Marian Antohi; Maricel Adam; Alin Dragomir; Dragos Mugoci; Alexandru Panțiru, Industrial Communication Networks Used within SAW Sensors Data

Transmission, 10th International Conference on Modern Power Systems – MPS 2023, Cluj, România 2023. (*IEEExplore*).

2. Alin Dragomir; Maricel Adam; Silviu Marian Antohi; Dragos Mugoci; Alexandru Panțiru, Temperature Monitoring of MV Switchgear Cabinet by Non-Intrusive Methods, 10th International Conference on Modern Power Systems – MPS 2023, Cluj, România 2023. (*IEEExplore*).
3. Alin Dragomir; Maricel Adam; Mihai Andrușcă, Centralized Monitoring and Diagnosing of the Return Circuit of Electric Railway Traction, XXVII International Conference"INVENTICA 2023. Science of creativity" June 22th, 2023, IASI, ROMANIA. (*IEEExplore*).
4. Alin Dragomir; Maricel Adam; Gabriel Chiriac; Dragoș Murgoci; Adrian Vîlcu; Costică Nițucă, Infrared Monitoring of Low Voltage Switch Separator Contact Resistance, 14th International Conference on Electromechanical and Power Systems – SIELMEN 2023, Chișinău, Rep. Moldova, 11-13 October 2023. (*IEEExplore*).
5. Antohi S.-M., Lucache D.-D., Adam M., Dragomir, A., Nadabaica S.-A., Bodoga A., Digital Settings of Low Voltage Circuit Breakers, ICATE 2024 - Proceedings of the 2024 International Conference on Applied and Theoretical Electricity, 2024, Craiova, Romania. (*IEEExplore*).
6. .Paduraru C.-B., Munteanu A., Adam, M., Dragomir A., Nadabaica S.-A., Chiriac G., Analysis of the permanent magnets influence on the operation of a BLDC motor, EPE 2024 - Proceedings of the 2024 13th International Conference and Exposition on Electrical and Power Engineering, 2024. (*IEEExplore*).
7. Anton A., Andrusca M., Adam, M., Dragomir. A, Micu M.-B., Antiohi S.-M., About Contact Resistance Monitoring and Vibration Analysis of a Power Circuit Breaker, EPE 2024 - Proceedings of the 2024 13th International Conference and Exposition on Electrical and Power Engineering, 2024. (*IEEExplore*).
8. Dragomir. A, Pingescu B.- A., Adam, M., Paizan D. , Astanei D.-G, Bodoga A., Digital Communication Capabilities of Low Voltage Circuit Breakers, EPE 2024 - Proceedings of the 2024 13th International Conference and Exposition on Electrical and Power Engineering, 2024. (*IEEExplore*).
9. Alin Dragomir; Maricel Adam; Silviu-Marian Antohi; Marian Atanasoaei; Alexandru Pantiru, Monitoring and Diagnosis of Electrical Equipment by Infrared Thermography, The 12th International Conference and Exposition on Electrical and Power Engineering- EPE 2022, Iaşi, România, 20-22 0ctombrie 2022 (*IEEExplore*).
10. Alexandru Pantiru; Marinela Barbuta; Maricel Adam; Alin Dragomir; Silviu-Marian Antohi, Foundation Structural Resistance Calculation of SF6 High-Voltage Circuit Breaker, The 12th International Conference and Exposition on Electrical and Power Engineering- EPE 2022, Iaşi, România, 20-22 0ctombrie 2022 (*IEEExplore*).
11. Marian Atănăsoaei; Maricel Adam; Mihai Andrusca; Alin Dragomir; Cosmin Nistor Deac, The Influence of TCSC Devices on Distance Protection Tripping Characteristic, The 12th International Conference and Exposition on Electrical and Power Engineering- EPE 2022, Iaşi, România, 20-22 0ctombrie 2022 (*IEEExplore*).
12. Silviu-Marian Antohi; Maricel Adam; Alin Dragomir; Marian Atanasoaei; Alexandru Pantiru, The Influence of Electrical Equipment Structural Elements on their Wireless Communications, The 12th International Conference and Exposition on

Electrical and Power Engineering- EPE 2022, Iaşi, România, 20-22 0ctombrie 2022 (*IEEExplore*).

13. Alin Dragomir; Maricel Adam; Mihai Andrușcă; Silviu Marian Antohi; Cosmin Nistor Deac; Seeram Ramakrishna, Perspectives on Railway Electric Traction System Improvement Brought by Monitoring the Impedance Bonds, 13th International Conference on Electromechanical and Power Systems – SIELMEN 2021, Chișinău, Rep. Moldova, 06-08 October 2021 (*IEEExplore*).
14. Silviu Marian Antohi; Maricel Adam; Alin Dragomir; Mihai Andrusca; Marian Atanasoaei; Alexandru Miron; Anamaria Iamandi, About Communication Networks Used within Electrical Equipment, 13th International Conference on Electromechanical and Power Systems – SIELMEN 2021, Chișinău, Rep. Moldova, 06-08 October 2021 (*IEEExplore*).
15. Silviu Marian Antohi; Maricel Adam; Alin Dragomir; Mihai Andrusca; Marian Atanasoaei; Alexandru Miron; Anamaria Iamandi, Wireless Communication Networks within Electrical Equipment , 9th International Conference on Modern Power Systems – MPS 2021, Cluj, România 2021 (*IEEExplore*).
16. Dragomir A., M. Adam, M. Andrusca, M. Dragomir, Filip B., Iamandi A., Electrical Equipment Condition Monitoring by Vibration Diagnosis, 6th International Conference on Condition Monitoring, Diagnosis and Maintenance - CMDM 2021, 11-13 Octomber 2021, Bucharest, Romania (*IEEExplore*).
17. M. Atanasoaei, M. Adam, M. Andrusca, A. Dragomir, C.N. Deac, Aspects Regarding the Presence of TCSC Devices on the Transmission Lines, 9th International Conference on Modern Power Systems - MPS, 16-17 June 2021, Cluj, România (*IEEExplore*).
18. M. B. Micu, M. Adam, M. Andrusca, A. Dragomir, C.N. Deac, Aspects Regarding the Loads Patterns Determination from the Internal Sevices of the Power Substations, The 11th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 22-23 0ctombrie 2020 (*IEEExplore*).
19. A. Dragomir, M. Adam, M. Andrusca, M. Atanasoaei, O. Rusu, A. Miron, A. Iamandi, Aspects Regarding the Infrared Monitoring of Electrical Equipment Temperature, The 11th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 22-23 0ctombrie 2020 (*IEEExplore*).
20. E. Ojovanu, A. Dragomir, M. Adam, M. Andrusca, C.N. Deac, M. Cardasim, G. Mocanu, Mechanical Fault Detection by Vibration Monitoring of Electrical Equipment, The 11th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 22-23 0ctombrie 2020 (*IEEExplore*).
21. C.N. Deac, M. Adam, M. Andrusca, A. Dragomir, M. Micu, Supervision and Control System of an Electrical Equipment Testing Installation, The 11th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 22-23 0ctombrie 2020 (*IEEExplore*).
22. M. Atanasoaei, M. Adam, M. Andrusca, A. Dragomir, C.N. Deac, Effects of Solid State Current Limiter on the Power Grid, The 11th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 22-23 0ctombrie 2020 (*IEEExplore*).
23. M. Adam, M. Andrusca, A. Dragomir, D. Astanei, R. Burlica, Technical Condition Monitoring of Impedance Bonds using Sensors and Dedicated Device, The 11th International Conference and Exposition on Electrical and Power Engineering-EPE, Iaşi, România, 22-23 0ctombrie 2020 (*IEEExplore*).
24. Atănăsoaei M., Adam M., Andruşcă M., Dragomir A., Deac N. C., Aspects Regarding the Protection Relays from Power Substations, 12th International

Conference on Electromechanical and Power Systems - SIELMEN, Chișinău, Rep. Moldova, 2019 (*IEEExplore*).

25. Deac C.N., Adam M., Dragomir A., Micu M. B., Aspects Regarding the Alternating Current Monitoring In Electrical Equipment Testing Installations, 12th International Conference on Electromechanical and Power Systems - SIELMEN, Chișinău, Rep. Moldova, 2019 (*IEEExplore*).
26. Dragomir M., Iamandi A., Istrate M., Dragomir A., A Review of Phasor Estimation Algorithms for Power System Applications, 8th IEEE PES Innovative Smart Grid Technologies Europe - ISGT 2019 , 29th September- 2nd October, București, România 2019 (*IEEExplore*).
27. Dragomir A., Atănăsoaei M., Adam M., Andruşcă M., Deac N. C., Dragomir M., Infrared Procedure for Monitoring Long-term Thermal Stresses of Electrical Equipment, 54th International Universities Power Engineering Conferance, București, Septembrie 3-6, 2019 (*IEEExplore*)..
28. Dragomir M., Iamandi A., Rusu A. C., Atănăsoaei M., Dragomir A. , Adam M., Andruşcă M., Single-terminal Fault Location Algorithm for Electrical Lines, 54th International Universities Power Engineering Conferance, București, Septembrie 3-6, 2019 (*IEEExplore*).
29. Iamandi A., Iliescu S.S., Ionescu I., Dragomir M., Dragomir A., Reliability of protection schemes used for multi-terminal transmission lines, 8th International Conference on Modern Power Systems - MPS, Cluj, România 2019 (*IEEExplore*).
30. Dragomir M., Istrate M., Dragomir A., Filip B., Iamandi A., Machidon D., Estimation of Line Zero Sequence Impedance using Real Field Fault Data for Fault Location Application, 8th International Conference on Modern Power Systems - MPS, Cluj, România 2019 (*IEEExplore*).
31. Deac C.N., Adam M., Andruşcă M., Dragomir A., Aspects Regarding Contact Resistance Measurement, 8th International Conference on Modern Power Systems - MPS, Cluj, România 2019(*IEEExplore*).
32. Dragomir A. , Adam M., Andruşcă M., Deac C.N., Iamandi A.,Temperature logger for Electrical Equipment's Thermal Stress Monitoring, 8th International Conference on Modern Power Systems - MPS, Cluj, România 2019(*IEEExplore*).
33. Dragomir A. , Adam M., Andruşcă M., A Review about Wireless Monitoring of Electrical Equipment Temperature, 11th International Symposium on Advanced Topics in Electrical Engineering, București, Martie 28-30, 2019(*IEEExplore*).
34. Burlică R., Astanei D., Adam M., Dragomir A., Overvoltage Differential Protection of Low Voltage Circuits, The 10th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2018 (*IEEExplore*).
35. Andrușcă M., Adam M., Dragomir A., Astanei D., Andrușcă L., About Monitoring of Medium Voltage Circuit Breakers with SF6, The 10th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2018 (*IEEExplore*).
36. Munteanu A., Adam M., Andrușcă M., Dragomir A., Micu M. B., Aspects regarding the Monitoring of Electrical Equipment from Electric Traction, The 10th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2018(*IEEExplore*).
37. Munteanu A., Adam M., Andrușcă M., Dragomir A., Micu M. B., Cardașim M., A Possibility to Monitoring and Diagnosis of the Joint Coils from Railway Electric Traction, The 10th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2018(*IEEExplore*).

38. Deac C. N., Adam M., Pancu C., Andrușcă M., Dragomir A., Aspects Regarding the High-Current Testing of Current Paths, The 10th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2018 (*IEEExplore*).
39. Dumitrescu C., Plesca A. T., Dumitrescu L., Adam M., Nițucă C., Dragomir A., Assessment of Data Center Energy Efficiency. Methods and Metrics, The 10th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2018(*IEEExplore*).
40. Dumitrescu C., Plesca A. T., Adam M., Nițucă C., Dragomir A., Methods for Reducing Energy Consumption, Optimization in Operational Data Centers, The 10th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2018 (*IEEExplore*).
41. Pintilie C., Plesca A. T., Gabor G., Nițucă C., Adam M., Dragomir A., Thermal Analysis of Tankless Heating System Using PLC, The 10th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2018 (*IEEExplore*).
42. Adam M., Andruşcă M., Dragomir A., Burlică R., Short-circuit Thermal State of a Withdrawable Contact, The 10th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2018 (*IEEExplore*).
43. Dragomir M., Istrate M., Dragomir A., Review of Error Sources in One-End Data Impedance-Based Fault Location Algorithms, The 10th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2018 (*IEEExplore*).
44. Dragomir M., Filip B., Dragomir A., Improving the Fault Location for Transmission Grids using the Existing Measurements, The 10th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2018 (*IEEExplore*).
45. Micu M. B., Adam M., Andruşcă M., Dragomir A., Aspects Regarding Electrical Loads Pattern Recognition Using Artificial Neural Network, The 10th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2018 (*IEEExplore*).
46. Dragomir A., Adam M., Andruşcă M., Burlică R., Micu M. B., Patrichi S., Simulating Electrical Connections in Terms of Thermal Stresses, The 10th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2018 (*IEEExplore*).
47. Dragomir A., Adam M., Andruşcă M., Astanei D., Andrușcă L., Dumitrescu C., About Some Connection Modes of the Current Conducting Paths, The 10th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2018 (*IEEExplore*).
48. Miron A., Danubianu D., Dragomir A., Popa C., Pentiuc R., Using ANNs in Protection of Transmission Lines, the 14th Regional Energy Forum, Comitetul Român National al Consiliului Mondial de Energie, 10-14 Iunie, Costinești, Romania, 2018.
49. Dragomir M., Moraru Gh., Iamandi A., Miron A., Dragomir A., Review of Error Sources for Impedance-Based Fault Location Algorithms, 4th edition CIGRE Regional South-East European Conference - RSEEC 2018, 3-5 Octombrie, University "Politehnica" of Bucharest, Romania, 2018.
50. Munteanu A., Adam M., Andruşcă M., Dragomir A., Boghiu E., About monitoring of joint coils from electric traction railway, the 11th International Conference on

Electromechanical and Power Systems - SIELMEN, Chișinău, Rep. Moldova, pp. 86-89, 2017(*IEEExplore*).

51. Munteanu A., Adam M., Andruşcă M., Boghiu E., Dragomir A. , Thermal Stress Analysis of Current Path from Return Circuit of Electric Traction, 7th International Conference on Modern Power Systems - MPS, Cluj, România 2017 (*IEEExplore*).
52. Gheorghiţă M.C., Adam M., Andruşcă M., Munteanu A., Dragomir A., About Contact Resistance of the Electrical Equipment, 7th International Conference on Modern Power Systems - MPS, Cluj, România 2017 (*IEEExplore*).
53. Dragomir M., Dragomir A., Miron A., Wireless Devices for Electrical Equipment's Thermal Stress Monitoring, International Conference on Condition Monitoring, Diagnosis and Maintenance - CDMD, Bucureşti, România, pp. 391-396, 2017.
54. Dragomir A., Adam M., Andruşcă M., Munteanu A., Boghiu E., Considerations regarding infrared thermal stresses monitoring of electrical equipment, the 11th International Conference on Electromechanical and Power Systems - SIELMEN, Chișinău, Rep. Moldova, pp. 100-103, 2017(*IEEExplore*).
55. Dragomir A., Adam M., Andruşcă M., Munteanu A., Environmental Footprint created by Thermal Stresses Electrical Equipment, 7th International Conference on Modern Power Systems - MPS, Cluj, România 2017 (*IEEExplore*).
56. Boghiu E., Adam M., Andruşcă M., Dragomir A., Munteanu A., Aspects regarding controlled switching of the vacuum circuit breaker, the 11th International Conference on Electromechanical and Power Systems - SIELMEN, Chișinău, Rep. Moldova, pp. 82-85, 2017 (*IEEExplore*).
57. Boghiu E., Adam M., Andruşcă M., Dragomir A., Munteanu A., Influence of Operational Voltage on Switching Time of the Circuit Breakers, 7th International Conference on Modern Power Systems - MPS, Cluj, România 2017 (*IEEExplore*).
58. Munteanu A., Adam M., Andruşcă M., Dragomir A., Modeling and Simulation of a Supply System from Electric Traction , The 9th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2016 (*IEEExplore*).
59. Dragomir M., Miron A., Istrate M., Dragomir A., A Solution to Obtain Precise Fault Location Usinf a Two-End Data Algoritm , 9th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2016 (*IEEExplore*).
60. Dragomir A., Adam M., Andruşcă M., Munteanu A., Aspects Concerning the Influence of Environmental Factors in Infrared Monitoring of Electrical Equipment, The 9th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2016 (*IEEExplore*).
61. Andruşcă M., Adam M., Burlică R., Munteanu A., Dragomir A., Considerations Regarding the Influence of Contact Resistance on the Contacts of Low Voltage Electrical equipment, The 9th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2016 (*IEEExplore*).
62. Adam M., Andruşcă M., Munteanu A., Dragomir A., About the dynamic contact resistance of the circuit breakers, The 9th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2016 (*IEEExplore*).
63. Dragomir M., Dragomir A., Adam M., Miron A., Moraru G., Thermal Stress Monitoring Device for Electrical Equipment, International Conference on Condition Monitoring, Diagnosis and Maintenance - CDMD, Bucureşti, România, 2015.
64. Dragomir M., Miron A., Istrate M., Dragomir A., A Review of Impedance –Based Fault Approaches for Transmission Lines , 8th International Conference and

Exposition on Electrical and Power Engineering - EPE, Iași, România, 2014 (*IEEExplore*).

65. Dragomir A., Adam M., Andruşcă M., Pantelimon R., Thermal stress wireless monitoring devices for electrical equipment, The 8th International Conference and Exposition on Electrical and Power Engineering - EPE, Iaşi, România, 2014 (*IEEExplore*).
66. Andruşcă M., Adam M., Dragomir A., Roman C., Adruşcă L., Asset Management System – Software Application on Power Substation Level, 8th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2014 (*IEEExplore*).
67. Andruşcă M., Adam M., Baraboi A., Dragomir A., Munteanu A., Using fuzzy logic for diagnosis of technical condition of power circuit breakers, 8th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2014 (*IEEExplore*).
68. Cotruş A., Adam M., Pancu C., Pantelimon R., Dragomir A., Molodeschi M., Monitoring and command system for medium voltage circuit breakers with sulfur hexafluoride, 6th International Conference on Energy and Environment - CIEM, Editura POLITEHNICA press, Bucuresti, 2013.

Y. Invenţii.

Z. Contracte de cercetare/granturi.

1. Dezvoltarea instituțională a TUIASI prin creșterea performanței în cercetare, dezvoltare și inovare – COMPETE 2.0, Contract tip PNCDI III – PFE, nr. 27PFE/2021, 2021÷2023, funcția coordonator științific de proiect, echipa 7, Director proiect: prof.univ.dr.ing Maria Carmen Loghin.
2. Dezvoltarea Instituțională a TUIASI Prin Creșterea Vizibilității și a Performanței Cercetării TUIASI-COMPETE, Contract tip PNCDI III – PFE, nr. 9PFE/2018, 2018÷2020, funcția coordonator științific de proiect, echipa 2, Director proiect: prof.univ.dr.ing Maria Carmen Loghin.
3. Proiect mobilitati Romania-Franta PN III, PN-III-P3-3.1-PM-RO-FR, nr. 19BM / 2019, perioada 2019-2020 (international), Titlu: Evaluarea apei activate produse de către diferite reactoare de plasmă non-termică, funcția membru echipa implementare, Director proiect: S.l.dr.ing. Dragos-George Astanei.
4. Proiect ERANET-MANUNET-III-PlasmaPack nr. 214/2020, perioada 2020-2022 (international), Titlu: Bio-tratament aplicat pe ambele suprafete ale foliei polimerice utilizata pentru impachetarea produselor alimentare utilizand plasma non-termica DBD-Corona, funcția membru echipa implementare, Director proiect: S.l.dr.ing. Dragos-George Astanei.
5. Proiect PN-III-P2-2.1-PED-2019-0556 nr. 361PED /2020, perioada 2020 (national), Titlu: Model experimental pentru demonstrarea fezabilitatii cresterii potentialului terapeutic al germenilor de grau prin tratarea acestora cu apa activata cu plasma non-termica (PAW), funcția membru echipa implementare, Director proiect prof.univ.dr.ing Radu Burlică,
6. Proiect de tip ERANET-MANUNET-III-Treatoflex nr. 146/2020, perioada 2020-2022 (international), Titlu: Reactor cu plasma non-termica la presiune atmosferica pentru pre-tratamentul substraturilor polimerice utilizate in fabricarea circuitelor

imprimate flexibile, funcția membru echipa implementare, Director proiect: prof.univ.dr.ing Radu Burlică.

7. Granturi interne - IDEI DE PROIECT nr. GI_P7_IDEI_2021, Proiect pentru susţinerea capacităţii de participare cu propuneri de proiecte în cadrul Programului Cadru al Uniunii Europene pentru Cercetare şi Inovare 2021-2027 Orizont Europa, perioada 01.08.2021- 15.12.2021, Titlu: Sistem și metodă pentru producerea de energie electrică cu ajutorul micro-organismelor vii, funcția Director proiect: ș.l.dr.ing Alin Dragomir.
8. Granturi interne - IDEI DE PROIECT nr. GI_P8_IDEI_2021, Proiect pentru susţinerea capacităţii de participare cu propuneri de proiecte în cadrul Programului Cadru al Uniunii Europene pentru Cercetare şi Inovare 2021-2027 Orizont Europa, perioada 01.08.2021- 15.12.2021, Titlu: Sistem modular de stocare a energiei electrice pentru un vehicul electric cu posibilitatea inlocurii partiale a acumulatorului, funcția membru în echipa de proiect, Director proiect: ș.l.dr.ing Daniel Sticea.
9. Granturi interne - PUBLICATII nr. GI_P15_2021, Proiect pentru susţinerea capacităţii de participare cu propuneri de proiecte în cadrul Programului Cadru al Uniunii Europene pentru Cercetare şi Inovare 2021-2027 Orizont Europa, perioada 01.07.2021- 15.12.2021, Titlu: Sistem inteligent pentru monitorizarea și protecția instalațiilor de alimentare din tracțiunea electrică / Modelarea, simularea si monitorizarea solicitărilor termice ale elementelor sistemului de retur din tracțiunea electrică, membru în echipa de proiect, Director proiect: ș.l.dr.ing Mihai Andrușcă.

AA. Premii, distincţii.

BB. Alte realizări semnificative.

Data, 09.04.2025

Ș.l. dr. ing. Alin Dragomir

Anexa A.3.3.c. Lista de lucrari, cadre didactice

Lista de lucrări în domeniul de studii universitare de masterat

Managementul sistemelor de energie

Numele şi prenumele: Iuliana Vieru

A. Teza de doctorat.

• Contributii la optimizarea comportarii liniilor electrice aeriene la supratensiuni de trasnet, 2010

B. Lucrări ştiinţifice publicate în volumele conferinţelor.

• Iuliana Hriscu, Mircea Gusa and Marcel Istrate: „Analysis of Overhead Lines Behavior to Direct Lightning Strokes", WESC 2008

• Hriscu I, Gusa M and Istrate M: „Lightning stroke against overhead electric lines: a comparision between analytical and simulation methods of study" IS-SPETO 2009

• Iuliana Hriscu, Mircea Gusa and Marcel Istrate: „Some Aspects Concerning the ightning Behavior of Overhead Lines", CNEI 2009

• Iuliana Hriscu, Mircea Gusa and Marcel Istrate: „Some Aspects Concerning the Influences of Surge Arresters upon Lightning Behavior of Overhead Lines", WESC 2010

Data, Nume, semnătura

09.04.2025 dr. ing. Iuliana Vieru (Hriscu)

Lista de lucrări în domeniul de studii universitare de masterat Inginerie Energetica

Numele şi prenumele: **ADAM Maricel**

A. Teza de doctorat

2. "Contribuţii la supravegherea, controlul, încercarea şi diagnosticarea echipamentelor electrice", 1996, sub coordonarea d-lui prof.dr.ing. Petru Leonte, domeniul: Maşini, Aparate şi Acţionări electrice, Universitatea Tehnică Iaşi

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS)

1. Pancu C., Andruşcă M., **Adam M.,** Echipamente cu logică programabilă, Editura PIM, Iasi, 2017, 170 pag., ISBN: 978-606-13-3721-7.
2. Andruşcă M., **Adam M.,** Managementul echipamentelor electrice, Editura Politehnium, Iasi, 2017, 200 pag., ISBN: 978-973-621-464-6.
3. **Adam M.,** Baraboi A., Pancu C., Andruşcă M., Echipamente electrice - vol.1 îndrumar de laborator, Editura Politehnium, Iasi, 200 pag., 2013, ISBN: 978-973-621-411-0.
4. Pancu C., **Adam M.,** Baraboi A., Echipamente cu logica programabila. Îndrumar de laborator, Editura Politehnium Iași, pag. 150 (40 rânduri/pag.), 2013, ISBN 978-973-621-399-1.
5. Pancu C., Baraboi A., **Adam M.,** Echipamente electrice. Solicitări. Modelare şi simulare numerică, Editura Politehnium, Iaşi, pag. 165, 2009, ISBN 978-973-621-289-5.
6. Baraboi A., Adam M., Popa S., Pancu C., Compatibilitate electromagnetică, Editura PIM, Iaşi, pag.200, 2007, ISBN 978-973-716-562-6.
7. Adam M., Pancu C., Baraboi A., Structuri hardware-software în construcţia echipamentelor electrice inteligente, Editura VENUS, Iaşi, pag. 165, 2006, ISBN 973-756-031-0.
8. Munteanu Fl., Adam M., Ivas D., Nemeş C., Aparate şi comutări inteligente în sistemele electroenergetică, Editura VENUS, Iaşi, pag.317, 2006, ISBN 973-756-025-6.
9. Popa S., Baraboi A., Adam M., Pancu C., Emisii electromagnetice poluante ale echipamentelor si instalatiilor electrice, Editura VENUS, Iaşi, pag.143, 2006, ISBN 973-756-004-3.
10. Adam M., Baraboi A., Electronică de putere, Editura VENUS, Iaşi, pag. 318, 2005, ISBN 973-7960-92-0.
11. Schreiner Cristina, Adam M., Ciobanu R. C., Cercetări privind asigurarea calităţii şi fiabilităţii în ingineria electrică, Editura Gh. Asachi, Iaşi, pag.150, 2003, ISBN 973-621-031-6.
12. Furnică E., Baraboi A., Adam M., Întrerupătoare cu vid, Editura Gh. Asachi, Iaşi, pag.166, 2002, ISBN 973-8292-36-2.
13. Baraboi A., Adam M., Ciobanu R., Aparate electrice de înaltă tensiune, Editura Gh. Asachi, Iaşi, pag. 208, 2002, ISBN 973-8292-23-9.
14. Adam M., Baraboi A., Echipamente electrice, Vol. II, Editura Gh. Asachi, Iaşi, pag. 216, 2002, ISBN 973-8292-37-9.
15. Baraboi A., Adam M., Echipamente electrice, Vol. I, Editura Gh. Asachi, Iaşi, pag. 236, 2002, ISBN 973-8292-36-2.
16. Pleşca T., Baraboi A., Leonte P., Adam M., Protecţia prin siguranţe fuzibile a dispozitivelor semiconductoare de putere, Editura Gh. Asachi, Iaşi, pag. 200, 2001, ISBN 973-8292-15-8.

17. Adam M., Baraboi A., Ciobanu R., Monitorizarea şi diagnosticarea întrerupătoarelor de putere, Editura Gh. Asachi, Iaşi, pag. 256, 2001, ISBN 973-8292-18-2.
18. Adam M., Istrate M., Baraboi A., Guşă M., Echipamente de comutaţie şi izolaţia reţelelor electrice, Editura A.G.I.R., Bucureşti, pag.186, 2001, ISBN 973-8130-38-7.
19. Leonte P., Baraboi A., Adam M., Magnetizarea în câmpuri ortogonale, Editura Spectrum, Iaşi, pag. 210, 1998, ISBN 973-98335-2-7.
20. Baraboi A., Leonte P., Adam M., Solicitările echipamentelor electrice, Editura BIT, Iaşi, pag. 250, 1997, ISBN 973-97908-6-0.
21. Baraboi A., Adam M., Ciutea I., Hnatiuc E., Tehnici moderne în comutaţia de putere, Editura A 92, Iaşi, pag. 350, 1996, ISBN 973-97393-5-0.

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

1. Adam M., Baraboi A., Echipamente electrice - curs, Universitatea Tehnică "Gh. Asachi" Iaşi, pag. 422, 1997.
2. Hnatiuc E., Leonte P., Furnică E., Adam M., Aparate electrice, Vol. I, Indrumar de laborator, Universitatea Tehnică "Gh. Asachi" Iaşi, pag.262, 1994.
3. Leonte P., Hnatiuc E., Furnică E., Adam M., Aparate electrice, Vol. II, Indrumar de laborator, Universitatea Tehnică "Gh. Asachi" Iaşi, pag. 255, 1993.
4. Baraboi A., Adam M., Furnică E., Echipamente electrice. Lucrări de laborator, Institutul Politehnic "Gh. Asachi" Iaşi, pag. 214, 1990.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale

8. M. Andrusca, M. Adam, A. Dragomir, E. Lunca, R. Seeram, O. Postolache, Condition Monitoring System and Faults Detection for Impedance Bonds from Railway Infrastructure, Journal Applied Sciences (ISSN 2076-3417; CODEN: ASPCC7), 4 September 2020, WOS.
9. Andrusca M, Adam M., Dragomir A., Lunca E, Innovative Integrated Solution for Monitoring and Protection of Power Supply System from Railway Infrastructuresm Sensors MDPI, 2021, FI-3.57, Q1. 3.
10. Dragomir A., Adam M., Andrusca M, Grigoraș G., Dragomir M., Ramakrishna S., Modeling, Simulation and Monitoring of Electrical Contacts Temperature in Railway Electric Traction, Mathematics MDPI, 2021, FI-2.25, Q1.
11. Schreiner, T.G., Turcan, I., Olariu, M.A., Ciobanu, R.C., Adam, M., Liquid Biopsy and Dielectrophoretic Analysis— Complementary Methods in Skin Cancer Monitoring, , Applied Sciences 12 (7), 3366, 2022, FI-2.838, Q1.
12. Schreiner T.G., González M. M., Adam M., Popescu B. O., Szilagyi A., Stanciu G. D., Tamba B.I., Ciobanu R. C., A Nanostructured Protein Filtration Device for Possible Use in the Treatment of Alzheimer's Disease—Concept and Feasibility after In Vivo Tests, Bioengineering 2023, 10, 1303. https://doi.org/10.3390/bioengineering10111303, FI 4,6.
13. Schreiner T. G., Schreiner O. D., Adam M., Popescu B.O., The Roles of the Amyloid Beta Monomers in Physiological and Pathological Conditions, Biomedicines 2023, 11(5), 1411; https://doi.org/10.3390/biomedicines11051411, FI 4,757.
14. Dragomir A., Adam M., Pancu C., Andruşcă M., Pantelimon R. , Monitoring of long term thermal stresses of electrical equipment, UPB Scientific Bulletin, Series C: Electrical Engineering, Volume 77, Issue 2, 2015, pag. 245-252. Database: ISI
15. Dragomir A., Adam M., Andruşcă M., Munteanu A., Impact of Long-Term Thermal Stresses of Electrical Equipment on Climate Change, WSEAS Transactions on Environment and Development, 2224-3496, Volume 13, 2017, Art. #3, pp. 19-26, ISSN / E-ISSN: 1790-5079 / 2224-3496. Database: Scopus

16. Adam M., Baraboi A., Pancu C., Plesca A., Reliability centered maintenance of the circuit breakers, International Review of Electrical Engineering - IREE, vol. 5, no. 3, may- june 2010, pp.1218-1224, ISSN 1827-6660. Revista cotata ISI, Scopus
17. Pleşca A., Baraboi A., Adam M., Pancu C., New Aspects Related to High Breaking Capacity Fuses, International Review of Electrical Engineering - IREE, vol. 4, no. 5, part.B, september- october, 2009, pp. 1035-1042, ISSN 1827-6660. Revista cotata ISI, Scopus
18. Adam M., Baraboi A., Pancu C., Pispiris S., The analysis of circuit breakers kinematics characteristics using the artificial neural networks, WSEAS TRANSACTIONS on CIRCUITS and SYSTEMS, Issue 2, Volume 8, February 2009, pp. 187-196, ISSN: 1109-2734, Revista indexata: EI Compendex, ACM, IET (IEE), SCOPUS, ASM, ACM, ACS, CSA, ELSEVIER , ZENTRALBLATT etc.
19. Pleşca A., Adam M., Baraboi A., Pancu C., New Device to Adjust On Load the Voltage Level at Power Transformers, International Review of Electrical Engineering - IREE, vol. 4, no. 1, January- February, 2009, pp.66-74, ISSN 1827-6660. Revista cotata ISI, Scopus
20. Pancu C., Baraboi A., Adam M., New Approach Regarding the Electroerosion Estimation of the Circuit Breakers Contacts, WSEAS TRANSACTIONS on CIRCUITS and SYSTEMS, Issue 1, Volume 8, January 2009, pp. 157-166, ISSN: 1109-2734, Revista indexata: EI Compendex, ACM, IET (IEE), SCOPUS, ASM, ACM, ACS, CSA, ELSEVIER , ZENTRALBLATT etc.
21. Adam M., Baraboi A., Pancu C., Plesca A., Aspects Regarding the Controlled Switching of the Circuit Breakers, International Review of Electrical Engineering - IREE, vol. 3, no. 5, september- october 2008, pp.759-767, ISSN 1827-6660. Revista cotata ISI, Scopus
22. Baraboi A., Adam M., Plesca A., Pancu C., Multiple Non-linear Resonance Phenomena in Circuits with an Orthogonal Magnetising Controlled Reactor, International Review of Electrical Engineering - IREE, vol. 3, no. 6, november- december 2008, pp.1039-1047, ISSN 1827-6660. Revista cotata ISI, Scopus
23. Pleşca A., Baraboi A., Adam M., Pancu C., Optimum vias distribution for a printed circuit board using 3D modelling and simulation, International Review of Electrical Engineering - IREE, vol. 3, no. 4, july- august 2008, pp. 613-620, ISSN 1827-6660. Revista cotata ISI, Scopus
24. Pleşca A., Adam M., Baraboi A., Pancu C., Thermal Analysis of Power Semiconductor Fuse, International Review of Modelling and Simulations-IREMOS, vol.1, nr.1, september-october 2008, pp. 129-134, ISSN 1974-9821. Revista indexata: Academic Search Complete - EBSCO Information Services, Cambridge Scientific Abstracts - CSA/CIG
25. construction, Bul. Inst. Polit. Iaşi, XLV (IL), Fasc. 5b, pp.112-115, 1999, ISSN 0258-9109, Database: Inspec.
26. Baraboi A., Adam M., Baraboi T. A., About the influence of temperature on the contact resistence, Bul. Inst. Polit. Iaşi, XLV (IL), Fasc. 5b, pp.116-119, 1999, ISSN 0258-9109, Database: Inspec.
27. Adam M., Baraboi A., Pancu C., The efficiency increasing of a.c. transmission with FACTS devices, Bul. Inst. Polit. Iaşi, XLV (IL), pp. 251-254, Fasc. 5b, 1999, ISSN 0258-9109, Database: Inspec.
28. Adam M., Baraboi A., Pancu C., Lazar M., FACTS devices for static compensation, Bul. Inst. Polit. Iaşi, XLV (IL), Fasc. 5b, pp. 255-258, 1999, ISSN 0258-9109, Database: Inspec.

G. Lucrări ştiinţifice publicate în reviste din străinătate

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS

6. Alin Dragomir, Maricel Adam, Silviu-Marian Antohi, Adrian Vîlcu, Alexandra Bodoga, Considerations Regarding Electrical Equipment Monitoring Through Infrared Thermography, Bulletin of the Polytechnic Institute of Iași, Electrical Engineering, Power Engineering, Electronics Section, Vol.68 (2022), Iasi, ROMANIA, 2024.
7. Dragos Murgoci, Maricel Adam, The Synchronous Electric Machine with Variable Geometry Done by Elastic Permanent Magnets, Bulletin of the Polytechnic Institute of Iași, Electrical Engineering, Power Engineering, Electronics Section, Vol.68 (2022), Iasi, ROMANIA, 2024.
8. M. Atanasoaei, M. Adam, M. Andrusca, A. Dragomir, C.N. Deac, Aspects Regarding the Use of Electronic Power Devices in Power Grid, Bulletin of the Polytechnic Institute of Iași. Electrical Engineering, Power Engineering, Electronics Section, vol. 67, nr. 1, pag. 55-63, 2021, (cod CNCSIS 87).
9. M.B. Micu, M. Adam, M. Andrusca, Nonintrusive electrical loads pattern determination Bulletin of the Polytechnic Institute of Iași. Electrical Engineering, Power Engineering, Electronics Section, vol. 67, nr. 1, pag. 65-74, 2021, (cod CNCSIS 87).
10. Th. G. Schreiner, M. Adam, Broadband Dielectric Spectroscopy and Its Role in the Characterization of Biological Cells, Bulletin of the Polytechnic Institute of Iași. Electrical Engineering, Power Engineering, Electronics Section, vol. 67, nr. 1, pag. 9-20, 2021, (cod CNCSIS 87).
11. Th. G. Schreiner, M. Adam, The Role of Dielectrophoresis in the Detection and Separation of Circulating Tumor Cells, Bulletin of the Polytechnic Institute of Iași. Electrical Engineering, Power Engineering, Electronics Section, vol. 67, nr. 2, pag. 53-63, 2021, (cod CNCSIS 87).
12. Dragomir A., Adam M., Andruşcă M., Munteanu A., Thermal stress wireless monitoring devices for electrical equipment, Buletinul Inst. Polit. Iasi, vol. 62 (66), nr.1, 2016, secția Electrotehnica, Energetica, Electronica, pp.19-27, (cod CNCSIS 87).
13. Dragomir A., Adam M., Andruşcă M., Munteanu A., Long term thermal stresses of a withdrawble electrical contact, Acta Electrotehnica, nr.3, 2015, pp. 83-87, (cod CNCSIS 576).
14. Munteanu A., Adam M., Andruşcă M., Cotruş A., Aspects about Supply Systems in Railway Electric Traction, Acta Electrotehnica, nr.3, 2015, pp. 183-187, (cod CNCSIS 576).
15. Andruşcă M., Adam M., R. Pantelimon, Baraboi A, Pancu C., Hardware-software Application for Monitoring and Diagnosis of Circuit Breakers, Acta Electrotehnica, Cluj, 2013, pp. 243-251, (cod CNCSIS 576).
16. Pantelimon R., Adam M., Andruşcă M., Pancu C., Comparative Study between Perturb and Observe and Open Circuit Voltage Algorithms used for Maximum Power Point Tracking, Acta Electrotehnica, Cluj, 2013, pp. 251-257, (cod CNCSIS 576).
17. Irimia D.F, Andruşcă M., Case study: a comparative analysis of the electric field near low frequency electric lines, Buletinul AGIR, nr. 2, 2012, pp. 781-787, (cod CNCSIS 415).
18. Adam M., Andruşcă M., Baraboi A., Irimia D., Technical condition and the importance of electrical equipment from a transformer electric substation on their maintenance order, Buletinul AGIR, nr. 2, 2012, pp. 503-511, (cod CNCSIS 415).
19. Andruşcă M., Adam M., Irimia D., Baraboi A., Electrical equipment maintenance, component of the asset management, Buletinul AGIR, nr. 2, 2012, pp. 513-520 (cod CNCSIS 415).
20. Andruşcă M., Adam M., Baraboi A., Irimia F. D., Aspects regarding the asset management of the electrical equipment into a power station, Buletinul AGIR, nr. 4, 2011, pp. 165-170, (cod CNCSIS 415).
21. Adam M., Baraboi A., Pancu, C., Andruşcă M., System for monitoring and diagnostics of the electrical equipment, Acta Electrotehnica, vol. 52, nr. 5, 2011, pp. 1-7, (cod CNCSIS 576).
22. Adam M., Baraboi A., Pancu, C., Plesca, A., About the impedance of the static var compensator and of the thyristor controlled series capacitor, Bul. Inst. Polit. Iasi, LVI (LX), Fasc. 2, 2010, pp. 65-75, ISSN 1223-8139. B+

23. Pancu C., Baraboi A., Adam M., Plesca A., Embedded system for monitoring, diagnostic and remote control of circuit breakers, Bul. Inst. Polit. Iasi, LVI (LX), Fasc. 1, 2010, pp. 109-116, ISSN 1223-8139. B+
24. Puiu P. G., Baraboi A., Adam M., Ababei S., Popa S. E., The software technics use for the realization of the asset management system in the electroenergetical domain, Romanian Technical Sciences Academy, Univerisy of Bacau, MOCM-14, vol 4, pp., 2009, ISSN 1224-7480. B+
25. Monica Rotariu, Baraboi A., Adam M., Pancu C., Power line monitoring and diagnoses using electromagnetic radiation field, PSC 2009, Timişoara, Romania, Bul. Univ. "Politehnica" Timisoara, Tom 54(68), pp.429-434, 2009, ISSN 1582-7194.
26. Adam, M., Baraboi A., Pancu, C., Aspects regarding of thyristors controlled series compensator, Bul. Inst. Polit. Iasi, LIV (LVIII), Fasc. 3, 2008, p. 205-210, ISSN 1223-8139. C
27. Pancu, C., Baraboi A., Adam, M., Plesca, A., Wireless solution for monitoring, diagnostic and control of circuit breakers, Bul. Inst. Polit. Iasi, LIV (LVIII), Fasc. 3, 2008, p. 73-78, ISSN 1223-8139. C
28. Ignat J., Chereches N. C., Adam M., Etude concernant l'effet de mise à terre dans le systéme de protection par liaison à la terre, Bul. Inst. Polit. Iaşi, LIII (LVII), Fasc. 3-4, pp.121-129, 2007, ISSN 1223-8139. B
29. Adam M., Baraboi A., Pancu C., Shunt compensation equipment controlled with thyristors, Bul. Inst. Polit. Iaşi, LII (LVI), Fasc. 5A, pp.175-180, 2006, ISSN 1223-8139. B
30. Baraboi A., Adam M., Pancu C., About the artificial intelligence control of the electromagnetic field monitoring and diagnostic, Bul. Inst. Polit. Iaşi, LII (LVI), Fasc. 5C, pp.1337-1342, 2006, ISSN 1223-8139. B
31. Pancu C., Popa S., Baraboi A., Adam M., New aspects regarding the magnetic field in the proximity of the electrical contacts, Bul. Inst. Polit. Iaşi, LII (LVI), Fasc. 5C, pp.1095-1100, 2006, ISSN 1223-8139. B
32. Baraboi A., Adam M., Pancu C., Modelling and simulation of the orthogonal magnetising controlled reactor, Bul. Inst. Polit. Iaşi, L (LIV), Fasc. 5A, pp.433-438, 2004, ISSN 1223-8139.
33. Bartic P., Baraboi A., Adam M., Pancu C., New aspects with regard to the monitoring and diagnostic of the systems end electrical equipment, Bul. Inst. Polit. Iaşi, L (LIV), Fasc. 5A, pp.305-311, 2004, ISSN 1223-8139.
34. Adam M., Baraboi A., Pancu C., Considerations concernant le compensateur statique shunt avance, Bul. Inst. Polit. Iaşi, L (LIV), Fasc. 5A, pp.249-254, 2004, ISSN 1223-8139.
35. Adam M., Baraboi A., Pancu C., Modele topologique du statcom, Bul. Inst. Polit. Iaşi, L (LIV), Fasc. 5A, pp.255-260, 2004, ISSN 1223-8139.
36. Luchian F., Pancu C., Baraboi A., Adam M., Intelligent system for the contact resistance evaluation of the switchgears, Bul. Inst. Polit. Iaşi, L (LIV), Fasc. 5A, p.185-190, 2004, ISSN 1223-8139.
37. Adam M., Baraboi A., Pancu C., Asset management in case of a substation, Bul. Inst. Polit. Iaşi, XLVIII (LII), Fasc. 5a, pp.311-316, 2002, ISSN 0258-9109.
38. Adam M., Baraboi A., Pancu C., Diagnostic and monitoring of the circuit breakers, Bul. Inst. Polit. Iaşi, XLVIII (LII), Fasc. 5b, pp.49-54, 2002, ISSN 0258-9109.
39. Baraboi A., Adam M., Modelisation et simulation de l'actionnement electromagnetique des disjoncteurs, Bul. Inst. Polit. Iaşi, XLVIII (LII), Fasc. 5b, pp.21-26, 2002, ISSN 0258-9109.
40. Baraboi A., Adam M., Modelisation et simulation du functionnement des appareils electriques limiteurs, Bul. Inst. Polit. Iaşi, XLVIII (LII), Fasc. 5b, pp.27-32, 2002, ISSN 0258-9109.
41. Baraboi A., Adam M., P. Leonte, Emploi du réacteur commandé orthogonalement pour le traitement du neutre dans les intallations moyenne tension, Bul. Inst. Polit. Iaşi, XLI (XLV), 1-2, s. III, pp.65-70, 1995.

42. Baraboi A., Adam M., I. Ciutea, Coculeana Popa, C. Iacob, Techniques modernes dans la commutation de puissance, Bul. Inst. Polit. Iaşi, XLI (XLV), Fasc. 5, s. III, pp.603-609, 1995.
43. Baraboi A., E. Hnatiuc, Adam M., Intensification du refroidissement des conducteurs à l'aide des caloducs, Bul. Inst. Polit. Iaşi, XL (XLIV), 1-4, s. III, pp.91-95, 1994.
44. Baraboi A., Adam M., Le spectre thermique d'un contact électrique glissant, Bul. Inst. Polit. Iaşi, XXXVIII(XLII), 1-4, s. III, pp.57-62, 1992.
45. E. Hnatiuc, Adam M., Sur une posibilité d'obtenir l'augmentation des performances des relais d'induction munis avec deux bagues de déphasage, Bul. Inst. Polit. Iaşi, XXXVIII(XLII), 1-4, s. III, pp.63-66, 1992.
46. Adam M., Baraboi A., Controlling dynamic characteristics of commutation electric equipment, Bul. Inst. Polit. Iaşi, XXXVII(XLI), 1-4, s. III, pp.41-43, 1991.
47. Baraboi A., Adam M., L'échauffement en régime permanent de la pièce en graphit d'un contact électrique glissant, Bul. Inst. Polit. Iaşi, XXXVI(XL), 1-2, s. III, pp.33-37, 1990.
48. Pancu C., Nemes C., Baraboi A., Adam M., The using of artificial intelligence in the reliabitily indices optimisation of electrical equipment, Romanian Technical Sciences Academy, Univerisy of Bacau, MOCM-14, vol 1, pp.179-184, 2008, ISSN 1224-7480.
49. Adam M., Baraboi A., Pancu C., Power factor of controlled rectifiers, Bul. Univ. "Politehnica"Timisoara, Tom 52(66), pp.1-8, 2007, ISSN 1582-7194.
50. Pancu C., Baraboi A., Adam M., P. Bartic Hardware /software structure for medium voltage circuit breaker control, Bul. Univ. "Politehnica"Timisoara, Tom 52(66), pp.503-509, 2007, ISSN 1582-7194.
51. Adam M., Baraboi A., Pancu C., Monitoring and diagnostic system for high voltage circuit breakers, Annals of the University of Craiova, Electrical Engineering series, No.31, Vol.1, pp.55-60, 2007, ISSN 1842-4805.
52. Pancu C., Baraboi A., Adam M., Hardware/software structure for the contact resistance estimation in case of an elementary contact, Annals of the University of Craiova, Electrical Engineering series, No.31, Vol.1, pp.68-71, 2007, ISSN 1842-4805.
53. Adam M., Baraboi A., Pancu C., Regarding to the controlled closing of the circuit breakers, Annals of the University of Craiova, Electrical Engineering series, No.30, pp.49-52, 2006, ISSN 1842-4805.
54. Pancu C., Baraboi A., Adam M., Artificial intelligence controlled system for the monitoring of electromagnetic pollution, Annals of the University of Craiova, Electrical Engineering series, No.30, pp.53-56, 2006, ISSN 1842-4805.
55. Baraboi A., Adam M., Pancu C., New aspects regarding the monitoring and diagnostic of the systems and electrical equipment, Annals of the University of Craiova, Electrical Engineering series, No.30, pp.229-232, 2006, ISSN 1842-4805.
56. Adam M., Baraboi A., Pancu C., Statcom, device of intelligent electrical networks, Bul. Univ. "Politehnica"Timisoara, Tom 50(64). Fasc. 1-2, pp.1-6, 2005, ISSN 1582-7194.
57. Pancu C., Baraboi A., Adam M., P. Bartic, The using of artificial intelligence in the analisys of the electric arc effects on the contacts, Bul. Univ. "Politehnica"Timisoara, Tom 50(64). Fasc. 1-2, pp.439-444, 2005, ISSN 1582-7194.
58. Baraboi A., Adam M., Pancu C., Modelling and EMTP Simulation of the Nonlinear and Parametrical Circuits to the Electrical Power Quqlity Evaluation, Romanian Technical Sciences Academy, Univerisy of Bacau, MOCM-11, vol 4, pp.99-104, 2005, ISSN 1224-7480.
59. Pancu C., Bartic P., Baraboi A., Adam M., New Approch for the Contact Resistance, Romanian Technical Sciences Academy, Univerisy of Bacau, MOCM-10, vol 2, pp.76-79, 2004, ISSN 1224-7480.
60. Adam M., Baraboi A., Pancu C., Stored energy of the acting mechanism and the performances of the circuit-breakers, Bul. Univ. "Politehnica"Timisoara, Tom 48 (62), Fasc. 1-2, pp.13-18, 2003, ISSN 1582-7194.
61. Pancu C., Baraboi A., Adam M., C. Donciu, PC sound card in the contact resistance's estimation , Bul. Univ. "Politehnica"Timisoara, Tom 48 (62), Fasc. 1-2, pp.399-402, 2003, ISSN 1582-7194.

62. Baraboi A., Adam M., Sur le fonctionnement d'un relais de type ferrorésonnant, Analele ştiinţifice ale Universităţii "Al. I. Cuza" Iaşi, Tomul XXXVIII, s. I. b. Fizică, 1992.
63. Baraboi A., Adam M., E. Furnică, Des possibilités de l'approximation des caractéristiques de la bobine nonlinéaire à noyau magnétisé orthogonalement et quelques aspects concernant le fonctionnement en régime permanent de celle-ci, Analele ştiinţifice ale Universităţii "Al. I. Cuza" Iaşi, Tomul XXXVIII, s. I. b. Fizică, 1992.
64. Adam M., Baraboi A., Sistem de management al echipamentelor electrice ale unei statii de transformare, Energetica, Vol. 51, nr.10, 424-427, 2003, ISSN 1453-2360.
65. Adam M., Baraboi A., N. Bruma, Popa Coculeana, Pancu C., Modelarea şi simularea solicitărilor termice ale întrerupătoarelor, Producerea, transportul şi distribuţia energiei electrice şi termice, nr.4, pp.25-31, 2001, ISSN 1224-1113.
66. R. Ciobanu, Baraboi A., Adam M., Aspecte manageriale în implementarea modeleleor de asigurare a calităţii totale în cadrul laboratoarelor, OPTIMUM Q, nr.1-2, 2001, ISSN 1220-6598.
67. Ciobanu R., Baraboi A., Adam M., Cristina Schreiner, Pancu C., Consideraţii privind raportul “Calitatea energiei-Compatibilitatea electromagnetică” în electroenergetică, OPTIMUM Q, X, nr. 3-4, pp.163-169, 2000, ISSN 1220-6598.
68. Baraboi A., Adam M., Intreruptoare de putere cu comutaţie în hexafluorură de sulf, Energetica, seria B, 5, pp.219-228, 1992.

I. Lucrări ştiinţifice publicate în volumele conferinţelor

I.1. Articole tipărite în volumele conferinţelor internaţionale din străinătate

1. Alin Dragomir; Maricel Adam; Gabriel Chiriac; Dragoș Murgoci; Adrian Vîlcu; Costică Nițucă, Infrared Monitoring of Low Voltage Switch Separator Contact Resistance, 14th International Conference on Electromechanical and Power Systems – SIELMEN 2023, Chișinău, Rep. Moldova, 11-13 October 2023.
2. A. Dragomir, M. Adam, M. Andrusca, M. Atanasoaei, S.M. Antohi, C.N. Deac, Ramakrishna, Perspectives on Railway Electric Traction System Improvement Brought by Monitoring the Impedance Bonds, 2021 International Conference on Electromechanical and Energy Systems (SIELMEN), Chisnau, Moldova, 2021.
3. S.M. Antohi, M. Adam, A. Dragomir, M. Andrusca, M. Atanasoaei, A. Miron, A. Iamandi, About Communication Networks Used within Electrical Equipment, 2021 International Conference on Electromechanical and Energy Systems (SIELMEN), Chisnau, Moldova, 2021.
4. Micu M.B., Adam M., Andruşcă M., Deac C.N, Possibilities of Monitoring, Commands and Control of the Circuit Breakers International Conference on Electromechanical and Energy Systems (SIELMEN), 2019.
5. Atanasoaei M., Adam M., Andruşcă M., Dragomir A., Deac C.N, Aspects regarding the Protection Relays from Power Substations, International Conference on Electromechanical and Energy Systems (SIELMEN), 2019.
6. Deac C.N., Adam M., Dragomir A., Micu M. B., Aspects Regarding the Alternating Current Monitoring In Electrical Equipment Testing Installations, 12th International Conference on Electromechanical and Power Systems - SIELMEN, Chișinău, Rep. Moldova, 2019.
7. Dragomir A., Adam M., Andruşcă M., Munteanu A., Boghiu E., Considerations Regarding Infrared Thermal Stresses Monitoring of Electrical Equipment, 11th International Conference on Electromechanical and Power Systems, Chisinau, Moldova, 2017, pp.100-103 (WoS Proceedings).
8. Munteanu A., Adam M., Andruşcă M., Dragomir A., Boghiu E., About Monitoring of Joint Coils from Electric Traction Railway, 11th International Conference on Electromechanical and Power Systems, Chisinau, Moldova, 2017, pp. 86-89 (WoS Proceedings).
9. Boghiu E., Adam M., Andruşcă M., Dragomir A., Munteanu A Aspects Regarding Controlled Switching of the Vacuum Circuit Breaker, 11th International Conference on

Electromechanical and Power Systems, Chisinau, Moldova, 2017, pp. 82-85 (WoS Proceedings).
10. Irimia F. D., Rotariu Monica, Andrusca M., Baraboi A., Adam M., Using the electromagnetic field in monitoring and diagnose of the electrical apparatus, The 7th International Symposium on Advanced topics in electrical engineering, Bucharest, Romania, 2011, pp. 277-282, ISSN 2068-7966, Database: ISI, IEEE Xplore, INSPEC.
11. Pancu C., Baraboi A., Adam M., Plesca T., GSM Based Solution for Monitoring and Diagnostic of Electrical Equipment, 13th WSEAS International Conference on Circuits, JUL 22-24, 2009, Rodos GREECE, pp. 58-63, ISSN: 1790-5117, ISBN: 978-960-474-096-3. Database: ISI
12. Baraboi A., Adam M., Pancu C., The Analyse and EMTP Simulation of an AC Tuned Filter, 13th WSEAS International Conference on Circuits JUL 22-24, 2009 Rodos GREECE, pp. 75-80, ISSN: 1790-5117, ISBN: 978-960-474-096-3. Database: ISI
13. Adam M., Baraboi A., Pancu C., About some FACTS devices from the power systems, 13th WSEAS International Conference on Circuits JUL 22-24, 2009 Rodos GREECE, pp. 87-92, ISSN: 1790-5117, ISBN: 978-960-474-096-3. Database: ISI
14. Adam M., Baraboi A., Pancu C., Pispiris S., New approach regarding the kinematics characteristics analysis of circuit breakers, 8th WSEAS International Conference on Electric Power Systems, High Voltages, Electric Machines "POWER ‘08", Venice, Italia, 2008, p. 77-80, ISBN 978-960-474-026-0, ISSN 1790-5117. Database: ISI
15. Pancu C., Adam M., Baraboi A., Roman C., New possibility for the electroerosion estimation of the circuit breakers contacts, 8th WSEAS International Conference on Electric Power Systems, High Voltages, Electric Machines "POWER ‘08", Venice, Italia, 2008, p. 81-84, ISBN 978-960-474-026-0, ISSN 1790-5117. Database: ISI
16. Adam M., Baraboi A., Pancu C., Aspects concerning the Static Var Compensator, 7th WSEAS International Conference on POWER SYSTEMS (PE 2007), Beijing, China, pp.197-200, 2007, ISSN: 1790-5117, ISBN: 978-960-6766-04-6. Database: ISI.
17. Pancu C., Baraboi A., Adam M., Hardware structure for synchronous switching of switchgears, The 10th International Conference on Optimization of Electrical and Electronic Equipments “OPTIM 2006”, Braşov, Romania, pp.169-172, 2006, ISBN 973-635-703-1. Database: ISI.
18. Baraboi A., Hnatiuc E., Adam M., Study about one possibility of modelation of the electric arc, 3rd AFRICON Conference, Africa de Sud, Ezulwini Valley, pp.139-142, 1992, Database: ISI, Inspec, IEEE-Xplore.
19. Irimia F. D., Baraboi A., Andruşcă M., Adam M., About some quality aspects regarding the renewable energy installations voltage, 11th International Conference on Electrical Power Quality and Utilisation – EPQU, 17-19 Octombrie 2011, Lisabona, Portugalia, pp. 1-6 (IEEExplore).
20. Adam M., Baraboi A., Pancu C., New aspects regarding controlled switching of the capacitor banks, The Sixth World Energy System Conference, Torino, Italy, pp.429-432, 2006, ISSN 88-87380-51-1.
21. Adam M., Baraboi A., Pancu C., New possibility for the contacts thermal stresses analysis, caused by the electric arc, using artificial neural network, Tenth International Conference "Switching Arc Phenomena-SAP2005”, Lodz, Poland, 2005.
22. Baraboi A., Adam M., Pancu C., About the possibilities to emtp simulating of the electrical arc phenomena, Tenth International Conference "Switching Arc Phenomena-SAP2005”, Lodz, Poland, 2005.
23. Pancu C., Baraboi A., Adam M., RISC architectures for medium voltage circuit breakers acting, SIELMEN 2005, Chisinau, Rep. Moldova, vol. I, pp.53-56, 2005, ISBN 973-716-208-0.
24. Baraboi A., Adam M., Pancu C., Electromagnetic actuators modelling and simulation, SIELMEN 2005, Chisinau, Rep. Moldova, vol. I, pp.37-40, 2005, ISBN 973-716-208-0.
25. Adam M., Baraboi A., Pancu C., Aspects regarding the management system of electrical apparatus, SIELMEN 2005, Chisinau, Rep. Moldova, vol. I, pp.57-60, 2005, ISBN 973-716-208-0.

26. Adam M., Baraboi A., Pancu C., About the monitoring and diagnostic of the circuit breakers, The XIIIth International Symposium on High Voltage Engineering, Delft, Olanda, p.4, 2003, ISBN 90-77017-79-8-CD-ROM.
27. Baraboi A., Adam M., Pancu C., Buhaescu R., The Analyse and EMTP Simulation of an AC Tuned Filter, EPQU 2003, Cracow, Poland, paper 2.6, 2003.
28. Adam M., Baraboi A., Pancu C., Buhaescu R., Influence of the Electrical Equipment Quality on Continuity of Supply, EPQU 2003, Cracow, Poland, paper 6.5, 2003.
29. Adam M., Baraboi A., Pancu C., Thyristors Controlled Series Compensator with Protection System, 7th International Conference on Modeling and Simulation of Electric Machines, Converters and Systems “ELECTRIMACS”, Montreal, Canada, p. 6, 2002, ISBN 2-921145-31-6 - CD-ROM.
30. Adam M., Baraboi A., Pancu C., About the electric arc model influence on thermal stress of the contact pieces, Nine International Conference "Switching Arc Phenomena-SAP2001, Lodz, Poland, pp.196-199, 2001.
31. Baraboi A., Adam M., Pancu C., Baraboi T. A., A new aproach on the combined Cassie-Mayr conductance type electric arc model, Ninth International Conference "Switching Arc Phenomena-SAP2001”, Lodz, Poland, pp.174-178, 2001.
32. Baraboi A., Adam M., Pancu C., The influence of supply voltage quality to the actuators behaviour, 6th international Conference “Electrical Power Quality and Utilisation-EPQU’01”, Cracow, Poland, pp.471-475, 2001, ISBN 83-914296-1-X.
33. Adam M., Baraboi A., Pancu C., Simulation of Thyristors Controlled Series Compensator, V Konferenkja Naukowo-Techniczna “ZASTOSOVANIA KOMPUTERÓW w ELEKTROTECHNICE”, Poznan/Kierkz, Poland, pp.227-230, 2000, ISBN 83-912306-0-0.
34. Baraboi A., Adam M., Pancu C., Limitation of the disturbing effects due power electronic rectifiers, V Konferenkja Naukowo-Techniczna “ZASTOSOVANIA KOMPUTERÓW w ELEKTROTECHNICE”, Poznan/Kierkz, Poland, pp.187-190, 2000, ISBN 83-912306-0-0.
35. Baraboi A., Adam M., Pancu C., Creşterea calităţii siguranţelor fuzibile prin ameliorarea caracteristicilor timp-curent, Conferinţa Naţională de Energetică, Chişinău, R. Moldova, I, pp.397-402, 2000
36. Adam M., Baraboi A., Pancu C., Metodă de evaluare a beneficilor economice ale monitorizării şi diagnosticării echipamentelor electrice, Conferinţa Naţională de Energetică, Chişinău, R. Moldova, I, pp.403-408, 2000.
37. Baraboi A., Ciutea I., Adam M., Pancu C., Baraboi T.A., Modeling and simulation of the thermal stress at the electric fuses contacts, Sixth International Conference on electric Fuses and Their Applications, Torino, Italy, pp.59-64, 1999.
38. Adam M., Baraboi A., Pancu C., Plesca T., Thermal stresses of fuses and protected semiconductor devices, Sixth International Conference on electric Fuses and Their Applications, Torino, Italy, pp.319-322, 1999.
39. Baraboi A., Adam M., Pancu C., Lazar Mariana, Compatibilitatea electromagnetică a aparatelor electrice din generaţii diferite, A Doua Conferinta Internationala de Sisteme Electromecanice, Chisinau, Modova, vol. II, pp.203-206, 1999.
40. Lazar Mariana, Baraboi A., Adam M., Pancu C., Comutaţia controlată în instalaţiile de înaltă tensiune, A Doua Conferinta Internationala de Sisteme Electromecanice, Chisinau, Modova, vol. II, pp.195-199, 1999.
41. Pancu C., Baraboi A., Adam M., Lazar Mariana, Simularea numerică a solicitărilor termice ale căilor conductoare, A Doua Conferinta Internationala de Sisteme Electromecanice, Chisinau, Modova, vol. II, pp.195-199, 1999.
42. Baraboi A., Adam M., Leonte P., Baraboi T. A., Asupra unei posibilităţi de simulare numerică a funcţionării sistemelor electromecanice, Prima Conferinţă Internaţională de Sisteme Electromecanice, Chişinău, R. Moldova, II, pp.3-6, 1997, ISBN 9975-910-22-X.
43. Leonte P., Furnică E., Adam M., Dispozitive electromagnetice pentru menţinerea nivelului de tensiune în reţelele electrice de distribuţie, Prima Conferinţă Internaţională de Sisteme Electromecanice, Chişinău, R. Moldova, II, pp.15-18, 1997, ISBN 9975-910-22-X.
44. Adam M., Baraboi A., Leonte P., Posibilitate de supraveghere a caracteristicilor cinematice ale întrerupătoarelor de înaltă tensiune, Prima Conferinţă Internaţională de

Sisteme Electromecanice, Chişinău, R. Moldova, II, pp.11-14, 1997, ISBN 9975-910-22-X.

45. Baraboi A., Adam M., Furnică E., Baraboi T. A., On the interaction arc-network, during the opening operations, Eighth International Conference "Switching Arc Phenomena", Lodz, Poland, pp.16-19, 1997, ISBN 83-87198-20-X.
46. Adam M., Baraboi A., Leonte P., A possibility to estimate the contacts electroerosion for the circuit breakers en service, Eighth International Conference "Switching Arc Phenomena", Lodz, Poland, pp.226-229, 1997, ISBN 83-87198-20-X.
47. Adam M., A. Baraboi, Ciutea I., Coculeana Popa, Leonte P., Simulation and Monitoring of the Circuit Breakers Mechanical System, Proceedings of ELECTRIMACS, Saint-Nazaire, France, 3, pp.1183-1186, 1996.
48. Baraboi A., Adam M., Leonte P., Modelling of circuit breaking at the fuses working, Fifth International Conference on Electric Fuses and their Applications, Ilmenau, Germany, pp.143-149, 1995.
49. Adam M., Baraboi A., Hnatiuc E., Aspects related with the diagnosis of the electric arc in the case of maintenance of circuit breakers, XIth Symposium on physics of switching arc, Brno, Czech Republic, pp.159-162, 1994.
50. Baraboi A., Adam M., Hnatiuc E., Unified Cassie Mayr model aided computation of the ac arc's characteristics, XIth Symposium on physics of switching arc, Brno, Czech Republic, pp.21-24, 1994.
51. Hnatiuc E., Baraboi A., Adam M., Czernichowski A., Cormier J. M., Richard F., The cold plasma discharge type of running the electrochemical "gliding arc" reactors, XIth Symposium on physics of switching arc, Brno, Czech Republic, pp.151-154, 1994.
52. Hnatiuc E., Baraboi A., Adam M., About the influence of the different factors concerning the harmonious components of the electric arc tension of the alternative current, International Scientific Conference on "Quality of electrical energy", Spala, Poland, I, pp.249-254, 1991.
53. Adam M., Mathe B., Ogranicenie poteri v metalliceskoi obolocike kabelei s pomoşciiu drosselei nasişceniia, ELENERGO '88, Sofia, Bulgaria, 1988.

I.2. Articole tipărite în volumele conferinţelor internaţionale din România

69. Silviu Marian Antohi; Maricel Adam; Alin Dragomir; Dragos Mugoci; Alexandru Panțiru, Industrial Communication Networks Used within SAW Sensors Data Transmission, 10th International Conference on Modern Power Systems – MPS 2023, Cluj, România 2023.
70. Alin Dragomir; Maricel Adam; Silviu Marian Antohi; Dragos Mugoci; Alexandru Panțiru, Temperature Monitoring of MV Switchgear Cabinet by Non-Intrusive Methods, 10th International Conference on Modern Power Systems – MPS 2023, Cluj, România 2023.
71. Alin Dragomir; Maricel Adam; Mihai Andrușcă, Centralized Monitoring and Diagnosing of the Return Circuit of Electric Railway Traction, XXVII International Conference"INVENTICA 2023. Science of creativity" June 22th, 2023, IASI, ROMANIA.
72. M.B. Micu, M. Adam, M. Andrusca , A. Anton, Bodolică M.C., Non-intrusive Monitoring of Consumers of the Power Station Internal Services, 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi), pp. 518-522, Iasi, Romania, 2024, (IEEExplore).
73. C Mihnea, M Andruşcă, M Adam, C Ciornohac, BN Ghiujan, A Anton, Monitoring of Medium Voltage Circuit Breakers using a Programmable Logic Controller, 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi), pp. 406-410, Iasi, Romania, 2024, (IEEExplore).
74. MC Bodolică, M Andrușcă, M Adam, A Anton, MB Micu, Aspects about Loads Monitoring and Static Switching for Unbalanced Low-Voltage Distribution Networks, pp. 435-439, Iasi, Romania, 2024, (IEEExplore).
75. Toma B.E., M Andrușcă, M Adam, C Mihnea, A Anton, D Daniel, Intelligent System of Management, Command, and Control of Electricity Generated by Renewable Sources, pp. 411-414, Iasi, Romania, 2024, (IEEExplore).

76. A Anton, M Andruşcă, M Adam, MB Micu, A Dragomir, SM Antohi, About Contact Resistance Monitoring and Vibration Analysis of a Power Circuit Breaker, pp. 430-434, Iasi, Romania, 2024, (IEEExplore).
77. Antohi S.-M., Lucache D.-D., Adam M., Dragomir, A., Nadabaica S.-A., Bodoga A., Digital Settings of Low Voltage Circuit Breakers, ICATE 2024 - Proceedings of the 2024 International Conference on Applied and Theoretical Electricity, 2024, Craiova, Romania.
78. Paduraru C.-B., Munteanu A., Adam, M., Dragomir A., Nadabaica S.-A., Chiriac G., Analysis of the permanent magnets influence on the operation of a BLDC motor, EPE 2024 - Proceedings of the 2024 13th International Conference and Exposition on Electrical and Power Engineering, 2024.
79. Dragomir. A, Pingescu B.- A., Adam, M., Paizan D. , Astanei D.-G, Bodoga A., Digital Communication Capabilities of Low Voltage Circuit Breakers, EPE 2024 - Proceedings of the 2024 13th International Conference and Exposition on Electrical and Power Engineering, 2024.
80. S.M. Antohi, M. Adam, A. Dragomir, M. Andrusca, M. Atanasoaei, A. Miron, A. Iamandi, Wireless Communication Networks within Electrical Equipment, 2021 9th International Conference on Modern Power Systems (MPS), Cluj, Romania, 2021.
81. M. Atanasoaei, M. Adam, M. Andrusca, A. Dragomir, C.N. Deac, Aspects Regarding the Presence of TCSC Devices on the Transmission Lines, 2021 9th International Conference on Modern Power Systems (MPS), Cluj, Romania, 2021. .
82. Antohi, S.-M., Adam, M., Dragomir, A., Atanasoaei, M., Pantiru, A., The Influence of Electrical Equipment Structural Elements on their Wireless Communications, EPE 2022 - Proceedings of the 2022 12th International Conference and Exposition on Electrical and Power Engineering, pp. 703-707, 2022.
83. Dragomir, A., Adam, M., Antohi, S.-M., Atanasoaei, M., Pantiru, A., Monitoring and Diagnosis of Electrical Equipment by Infrared Thermography, EPE 2022 - Proceedings of the 2022 12th International Conference and Exposition on Electrical and Power Engineering, pp.516-520, 2022.
84. Murgoci, D., Adam, M., Research on the Influence of the Nominal Current on the Torque and Respectively on the Efficiency for the BLDC Motor with Variable Geometry, EPE 2022 - Proceedings of the 2022 12th International Conference and Exposition on Electrical and Power Engineering, pp. 610-616, 2022.
85. Pantiru, A., Barbuta, M., Adam, M., Dragomir, A., Antohi, S.-M., Foundation Structural Resistance Calculation of SF6 High-Voltage Circuit Breaker, EPE 2022 - Proceedings of the 2022 12th International Conference and Exposition on Electrical and Power Engineering, pp. 698-702, 2022.
86. Schreiner, T.G., Schreiner, O.D., Adam, M., Dielectric parameters of circulating tumor cells - in search of the most suitable buffer solution, EPE 2022 - Proceedings of the 2022 12th International Conference and Exposition on Electrical and Power Engineering, pp. 84-88, 2022.
87. Atanasoaei, M., Adam, M., Andrusca, M., Dragomir, A., Deac, C.N., The Influence of TCSC Devices on Distance Protection Tripping Characteristic, EPE 2022 - Proceedings of the 2022 12th International Conference and Exposition on Electrical and Power Engineering, pp. 135-140, 2022.
88. M. B. Micu, M. Adam, M. Andrusca, A. Dragomir, C.N. Deac, Aspects Regarding the Loads Patterns Determination from the Internal Sevices of the Power Substations, The 11th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 22-23 0ctombrie 2020.
89. A. Dragomir, M. Adam, M. Andrusca, M. Atanasoaei, O. Rusu, A. Miron, A. Iamandi, Aspects Regarding the Infrared Monitoring of Electrical Equipment Temperature, The 11th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 22-23 0ctombrie 2020.
90. E. Ojovanu, A. Dragomir, M. Adam, M. Andrusca, C.N. Deac, M. Cardasim, G. Mocanu, Mechanical Fault Detection by Vibration Monitoring of Electrical Equipment, The 11th

International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 22-23 0ctombrie 2020.
91. C.N. Deac, M. Adam, M. Andrusca, A. Dragomir, M. Micu, Supervision and Control System of an Electrical Equipment Testing Installation, The 11th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 22-23 0ctombrie 2020.
92. M. Atanasoaei, M. Adam, M. Andrusca, A. Dragomir, C.N. Deac, Effects of Solid State Current Limiter on the Power Grid, The 11th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 22-23 0ctombrie 2020.
93. M. Adam, M. Andrusca, A. Dragomir, D. Astanei, R. Burlica, Technical Condition Monitoring of Impedance Bonds using Sensors and Dedicated Device, The 11th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 22-23 octombrie 2020.
94. Dragomir M., Iamandi A., Rusu A.C., Atanasoaei M., Dragomir A., Adam M., Andruşcă M., Single-terminal Fault Location Algorithm for Electrical Lines, 54th International Universities Power Engineering Conference (UPEC) 2019.
95. Dragomir A., Atanasoaei M., Adam M., Andruşcă M., Deac C.N, Dragomir M., Infrared Procedure for Monitoring Long-term Thermal Stresses of Electrical Equipment, 54th International Universities Power Engineering Conference (UPEC) 2019.
96. Dragomir A., Adam M., Andruşcă M., Deac C.N, Iamandi A., Temperature logger for Electrical Equipment's Thermal Stress Monitoring, 8th International Conference on Modern Power Systems (MPS), 2019.
97. Deac C.N., Adam M., Andruşcă M., Dragomir A., Aspects Regarding Contact Resistance Measurement, 8th International Conference on Modern Power Systems (MPS), 2019.
98. Micu, M.B., Adam M., Andruşcă M., Deac C.N., Aspects Regarding the Electromagnetic Pattern for the Operating Mechanism of a Medium Voltage Circuit Breaker, 8th International Conference on Modern Power Systems (MPS), 2019.
99. Dragomir A., Adam M., Andruşcă M., A Review about Wireless Monitoring of Electrical Equipment Temperature, 11th International Symposium on Advanced Topics in Electrical Engineering (ATEE), 2019
100. Andruşcă M., Adam M., Dragomir A., Astanei D., Andrusca L., About Monitoring of Medium Voltage Circuit Breakers with SF6, 10th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2018, pp. 551-559 (WoS Proceedings).
101. Adam M., Andruşcă M., Dragomir A., Burlica R., Short-circuit Thermal State of a Withdrawable Contact, 10th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2018, pp. 963-967 (WoS Proceedings).
102. Dragomir A., Adam M., Andruşcă M., Astanei D., Andrusca L., Dumitrescu C., About Some Connection Modes of the Current Conducting Paths, 10th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2018, pp. 357-361 (WoS Proceedings).
103. Dragomir A., Adam M., Andruşcă M., Burlica R., Micu M.B., Patrichi S., Simulating Electrical Connections in Terms of Thermal Stresses, 10th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2018, pp. 361-367 (WoS Proceedings).
104. Astanei D., Burlica R., Dirlau I.D., Andruşcă M., Ayrton Relation Applied for Medium Voltage AC Electrical Discharges, 10th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2018, pp. 583-589 (WoS Proceedings).
105. Munteanu A., Adam M., Andruşcă M., Dragomir A., Micu M.B., Cardasim M., A Possibility to Monitoring and Diagnosis of the Joint Coils from Railway Electric Traction, 10th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2018, pp. 538-542 (WoS Proceedings).
106. Munteanu A., Adam M., Andruşcă M., Dragomir A., Micu M.B., Aspects regarding the Monitoring of Electrical Equipment from Electric Traction, 10th International Conference

and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2018, pp. 547-551 (WoS Proceedings).

107. Micu M.B., Adam M., Andruşcă M., Dragomir A., Aspects Regarding Electrical Loads Pattern Recognition Using Artificial Neural Network, 10th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2018, pp. 325-329 (WoS Proceedings).
108. Deac C. N., Adam M., Pancu C., Andruşcă M., Dragomir A., Aspects Regarding the High-Current Testing of Current Paths, 10th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2018, pp. 508-512 (WoS Proceedings).
109. Dragomir A., Adam M., Andruşcă M., Munteanu A., Environmental Footprint created by Thermal Stresses Electrical Equipment, 7th International Conference on Modern Power Systems - MPS, Cluj, România 2017 (WoS Proceedings).
110. Munteanu A., Adam M., Andruşcă M., Boghiu E., Dragomir A. , Thermal Stress Analysis of Current Path from Return Circuit of Electric Traction, 7th International Conference on Modern Power Systems - MPS, Cluj, România 2017 (WoS Proceedings).
111. Boghiu E., Adam M., Andruşcă M., Dragomir A., Munteanu A., Influence of Operational Voltage on Switching Time of the Circuit Breakers, 7th International Conference on Modern Power Systems - MPS, Cluj, România 2017 (WoS Proceedings).
112. Gheorghiţă M.C., Adam M., Andruşcă M., Munteanu A., Dragomir A., About Contact Resistance of the Electrical Equipment, 7th International Conference on Modern Power Systems - MPS, Cluj, România, 2017 (WoS Proceedings).
113. Andruşcă M., Adam M., Burlica R., Dragomir A., Munteanu A., Considerations regarding the Influence of Contact Resistance on the Contacts of Low Voltage Electrical Equipment Proceedings, 9th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2016, pp. 123-128 (WoS Proceedings).
114. Adam M., Andruşcă M., Dragomir A., Munteanu A., About the Dynamic Contact Resistance of the Circuit Breakers, 9th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2016, pp. 129-132 (WoS Proceedings).
115. Boghiu E., Adam M., Andruşcă M., Micu M., Aspects Regarding the Controlled Switching of the Shunt Reactors, 9th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2016, pp. 119-122 (WoS Proceedings).
116. Micu M., Adam M., Andruşcă M., Boghiu E., Aspects Regarding the Nonintrusive Load Monitoring and Electrical Equipment Diagnosis from Power Substations, 9th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2016, 115-118 (WoS Proceedings).
117. Munteanu A., Adam M., Andruşcă M., Dragomir A., Modeling and Simulation of a Supply System from Electric Traction, 9th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2016, pp. 111-114 (WoS Proceedings).
118. Dragomir A., Adam M., Andruşcă M., Munteanu A. Aspects Concerning the Influence of Environmental Factors in Infrared Monitoring of Electrical Equipment, 9th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2016, pp. 133-138 (WoS Proceedings).
119. Burlica R., Astanei D., Andruşcă M., Hnatiuc E. The Dynamic Behavior of Electromagnetic Plunger Drivers For Electrical Apparatusses with Contacts, 9th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2016, pp. 139-142 (WoS Proceedings).
120. Andruşcă M., Adam M., Baraboi A., Pantelimon R., Dragomir A., Using Fuzzy Logic for Diagnosis of Technical Condition of Power Circuit Breakers, Proceedings 8th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2014, pp. 268-273 (WoS Proceedings).

121. Andruşcă M., Adam M., Molodeschi M., Roman C., Andruşcă L., Asset Management System - Software Application on Power Substation Level, Proceedings 8th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2014, pp. 274-279 (WoS Proceedings).
122. Dragomir A., Adam M., Andruşcă M., Molodeschi M., About Thermal Stresses Monitoring and Diagnosis of Electrical Equipment, Proceedings 8th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2014, pp. 289-294 (WoS Proceedings).
123. Cotruş A., Adam M., Andruşcă M., Pantelimon R., Power Flow Control Equipment, Proceedings 8th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2014, pp. 284-288 (WoS Proceedings).
124. Andruşcă M., Adam M., R. Pantelimon, Baraboi A., About diagnosis of circuit breakers from electricity company, 8th International Symposium on Advanced Topics In Electrical Engineering-ATEE Bucureşti, România, 2013, (WoS Proceedings).
125. Pantelimon R., Adam M., Andruşcă M., Pancu C., Aspects regarding solar battery charge controllers, 8th International Symposium on Advanced Topics In Electrical Engineering - ATEE, Bucureşti, România, 2013 (WoS Proceedings).
126. Andruşcă M., Adam M., Irimia D., Baraboi A., Aspects about the monitoring and diagnosis of high voltage circuit breakers, Proceedings 7th International Conference and Exposition on Electrical and Power Engineering - EPE, Octombrie, Iași, România, 2012, pp. 154 – 158 (WoS Proceedings).
127. Andruşcă M., Adam M., Irimia D., Baraboi A., Embedded system and software application for monitoring and diagnosis of high voltage circuit breakers, Proceedings 7th International Conference and Exposition on Electrical and Power Engineering -EPE, Octombrie, Iași, România, 2012, pp. 159 – 166 (WoS Proceedings).
128. Irimia D., Baraboi A., Adam M., Andruşcă M., Modeling, EMTP simulation and analyse of the electrical equipment from renewable energy system, Proceedings 7th International Conference and Exposition on Electrical and Power Engineering-EPE,Octombrie, Iași, România, 2012, pp. 143 – 147 (WoS Proceedings).
129. Irimia D., Baraboi A., Adam M., Andruşcă M., Monitoring and diagnosis of the inverter from a renewable energy system, Proceedings 7th International Conference and Exposition on Electrical and Power Engineering-EPE, Octombrie, Iași, România, 2012, pp. 167 – 171 (WoS Proceedings).
130. Andruşcă M., Adam M., Irimia D., Baraboi A., Prioritization of maintenance activities from an electricity company, 13th International Conference on Optimization of Electrical and Electronic Equipment (OPTIM 2012), Braşov, România, 2012, pp.1259-1265 (IEEE Xplore).
131. Andruşcă M., Adam M., Baraboi A., Irimia D., Pancu C., Pleşca T., Considerations regarding the asset management into electricity company, The 5th International Conference of Management and Industrial Engineering ICMIE 2011, 20-21 Octombrie Bucureşti, România, 2011, pp. 396-405 (WoS Proceedings).
132. Andruşcă M., Adam M., R. Pantelimon, Baraboi A, Pancu C., LabVIEW Software Aplication for Monitoring and Diagnosis of Circuit Breakers, Proceedings of 5th International Conference on Modern Power Systems – MPS, Cluj-Napoca, România, 2013, pp. a34-a40.
133. Pantelimon R., Adam M., Andruşcă M., Pancu C., Comparative Study of Maximum Power Point Tracking Algorithms used in Solar Battery Charge Controllers, Proceedings of 5th International Conference on Modern Power Systems – MPS, Cluj-Napoca, România, 2013, pp. a40-a43.
134. Adam M., Baraboi A., Pancu C., Monitoring and diagnostic system for high voltage circuit breakers (first part),The 6th Conference on Electrical and Power Engineering, Iaşi, Romania, vol. I, pp. 65-68, 2010, ISBN 978-606-13-0077-8
135. Adam M., Baraboi A., Pancu C., Monitoring and diagnostic system for high voltage circuit breakers (second part),The 6th Conference on Electrical and Power Engineering, Iaşi, Romania, vol. I, pp. 69-72, 2010, ISBN 978-606-13-0077-8

136. Baraboi A., Adam M., Pancu C., EMTP simulation of the electrical contacts, The 6th Conference on Electrical and Power Engineering, Iaşi, Romania, vol. I, pp. 49-52, 2010, ISBN 978-606-13-0077-8
137. Baraboi A., Adam M., Monica Rotariu, On the modeling and emtp simulation of electrical fuse operation, The 6th Conference on Electrical and Power Engineering, Iaşi, Romania, vol. I, pp. 61-64, 2010, ISBN 978-606-13-0077-8
138. Pancu C., Baraboi A., Adam M., Hardware structure for synchronous switching of switchgears, The 10th International Conference on Optimization of Electrical and Electronic Equipments "OPTIM 2006", Braşov, Romania, pp.169-172, 2006, ISBN 973-635-703-1.
139. Pancu C., Baraboi A., Adam M., Study on cinematic characteristics of switchgears using artificial intelligence, The fifth International World Energy System Conference, Oradea, Romania, pp.342-345, 2004.
140. Adam M., Baraboi A., Pancu C., Possibilite de surveillence, diagnose et commande pour les appareils de comutation, The fifth International World Energy System Conference, Oradea, Romania, pp.88-91, 2004.
141. Pancu C., Baraboi A., Adam M., Evaluarea rezistenţei de contact a aparatelor de comutaţie utilizând reţele neuronale artificiale, Simpozionul Internaţional "Sisteme de inteligenţă artificială în electroenergetică", Galaţi, pp.211-216, 2004, ISBN 973-87078-0.
142. Adam M., Baraboi A., Pancu C., Arhitecturi pentru sistemele de monitorizare şi diagnosticare ale echipamentelor electrice, Simpozionul Internaţional "Sisteme de inteligenţă artificială în electroenergetică", Galaţi, pp.3-10, 2004, ISBN 973-87078-0.
143. Baraboi A., Adam M., Pancu C., Modeling and simulation of the currents effects on the electric contacts, The International Conference on Applied and Theoretical Electrotechnics "ICATE 2004", Baile Herculane, Romania, pp.253-258, 2004.
144. Baraboi A., Adam M., Pancu C., Stationary and dynamic thermal problems at the electrical apparatus, The International Conference on Applied and Theoretical Electrotechnics "ICATE 2004", Baile Herculane, Romania, pp.259-264, 2004.
145. Adam M., Baraboi A., Performances dinamiques du compensateur serie comande par thyristors, CIGRE BLACK SEA EL-NET-2001, Romania, 2001.
146. Adam M. , Baraboi A., Leonte P., The predictive maintenance of circuit breakers using reliability in service, The International Conference on Applied and Theoretical Electrotechnics "ICATE'98" Craiova, Romania, vol.II, pp.117-121, 1998.
147. Baraboi A., Dobrea V., Ignat C., Adam M., Pancu C. M., L`utilisation de l'alliage CuNi3SiMn dans la construction des contacts électriques, The International Conference on Applied and Theoretical Electrotechnics "ICATE'98" Craiova, Romania, vol.II, pp.17-21, 1998.
148. Baraboi A., Adam M., Ciutea I., Coculeana Popa , Brumă N., Computation and measurement of the electric and magnetic fields of overhead transmission lines, The 5th International Conference on Optimization of Electric and Electronic Equipments OPTIM'96, Braşov, Romania, pp.897-902, 1996, ISBN 973-97549-5-3.
149. Adam M., Baraboi A., Leonte P., Modelling of the thermal stress and the monitoring of circuit breakers, The 5th International Conference on Optimization of Electric and Electronic Equipments OPTIM'96, Braşov, Romania, pp.641-646, 1996, ISBN 973-97549-5-3.
150. Baraboi A., Adam M., Leonte P., Baraboi T. A., Simulation des contraintes thermiques de l'appareillage électrique, The International Conference on Applied and Theoretical Electrotechnics "ICATE'96", Craiova, Romania, vol. II, pp.11-16, 1996.
151. Adam M., Baraboi A., Brumă N., Leonte P., Iacob C., Surveillance et simulation du système mécanique des disjoncteurs, The International Conference on Applied and Theoretical Electrotechnics "ICATE'96" Craiova, Romania, vol.II, pp.1-4, 1996.
152. Adam M., Baraboi A., Leonte P., La surveillance des équipements électriques dans les installations THT, VHV Networks Symposium Sibiu, Romania, vol. I, s. I-II, pp.143-146, 1995.

153. Baraboi A., Adam M., Leonte P., Modélisation de l'arc électrique dans l'appareillage de coupure THT, VHV Networks Symposium Sibiu, Romania, vol. I, s. I-II, pp.147-150, 1995.
154. Baraboi A., Ignat C., Adam M., Dobrea V., Research about the using of the CuNi4AlSi material in electric contacts construction, The 4th International Conference on Optimization of Electric and Electronic Equipments OPTIM'94, Braşov, Romania, pp.103-108, 1994.
155. Adam M., Baraboi A., Leonte P., The electric equipments diagnosis. The current monitoring, The 4th International Conference on Optimization of Electric and Electronic Equipments OPTIM'94, Braşov, Romania, pp.23-27, 1994.
156. Adam M., Baraboi A., Leonte P., Some aspects concerning the diagnostic of high voltage circuit breakers, The International Conference on Applied and Theoretical Electrotechnics "ICATE'93", Craiova, Romania, B, pp.196-201,1993.
157. Baraboi A., Adam M., Les influences des conditions à la limite et de la force de contact sur l'echauffement des contacts électriques glissants, The International Conference on Applied and Theoretical Electrotechnics "ICATE'93", Craiova, Romania, B, pp.208-213, 1993.
158. Adam M., Baraboi A., Sensitizing of a minimal voltage protection for the sequence order of the phases, The International Conference on Applied and Theoretical Electrotechnics "ICATE'91", Craiova, Romania, B, pp.B1, 1991.
159. Baraboi A., Adam M., Analyse in forced operating conditions of a real crossed magnetic fields reactor, The International Conference on Applied and Theoretical Electrotechnics "ICATE'91", Craiova, Romania, B, pp.B4, 1991.

I.3. Articole tipărite în volume ale conferinţelor naţionale

1. Benchea M., Baraboi A., Adam M., Puiu P. G., Sisteme de telecomunicații pentru monitorizarea online continuă, de la distanță a echipamentelor de teleprotecție, Simpozionul Național de Informatică, Automatizări și Telecomunicații în Energetică, SIE 2012, Sinaia, Romania, p.1.23, 2012.
2. Benchea M., Drilea D., Baraboi A., Adam M., Puiu P. G., Soluții tehnice pentru monitorizarea echipamewntelor si instalațiilor electrice, Simpozionul Național de Informatică, Automatizări și Telecomunicații în Energetică, SIE 2012, Sinaia, Romania, p.1.16, 2012.
3. Puiu P. G., Baraboi A., Adam M., Ababei S., Popa S., The software technics use for the realization of the asset management system in the electroenergetical domain,7th National Conference on Industrial Energetics, Bacau, pp.261-270, 2009, ISBN 987-606-527-050-3.
4. Adam M., Baraboi A., Pancu C., Arhitecturi pentru sistemele de monitorizare şi diagnosticare ale echipamentelor electrice, Simpozionul Internaţional "Sisteme de inteligenţă artificială în electroenergetică", Galaţi, pp.3-10, 2004, ISBN 973-87078-0.
5. Pancu C., Baraboi A., Adam M., Evaluarea rezistenţei de contact a aparatelor de comutaţie utilizând reţele neuronale artificiale, Simpozionul Internaţional "Sisteme de inteligenţă artificială în electroenergetică", Galaţi, pp.211-216, 2004, ISBN 973-87078-0.
6. Adam M., Baraboi A., Pancu C., Dynamic behaviour of thyristors controlled series compensator, Conferinţa Naţională a Energiei "CNE 2002"- Ediţia a VI-a, , Neptun, 2002.
7. Adam M., Baraboi A., Consideraţii privid montorizarea şi diagnosticarea funcţiei de comutaţie a întrerupătoarelor, Conferinţa Naţională de Energetică Industrială-CNEI 2000, Bacău, pp.7-10, 2000.
8. Baraboi A., Adam M., Pancu C., Utilizarea tuburilor termice în construcţia echipamentelor electrice, Conferinţa Naţională de Energetică Industrială-CNEI 2000, Bacău, pp.102-105, 2000.
9. Pancu C., Baraboi A., Adam M., Rădăşanu Daniela, Iacob C., Utilizarea reţelelor neuronale artificiale în estimarea stării tehnice a contactelor aparatelor de comutaţie, Simpozionul Naţional de Reţele electrice-SNRE , Iaşi, II, pp.73-78, 2000.

10. Baraboi A., Adam M., Pancu C., Popa Coculeana, H. Alexandrescu, Prezent şi perspective în dezvoltarea tehnicilor de comutaţie, Simpozionul Naţional de Reţele electrice, Iasi, II, pp.89-98, 2000.
11. Adam M., Baraboi A., Coculeana Popa, Brumă N., Aprecierea electroeroziunii contactelor la întrerupătoarele de putere, Simpozionul Naţional de Reţele Electrice - SNRE 98, Piteşti, pp.727-733, 1998.
12. Baraboi A., Adam M., Leonte P., Ciutea I., Sufleţel N., Iacob C., Modernizarea siguranţelor fuzibile de joasă tensiune prin îmbunătăţirea caracteristicilor de protecţie, Simpozionul Naţional de Reţele Electrice, Cluj, pp.212-215, 1996.
13. Adam M., Baraboi A., Leonte P., Coculeana Popa, Ştefanovici C., Mentenanţa echipamentelor de comutaţie, centrată pe supravegherea fiabilităţii în exploatare, Simpozionul Naţional de Reţele Electrice, Cluj, pp.143-146, 1996.
14. Adam M., Baraboi A., Leonte P., Cu privire la diagnosticarea echipamentelor electrice de comutaţie, Simpozionul Naţional de Reţele Electrice, Suceava, I pp.145-151, 1994,.
15. Baraboi A., Adam M., Consideraţii privind implementarea echipamentelor electronice de putere în reţelele electrice, Simpozionul Naţional de Reţele Electrice, Suceava, III, pp.391-401, 1994.
16. Adam M., Baraboi A., Leonte P., Hnatiuc E., Regarding on the electric equipments diagnosis, National Energy Conference, Neptun, România, IV, pp.43-47, 1992.
17. Leonte P., Baraboi A., Adam M., Equipment for the drying of the asinchronous three-phase electromotors used in the generating plants, National Energy Conference, Neptun, România, V, pp.69-75,1992.
18. Baraboi A., Hnatiuc E., Adam M., Antibiphasic protection of the electromotors sensitive for the sequence order of the phases, Proceedings of "The Eighth National Conference Of Electrical Drives", Iaşi, II, pp.D.20.1- D.20.4, 1992.

I.4. Articole tipărite în volume ale conferinţelor de interes naţional şi alte publicaţii

1. Baraboi A., Adam M., Pancu C., Electromagnetic pollution effect of the power systems, The 3rd Workshop of Electromagnetic Compatibility - CEM 2006, Iasi, pp.12-15, 2006.
2. Baraboi A., Adam M., Soluţii moderne de limitare a supracurenţilor în instalaţiile electroenergetice, Buletin Informativ SC Electrica SA, pp.26-37, Ianuarie 2001.
3. Adam M., Afef Kedos Lebouc, Pilotage d'un banc de caractérisation de type, cadre à bande unique, utilisant l'environnement LabWindows/CVI, Buletinul Informativ TEMPUS, nr.2, pp.156-161, 2000.
4. Adam M., Baraboi A., Leonte P., Ştefanovici C., Supravegherea şi diagnosticarea întrerupătoarelor cu ajutorul calculatorului, Simpozionul de informatică în energetică SIE'96, Suceava, vol. I, pp.206-211, 1996.
5. Adam M., Baraboi A., Coculeana Popa, C. Ştefanovici, Leonte P., Asupra unei posibilităţi de decizie în aplicarea mentenanţei preventive în instalaţiile de distribuţie, Simpozionul de siguranţă în funcţionarea SEN, Galaţi, 1995.
6. Adam M., Baraboi A., Leonte P., Diagnosticarea întrerupătoarelor cu SF6, Simpozionul de siguranţă în funcţionarea SEN, Cluj, 1993.
7. Leonte P., Furnică E., Adam M., Transformer of the phases for some utilisations with a single-phase power lead, Sesiunea ştiinţifică jubiliară "80 de ani de învăţământ electrotehnic la Iaşi", Facultatea de Electrotehnică, Iaşi, pp.161-164, 1992.
8. Adam M., Baraboi A., Leonte P., The electronic equipments protection possibilities against superintensity, Sesiunea ştiinţifică jubiliară "80 de ani de învăţământ electrotehnic la Iaşi", Facultatea de Electrotehnică, Iaşi, pp.157-160, 1992.
9. Baraboi A., Leonte P., Hnatiuc E., Adam M., Asupra dependenţei rezistenţei de contact în raport cu temperatura, Al III-lea simpozion "Optimizarea dezvoltării şi exploatării instalaţiilor energetice", Facultatea de Electrotehnică, Iaşi, III, pp.201-204, 1991.
10. Baraboi A., Adam M., Hnatiuc E., Leonte P., Utilizarea tuburilor termice în construcţia contactelor electrice, Al III-lea simpozion "Optimizarea dezvoltării şi exploatării instalaţiilor energetice", Facultatea de Electrotehnică, Iaşi, III, pp.209-212, 1991.

11. Adam M., Baraboi A., Leonte P., Hnatiuc E., Furnică E., Aspecte privind diagnosticarea echipamentelor electrice. Rezistenţa de contact dinamică, Al III-lea simpozion “Optimizarea dezvoltării şi exploatării instalaţiilor energetice”, Facultatea de Electrotehnică, Iaşi, III, pp.205-208, 1991.
12. Hnatiuc E., Baraboi A., Leonte P., Furnică E., Adam M., Stadiul actual şi perspective în realizarea aparatelor de comutaţie de joasă tensiune, Al III-lea simpozion “Optimizarea dezvoltării şi exploatării instalaţiilor energetice”, Facultatea de Electrotehnică, Iaşi, III, pp.279-285, 1991.
13. Adam M., Baraboi A., Leonte P., Hnatiuc E., Furnică E., Influenţa modului de legare la pământ a ecranului metalic al cablurilor monofazate asupra impedanţei de serviciu, Al III-lea simpozion “Optimizarea dezvoltării şi exploatării instalaţiilor energetice”, Facultatea de Electrotehnică, Iaşi, III, pp.297-300, 1991.
14. Adam M., Aparat pentru determinarea nesimultaneităţii închiderii şi deschiderii contactelor întrerupătoarelor, Sesiunea ştiinţifică a Facultăţii de Electrotehnică, Iaşi, VI, pp.245-248, 1986.
15. Adam M., Baraboi A., Aparat pentru testarea întreruptoarelor de medie şi înaltă tensiune, Sesiunea ştiinţifică a Facultăţii de Electrotehnică, Iaşi, VI, pp.249-256, 1986.

J. Invenţii

1. Metodă şi aparat pentru monitorizarea și diagnosticarea bobinelor de joantă, Adam M., Munteanu A., Pancu C.M., Andrușcă M., Brevet de invenție nr. RO132165 (B1), 2023-03-30.
2. Minireactor electrochimic cu plasma non-termica cu geometrie in forma de T pentru producerea apei activate, Burlica R., Astanei D., Dirlau D., Beniuga O., Andrusca M., Adam M., Brevet de invenție nr. RO134206 (B1), 2024.
3. Adam M., Munteanu A., Pancu C.M., Andrușcă M., Metodă și sistem pentru localizarea sectorului cu defect în instalațiile de alimentare din tracțiunea electrică, Cerere brevet de invenție nr. a 00936, 2017.
4. Comutator de reglaj sub sarcină tensiunii pentru transformatoarele de forţă, Leonte P., Baraboi A., Adam M., Brevet RO 116328 B1, 2001.
5. Dispozitiv pentru supravegherea electroeroziunii contactelor întrerupătoarelor, Adam M., Bruma N., Leonte P., Baraboi A., Brevet RO nr. 110586 B1, 1996.
6. Dispozitiv de protecţie la supracurenţi sau supratemperaturi, Baraboi A., Leonte P., Adam M., Brevet RO nr. 110102 B1, 1995.
7. Dispozitiv electromagnetic de protecţie, Leonte P., Baraboi A., Adam M., Brevet RO nr. 108509 B1, 1994.
8. Dispozitiv electromagnetic de semnalizare avarii, Leonte P., Baraboi A., Adam M., Brevet RO nr. 106169 C1, 1993.
9. Dispozitiv sesizor de câmp electric alternativ, Leonte P., Baraboi A., Hnatiuc E., Adam M., Brevet RO nr. 107772 B1, 1993.
10. Releu trifazat minimal de tensiune sensibil la ordinea de succesiune a fazelor, Baraboi A., Hnatiuc E., Adiaconitei C., Iordan I., Adam M., Albu I., Brevet nr. 91757, 1986.

K. Contracte de cercetare/granturi

1. „Energy generation from Non-Powered Dams – ENERGYDAM”, EEA and Norway Grants, Contract nr. 11155/06.04.2022 TUIASI, Innovation Norway No. 2021/332809, (membru in echipa de cercetare).
2. „Reactor cu plasma non-termica la presiune atmosferică pentru pre-tratamentul substraturilor polimerice utilizate în fabricarea circuitelor imprimate flexibile”, tipul PN III-ERANET-MANUNET-III, nr. 146 / 01.04.2020-2022 (membru in echipa de cercetare).

3. Creșterea producției agricole în sere utilizând irigarea cu apă activată cu plasmă rece, Proiect tip PNIII – PCE, nr. 15/12.07.2017, Valoare: 800.000 lei, 2017-2019, Adam M.-membru.
4. “Sistem energetic inteligent în arii naturale protejate SEI”, Programul „RO 06 Energie regenerabilă” - RONDINE, derulat prin Granturile SEE 2009-2014, Nr. contract finanțare: 528/31.08.2015, valoare totala: 2.746.371 lei, valoare totala UTI: 1.930.835 lei, 2016-2017, Adam M.-membru.
5. Dezvoltarea platformei de cercetare pentru energie eficientă şi durabilă-ENERED, Grant POSCCE A2- O221-2009, ID 91, Cod SMIS 13987, Contract: /2012-2016, Valoare totala: 51.000.000 RON, Adam M.-membru
6. Sistem Inteligent de Monitorizare şi Diagnosticare a Echipamentelor Electrice – SIMDE, Grant PNCDI 2-Parteneriate, Contract nr. 21014 /2007-20010, Coordonator: UTI, Adam M.-Director proiect, Valoare totală 1246591 RON; Valoare UTI/2010: 38507. Valoare UTI/2009: 68505. Valoare UTI/2008: 392336 RON. Valoare UTI/2007: 76000 RON.
7. Noi concepte privind functionarea sigurantelor fuzibile folosind metode specifice instrumentatiei virtuale, Grant PNCDI 2-Idei, Cod proiect 352/2009-2011, Adam M.-membru, Valoare totală 970000 RON; Valoare 2009: 421689 RON.
8. Laborator de monitorizare, diagnosticare şi testarea calităţii echipamentelor electrice – MODITEST, ID-777, competiţia IMPACT (iunie 2007), obţinerea finanţării studiului de fezabilitate al proiectului, Adam M.-Director de proiect
9. Grant de mobilitate cercetător, tip PN-II-RU-MC, cod CNCSIS 49, Adam M.-aplicant; Valoare 7000 RON, 2007.
10. Cercetarea si implementarea unor structuri software/hardware avansate in constructia aparatelor electrice inteligente, Grant CNCSIS tip A, cod 407, contract nr. …./2007, tema 1, 16500 RON, 2007.
11. Sistem controlat prin inteligenţă artificială, de monitorizare a emisiilor electromagnetice poluante şi de diagnosticare a aparatelor, echipamentelor şi instalaţiilor electrice şi electroenergetice, Grant CNCSIS tip A, cod 409, contract nr. A1/GR164/19.05.2006, tema 7, 17000 RON, 2006.
12. Cercetarea si implementarea unor structuri software/hardware avansate in constructia aparatelor electrice inteligente, Grant CNCSIS tip A, cod 407, contract nr. A1/GR164/19.05.2006, tema 2, 15000 RON, 2006.
13. Contacte debroşabile de 2500 A, 12 kV, 50 kA şi de 2500 A, 24 kV, 50 kA pentru întrerupătoarele de medie tensiune de 12 kV, respectiv de 24 kV, Contract nr. 2062P/2006, Electroalfa International SA Botosani, 23800 RON, 2006-2007.
14. Aparate şi comutări inteligente în sistemele electroenergetice, Grant CEEX tip P-CD, cod 607, 50000 RON-180000 RON -40000 RON, 2005-2006-2007.
15. Cercetarea si implementarea unor structuri software/hardware avansate in constructia aparatelor electrice inteligente, Grant CNCSIS tip A, cod 407, contract nr. 27637/14.03.2005, tema 2, 8000 RON, 2005.
16. Sistem controlat prin inteligenţă artificială, de monitorizare a emisiilor electromagnetice poluante şi de diagnosticare a aparatelor, echipamentelor şi instalaţiilor electrice şi electroenergetice, Grant CNCSIS tip A, cod 409, contract nr. 27637/14.03.2005, tema 8, 28000 RON, 2005.
17. Metode avansate de proiectare si testare a sistemelor de izolatie destinate functionarii in conditii extreme si tolerante la defectare, Grant CNCSIS tip A, cod 489, 150 mil ROL, 2004.
18. Metoda avansata de analiza a calitatii si de optimizare a structurii si tehnologiei bio_ si nano_compozitelor, pe baza spectroscopiei dielectrice corelata cu teoria elementului finit, Grant CNCSIS tip E, cod 82, 650 mil ROL, 2004.
19. Soluţii moderne de monitorizare şi diagnosticare a aparatajului din instalaţiile electrice, Grant CNCSIS tip A, cod 294, contract nr. 33557/2003, tema 1, 67,5 mil ROL, 2003.
20. Degivrarea liniilor de contact pentru poduri rulante exterioare, contract nr. 866P/2003, SC PETROTUB SA Roman, 172,5 mil ROL, 2003.

21. Soluţii moderne de monitorizare şi diagnosticare a aparatajului din instalaţiile electrice, Grant CNCSIS tip A, cod 129, contract nr. 33479/2002, tema 52, 50 mil ROL, 2002.
22. Sisteme expert de asigurare a calităţii totale în industria de materiale şi echipamente, Grant CNCSIS tip D, cod 215, 62 mii USD, 2000-2001.
23. Studiu privind monitorizarea şi diagnosticarea on-line a aparatajului de comutaţie, contract nr. 1458P/2000, ISCE Bucureşti, 70 mil ROL, 2000.
24. Modelarea şi simularea numerică a solicitării complexe a echipamentelor electrice din instalaţiile FTDEE Bacău, în vederea predicţiei stării tehnice a acestora, contract nr. 1517/14.02.1998, RENEL-FTDEE Bacău, 14,2 mil ROL, 1998.
25. Sistem de monitorizare a transformatoarelor de putere din staţiile de înaltă tensiune, contract nr. 2812/27.02.1997, RENEL-FRE Bacău, 9 mil ROL, 1997.
26. Modelarea solicitărilor termice ale căii de curent a întrerupătorului de 24 kV cu SF6 , contract nr. 7187/22.05.1996, ELECTROPUTERE Craiova, 4 mil ROL, 1996.
27. Modelarea şi identificarea structurii şi dinamicii stărilor pentru creşterea performanţelor instalaţiilor energetice, Grant CNCSU-MIS, cod 595/96, 10 mil ROL, 1996.
28. Studiul posibilităţilor de îmbunătăţire a activităţii de mentenanţă la întrerupătoarele de înaltă tensiune, contract nr. 4423/28.03.1996, RENEL-FRE Iaşi, 4 mil ROL, 1996.
29. Studierea sistemului de comandă a întrerupătoarelor pentru reducerea supratensiunilor de comutaţie, contract nr. 1660/7.02.1996, RENEL-FRE Bacău, 5 mil ROL, 1996.
30. Studiul posibilităţilor de aplicare a unor tehnici de încercare şi măsurare specifice compatibilităţii electromagnetice, contract nr. 4422/28.03.1996, RENEL-FRE Iaşi, 3,8 mil ROL, 1996.
31. Modernizarea siguranţelor fuzibile tip MPR prin îmbunătăţirea caracteristicilor de protecţie timp-curent,contract nr. 10986/07.08.1995, RENEL-FRE Iaşi, 3,6 mil ROL, 1995.
32. Modelarea şi identificarea structurii şi dinamicii stărilor pentru creşterea performanţelor instalaţiilor energetice, Grant CNCSU-MIS, cod 527/95, 3 mil ROL, 1995.
33. Analiza reţelelor din FRE Iaşi din punct de vedere al compatibilităţii electromagnetice, RENEL-FRE Iaşi, 1995.
34. Studiul posibilităţilor de îmbunătăţire a activităţii de mentenanţă la întrerupătoarele de înaltă tensiune, RENEL-FRE Iaşi, 1995.
35. Menţinerea nivelului de tensiune, pe joasă tensiune, la consumatorii izolaţi, RENEL-FRE Buzău, 1995.
36. Metode de control şi diagnostic în tehnica echipamentelor electrice cu aplicaţii la activitatea de întreţinere din staţii, RENEL-FRE Suceava, 1994, 1995.
37. Metode de control şi diagnostic în tehnica echipamentelor electrice, MIS, 1991, 1992, 1993.
38. Studiul posibilităţilor de utilizare a tubului termic în construcţia contactelor electrice ale întreruptoarelor de medie tensiune, IRE Iaşi, 1989.
39. Determinarea perametrilor lineici ai cablurilor de 12/20 kV realizate cu izolaţie extrudată indigenă, MEE-CIRE Bucureşti, 1988.

L. Premii, distincţii

1. Medalie de bronz şi diplomă la "50ème Salon mondial de l'invention, de la recherche et de l'innovation industrielle BRUSSELS EUREKA 2001", Bruxelles 2001.
2. Medalie de bronz şi diplomă la "Salon international des inventions et des techniques nouvelles", Iaşi 1996.
3. Medalie de argint şi diplomă la "44ème Salon mondial de l'invention, de la recherche et de l'innovation industrielle BRUSSELS EUREKA'95", Bruxelles 1995.
4. Medalie de bronz şi diplomă la "44ème Salon mondial de l'invention, de la recherche et de l'innovation industrielle BRUSSELS EUREKA'95", Bruxelles 1995.
5. Medalie de bronz şi diplomă la "Salon international des inventions et des techniques nouvelles", Iaşi 1994.

M. Alte realizări semnificative

1. Releu trifazat minimal de tensiune sensibil la ordinea de succesiune a fazelor. Baraboi A., Hnatiuc E., Adiaconiţei C., Iordan I., Adam M., Albu I., Brevet 91757 (produs omologat, in fabricatie la IAE Focsani, 1987).
2. Contacte debrosabile de 2000 A, 50kA/1s, Adam M., Baraboi A., Pancu C., (produs omologat Electroalfa Botoșani, 2008).
3. Sistem inteligent de monitorizare si diagnosticare a echipamentelor electrice tip SIMDE, 2010, (produs omologat Universitatea Tehnică Iași, 2010).

Data, Prof.dr.ing. Maricel Adam

Lista de lucrări în domeniul de studii universitare de masterat:
Managementul sistemelor de energie

Numele şi prenumele: **prof.asoc.dr.ing. Mircea-Dan Guşă**

A. Teza de doctorat.

1. "Contribuţii la optimizarea tratării neutrului în reţelele de medie tensiune", 1984, Domeniul "Inginerie energetică , Universitatea Tehnică „Gheorghe Asachi" din Iaşi, conducător doctorat: prof. dr. ing. Poeată Alexandru.

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).

22. **Guşă M.**, Istrate M., Bucă C., Tehnica tensiunilor înalte-Aplicaţii. Editura Venus, Iaşi 2005, 351 pag., ISBN 973-7960-93-9.
23. **Guşă M.**, Regimuri tranzitorii în reţelele electrice – analiză asistată de calculator. Editura „Gh. Asachi" Iaşi, 2002, 237 pag., 150 exemplare, ISBN 973-8292-16-6.
24. Adam M., Istrate M., Baraboi A., **Guşă M.** , Echipamente de comutaţie şi izolaţia reţelelor electrice, Editura AGIR, Bucureşti, 2001, 185 pagini, 150 exemplare, ISBN – 973-8130-38-7.
25. Istrate M., **Guşă M.**, Impactul producerii, transportului şi distribuţiei energiei electrice asupra mediului. Editura AGIR, Bucureşti, 2000, 210 pagini, 150 exemplare, ISBN 973-99295-5-9.
26. Asaftei C., **Guşă M.**, Istrate M., Gavrilaş N., Tehnici de control şi supraveghere a reţelelor de distribuţie, Editura Fundaţiei Culturale "Renaşterea Română", Iaşi, 1998, 315 pagini, 200 exemplare, ISBN 973-97246-1-2.
27. **Guşă M.**, Istrate M.,Gavrilaş N., Asaftei C.Tehnica tensiunilor înalte - Supratensiuni în sistemele electroenergetice, Ed. Fundaţiei culturale "Renaşterea Română, Iaşi, 1997, ISBN 973-97246-3-9,300 pag.

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

1. Machidon D., **Guşă M.**, Energetică generală - Curs şi aplicaţii, Editura Politehnium, Iași, 2023, ISBN: 978-973-621-521-6, 252 pag.
2. Gavrilaş N., Istrate M., **Guşă M.**, Asaftei C., Tehnica tensiunilor înalte - Supratensiuni în sistemele electroenergetice., Litografia Universității Tehnice „Gheorghe Asachi" din Iaşi, 210 pag., 1996.
3. **Guşă M.**, Energetică generală, Litografia Universităţii Tehnice „Gheorghe Asachi" din Iaşi, 304 pag., 1994.
4. Gavrilaş M., Olah R., **Guşă M.**, Asaftei C., Tehnica tensiunilor înalte-Lucrări de laborator, Litografia Universităţii Tehnice „Gheorghe Asachi" din Iaşi, 250 pag., 1986.

5. Olah.R., **Gușă M.**, Dudici-Ruscior M., Supratensiuni şi izolaţia reţelelor electrice, Litografia Universităţii Tehnice „Gheorghe Asachi" din Iaşi, 342 pag., 1976.
6. Gavrilaş N., Olah R., **Gușă M.**, Dudici-Ruscior M., Tehnica tensiunilor înalte, Litografia Universităţii Tehnice „Gheorghe Asachi" din Iaşi, 496 pag., 1975.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

4. **Gușă M.**, Tehnica tensiunilor înalte – note de curs, www.tti.ieeia.tuiasi.ro/ Tehnica tensiunilor înalte.pdf
5. **Gușă M.**, Coordonarea izolaţiei-note de curs, www.tti.ieeia.tuiasi.ro/ Coordonarea izolatiei.pdf
6. Istrate M., **Gușă M.**, Machidon D., High Voltage Enegineering – curs electronic, www.tti.ieeia.tuiasi.ro

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

29. Istrate M., Miron A., Istrate C., **Gusa M.**, Machidon D., Single-phased Fault Location on Transmission Lines Using Unsynchronized Voltages, Advances in Electrical and Computer Engineering, Issue 3, 2009, pages 51-56, ISSN: 1582-7445, e-ISSN: 1844-7600, Digital Object Identifier: 10.4316/AECE.2009.03010, Accession Number: WOS:000271872000010.

G. Lucrări ştiinţifice publicate în reviste din străinătate.

1. Istrate M., Gavrilaş N., **Gușă M.**, Asaftei C., Calculul supratensiunilor temporare datorate efectului capacitiv pe liniile de foarte înaltă tensiune, cu considerarea descărcării corona, Analele Institutului de Energetică al Academiei de Ştiinţe a Republicii Moldova, pag. 213 – 218, 1996.
2. Asaftei C., Gavrilaş N., **Gușă M.**, Istrate M., Cu privire la transmiterea şi recepţia semnalelor emise de indicatoarele de defect, Analele Institutului de Energetică al Academiei de Ştiinţe a Republicii Moldova, Chişinău, pag. 229 – 237, 1996.
3. **Gușă M.**, Gavrilaş N., Asaftei C., Istrate M., Supratensiuni provocate de scurtcircuitul monofazat în reţele de medie tensiune având neutrul tratat cu inductanţă Analele Institutului de Energetică al Academiei de Ştiinţe a Republicii Moldova, Chişinău, pag. 203 – 212, 1996.
4. Asaftei C., **Gușă M.**, Gavrilaş N., Istrate M., Semnalizarea locală a zonelor cu defect de izolaţie a reţelelor electrice de medie tensiune, Upravlemie Electroperedaci, editat de Academia de Ştiinţe a Republicii Moldova, Vol. 7, pag. 56 – 60, 1993.
5. Asaftei C., **Gușă M.**, Gavrilaş N., Istrate M., Telesemnalizarea zonelor cu defect în liniile de medie tensiune, Buletinul Academiei de Ştiinţe a Republicii Moldova, Seria Fizică şi tehnică, Chişinău, nr.3 (9), pag.101-106, 1992.

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

1. Neagu B., Georgescu Gh., Guşă M., Load Curves Characteristics of Consumers Supplied from Electricity Repartition and Distribution Public Systems. Buletinul Institutului Politehnic din Iaşi, Tomul LVII (LXI), Fasc. 1, 2011, pp. 141-157.

2. Istrate M., Gusa M., Analysis of Lightning's Strokes on HV Lines in an ATP Approach., Acta Electrotechnica, Proceedings of the 2nd International Conference on Modern Power Systems MPS 2008, pp 162-165, ISSN 1841-3323 (VINITI, DOAJ)
3. Istrate M., Gusa M., Assessment Of Two Single-End Fault Location Algorithms In An ATP Approach, Revue Roumaine de Sciences Techniques – Électrotechique et Énergétique, Tome 54, 4, pp. 345-354, ISSN: 0035-4066, 2009.
4. Istrate M., Guşă M., Simularea ATP a localizării scurtcircuitelor în reţele de transport a energiei electrice, Revista Energetica, anul 56, nr.8, august 2008, pag. 304 –309, ISSN 1453-2360.
5. Istrate M., Gusa M., Analysis of Lightning's Strokes on HV Lines in an ATP Approach, Acta Electrotechnica, Proceedings of the 2nd International Conference on Modern Power Systems MPS 2008, pp 162-165, ISSN 1841-3323 (VINITI, DOAJ)
6. Guşă M., Istrate M., Paratrăsnete verticale sau orizontale pentru protecţia staţiilor de transformare. Revista Energetica, anul 55, nr.7, iulie 2007, pag. 243 –247, ISSN 1453-2360.
7. Istrate M., Guşă M., Aspects of the Power Grids' Impedance Relaying in an ATP-MODELS Approach. Analele Universităţii din Craiova, seria Inginerie Electrică, anul 31, nr.31, 2007, Vol. II, pag. 327-330 ISSN 1842-4805.
8. Istrate M., Guşă M., Hriscu I., ATP Models Of Impedance Relays Simulation. Part I: Theory And Algorithms, Buletinul Institutului Politehnic Iaşi, Tomul LII (LVI), Fasc. 5B, 2006, pag. 703-708, ISSN 1223-8139.
9. Istrate M., Guşă M., Hriscu I., ATP Models Of Impedance Relays Simulation. Part II: Models Implementation. Buletinul Institutului Politehnic Iaşi, Tomul LII (LVI), Fasc. 5B,2006,pag.709-714, ISSN 1223-8139.
10. Istrate M., Guşă M., Hriscu I., Single End Algorithms for Distance Relaying Coordination in an ATP Approach, Buletinul Institutului Politehnic Iaşi, Tomul LII (LVI), Fasc.5C, 2006, pag.1396 - 1401, ISSN 1223-8139
11. Istrate M., Guşă M., ATP Approach of a Double End Algorithm in HV Grids' Fault Location Estimation. Buletinul Institutului Politehnic Iaşi, Tomul LII (LVI), Fasc. 5C, 2006, pag. 1402-1407, ISSN 1223-8139.
12. Guşă M., Istrate M., Hriscu I., Switching Overvoltages on Overhead Lines Protected with Metal-Oxide Arresters. Buletinul Institutului Politehnic Iaşi, Tomul LII (LVI), Fasc. 5C, 2006, pag. 1373-1379, ISSN 1223-8139.
13. Guşă M., Istrate M., Protection of Overhead Lines with Metal_oxide Arresters. Analele Universităţii din Craiova, Seria Inginerie Electrică, Anul 30, nr. 30, 2006, pag. 218-222, ISSN 1842 - 4805
14. Istrate M., Guşă M., Hriscu I., First Tripping Zone of Distance Relaying in an ATP-MODELS Approach. Acta Electrotehnica, Volume 47, Number 50, 2006, pag. 65-68, ISSN 1841 - 3323
15. Guşă M., Istrate M., Hriscu I. Overhead Lines Lightning Behaviour Improving with Metal-Oxide Arresters Acta Electrotehnica, Volume 47, Number 50, 2006, pag. 61-64, ISSN 1841 - 3323
16. Istrate M., Guşă M., Bucă C., Aplicaţie didactică pentru coordonarea protecţiei de distanţă din reţelele de înaltă tensiune prin simulare ATP. Buletinul ştiinţific al Universităţii "Politehnica"Timişoara, tom 50(64), 2005, fasc.1-2, pag. 295-302, ISSN 1582-7194.
17. Guşă M., Istrate M., Aspecte ale protecţiei liniilor electrice aeriene cu descărcătoare cu oxizi metalici. Energetica, 2005, nr.8, pag.283-289.

18. Guşă M., Istrate M., Bucă C., Analiza comparativă a protecţiei realizate de descărcătoarele cu rezistenţă variabilă în staţiile de transformare. Energetica, nr.10/2003, pg. 428-432
19. M. Istrate, M. Guşă, A. Patriciu, A. Miron, Didactical Software for High Voltage Networks' Classical Distance Relaying Coordination. Bul.I.P.Iaşi, tom XLVIII(LII),fasc.5A, 2002, pag.211-214
20. Guşă M., M. Istrate, T.Popa, Lightning Overvoltage Protection of Transformer Points Connected to Overhead Lines via Cable Segments. Bul.I.P.Iaşi, tom XLVIII(LII),fasc.5A, 2002, pag.221-226
21. Guşă M., M.Istrate, Anca Spatariu, Surge Arresters to Overhead Line Protection Against Lightning Overvoltages. Bul.I.P.Iaşi, tom XLVIII(LII), fasc.5A, 2002, pag.215-2206.
22. Guşă M., Istrate M., Gavrilaş N., Viziteu I. Aspecte privind protecţia staţiilor de transformare împotriva loviturilor directe de trăsnet , Bul. Şt. al Univ. "Politehnica" Timişoara, Tom 46 (60), 2001, Fasc. 2, vol. I, pag. 61-66.
23. Guşă M., Istrate M., Gavrilaş N., Ciobanu C., Solicitarea izolaţiei posturilor de transformare datorită supratensiunilor de trăsnet Producerea transportul şi distribuţia energiei electrice şi termice" – nr.4 /2001, pag. 32-37.
24. Gavrilaş N., Guşă M., Istrate M., Ciobanu C., Rolling Sphere Method Application to Substations Protection. Revue Roumaine de Sciences Techniques – Électrotechn. et Énerg., 45, 4/2000 pag.553-561, Bucarest 2000.
25. Asaftei C., Gabura A., Guşă M., Gavrilaş N., Istrate M., Sistem inteligent pentru supravegherea şi localizarea defectelor în reţelele electrice de distribuţie aeriene. Energetica, nr. 8 – 9, 1999, pg. 364 – 368.
26. Gavrilaş N., Istrate M., Guşă M., Ciobanu C., Concerning The Protective zones of The Vertical Lightning Protection Systems Using the "Rolling Sphere" Method. Bul. Şt. Universităţii "Politehnica"Timişoara, Tom 44 (58), 1999, Fasc. 2, vol. I, pag. 61-66.
27. Guşă M., Istrate M., Gavrilaş N., Ciobanu C. Temporary Overvoltages Transmission in LV Distribution Networks via Transformer Points. Bul.I.P. Iaşi, Tom XLV (IL), 1999, Fasc.5B, pag. 310-313.
28. Gavrilaş N., Istrate M., Guşă M., Ciobanu C., Concerning The Protective zones of The Horizontal Lightning Protection Systems using the "Rolling Sphere" Method. Bul.I.P. Iaşi, Tom XLV (IL), 1999, Fasc.5B, pag. 300-305.
29. Istrate M., Guşă M., Gavrilaş N., Ciobanu C., EMTP Study of Internal Overvoltages in Very High Voltage Networks with Compact Lines. Bul.I.P. Iaşi, Tom XLV (IL), 1999, Fasc.5B, pag. 322-325.
30. Asaftei C., Guşă M., Gabură A., Istrate M., Sistem de telecomandă şi telesemnalizare pentru LEA MT folosind semnale de joasă frecvenţă. Producerea, transportul şi distribuţia energiei electrice şi termice", nr. 8-9, 1998, pag.43-47.
31. Guşă M., Istrate M., Gavrilaş N., Asaftei C., Popa C., Single-phase faults detection in compensated networks using zero-sequence current phase measurement. Bul.Şt al Univ."Politehnica" Timişoara, 42(56), 1997, fasc.2, vol.II, pag.97-102.
32. Istrate M., Guşă M., Miron Al., Asaftei C., Gavrilaş N., A method to generate information transmitting signals in overhead medium voltage networks. Bul.Şt al Univ."Politehnica" Timişoara, 42(56), 1997, fasc.2, vol.III, pag.107-112.
33. Gavrilaş N., Miron Al., Guşă M., Consideraţii cu privire la tensiunea neutru-pământ în reţelele compensate. Producerea, transportul şi distribuţia energiei electrice şi termice", Bucureşti, 1996, nr.6-7, pag.1-8.

34. Guşă M., Istrate M., Asaftei C., Gavrilaş N., Contribuţii la creşterea observabilităţii reţelelor aeriene de medie tensiune. Energetica, 1995, nr.6B, pag. 288-293.
35. Istrate M., Guşă M., Gavrilaş N., Asaftei C., Popa C., Possibility of Simulating the Corona Discharge under Transient Regimes Determinated by Switchings in the UHV Networks. Bul.I.P. Iaşi, XLI(XLV), 1995, fasc.5, secţia III, pag.527-534.
36. Istrate M., Gavrilaş N., Guşă M., Asaftei C., Popa C. Modelling the Influence of the Corona on the Level of the Temporary Overvoltages. Bul.I.P. Iaşi XLI(XLV), 1995, fasc.5, secţia III, pag.519-526.
37. Guşă M., Istrate M., Asaftei C., Gavrilaş N., Grigoruţ M., Surtensions transitoires crées par les defauts monophasés simples et répetées dans les réseaux moyenne tension. Bul.I.P. Iaşi, XLI(XLV), 1995, fasc.5, secţia III, pag.513-518.
38. Asaftei C., Guşă M., Istrate M., Gavrilaş N., Sur la signalisation à distance des courtcircuits dans les réseaux de moyenne tension. Buletinul I.P.I. XLI(XLV), 1995, fasc.1-2, secţia III, pag. 1-6.
39. Gavrilaş N., Istrate M., Guşă M., Asaftei C. Modelarea fizică a circuitului rezonant serie, utilizat ca instalaţie de încercare. Producerea, transportul şi distribuţia energiei electrice şi termice", Bucureşti, 1994, nr.7, pag.15-21.
40. Asaftei C., Gavrilaş N., Guşă M., Istrate M., Quelques aspects thèoriques concernant la propagation des signaux émis par les indicateurs de défaut sur les lignes moyenne tension. Buletinul I.P.I. XL(XLIV), 1994, fasc.1-4, secţia III, pag. 111-114.
41. Gavrilaş N., Asaftei C., Guşă M., Istrate M., General Considerations on the Detecting and the Location of the Short-Circuits on Overhead Distribution Lines. Buletinul I.P.I., XL(XLIV), 1994, fasc.1-4, secţia III, pag. 123-126.
42. Asaftei C., Guşă M., Gavrilaş N., Istrate M. Construcţia şi funcţionarea unui dispozitiv de semnalizare a defectelor pe linii electrice aeriene de medie tensiune. Energetica, 1992, nr.6-B, pag. 282-286.
43. Asaftei C., Guşă M., Gavrilaş N., Istrate M. Sur la sensibilite d'un indicateur local des courcircuits pour reseaux aeriens. Buletinul I.P.I, XXXVIII (XLII), 1992, fasc.1-4, secţia III, pag.91-97.
44. Guşă M., Asaftei C., Gavrilaş N., Istrate M., Contribuţii privind semnalizarea locală a scurtcircuitelor în reţelele electrice aeriene de medie tensiune. Energetica, 1990, nr.10-12, pag.425-429.
45. Gavrilaş N., Guşă M., Baraboi A., Asupra unor mijloace moderne de protecţie a instalaţiilor electroenergetice împotriva supratensiunilor. Energetica, 1988, nr.2, pag. 81-85.
46. Guşă M., Gavrilaş N., Perfecţionarea construcţiei regulatorului automat pentru bobine de stingere. Energetica, 1988, nr.5, pag.221-226.
47. Gavrilaş N., Guşă M., Adaptarea modului de tratare a neutrului la stadiul de dezvoltare a reţelelor de medie tensiune din România. Energetica, 1979, nr.1-2, pag.60-63.
48. Gavrilaş M., Guşă M., Olah R., Dudici-Ruscior M., Asupra unor aspecte ale descărcărilor electrice în câmp electric puternic neuniform în prezenţa unor învelişuri pe electrozi. Bul. IPI XXIV(XXVIII), 1978, fasc. 1-2, secţia III, pag. 111-118.
49. Cîrţină Gh., Georgescu Gh., Guşă M., Model matematic de simulare pentru repartizarea economică a condensatoarelor într-o reţea radială. Energetica, 1977, nr.1, pag.29-32.
50. Gavrilaş N., Olah R., Guşă M., Dudici-Ruscior M., Influenţa ecranelor dielectrice asupra descărcării corona în sistemul de electrozi conductor-placă. Bul IPI, XX(XXIV), 1974, fasc.3-4,,secţia III,,pag.88-94.

51. Gavrilaş N., Olah R., Guşă M., Influenţa bobinei de stingere din neutrul transformatorului asupra solicitării izolaţiei acestuia la aplicarea tensiunii de impuls. Bul. IPI, XIX(XXIII), 1973, fasc.3-4, secţia III, pag.189-196.
52. Gavrilaş N., Olah R., Guşă M., Asupra transmisiei tensiunii de impuls în transformatoarele cu două înfăşurări. Bul. IPI, XIX(XXIII) 1973, fasc 1-2, secţia III, pag. 103-118.

I. Lucrări ştiinţifice publicate în volumele conferinţelor.

1. Machidon D., Istrate M., Guşă M., Dragomir M.,The Elliptic Model Implementation For The Estimation Of The Vertical Rod's Protection Zones, World Energy System Conference.Towards Sustainable and Integrated Energy Systems, Suceava, 28-30 iunie 2012, Buletinul AGIR, nr.2/2012, An.XVII, Index Copernicus International, ISSN-L 1224-7928, Online: ISSN 2247-3548, pp.477-482.
2. Machidon D., Istrate M., Ţibuliac S., Mircea Guşă M., Lightning Protection Zones Estimation For A Power Station Using The Elliptic Model, Proceedings of the 7th International Conference and Exposition on Electrical and Power Engineering, pp. 225-230, ISBN 978-1-4673-1173-7, IEEE Catalog Number: CFP1247S-DVD, INSPEC Accession Number:13326272, Digital Object Identifier: 10.1109/ICEPE.2012.6463925, October 25-27, 2012, Iaşi, Romania;
3. Neagu B., Georgescu Gh., Guşă M., Issues Regarding a Series of Mathematical Models and Software Application for Technical Losses Evaluation in Operation of Public Distribution Networks Elements in Symmetric State. WEC CENTRAL & EASTERN EUROPE ENERGY FORUM – FOREN 2012, Neptun-Olimp, România, 17-21 June 2012, pp. .1-10, paper code:sp-43-en.
4. Neagu B., Georgescu Gh., Guşă M., Mathematical Methods for Technical Active Power and Energy Loss Evaluation in Operation Using Typical Load Profiles of the Consumers from Repartition Systems. The 4th International Conference on Modern Power Systems – MPS 2011, Cluj, pp. 139-142, ISSN 1841-3323.
5. Neagu B., Georgescu Gh., Guşă M., The Profiling of Load Curves and Main Parameters for Different Tertiary Consumer Categories Supplied Through Electricity Repartition and Distribution Systems. The 8th International Conference on Industrial Power Engineering – CIEI 2011, Bacău, pp. 82-87, ISSN 2069 - 9905.
6. Istrate M., Guşă M., Tibuliac S., Assesment of fault Location Algorithms in Transmission Grids, IEEE Bucharest PowerTech 2009, IEEE Catalog number: CFP01895-CDR, ISBN 978-1-4244-2235-7.
7. Dragomir M., Istrate M., Guşă M., Machidon D.,Assessment of PS-based Method and Combined Iterative Algorithm with FCDFT for Elimination of The DC componet from fault Current, Proceedings of The 7th National Conference on Industrial Energetics – with International Participation, 2009, pp. 107-112, ISBN 978-606-527-050-3.
8. Machidon D., Istrate M., Guşă M., Dragomir M., Rolling Sphere Method Application to 400 kV Overhead Line, Proceedings of The 7th National Conference on Industrial Energetics – with International Participation,2009, pp. 127-130, ISBN 978-606-527-050-3.
9. Hriscu I., Guşă M., Istrate M., Some Aspects Concerning The Lightning Behaviour of Overhead Lines, Proceedings of The 7th National Conference on Industrial Energetics – with International Participation, 2009, pp. 121-126, ISBN 978-606-527-050-3.
10. Dragomir M., Istrate M., Guşă M., Asandei D., Machidon D.,ATP/EMTP Model of the Protection based on Incremental Signals, Proceedings of The 7th International

Conference of Electromechanical and Power Systems SIELMEM 2009, Vol. I, pp 63-66, ISBN 978-606-520-618-2, ISBN Vol I 978-606-520-617-5
11. Machidon D., Istrate M., Guşă M., Dragomir M., Protective Zone DimensionsDetermination Using Rolling Sphere, Proceedings of The 7th International Conference of Electromechanical and Power Systems SIELMEM 2009, Vol. I, pp 67-70, ISBN 978-606-520-618-2, ISBN Vol I 978-606-520-617-5.
12. Hriscu I., Guşă M., Istrate M., Lightning Stroke Against Overhead Electric Lines: A Comparison Between Analytical and Simulation Methods of Study, 32-th International Conference on Fundamentals of Electrotechnics and Circuit Theory, Gliwice, Polonia, IC-SPETO 2009, pp. 85-86, ISBN 978-83-85940-30-2.
13. Guşă M., Istrate M., Popa C., Brumă N.,Riscul de avarie în staţiile de transformare datorită loviturilor de trăsnet. Al XVIII-lea simpozion naţional "Siguranţa în funcţionare a sistemului energetic"-SIG 2003, Oradea, septembrie 2003, pag.148-154.
14. Istrate M., Guşă M., Gavrilaş N., Popa C., Pachet de programe pentru calculul supratensiunilor temporare cu considerarea unor pierderi şi neliniarităţi. Al VII-lea simp. naţional de Tehnica tensiunilor înalte, Craiova, oct. 2001, pag.255-260.
15. Guşă M., Istrate M., Gavrilaş N., Ciobanu C., Brumă N., Comportarea transformatoarelor de distribuţie la tensiune de impuls de trăsnet. Al VII- lea Simpozion naţional de tehnica tensiunilor înalte, Craiova, oct. 2001, pag.45-51.
16. Gabură A., Asaftei C., Guşă M., Istrate M., Popa C., Sistem inteligent de monitorizare a defectelor pe liniile electrice de distribuţie. Simpozionul Naţional al Reţelelor Electrice, ediţia a X-a, Iaşi, 2000, vol. II, pag. 555-559.
17. Istrate M., Guşă M., Ciobanu C., Gavrilaş N., Miron A., Simularea EMTP a funcţionării unor protecţii din reţelele electrice. Simpozionul Naţional al Reţelelor Electrice, ediţia a X-a, Iaşi, 2000, vol. I, pag. 645-654.
18. Gavrilaş N., Ciobanu C., Istrate M., Guşă M., Determinarea zonelor de protecţie ale unor sisteme de paratrăsnete verticale prin metoda modelării electrogeometrice. Simpozionul Naţional al Reţelelor Electrice, ediţia aX-a, Iaşi, 2000, vol. I, pag. 655-658.
19. Gavrilaş N., Ciobanu C., Istrate M., Guşă M., Unele aspecte asupra determinării zonelor de protecţie ale unor sisteme de paratrăsnete verticale prin metoda sferei fictive. Conferinţa "50 ani de învăţământ energetic în Universitatea Politehnica Bucureşti", 2000, Vol. I, pag. 163-166.
20. Gavrilaş N., Istrate M., Guşă M., Ciobanu C., Folosirea metodei sferei fictive la construirea zonelor de protecţie ale unor sisteme de paratrăsnete. Al VI-lea Simpozion Naţional "Tehnica Tensiunilor Inalte",raport III-11, Bucureşti, 1999.
21. Guşă M., Istrate M., Gavrilaş N., Ciobanu C., Aspecte privind protecţia posturilor de transformare din liniile aeriene de distribuţie împotriva supratensiunilor de trăsnet. Al VI-lea Simpozion Naţional "Tehnica Tensiunilor Inalte",raport III-10, Bucureşti, 1999.
22. Istrate M., Guşă M., Gavrilaş N., Ciobanu C., Studiu prin simulare EMTP a supratensiunilor de comutaţie în reţele de transport a energiei electrice cu linii compacte. Al VI-lea Simpozion Naţional "Tehnica Tensiunilor Inalte",raport III-4, Bucureşti,1999.
23. Guşă M., Istrate M., Gavrilaş N., Asaftei C., Martinaş E., Protecţia homopolară de curent temporizată în reţelele de medie tensiune având neutrul tratat prin rezistor. Simpozionul Naţional al Reţelelor Electrice, ediţia a IX-a, Piteşti, septembrie 1998, vol. II, pag. 1056÷1064.
24. Istrate M., Guşă M., Gavrilaş N., Asaftei C., Popa C., Aplicaţie de calcul a supratensiunilor temporare în reţele cu pierderi. Simp. Naţional al Reţelelor Electrice, ediţia a IX-a, Piteşti, sept. 1998, vol. II, pag. 710-716.

25. Asaftei C, Istrate M, Guşă M., Gavrilaş N., Popa C.Cu privire la un sistem de testare a indicatoarelor de defect. Simpozionul naţional de reţele electrice, ediţia a VIII-a, Cluj-Napoca, 1996, pag.211- 212.
26. Guşă M., Asaftei C., Istrate M., Gavrilaş N., Studiul câmpului magnetic al liniilor electrice de medie tensiune. Simpozionul naţional al reţelelor electrice, ediţia a VII-a, Suceava, 1994, Editura Licurici, Suceava, vol.II, pag.200-208 (ISBN 973-95737-2-X).
27. Istrate M., Pompaş F., Gavrilaş N., Guşă M., Asaftei C., Studiul comportării liniilor electrice aeriene compactizate la supratensiuni atmosferice. Simpozionul naţional al reţelelor electrice, ediţia a VII-a, Suceava 1994, Editura Licurici Suceava, vol.II, pag. 183-191. ISBN 973-95737-2-X.
28. Istrate M., Gavrilaş N., Guşă M., Asaftei C.Posibilităţi de calcul a supratensiunilor de comutaţie în reţele trifazate. Simpozionul naţional al reţelelor electrice, ediţia a VII-a, Suceava 1994, Editura Licurici Suceava, vol.I, pag. 330-339. ISBN 973-95737-1-1.
29. Asaftei C., Istrate M., Gavrilaş N., Guşă M., Contribuţii privind semnalizarea locală şi la distanţă a zonelor cu defect de izolaţie. Simpozionul naţional al reţelelor electrice, ediţia a VI-a, Bacău, 1992, Editura Helicon, Timişoara, vol.II, pag.199-202 (ISBN 973-9133-20-7).
30. Istrate M., Asaftei C., Guşă M., Dispozitiv trifazat de semnalizare centralizată a zonelor cu defect în reţelele electrice de medie tensiune. Simpozionul naţional al reţelelor electrice, ediţia a VI-a, Bacău, 1992, Editura Helicon, Timişoara, vol.II, pag.193-198 (ISBN 973-9133-20-7).
31. Asaftei C., Istrate M., Guşă M., Gavrilaş N., Dispositif recepteur pilote avec quartz. Sesiunea jubiliară a facultăţii de Electrotehnică din Iaşi, 1992, vol “Tehnici noi de conducere a reţelelor de distribuţie”, pag. 81-84.
32. Asaftei C., Istrate M., Gavrilaş N., Guşă M., Sur le traitement des informations concernant les defauts sur les lignes MT a l’aide d’un ordinateur. Sesiunea jubiliară a facultăţii de Electrotehnică din Iaşi, 1992, vol “Tehnici noi de conducere a reţelelor de distribuţie”, pag. 77-80.
33. Asaftei C., Guşă M., Istrate M., Gavrilaş N., Dispositif emetteur pilote aves quartz. Sesiunea jubiliară a facultăţii de Electrotehnică din Iaşi, 1992, “Tehnici noi de conducere a reţelelor de distribuţie”, pag.71-75.
34. Asaftei C., Guşă M., Istrate M., Gavrilaş N., Sur l’encadrement des dispositifs émetteur-récepteur dans un système de signalisation centralisée des défauts. Sesiunea jubiliară a facultăţii de Electrotehnică din Iaşi, 1992, “Tehnici noi de conducere a reţelelor de distribuţie”, pag. 59-63.
35. Istrate M., Guşă M., Asaftei C., Gavrilaş N., Trusă de testare-reglaj a dispozitivelor emiţătoare pentru semnalizarea centralizată a scurtcircuitelor. Simpozionul “Optimizarea şi exploatarea instalaţiilor energetice”, Facultatea de Electrotehnică Iaşi, 1991, pag. 115-119.
36. Asaftei C., Guşă M., Istrate M., Gavrilaş N., Sistem de emisie-recepţie pentru semnalizarea centralizată a producerii scurtcircuitelor în reţelele electrice aeriene de medie tensiune. Simpozionul “Optimizarea şi exploatarea instalaţiilor energetice”, Facultatea de Electrotehnică Iaşi, 1991, pag.111-115.
37. Istrate M., Guşă M., Asaftei C., Gavrilaş N., Emiţător de semnale codificate. Simpozionul “Optimizarea şi exploatarea instalaţiilor energetice”, Facultatea de Electrotehnică Iaşi, 1991, pag. 107-111.
38. Guşă M., Asaftei C., Gavrilaş N., Istrate M., Semnalizarea centralizată a scurtcircuitelor în reţelele aeriene de medie tensiune. Simpozionul “Optimizarea şi

exploatarea instalaţiilor energetice", Facultatea de Electrotehnică Iaşi, 1991, pag.103-107.
39. Guşă M., Gheorghiţă D., Istrate M., Asaftei C., Trusă pentru verificarea funcţionării dispozitivelor de semnalizare locală a scurtcircuitelor pe LEA de medie tensiune. Simpozionul "Optimizarea şi exploatarea instalaţiilor energetice", Facultatea de Electrotehnică Iaşi, 1991, pag.99-103.
40. Asaftei C., Guşă M., Gavrilaş N., Istrate M., Cu privire la semnalizarea locală a zonei în care s-a produs un scurtcircuit pe o linie electrică aeriană. Simpozionul "Optimizarea şi exploatarea instalaţiilor energetice", Facultatea de Electrotehnică Iaşi, 1991, pag. 95-99.
41. Guşă M., Asaftei C., Gavrilaş N., Istrate M., Dispozitiv de semnalizare locală a scurtcircuitelor pe LEA de medie tensiune. Simpozionul "Optimizarea şi exploatarea instalaţiilor energetice", Facultatea de Electrotehnică Iaşi, 1991, pag. 91-95.
42. Gavrilaş N., Istrate M., Guşă M., Asaftei C., Modelarea fizică a instalaţiilor de încercare a izolaţiei pe baza schemei circuitului rezonant serie. Simpozionul "Optimizarea şi exploatarea instalaţiilor energetice", Facultatea de Electrotehnică Iaşi, 1991, pag. 73-77.
43. Gavrilaş N., Istrate M., Guşă M., Asaftei C., Asupra calculului supratensiunilor temporare pe linii lungi funcţionând în gol. Simpozionul "Optimizarea şi exploatarea instalaţiilor energetice", Facultatea de Electrotehnică Iaşi, 1991, pag. 17-21.
44. Asaftei C., Poeată Al., Guşă M., Contribuţii la calculul parametrilor liniilor electrice autocompensate. Simpozionul naţional al reţelelor electrice, Piteşti, 1986, vol.I, pag. 337-344.
45. Gavrilaş N., Roşca I., Leon D., Maranda Gh., Guşă M., Asaftei C., Tehnologia de realizare şi încercare a tuburilor electroizolante pentru lucrul sub tensiune pe liniile electrice aeriene. Simpozionul naţional al reţelelor electrice, Piteşti, 1986, vol.II, pag. 3-8.
46. Olah R., Guşă M., Asaftei C., Gavrilaş N.,, Influenţa geometriei electrozilor asupra randamentului electric al descărcării în instalaţiile electrohidraulice. Ses. şt. a Fac. Electrotehnică, Iaşi, 1986, vol.XIV, pag.285-292.
47. Olah R., Guşă M., Asaftei C., Gavrilaş N., Corelarea parametrilor instalaţiilor de curăţire electrohidraulică în vederea utilizării eficiente a conversiei energiei electrice în energie mecanică. Ses. şt. a Fac. Electrotehnică, Iaşi, 1986, vol.XIV, pag.275-283.
48. Guşă M., Gavrilaş N., Asaftei C., Supratensiuni datorate defectelor monofazate în reţelele de medie tensiune având neutrul tratat cu impedanţă redusă. Sesiunea şt. a Fac. Electrotehnică, Iaşi, 1986, vol.XIV, pag.179-187.
49. Gavrilaş N., Maranda Gh., Guşă M., Asaftei C., Asupra încercărilor electrice ale tuburilor electroizolante pentru lucrul sub tensiune pe linii electrice aeriene. Sesiunea şt. a Fac. Electrotehnică, Iaşi, 1986, vol.XIV, pag.135-140.
50. Guşă M., Gavrilaş N., Performanţele metodelor de reglare automată a bobinelor de stingere din reţelele de medie tensiune. Conferinţa naţională de Electrotehnică şi Electroenergetică, Craiova, 1984, vol.12, pag. 81-88.
51. Guşă M., Gavrilaş N., Influenţa variaţiei unor parametri asupra tensiunii de deplasare a neutrului reţelelor electrice. Conferinţa naţională de Energetică, Bucureşti, 1983, vol.32, pag. 5-15.
52. Guşă M., Gavrilaş N., Legarea la pământ a neutrului reţelelor subterane de medie tensiune prin reactanţă. Conferinţa naţională de Electrotehnică şi Electroenergetică, Timişoara, 1982, vol.11, pag.197-209.

53. Gavrilaş N., Guşă M., Dudici-Ruscior M., Consideraţii privind tratarea neutrului reţelelor electrice de cabluri. Prima conferinţă naţională a energeticienilor din România, Bucureşti, 1974, vol.VII, raport 37.

J. Invenţii.

1. Asaftei C., Istrate M., Guşă M., Gavrilaş N, Popa C., Dispozitiv de semnalizare cu bloc de testare. Brevet RO 114197B1/1998.

2. Asaftei C., Istrate M., Guşă M., Gavrilaş N, Popa C., Sistem de testare cu autoalimentare. Brevet RO 114048/1998.
3. Istrate M., Asaftei C., Guşă M., Gavrilaş N.Sistem de testare a semnalizatoarelor locale de scurtcircuit din reţelele electrice de medie tensiune. Brevet RO, 113907B/30.11.1998.
4. Guşă M., Istrate M., Asaftei C., Gavrilaş N., Procedeu şi dispozitiv de autodeclanşare selectivă şi semnalizare pentru separatoare de sarcină. Brevet RO, 116988/2001.
5. Asaftei C., Guşă M., Istrate M., Gavrilaş N., Indicator local pentru scurtcircuit. Brevet RO 106621 C1/1996.
6. Asaftei C., Guşă M., Istrate M., Gavrilaş N, Ciutea I., Sistem de semnalizare locală şi la distanţă. Brevet RO 105862 C1/1992
7. Asaftei C., Guşă M., Gabură A., Istrate M., Gavrilaş N., Receptor pilotat cu cuarţ. Brevet RO 105747 C1/1992.
8. Asaftei C., Guşă M., Gabură A., Istrate M., Gavrilaş N., Emiţător pilotat cu cuarţ. Brevet RO 105754 C1/1992.
9. Asaftei C., Guşă M., Istrate M., Gavrilaş N., Instalaţie pentru emiterea semnalelor electrice pe linii de medie tensiune. Brevet RO 105638 B1/1992.
10. Guşă M., Gavrilaş N., Asaftei C., Istrate M., Regulator automat pentru bobine de stingere. Brevet R O 104711/1991
11. Istrate M., Guşă M., Asaftei C., Gavrilaş N.Dispozitiv trifazat de semnalizare locală şi la distanţă. Brevet RO 104650/1991.
12. Istrate M., Guşă M., Asaftei C., Gavrilaş N., Releu de semnalizare locală şi la distanţă. Brevet RO 104649/1991.
13. Asaftei C., Guşă M., Istrate M., Gavrilaş N., Receptor de semnale codificate. Brevet RO 104264/1991
14. Guşă M., Asaftei C., Istrate M., Gavrilaş N., Instalaţie de semnalizare centralizată. Brevet RO 103783/1991
15. Asaftei C., Guşă M., Istrate M., Gavrilaş N., Receptor pentru semnalizarea centralizată a zonelor cu defect de izolaţie pe linii electrice de medie tensiune. Brevet RO 103548/1991.
16. Istrate M., Guşă M., Asaftei C., Gavrilaş N., Metodă şi dispozitiv emiţător pentru stabilirea zonelor cu defect de izolaţie. Brevet RO 103448/1991
17. Asaftei C., Guşă M., Gavrilaş N., Istrate M., Dispozitiv de semnalizare a depăşirii curentului maxim într-un conductor. Brevet RO 103490/1990
18. Asaftei C., Guşă M., Gavrilaş N., Sufleţel N., Dispozitiv pentru semnalizarea scurtcircuitelor în reţelele aeriene de medie tensiune. Brevet RO 99564/1989.
19. Asaftei C., Guşă M., Gavrilaş N., Sufleţel N., Dispozitiv pentru semnalizarea scurtcircuitelor în reţele aeriene. Brevet RO 99563/1989.
20. Asaftei C., Guşă M., Gavrilaş N., Sufleţel N., Dispozitiv pentru semnalizarea scurtcircuitelor în reţele aeriene. Brevet RO 99562/1989.
21. Guşă M., Baraboi A., Gavrilaş N., Asaftei C., Sufleţel N., Dispozitiv pentru semnalizarea scurtcircuitelor în reţelele electrice aeriene de medie tensiune. Brevet RO 99561/1989.

K. Contracte de cercetare/granturi.

1. Studiu privind expertizarea instalaţiilor de 110 şi 220 kV din staţia FAI, urmare modificării schemelor de conexiuni, prin metoda electrogeometrică, privind riscul producerii loviturilor directe de trăsnet în echipamentele staţiei; Beneficiar: CN Transelectrica SA, Sucursala de Transport Bacău, 2009, Guşă M. (membru echipă).
2. Instrument software destinat creşterii securităţii sistemelor electroenergetice prin coordonarea protecţiei de distanţă, dezvoltat pe baza unor tehnici de inteligenţă artificială. Grant CNCSIS, A, contract nr. GR 77/11.06.2008, tema nr. 20, cod CNCSIS 283, Guşă M. (membru echipă)
3. Instrument software destinat creşterii securităţii sistemelor electroenergetice prin coordonarea protecţiei de distanţă, dezvoltat pe baza unor tehnici de inteligenţă artificială. Grant CNCSIS, A, contract nr. GR 80 /23.05.2007, tema nr. 28, cod CNCSIS 283, Guşă M. (membru echipă)
4. Utilizarea descărcătoarelor cu oxizi metalici pentru protecţia liniilor electrice împotriva supratensiunilor de trăsnet şi de comutaţie. Grant CNCSIS A1/GR 164/19.05.2006, nr. temă 40, cod 483, Guşă M. (director grant).
5. Utilizarea descărcătoarelor cu oxizi metalici pentru protecţia liniilor electrice împotriva supratensiunilor de trăsnet şi de comutaţie. Grant CNCSIS nr. 27637/2005 nr. temă 28, cod 483, Guşă M. (director grant).
6. Aplicaţie software pentru analiza regimurilor tranzitorii electromagnetice generate de funcţionarea unor protecţii şi instalaţii automate din reţelele de transport 220, 400 kV. Beneficiar: Transelectrica Bacău, 2003, Guşă M. (membru echipă).
7. Studiul zonelor de protecţie împotriva loviturilor directe de trăsnet prin metoda sferei fictive aplicată pentru staţia 220/110 kV Munteni. Beneficiar: Transelectrica Bacău, 2003, Guşă M. (director contract).
8. Studiul zonelor de protecţie împotriva loviturilor directe de trăsnet prin metoda sferei fictive pentru staţia 110 kV Suceava. Beneficiar: Transelectrica Bacău, 2002, Guşă M. (director contract).
9. Protecţia staţiei de transformare IAŞI – Sud împotriva loviturilor directe de trăsnet. Beneficiar: SDFEE – Iaşi, 2002, Guşă M. (director contract).
10. Aplicaţie software pentru analiza regimurilor tranzitorii electromagnetice generate de funcţionarea unor protecţii şi instalaţii automate din reţelele de transport 220, 400 kV. Beneficiar: Transelectrica Bacău, 2002.
11. Studiul zonelor de protecţie împotriva loviturilor directe de trăsnet prin metoda sferei fictive–Aplicaţie pentru staţia de transformare Roman Nord. Beneficiar: S.D.E.E. Bacău 2001, Guşă M. (director contract).
12. Protecţia reţelelor de distribuţie de JT împotriva supratensiunilor transmise din reţelele de MT. Grant ANSTI, contract nr. 6177/2000, număr temă: A-19/2001, Guşă M. (director grant).
13. Protecţia reţelelor de distribuţie de JT împotriva supratensiunilor transmise din reţelele de MT. Grant ANSTI, contract nr. 6177/2000, număr temă: B-50/2000, Guşă M. (director grant).
14. Soluţii pentru evitarea incendiilor determinate de trăsnet la rezervoarele metalice cu capac flotant pentru produse petroliere. Beneficiar: S.C. “Oil Terminal” S.A. Constanţa, 2000, Guşă M. (director contract).

15. Transmiterea supratensiunilor de trăsnet prin transformatoarele de distribuţie de medie tensiune/joasă tensiune. Beneficiar: S.D.E.E. Iaşi, 2000, Guşă M. (director contract).
16. Studiu privind modelarea pe calculator a regimurilor de defect monofazat în reţeaua de distribuţie de 20 kV a municipiului Galaţi, având neutrul tratat prin rezistor. Beneficiar: S.D.E.E. Galaţi, 2000, Guşă M. (director contract).
17. Evaluarea nivelului de ţinere la impuls de trăsnet a izolaţiei echipamentelor de joasă tensiune din posturile de transformare MT/JT. Beneficiar: S.D.E.E. Bacău 2000. Guşă M. (membru echipă).
18. Studiul asistat de calculator al protecţiei staţiilor de transformare împotriva loviturii directe de trăsnet. Beneficiar: Sucursala de Transport a Energiei Electrice Constanţa, 2000. Guşă M. (membru echipă).
19. Analiza regimurilor complexe de avarie şi postavarie în reţeaua de transport a STD Bacău. Beneficiar: Sucursala Transport Dispecer Bacău, 1999, Guşă M. (director contract).
20. Protecţia împotriva supratensiunilor atmosferice a posturilor de transformare MT/JT şi a reţelei de joasa tensiune aferente. Beneficiar: S.D.E.E. Bacău, 1999, Guşă M. (director contract).
21. Protecţia împotriva supratensiunilor atmosferice a posturilor de transformare MT/JT şi a reţelei de joasă tensiune aferente. Beneficiar: S.D.E.E. Bacău, 1998, Guşă M. (director contract).
22. Analiza tensiunilor de regim tranzitoriu în zona de reţea de medie tensiune a municipiului Sibiu. Beneficiar: S.D.E.E. Sibiu, 1998, Guşă M. (director contract).
23. Sistem de autodeclanşare selectivă, telecomandă şi telesemnalizare centralizată pentru reţele aeriene de 20 kV. FTDEE Suceava, 1997, Guşă M. (director contract).
24. Studiu privind asigurarea selectivităţii şi sensibilităţii protecţiei în reţelele de medie tensiune aferente staţiilor cu neutrul tratat prin rezistenţă din municipiul Botoşani. FDEE Botoşani, 1997, Guşă M. (director contract).
25. Optimizarea funcţionării reţelelor compensate prin implementarea unor mijloace de detectare a defectelor monofazate. FRE Iaşi, 1996, Guşă M. (director contract).
26. Realizarea unui tester de verificare a indicatoarelor de defect pe LEA de medie tensiune şi montarea unor astfel de indicatoare în zona Tg.Frumos. FRE Iaşi, 1996, Guşă M. (membru echipă).
27. Analiza supratensiunilor interne în reţelele de 110 kV şi 220 kV cu considerarea unor fenomene neliniare. FRE Iaşi, 1996, Guşă M. (membru echipă).
28. Studiul posibilităţilor de detectare a zonelor de defect pe LEA de medie tensiune cu neutrul tratat cu bobină de stingere. FRE Iaşi, 1995, Guşă M. (director contract).
29. Determinarea supratensiunilor în reţele de înaltă tensiune cu considerarea unor pierderi şi neliniarităţi. FRE Iaşi, 1995, Guşă M. (membru echipă).
30. Studiul posibilităţilor de realizare şi realizarea unui tester de verificare a indicatoarelor de defect pe LEA de medie tensiune. FRE Iaşi, 1994, Guşă M. (membru echipă).
31. Determinarea supratensiunilor interne şi atmosferice în reţele de înaltă tensiune. FRE Iaşi, 1994, Guşă M. (membru echipă).
32. Autodeclanşarea selectivă a separatoarelor de sarcină în SF6 de pe derivaţii şi de pe axele de MT cu semnalizarea în staţia de alimentare prin transmisie pe conductoarele LEA. FRE Suceava 1994-96, Guşă M. (director contract).
33. Solicitarea izolaţiei liniilor electrice debuclate. FRE Bacău, 1994, Guşă M. (director contract).

34. Cercetări teoretice şi încercări experimentale privind rezistenţa la oboseală mecanică a izolatoarelor IsNs. FRE Bacău, 1993, Guşă M. (director contract).
35. Studiul comportării în exploatare a descărcătoarelor cu rezistenţă variabilă din instalaţiile FRE Iaşi. FRE Iaşi, 1993, Guşă M. (membru echipă).
36. Comanda declanşării întrerupătoarelor din reţelele aeriene de 20 kV cu neutrul tratat prin rezistenţă şi semnalizarea centralizată a funcţionării acestuia. FRE Suceava 1993-94, Guşă M. (membru echipă).
37. Cercetări privind implementarea şi funcţionarea unui sistem de semnalizare centralizată a defectelor în reţelele aeriene de distribuţie de medie tensiune. RENEL, Div.th.Strategie şi Retehnologizare, Bucureşti 1992, Guşă M. (membru echipă).
38. Proiectarea prototipului de sistem de semnalizare centralizată a defectelor în reţele electrice de distribuţie. M I S 1992, Guşă M. (membru echipă).
39. Controlul stării izolaţiei LEA de medie şi înaltă tensiune. FRE Bacău, 1992, Guşă M. (membru echipă).
40. Cercetarea comportării în exploatare a descărcătoarelor cu rezistenţă variabilă din instalaţiile de transport electric feroviar. Regionala CF Iaşi, 1991, Guşă M. (membru echipă).
41. Studiul posibilităţilor de realizare a detectării şi semnalizării centralizate a defectelor în reţelele electrice de distribuţie. M I S 1991, Guşă M. (membru echipă).
42. Realizarea şi testarea sistemului de semnalizare centralizată a defectelor într-o reţea aeriană de 20 kV cu un singur emiţător. IRE Iaşi, 1991, Guşă M. (membru echipă).
43. Proiectarea, realizarea şi experimentarea echipamentului pentru semnalizarea centralizată a defectelor într-o reţea aeriană de 20 kV. IRE Iaşi, 1990, Guşă M. (director contract).
]44. Cercetarea posibilităţilor de localizare de la distanţă a scurtcircuitelor monofazate în reţelele aeriene de medie tensiune având neutrul tratat prin rezistor. IRE Iaşi, 1989, Guşă M. (director contract).
45. Cercetarea posibilităţilor de localizare de la distanţă a scurtcircuitelor monofazate în reţelele aeriene de medie tensiune având neutrul tratat prin rezistor. IRE Iaşi, 1989, Guşă M. (director contract).
47. Studiu privind optimizarea consumului de energie electrică la Intreprinderea “Textila” din Iaşi. IIS Textila Iaşi, 1988, Guşă M. (membru echipă).
48. Posibilităţi de determinare a derivaţiei cu defect monofazat într-o reţea aeriană de medie tensiune având neutrul tratat cu rezistor. IRE Iaşi, 1986-87, Guşă M. (membru echipă).
49. Perfecţionarea construcţiei şi exploatării regulatorului automat pentru bobine de stingere. ICEMENERG, 1986, Guşă M. (director contract).
50. Cercetări privind curăţirea panourilor metalice de cofraj cu şocuri electrohidraulice. TMUC Bucureşti, 1984, Guşă M. (membru echipă).
51. Tehnologia de execuţie a tuburilor electroizolante pentru lucrul sub tensiune pe LEA. IRE Bacău, 1983-85, Guşă M. (membru echipă).
52. Instalaţii experimentale pentru încercarea surselor de înaltă tensiune pentru electrofiltre. ICPE-Iaşi, 1982, Guşă M. (membru echipă).
53. Tehnologia de realizare a reactanţelor pentru tratarea neutrului în reţele de medie tensiune. IRE Suceava, 1982, Guşă M. (director contract).
54. Tratarea neutrului cu impedanţă mică într-o reţea de medie tensiune. IRE Suceava, 1980-81, Guşă M. (director contract).
55. Incercări de tip ale accesoriilor cablurilor de 6 kV. Trustul de instalaţii-montaj Iaşi, 1981, Guşă M. (director contract).

56. Încercări de anduranţă pentru noi tipuri de accesorii pentru cabluri de 1 kV. IRE Iaşi, 1981, Guşă M. (director contract).
57. Îmbunătăţirea instalaţiei de tratare a neutrului în staţia Uzinei termice Iaşi. UET Iaşi, 1980, Guşă M. (membru echipă)
58. Reglarea automată a bobinelor de stingere în reţelele de medie tensiune ale IRE Suceava. IRE Suceava, 1978-79, Guşă M. (director contract).
59. Simulator de manevre şi avarii. IRE Suceava, 1979 , Guşă M. (membru echipă).
60. Tehnologia încercării transformatoarelor de sudură cu premagnetizare. IRE Bacău, 1978, Guşă M. (membru echipă).
61. Transformatoare de sudură cu premagnetizare în curent continuu. IRE Bacău, 1978, Guşă M. (membru echipă).
62. Tehnologia încercării izolaţiei echipamentului cu tensiunea nominală de 110-400 kV. IRE Bacău, 1977, Guşă M. (membru echipă).
63. Studiu de soluţie pentru un banc de probe la atelierul de transformatoare al IRE Iaşi. IRE Iaşi, 1976, Guşă M. (membru echipă).
64. Posibilitatea şi oportunitatea trecerii la 10 kV în actuala reţea de 6 kV a municipiului Iaşi. IRE Iaşi, 1976, Guşă M. (membru echipă).
65. Tratarea neutrului reţelelor de medie tensiune ale Combinatului siderurgic Galaţi. CSG, 1973-1974, Guşă M. (membru echipă).
66. Compensarea curentului capacitiv al reţelei de 6 kV a Uzinei de ţevi Roman. IRE Bacău, 1972, Guşă M. (membru echipă).

L. Premii, distincţii.

1. Medalia „Meritul pentru învăţământ, cl. a II-a
2. Medalia de aur la Salonul internaţional al invenţiilor, Bruxelles 1992
3. Medalia de bronz la Salonul Internaţional de inventică, Iaşi 1992

M. Alte realizări semnificative.

1. Specializarea personalului didactic universitar pentru funcţia de „Cadru didactic supervizor de practică tehnologică şi de cercetare", proiect POSDRU 57/1.3/S/17884, 2010-2012, **Guşă M.** (manager proiect).
2. Reţea Nationala de Formare **CON**tinuă a **C**adrel**OR** **D**idactice din Invatamantul Preuniversitar în Domeniile Informaticii, Tehnologiei, Comunicatiilor si Dezvoltarii Durabile – **CONCORD,** **proiect POSDRU/87/1.3/S/61397, 2011-2013, Guşă M.** (coordonator Partener 2).

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Lista de lucrări în domeniul de studii universitare de masterat
Managementul Sistemelor de Energie

Numele şi prenumele: **Ivanov Ovidiu**

A. Teza de doctorat.

3. „Contribuţii la managementul congestiilor în sistemele electroenergetice, 2011, Universitatea Tehnică ”Gheorghe Asachi” din Iași, Domeniul Energetică, conducător ştiinţific prof. dr. ing. Gavrilaş N.

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

1. Grigoraș Gh., Neagu B.C., **Ivanov O.**, Gavrilaș M., Scarlatache F. - Smart Meter Data-based Strategies: In the Optimal Operation of Electric Distribution Systems, LAP LAMBERT Academic Publishing, ISBN-10 : 6200503060, ISBN-13 : 978-6200503060, 264 pag., 31 Dec. 2019
2. Grigoras Gh., Ivanov O., Neagu B.C. , Kar P., Smart Metering Based Strategies for Improving Energy Efficiency in Microgrids, chapter in Microgrid Architectures, Control and Protection Methods (Naser Mahdavi Tabatabaei, Ersan Kabalci, Nicu Bizon, editors), Springer, https://doi.org/10.1007/978-3-030-23723-3 , ISBN 978-3-030-23723, pp. pp 463-490, 2019 (first online)
3. Neagu B., Grigoraș G., **Ivanov O**., *The Optimal Operation of Active Distribution Networks with Smart Systems*, in Advanced Communication and Control Methods for Future Smartgrids, InTech Open, London, ISBN 978-1-78984-106-0, 2019. https://www.intechopen.com/books/advanced-communication-and-control-methods-for-future-smartgrids/the-optimal-operation-of-active-distribution-networks-with-smart-systems

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).

28. **Ivanov O.**, Gavrilaș M., Metode metaeuristice cu aplicații în energetică, Editura PIM, Iași, 2018, 210 pag. ISBN 978-606-13-4698-1.
29. **Ivanov O.**, Bejinariu L.-E., MATLAB pentru cei mai începători dintre începători, Editura PIM, Iași, 2018, 188 pag. ISBN 978-606-13-4410-9.
30. **Ivanov O.**, Kriukov Al., Sisteme Electroenergetice – îndrumar de laborator – utilizarea programului DIgSILENT Power Factory, Editura PIM, Iași, 2018, 172 pag., ISBN 978-606-13-4411-6.
31. Gavrilaș M., Cârțină Gh., Alexandrescu V., **Ivanov O.**, Grigoraș Gh, Modelarea sarcinilor din retelele electrice, vol. 1, Editura PIM, Iași, 2007, 124 pag., ISBN 978-973-716-433-4, vol 2, Editura Cermi, Iași, 116 pag., ISBN 978-973-667-315-3.

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

7. **Ivanov O.** - Baze de date în Energetică – suport de curs (147 pagini) și lucrări de laborator (146 pagini) (2023 – prezent).

8. **Ivanov O.** – Procesarea Cunoștințelor și Calcul Inteligent – îndrumar de proiect și suport de curs (2017-prezent).
9. **Ivanov O.** - Monitoring and Management of Electrical Systems – note de curs (2014-2015).
10. **Ivanov O.** - Piete de Energie - Management si Reglementare si Piete de Energie si Politici Energetice – note de curs (2012-2013).
11. **Ivanov O.** - Retele si Echipamente pentru Conducerea Sistemelor Energetice – note de curs - (2012).
12. **Ivanov O.** - Sisteme Electroenergetice I – Note de curs (2012).

Fișierele sunt disponibile online la adresa web: https://drive.google.com/drive/folders/1u17C8UUTibDBBEeBcDv0BUygxd4Aoj4F?usp=sharing

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

a. Reviste ISI/WoS

1. **Ivanov O,** Luca M-A, Neagu B-C, Grigoras G, Gavrilas M. Flexible Energy Storage for Sustainable Load Leveling in Low-Voltage Electricity Distribution Grids with Prosumers. Sustainability. 2024; 16(10):3905. https://doi.org/10.3390/su16103905, WOS:001231408300001
2. Baiceanu, F.-C.; **Ivanov, O.;** Beniuga, R.-C.; Neagu, B.-C.; Nemes, C.-M. A Continuous Multistage Load Shedding Algorithm for Industrial Processes Based on Metaheuristic Optimization. Mathematics 2023, 11, 2684. https://doi.org/10.3390/math11122684
3. Hathaliya, J.; Parekh, R.; Patel, N.; Gupta, R.; Tanwar, S.; Alqahtani, F.; Elghatwary, M.; **Ivanov, O.**; Raboaca, M.S.; Neagu, B.-C. Convolutional Neural Network-Based Parkinson Disease Classification Using SPECT Imaging Data. Mathematics 2022, 10, 2566. https://doi.org/10.3390/math10152566
4. Grigoraș, G.; Neagu, B.-C.; **Ivanov, O.;** Livadariu, B.; Scarlatache, F. A New SQP Methodology for Coordinated Transformer Tap Control Optimization in Electric Networks Integrating Wind Farms. Applied Sciences, 2022, 12, 1129. https://doi.org/10.3390/app12031129, WOS:000754870900001
5. **Ivanov, O**.; Neagu, B.-C.; Grigoras, G.; Scarlatache, F.; Gavrilas, M. A Metaheuristic Algorithm for Flexible Energy Storage Management in Residential Electricity Distribution Grids. Mathematics 2021, 9, 2375. https://doi.org/10.3390/math9192375, WOS:000746426300001
6. Grigoraș, G.; Noroc, L.; Chelaru, E.; Scarlatache, F.; Neagu, B.-C.; **Ivanov, O.**; Gavrilaș, M. Coordinated Control of Single-Phase End-Users for Phase Load Balancing in Active Electric Distribution Networks. Mathematics 2021, 9, 2662. https://doi.org/10.3390/math9212662 WOS:000719474900001
7. **Ivanov, O.**; Neagu, B.-C.; Gavrilas, M.; Grigoras, G. A Phase Generation Shifting Algorithm for Prosumer Surplus Management in Microgrids Using Inverter Automated Control. Electronics 2021, 10, 2740. https://doi.org/10.3390/electronics10222740, WOS:000727513800001
8. Scarlatache, F.; Grigoras, G.; Scarlatache, V.-A.; Neagu, B.-C.; **Ivanov, O.** A Hybrid Methodology Based on Smart Management Energy Consumption in Irrigation Systems. Electronics 2021, 10, 2864. https://doi.org/10.3390/electronics10222864, WOS:000727225500001

9. Kriukov A., Gavrilaş M., **Ivanov O**., Grigoraş Gh., Neagu B.C. and Scarlatache F.,, Novel Decentralized Voltage-Centered EV Charging Control Algorithm Using DSRC System in Low Voltage Distribution Networks, in IEEE Access, vol. 9, pp. 164779-164800, 2021, doi: 10.1109/ACCESS.2021.3132419, WOS:000734431000001,
10. Neagu, B.-C.; **Ivanov, O.**; Grigoras, G.; Gavrilas, M.; Istrate, D.-M. New Market Model with Social and Commercial Tiers for Improved Prosumer Trading in Microgrids. Sustainability 2020, Vol. 12, Issue 18, Article No. 7265, eISSN: 2071-1050 https://doi.org/10.3390/su12187265, WOS:000584284700001
11. **Ivanov, O**.; Chattopadhyay, S.; Banerjee, S.; Neagu, B.-C.; Grigoras, G.; Gavrilas, M. A Novel Algorithm with Multiple Consumer Demand Response Priorities in Residential Unbalanced LV Electricity Distribution Networks. Mathematics 2020, Vol, 8, Issue 8, Article No. 1220. eISSN: 2227-7390 https://doi.org/10.3390/math8081220 , WOS:000567310900001
12. Neagu, B.-C.; **Ivanov, O**.; Grigoras, G.; Gavrilas, M. A New Vision on the Prosumers Energy Surplus Trading Considering Smart Peer-to-Peer Contracts. Mathematics 2020, Vol. 8, Issue 2, Article No. 235. eISSN: 2227-7390 , https://doi.org/10.3390/math8020235 , WOS:000519234000090
13. Ivanov O., Neagu B.C., Grigoraș Gh., Gavrilaș M. - Optimal Capacitor Bank Allocation in Electricity Distribution Networks Using Metaheuristic Algorithms, Energies 2019, Vol. 12, Issue 22, Article No. 4239; eISSN: 1996-1073 https://doi.org/10.3390/en12224239 , WOS:000504898500017
14. Gavrilaș M., Rusu I., Gavrilaș G., **Ivanov O.**, Synchronized Phasor Measurements for State Estimation, Revue Roumaine des Sciences Techniques - Serie Electrotechnique et Energetique, Vol. 54, No. 4, October–December 2009, pag. 335-344, WOS:000273123100001.
15. Gavrilaș M., Gavrilaș G., **Ivanov O.**, Electricity Load Prediction for Water Supply Systems, Environmental Engineering and Management Journal, Vol. 7, No. 4, July-August 2008, pag. 453-458, WOS:000259908700018.
16. Gavrilaș M., **Ivanov O.**, Load Profiling by Self-Organization with Affinity Control Strategy, Revue Roumaine des Sciences Techniques-Serie Electrotechnique et Energetique, Vol. 53, No. 4, October–December 2008, pag. 413-421, WOS:000262136600006.

b. Reviste BDI

1. Neagu B.-C., **Ivanov O.**, Grigoras Gh., Gavrilas M. - Short Term Load Forecast Approach Based on Artificial Neural Networks, Buletinul Institutului Politehnic din Iaşi, secția Electrotehnică. Energetică. Electronică, Volumul 65 (69), Numărul 2, 2019, ISSN 1223-8139, p. 81-95 (CNCSIS B+, Index Copernicus, getCITED, Ulrich's), http://www.bulipi-eee.tuiasi.ro/archive/2019/fasc.2/p1_f2_2019.pdf
2. Neagu B.C., Georgescu G., **Ivanov O.,** Determining Additional Power and Energy Losses in Low Voltage Electricity Distribution Networks Operated in Distorted and Unbalanced Operation States, Buletinul Institutului Politehnic din Iaşi, secția Electrotehnică. Energetică. Electronică, Vol. 63 (67), No. 1, 2017, ISSN 1223-8139, pp. 97-110 (CNCSIS B+, Index Copernicus, getCITED, Ulrich's)
3. Georgescu Gh., Neagu B.C., **Ivanov O.**, Voltage Quality Analysis in Low Voltage Public Electric Distribution Networks Operatedin Distorted and Unbalanced Conditions, Buletinul Institutului Politehnic din Iaşi, Vol. 62 (66), No. 2, 2016, pag. 81-95, 2016 (Index Copernicus, Ulrich's).
4. Neagu B.C., Georgescu Gh., **Ivanov O.**, The Evaluation of Active Power Losses in Low Voltage Distribution Systems Operated in Distorting Steady State, Buletinul Institutului

Politehnic din Iaşi, Vol. 62 (66), No. 2, 2016, pag. 97-109, 2016 (Index Copernicus, Ulrich's).

5. **Ivanov O.**, Gavrilaş M., Improvement of a Neural Network Based State Estimation Algorithm by Using PMU Measurements, Buletinul Institutului Politehnic din Iaşi, Tom LX (LXIV), No. 4, 2014, pag. 9-22, 2014 (Index Copernicus, Ulrich's).
6. Vicol B., Gavrilas M., **Ivanov O.**, Kriukov Al., On-Line Transmission Line Parameter Identification using Synchrophasor Measurements, 5th International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 28-31 May, Acta Electrotehnica, special issue, 2013, pag.526-529, 2013 (DOAJ).
7. Vicol B.; Gavrilas M.; Ivanov O., Modern Technologies for Power Systems Monitoring, Proc. of 5th International Symposium on Electrical Engineering and Energy Converters, ELS 2013, Suceava, România, 26 - 27 September, Buletinul AGIR, 3, iulie-septembrie, 2013, pag. 299-305, 2013 (Index Copernicus, Academic Keys).
8. Neagu B.C., Georgescu Gh., **Ivanov O.**, A New Approach for Electric Energy Distribution Network Routes Optimization, Buletinul Institutului Politehnic din Iaşi, Tom LIX (LXIII), No. 3, 2013, pag. 129-140, 2013 (Index Copernicus, Ulrich's).
9. Coroama I., Gavrilaş M., **Ivanov O.**, Multi-objective Pareto Optimization problem for technical, economic and environmental objectives, Buletinul AGIR, No. 3, iunie-august 2012, pag. 587-594, 2012 (Index Copernicus).
10. Kriukov Al., Vicol B., Gavrilaș M., **Ivanov O.**, A Stochastic Method for Calculating Energy Losses in Low Voltage Distribution Networks Using Genetic Algorithms, Buletinul AGIR, No. 3, iunie-august 2012, pag. 595-602, 2012 (Index Copernicus).
11. **Ivanov O.**, Gavrilaş M., Vicol B., New Models for Power Systems State Estimation, 5th International Conference on Energy and Environment - CIEM, Bucharest, Romania, 3 – 4 November, UPB Scientific Bulletin, Series C: Electrical Engineering, Vol. 74, No. 1, 2011/2012, pag. 181-188, 2012 (Scopus).
12. Gavrilaș M., **Ivanov O.**, Gavrilas G., REI equivalent design for electric power systems with genetic algorithms, WSEAS Transactions on Circuits and Systems, Issue 10, Volume 7, October 2008, ISSN: 1109-2734, p 911-921, 2008 (Scopus).

G. Lucrări ştiinţifice publicate în reviste din străinătate.

1. **Ivanov O.,** Gavrilas, M., Sfintes C-V., Dumitrache M., A Software Tool for Electricity Market Trade Price Analysis, XLI Conference on Fundamentals of Electrotechnics and Circuit Theory (SPETO), Gliwice - Ustron, Poland, 16-19 May 2018, pp. 61-62, Quarterly "ELEKTRYKA", Year LXIV (2018), Issue 1 (145), pp.43-50, Silesian University of Technology Publishing, ISSN 1897-8827, 2018

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

1. Aftanase R., Gavrilas M., **Ivanov O.**, A Survey on Recent Home Energy Management Systems for Demand Response Programs, 6th International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 18-21 May, Acta Electrotehnica, special issue, 2015, pag. 1-4, 4 pg., 2015 (Cod CNCSIS 576).
2. Vicol B., Gavrilaş M., **Ivanov O.**, Software Resource for Data Acquisition in Synchronized Phasor Measurement Systems (Aplicație software pentru achiziția datelor în sistemele de măsurări fazoriale sincronizate), Revista Energetica, Vol. 62, No. 3, martie 2014, pag. 96-99, 2014 (cod CNCSIS 512).
3. **Ivanov O.**, Gavrilas M., Static Power System State Estimation. A Neural Network Software Approach (Estimarea starii retelelor electrice - Model software cu retele

neuronale artificiale), Revista Energetica, Vol. 61, No. 5, mai 2013, pag. 184-188, 2013 (cod CNCSIS 512).

4. Vicol B., Gavrilas M., **Ivanov O.**, Kriukov Al., Estimation of Electrical Overhead Lines Parameters Using Synchro-Phasor Measurements (Estimarea parametrilor LEA folosind măsurători sincrofazoriale), Revista Energetica, Vol. 61, No. 5, mai 2013, pag. 194-198, 2013 (cod CNCSIS 512).
5. **Ivanov O.**, Gavrilas M., Enhanced REI Equivalents with Phasor Measurements, Buletinul Institutului Politehnic din Iaşi, Tom LVII (LXI), No. 1, 2011, pag. 125-132, 2011 (Cod CNCSIS 87).
6. Gavrilas M., Rusu I., **Ivanov O.**, Estimarea starii sistemelor electroenergetice folosind masurari fazoriale, Revista Energetica, nr. 8, august 2008, ISSN 1453-2360, pp. 334-340, 2008 (cod CNCSIS 512).
7. Dragoi C., Csulak F., Anisie D., Gavrilas M., **Ivanov O.**, Analiza CPT in reteaua de 110 kV a E.ON Moldova distributie in conditiile realizarii insulei Stanca-Costesti, Revista Energetica, nr. 3, martie 2008, ISSN 1453-2360, pp. 96-103, 2008 (cod CNCSIS 512).
8. Gavrilas M., Sfintes C.V., **Ivanov O.**, Demand Response Modeling Under Electricity Market Conditions Using an Object-Oriented Approach, Analele Universităţii din Craiova, Seria Inginerie electrica, Transportul şi distribuţia energiei electrice, pp. 339-344, 2007, ISSN 1842-4805 (cod CNCSIS 174).
9. **Ivanov O.**, Gavrilas M., Istrate M., A Radial Basis Function Neural Network with Pruning Strategy for Distance Relaying Systems, Analele Universităţii din Craiova, Seria Inginerie electrica, Transportul şi distribuţia energieie electrice, pp. 345-348, 2007, ISSN 1842-4805 (cod CNCSIS 174).
10. Gavrilas M., **Ivanov O.**, Medium Term Load Forecasting in Distribution Systems Using Load Profiling, Buletinul Institutului Politehnic Iasi, Tom LIII (LVII), Fasc. 3-4, Electrotehnica, Energetica, Electronica, ISSN 1223-8139, pp. 137-143, 2007 (Cod CNCSIS 87).
11. Gavrilas M., **Ivanov O.**, Sfintes C.V., Electricity Costs Optimization by Customer Activity Scheduling, Buletinul Institutului Politehnic Iasi, Tom LIII (LVII), Fasc. 3-4, , Electrotehnica, Energetica, Electronica, ISSN 1223-8139, pp.129-136, 8 pg., 2007 (Cod CNCSIS 87).
12. Gavrilas M., **Ivanov O.**, Ivaniciuc G., Braisteanu O., Load Profiling by Self-Organization, Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Electronica, Tom LII (LVI), Fasc. 5, ISSN 1223-8139, pp. 1193-1198, 2006 (Cod CNCSIS 87).
13. Gavrilas M., Cartina Gh., Grigoras Gh., **Ivanov O.**, Lupascu C., Integrated Model for Electric Load Profiling, Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Electronica, Tom LII (LVI), Fasc. 5, ISSN 1223-8139, pp. 1187-1192, 2006 (Cod CNCSIS 87).
14. Gavrilas M**.**, **Ivanov O.**, Distribution systems optimization with computational intelligence algorithms; The Annals of „Dunarea de Jos" University of Galati, Fascicle III, Electrotechnics, Electronics, Automatic control, Informatics, pp. 49-55, 2006, ISSN 1221-454X (cod CNCSIS 482).
15. **Ivanov O.**, Gavrilas M., Finding the optimal path of electrical distribution networks using cooperating agents, Buletinul Institutului Politehnic Iasi, Tom L (LIV), Fasc. 5C, Electrotehnica-Energetica-Electronica, ISSN 1223-8139, pag. 1436-1441, 2004 (Cod CNCSIS 87).

I. Lucrări ştiinţifice publicate în volumele conferinţelor.

a. ISI/WoS Proceedings

1. Neagu, B. C., Gavrilas M., **Ivanov, O.,** & Grigoras, G., Load Modeling Approaches in Smart Grids: An Overview. In The 15th International Conference Interdisciplinarity in Engineering: Conference Proceedings, Book Series Lecture Notes in Networks and Systems, Volume 386, Pages 533-561, 2022, Cham: Springer International Publishing, DOI 10.1007/978-3-030-93817-8_49, WOS:000773080200049
2. **Ivanov O.,** Neagu B.C., Niţu A.I., Gavrilaş M, An Improved Metaheuristic Algorithm for Load Balancing in LV Distribution Networks, 2021 9th International Conference on Modern Power Systems (MPS), 2021, pp. 1-5, doi: 10.1109/MPS52805.2021.9492680, WOS:000941563300084
3. Grigoras Gh., Neagu B.C., **Ivanov O.** - An Efficient Approach for Flattening the Electricity Consumption Profile at Small and Medium Enterprises, Proc. of 2019 8th International Conference on Modern Power Systems (MPS), 21-23 May 2019, Cluj Napoca, Cluj, Romania, DOI: 10.1109/MPS.2019.8759670, WOS:000612401900021 (WoS, IEEExplore)
4. Neagu B.C., Grigoras Gh., **Ivanov O.** - An Efficient Peer-to-Peer Based Blokchain Approach for Prosumers Energy Trading in Microgrids, Proc. of 2019 8th International Conference on Modern Power Systems (MPS), 21-23 May 2019, Cluj Napoca, Cluj, Romania, DOI: 10.1109/MPS.2019.8759743, WOS:000612401900090 (WoS, IEEExplore)
5. Grigoras Gh., Gavrilas M., Neagu B.C**., Ivanov O.** , Triștiu I. and Bulac C, "An Efficient Method to Optimal Phase Load Balancing in Low Voltage Distribution Network," 2019 International Conference on ENERGY and ENVIRONMENT (CIEM), 2019, pp. 323-327, doi: 10.1109/CIEM46456.2019.8937577, WOS:000630902700068
6. **Ivanov O.,** Neagu B.C., Grigoras Gh., Gavrilas; M., Sfintes C.V. - Phase Load Balancing in Low Voltage Distribution Networks Using Metaheuristic Algorithms, Proc. of 2019 International Conference on Electromechanical and Energy Systems (SIELMEN), OCT 09-11, 2019, Craiova, Romania, DOI: 10.1109/SIELMEN.2019.8905900, WOS:000630287500107 (WoS, IEEExplore)
7. Neagu B.C., Gavrilas; M., Grigoras Gh., **Ivanov O.** - Voltage Control in Microgrids in the Presence of Small-Scale Renewable Energy Source, Proc. of 2019 International Conference on Electromechanical and Energy Systems (SIELMEN), OCT 09-11, 2019, Craiova, Romania, DOI: 10.1109/SIELMEN.2019.8905811, WOS:000630287500022 (WoS, IEEExplore)
8. Grigoras Gh., Neagu B.C., **Ivanov O.**, Aggregate Method based on Expert System for Electricity Consumption Forecasting of Small and Medium Enterprises, Proc. of 2019 International Symposium on Advanced Topics in Electrical Engineering (ATEE), March 28-30, 2019, Bucharest, Romania, Electronic ISBN: 978-1-7281-0101-9, USB ISBN: 978-1-7281-0100-2, Print on Demand(PoD) ISBN: 978-1-7281-0102-6, ISSN: 1843-8571, DOI: 10.1109/ATEE.2019.8724966, Accession Number: WOS:000475904500123 (**WoS, IEEExplore**)
9. Neagu B.C., , **Ivanov O.**, Grigoras Gh., The Influence of Harmonics on Additional Power Losses at Large Enterprises, Proc. of 2019 International Symposium on Advanced Topics in Electrical Engineering (ATEE), March 28-30, 2019, Bucharest, Romania, Electronic ISBN: 978-1-7281-0101-9, USB ISBN: 978-1-7281-0100-2, Print on Demand(PoD) ISBN: 978-1-7281-0102-6, ISSN: 1843-8571, DOI: 10.1109/ATEE.2019.8724940, WOS:000475904500097 (**WoS, IEEExplore**)
10. **Ivanov O.**, Neagu B.C., Grigoras Gh., Smart Metering based Approaches to Solve the Load Phase Balancing Problem in Low Voltage Distribution Networks. Proc. of 2018 International Symposium on Fundamentals of Electrical Engineering (ISFEE) Nov. 01-

03, 2018, Bucharest, Romania, Electronic ISBN: 978-1-5386-7212-9, USB ISBN: 978-1-5386-7211-2, Print on Demand(PoD) ISBN: 978-1-5386-7213-6, DOI: 10.1109/ISFEE.2018.8742412, Accession Number: WOS:000480396400007 (**WoS, IEEExplore**)

11. Toma N., **Ivanov O.**, Neagu B.C., Gavrilas M., A PSO Algorithm for Phase Load Balancing in Low Voltage Distribution Networks, Proc. of 2018 International Conference and Exposition on Electrical And Power Engineering (EPE), 18-19 Oct. 2018, pp. 0857-0862, Electronic ISBN: 978-1-5386-5062-2, USB ISBN: 978-1-5386-5061-5, Print on Demand ISBN: 978-1-5386-5063-9, DOI: 10.1109/ICEPE.2018.8559805, ISBN:978-1-5386-5062-2, ISSN: 2471-6855, Accession Number: WOS:000458752200167 (**WoS, IEEExplore, Scopus**)
12. Kar P., Chattopadhyay S., **Ivanov O.**, Gavrilas M., A PSO Algorithm for Phase Load Balancing in Low Voltage Distribution Networks, Proc. of 2018 International Conference and Exposition on Electrical And Power Engineering (EPE), 18-19 Oct. 2018, pp. 0697-0702, Electronic ISBN: 978-1-5386-5062-2, USB ISBN: 978-1-5386-5061-5, Print on Demand ISBN: 978-1-5386-5063-9, DOI: 10.1109/ICEPE.2018.8559827, ISBN:978-1-5386-5062-2, ISSN: 2471-6855, Accession Number: WOS:000458752200137 (**WoS, IEEExplore, Scopus**)
13. Neagu B.C., **Ivanov O.**, Gavrilas M., A Comprehensive Solution for Optimal Capacitor Allocation Problem in Real Distribution Networks, International Conference on Electromechanical and Power Systems (SIELMEN), Iasi, Chisinau, Romania, 11-13 October 2017, pp. 565-570, WOS: 000426906000108, DOI: 10.1109/SIELMEN.2017.8123388 (**WoS, IEEExplore**).
14. **Ivanov O.**, Neagu B.C., Gavrilas M., Voltage Profile Improvement in Electricity Distribution Networks - A Genetic Algorithm Benchmark Study, International Conference on Electromechanical and Power Systems (SIELMEN), Iasi, Chisinau, Romania, 11-13 October 2017, pp. 560-564, WOS: 000426906000107, DOI: 10.1109/SIELMEN.2017.8123387 (**WoS, IEEExplore**).
15. Neagu B.C., **Ivanov O.**, Gavrilas M., Voltage profile improvement in distribution networks using the whale optimization algorithm, 9th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Targoviste, Romania, 29 June-1 July 2017, WOS: 000425865900081, DOI: 10.1109/ECAI.2017.8166465 (**WoS, IEEExplore**).
16. **Ivanov O.**, Neagu B.C., Gavrilas M., A Parallel PSO Approach for Optimal Capacitor Placement in Electricity Distribution Networks, 2017 International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 6-9 June, 2017, USB, WOS: 000428462600018, DOI: 10.1109/MPS.2017.7974387 (**WoS, IEEExplore**).
17. Neagu B.C., Georgescu Gh., **Ivanov O.**, The Impact of Harmonic Current Flow on Additional Power Losses in Low Voltage Distribution Networks, 2016 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, 20-22 October 2016, pp. 719 - 722, WOS: 000390706300143, DOI: 10.1109/ICEPE.2016.7781433 (**WoS, IEEExplore**).
18. Neagu B. C., **Ivanov O.**, Georgescu Gh., Reactive Power Compensation in Distribution Networks Using the Bat Algorithm, 2016 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, 20-22 October, 2016, pp. 711-714, WOS: 000390706300141, DOI: 10.1109/ICEPE.2016.7781431 (**WoS, IEEExplore**).
19. **Ivanov O.**, Gavrilaş M., A Hybrid GA-PSO Algorithm for Static VAR Compensation, 2016 International Conference and Exposition on Electrical and Power Engineering

(EPE), Iasi, Romania, 20-22 October 2016, pp. 681 – 686, WOS: 000390706300135, DOI: 10.1109/ICEPE.2016.7781425 (**WoS, IEEExplore**).

20. Banerjee A., Gavrilas M., **Ivanov O.**, Chattopadhyay S., Reliability Improvement and the Importance of Power Consumption Optimization in Wireless Sensor Networks, 9th International Symposium on Advanced Topics in Electrical Engineering (ATEE), Univ Politehnica Bucharest, Romania, 07-09 May 2015, pp. 735-740, WOS: 000368159800137, DOI: 10.1109/ATEE.2015.7133902 (**WoS, IEEExplore**).
21. Gavrilaş M., **Ivanov O.**, Gavrilaş G., Electricity Load Forecasting Based on a Mixed Statistical-Neural-Computational Intelligence Approach, 12th Symposium on Neural Network Applications in Electrical Engineering, NEUREL, School of Electrical Engineering, University of Belgrade, Belgrade; Serbia, 25-27 November 2014, pp. 61-66, WOS: 000380554900015, DOI: 10.1109/NEUREL.2014.7011461 (**WoS, IEEExplore**).
22. **Ivanov O.**, Gavrilaş M., Multilayer Perceptron Architecture Optimization for Peak Load Estimation, 12th Symposium on Neural Network Applications in Electrical Engineering, NEUREL, School of Electrical Engineering, University of Belgrade, Belgrade; Serbia, 25-27 November 2014, pp. 67-72, WOS: 000380554900016, DOI: 10.1109/NEUREL.2014.7011462 (**WoS, IEEExplore**).
23. Grigoraş Gh., **Ivanov O.**, Gavrilaş M., Customer Classification and Load Profiling Using Data from Smart Meters, 12th Symposium on Neural Network Applications in Electrical Engineering, NEUREL, School of Electrical Engineering, University of Belgrade, Belgrade; Serbia, 25-27 November, 2014, pp.73-78, WOS: 000380554900017, DOI: 10.1109/NEUREL.2014.7011464 (**WoS, IEEExplore**).
24. Kriukov Al., Grigoras Gh., Scarlatache F., **Ivanov O.**, Vicol B., Use of Fuzzy Techniques in Reliability Assessment of Electric Distribution Systems, 16th International Conference on Harmonics and Quality of Power (ICHQP), Bucharest, Romania, 25-28 May 2014, pp. 29-33, WOS: 000343776100007, DOI: 10.1109/ICHQP.2014.6842928 (**WoS, IEEExplore**).
25. Vicol B., Gavrilas M., **Ivanov O.**, Neagu B.C., Grigoras Gh., Synchrophasor Measurement Method for Overhead Line Parameters Estimation in MV Distribution Networks, 16th International Conference on Harmonics and Quality of Power (ICHQP), Bucharest, Romania, 25-28 May 2014, pp. 862-865, WOS: 000343776100177, DOI: 10.1109/ICHQP.2014.6842833 (**WoS, IEEExplore**).
26. Stativă A., Gavrilaş M., **Ivanov O.**, Optimal Power System Stabilizer Design Using Multiple Wide-Area Input Signals, 14th International Conference on Environment and Electrical Engineering (EEEIC), Krakow, Poland, 10-12 May 2014, pp. 34-39, WOS: 000343491900007, DOI: 10.1109/EEEIC.2014.6835832 (**WoS, IEEExplore**).
27. **Ivanov O.**, Gavrilaş M., Neagu B.C., Intelligent Monitoring and Control in Transmission and Distribution Networks, 14th International Conference on Optimization of Electrical and Electronic Equipment (OPTIM), Braşov, România, 22-24 May 2014, pp. 185-191, WOS: 000343551300027, DOI: 10.1109/OPTIM.2014.6850918 (**WoS, IEEExplore**).
28. **Ivanov O.**, Gavrilaş M., State Estimation with Neural Networks and PMU Voltage Measurements, 2014 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, 16-18 October 2014, pp. 983-988, WOS: 000353565300180, DOI: 10.1109/ICEPE.2014.6970056 (**WoS, IEEExplore**).
29. Coroama I., Gavrilas M., **Ivanov O.**, Stahie V., Meta-heuristic-based Methods for Multi-objective Non-conflicting Optimization of Distribution Networks Operation, International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, 2527 October 2012, pp. 280-285, WOS: 000324685300053, DOI: 10.1109/ICEPE.2012.6463916 (**WoS, IEEExplore**).

30. Aparaschivei E.D., **Ivanov O.**, Gavrilaş M., Load Flow Estimaton In Electrical Systems Using Artificial Neural Networks, International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, 25-27 October 2012, pp. 276-279, WOS: 000324685300052, DOI: 10.1109/ICEPE.2012.6463917 (**WoS, IEEExplore**).
31. **Ivanov O.**, Gavrilas M., State Estimation for Power Systems with Multilayer Perceptron Neural Networks, 11th Symposium on Neural Network Applications in Electrical Engineering (NEUREL), Belgrade, Serbia, 20-22 September 2012, pp. 243-246, WOS: 000318292500052, DOI: 10.1109/NEUREL.2012.6420026 (**WoS, IEEExplore**).
32. **Ivanov O.**, Gavrilaş M., Intelligent Distributed State Estimation Using REI System Equivalents and Phasor Measurements, 12th International Conference on Optimization of Electrical and Electronic Equipment (OPTIM), Brasov, Romania, 20-22 May 2010, pp. 1263-1268, WOS: 000291967300189, DOI: 10.1109/OPTIM.2010.5510455 (**WoS, IEEExplore**).
33. **Ivanov O.**, Gavrilas M., Applying Genetic Algorithms to REI System Equivalents, Bucharest PowerTech Conference, Bucharest, Romania, 28 June - 2 July 2009, pp. 738-743 (WoS), 1-6 (IEEExplore), WOS: 000276834600112, DOI: 10.1109/PTC.2009.5281875 (**WoS, IEEExplore**).
34. Gavrilas M., Gavrilas G., **Ivanov O.**, A Network Reduction Method with Synchronized Phasor Measurements, 9th WSEAS/IASME International Conference on Electric Power Systems, High Voltages, Electric Machines (POWER '09), Univ Genova, Genoa, Italy, 17-19 October 2009, pp. 92-97, WOS: 000276614400013 (**WoS**).
35. **Ivanov O.**, Gavrilas M., Improving WLS Estimation Results Using PMU Measurements, 9th WSEAS/IASME International Conference on Electric Power Systems, High Voltages, Electric Machines (POWER '09), Univ Genova, Genoa, Italy, 17-19 October 2009, pp. 98-103, WOS: 000276614400014 (**WoS**).
36. Gavrilas M., **Ivanov O.**, Gavrilas G., A New Static Network Reduction Technique Based on REI Equivalents and Genetic Optimization, 8th WSEAS International Conference on Power Systems and Power Technology (PS '08), Santander, Cantabria, Spain, 23-25 September 2008, pp. 106-111, WOS: 000262475100018 (**WoS**).
37. Gavrilas M., **Ivanov O.**, Gavrilas G., Load Profiling with Fuzzy Self-Organizing Algorithms, 9th Symposium on Neural Network Applications in Electrical Engineering (NEUREL), Belgrade, Serbia, 25-27 September 2008, pp. 60-64 / 63-67, WOS: 000264857900013, DOI: 10.1109/NEUREL.2008.4685564 (**WoS, IEEExplore**).
38. Gavrilas M., Sfintes C.V., **Ivanov O.**, Comparison of Neural and Evolutionary Approaches to Peak Load Estimation in Distribution Systems, The International Conference on "Computer as a Tool" (EUROCON), Belgrade, Serbia, 22-24 November 2005, pp. 1461-1464, WOS: 000237248900366, DOI: 10.1109/EURCON.2005.1630239 (**WoS, IEEExplore**).

b. Proceedings BDI

1. Neagu B.C., Luca M.A., Gavrilas M., Grigoras Gh., **Ivanov O.** and Scarlatache F, Leveraging Energy Storage Systems and Virtual Power Lines to Minimize Curtailment in Future Distribution Grids, 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi), Iasi, Romania, 2024, pp. 495-500, doi: 10.1109/EPEi63510.2024.10758096.
2. Livadariu B., Grigoraş Gh., Neagu B.C., **Ivanov O.,** Scarlatache F. and Gavrilas M., "Optimal Power Flow with the Clustering-Improved Fuzzy Models for Uncertainty Sources of Wind Power and Nodal Loads," 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi), Iasi, Romania, 2024, pp. 484-489, doi: 10.1109/EPEi63510.2024.10758170.

3. Luca M. -A. , Gavrilaş M., **Ivanov O.** and Neagu B.C, Efficient Operation Approach of Microgrids Enriched with Prosumers and Storage Systems, 2023 10th International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 2023, pp. 1-5, doi: 10.1109/MPS58874.2023.10187493.
4. Chelaru, E., Grigoraș, G., Noroc, L., Gălbău, Ș., Neagu, BC., **Ivanov, O.** (2023). Assessing the Modernization Process of a Transformer Fleet in the Electric Distribution Networks. Case Study in Romania. In: Moldovan, L., Gligor, A. (eds) The 16th International Conference Interdisciplinarity in Engineering. Inter-Eng 2022. Lecture Notes in Networks and Systems, vol 605. Springer, Cham. https://doi.org/10.1007/978-3-031-22375-4_51
5. Zetu, C., Neagu, BC., Grigoras, G., **Ivanov, O.,** Gavrilas, M. Overhead Transmission Lines Capacity Management Based on Different Weather Conditions. In: Moldovan, L., Gligor, A. (eds) The 16th International Conference Interdisciplinarity in Engineering. Inter-Eng 2022. Lecture Notes in Networks and Systems, vol 605. Springer, Cham. https://doi.org/10.1007/978-3-031-22375-4_53
6. **Ivanov O.,** Neagu B.C., Toma N.C., Grigoras Gh., Ghilan P.D. and Gavrilas M., "Metaheuristic Approaches for Distributed Generation Placement Optimization in Electrical Grids : A comparison between PSO, Tiki-Taka and Archimedes Optimzation Algorithms," 2022 International Conference and Exposition on Electrical And Power Engineering (EPE), Iasi, Romania, 2022, pp. 208-212, doi: 10.1109/EPE56121.2022.9959077. (IEEE)
7. Baiceanu F.C., Acsinte C., **Ivanov O.,** Nemes C.M. and Neagu B.C., "A Load Shedding Approach for Islanded Operation in Industrial Electrical Systems," 2022 14th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Ploiesti, Romania, 2022, pp. 1-6, doi: 10.1109/ECAI54874.2022.9847448. (IEEE)
8. Chelaru E., Grigoras Gh., Noroc L., Neagu B.C. and **Ivanov, O**. "An Efficient Integration Strategy of the Prosumers in the Active Electric Distribution Networks," 2022 14th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Ploiesti, Romania, 2022, pp. 1-6, doi: 10.1109/ECAI54874.2022.9847516. (IEEE)
9. Neagu B.C, Zetu C., Grigoras Gh., and **Ivanov O.** Theories about Mechanical Calculus in the Context of Coexistence between Overhead Power Lines and Buildings from Outskirts of Cities," 2021 International Conference on Electromechanical and Energy Systems (SIELMEN), 2021, pp. 159-162, doi: 10.1109/SIELMEN53755.2021.9600329 (IEEE)
10. Luca M.A., Neagu B.C., **Ivanov O.,** Gavrilas M., Grigoras Gh., A Deeper Analysis about the Impact of Prosumers on Power Losses in Low Voltage Microgrids, 2021 International Conference on Electromechanical and Energy Systems (SIELMEN), 2021, pp. 155-158, doi: 10.1109/SIELMEN53755.2021.9600366 (IEEE)
11. **Ivanov O.,** Neagu B.C., Cibotarica A., Gavrilas M., Multiobjective Prosumer Surplus Management for Optimal Microgrid Operation, Proceedings of 2021 10th International Conference on ENERGY and ENVIRONMENT, CIEM 2021, 2021, DOI: 10.1109/CIEM52821.2021.9614729 (IEEE)
12. Coroama I., Gavrilas M., **Ivanov O.**, A Genetic Algorithm Approach to Voltage-VAR Control in Systems with Distributed Generation, 11th WSEAS International Conference on Mathematical Methods and Computational Techniques in Electrical Engineering (MMACTEE), Timisoara, Romania, 21-23 October 2010, pp. 104-109 (Scopus).

c. Conferințe neindexate

1. Băncescu G. Chicco G., Mazza A., **Ivanov O.**, Gavrilaş M., Multi-Objective Pareto Particle Swarm Optimization for Radial Distribution Systems, 7th International

Conference on Energy and Environment (CIEM), Iasi, Romania, 22-23 October 2015, CD-ROM.

2. Rakotoarimanana L.G., Gavrilas M., **Ivanov O.**, Multiobjective Optimization of Capacitor Banks Placement in Distribution Networks, 13th WSEAS Conference on Evolutionary Computing (EC '12), vol. Latest Advances in Information Science, Circuits and Systems, G. Enescu University, Iasi, Romania, 13-15 June 2012, pp. 87-92.
3. Coroama I., Gavrilas M., **Ivanov O.**, A Hybrid Differential Evolution – Analytic Hierarchy Process Method for Multi-objective Optimization, 13th WSEAS Conference on Evolutionary Computing (EC '12), vol. Latest Advances in Information Science, Circuits and Systems, "G. Enescu" University, Iasi, Romania, 13-15 June 2012, pp. 93-98.
4. **Ivanov O.**, Gavrilas M., The Romanian electricity market in the European framework, International World Energy System Conference (WESC),"Gh. Asachi" Tehnical University, Iasi, Romania, 30 June – 2 July 2008, CD-ROM.
5. Gavrilas M., Sfintes C.V., **Ivanov O.**, Load Profiling Methodology For Electricity Markets, Proceedings of 30-th International Conference of Fundamentals of Electrotechnics and Circuit Theory – IC SPETO, May 2007, Gliwice-Ustron, Poland, CD-ROM.
6. Gavrilas M., Istrate M., **Ivanov O.**, Estimation of fundamental frequency components of voltage and current for digital distance relays, Proceedings of 30-th International Conference of Electrotechnics and Circuit Theory, IC-SPETO 2007, Gliwice, Poland, CD-ROM.
7. Gavrilas M., **Ivanov O.**, Sfintes C.V., Enhanced Particle Swarm Optimization Method For Power Loss Reduction In Distribution Systems, Proceedings of the International Conference on Electricity Distribution – CIRED, May 2007, Viena, Austria, Paper 0088, CD-ROM, pp. 1-4.
8. **Ivanov O.**, Gavrilas M., Load Profiling by a Genetic Algorithm, Proceedings of the International Youth Conference on Energetics – IYCE, May 2007, Budapest, Hungary, CD-ROM.
9. Gavrilas M., **Ivanov O.**, Load Profiling by Self Organization with Affinity Control Strategy, Proceedings of the National Symposium of Theoretical Electrical Engineering – SNET, Bucharest, Romania, October 2007, CD-ROM and pp. 129-134.
10. Gavrilas M., **Ivanov O.**, Sfintes C.V., Load estimation in distribution systems based on evolutionary algorithms, International World Energy System Conference WESC 2006, Torino, Italy, 10-12 July 2006, ISBN: 88-87380-51-1, pp. 153-156.
11. Gavrilas M., **Ivanov O.**, Optimization in Distribution Systems Using Particle Swarm Optimization and Immune Algorithms, First International Symposium on Electrical and Electronics Engineering – ISEEE, Galați, Romania,13-14 October 2006, ISBN 973-627-325-3, pp. 86-91.
12. Gavrilas M., **Ivanov O.**, Sfintes C.V., Reactive power compensation in distribution networks by capacitor placement optimization using immune algorithm, Simpozionul "Sistem de Inteligenta artificiala in electroenergetica", Galati, Romania, 27-28 septembrie 2006, ISBN 973-7870-73-5, pp. 105-111.
13. Gavrilas M., **Ivanov O.**, Metode ale inteligentei artificiale utilizate pentru planificarea tranzactiilor cu energie electrica, Conferinta Internationala Energie-Mediu CIEM 2003, Bucuresti, Octombrie 2003, vol.1, pp.73 – 78.

J. Invenţii.

1. Software platform for decision assistance in optimal ecological designing of electric systems, has data archiving module that allows quick identification of common characteristics of designs using data base exploring techniques

Patent Number(s): RO133527-A0

Inventor(s): GRIGORAS G, IVANOV O, NEAGU B C, SCARLATACHE F, GAVRILAS M

Patent Assignee Name(s) and Code(s): UNIV IASI TEHNICA ASACHI GHEORGHE (UYIA-Non-standard)

Derwent Primary Accession Number: 2019-68377H (cerere brevet)

2. Software platform for integrated management and control of electric energy and natural gas consumption, has fourth module that is adapted for programming energy consumption based on energy consumption profiles of equipment

Patent Number(s): RO132688-A0

Inventor(s): GRIGORAS G, IVANOV O, NEAGU B C, GAVRILAS M, SCARLATACHE F

Patent Assignee Name(s) and Code(s): UNIV IASI TEHNICA ASACHI GHEORGHE (UYIA-Non-standard)

Derwent Primary Accession Number: 2019-29111P (cerere brevet)

K. Contracte de cercetare/granturi.

a. Granturi

40. Platformă software inovativă pentru managementul energetic al consumatorilor finali in vederea cresterii eficientei energetice și a reducerii emisiilor de carbon, Grant PN-III-P2-2.1-CI-2018-1017, Contract nr. 174CI din 04/07/2018, Valoare: 49990 lei, Beneficiar: Energy Audits SRL, Autoritate contractantă: UEFISCDI, 2018, **Ivanov O.** (membru în echipă).
41. Management inteligent a centralelor electrice virtuale cu ajutorul platformelor software bazate pe inteligenta artificiala, in contextul competitivitatii energetice Europene, Grant PN-III-P2-2.1-CI-2018-1011, Contract nr. 173CI din 02/07/2018, Valoare: 49750 lei, Autoritate contractantă: UEFISCDI, 2018, **Ivanov O.** (membru în echipă).
42. Platformă software de asistare a deciziilor în proiectarea ecologică optimă a instalațiilor electrice cu producere si stocare locală a energiei, în contextul creșterii eficienței energetice, Grant PN-III-P2-2.1-CI-2018-1128, Contract 192CI/25.07.2018, Valoare: 50.000 lei, Beneficiar: Smoc M. Denis Claudiu, PFA, Autoritate contractantă: UEFISCDI, 2018, **Ivanov O.** (membru în echipă).
43. Instrument software pentru gestiunea tranzacțiilor pe piața de energie electrică (GTMarket), Grant PN-III-P2-2.1-CI-2017-0328, Contract tip Cecuri de Inovare nr. 45CI/2017, Valoare: 49990 lei, Beneficiar S.C. EFE Energy SRL, Buzău, Autoritate contractantă: UEFISCDI, 2017, **Ivanov O.** (responsabil partener).
44. Platformă de management si control integrat al fluxurilor purtatorilor de energie in scopul cresterii eficientei energetice la IMM-uri (EFIERED), contract tip Cecuri de Inovare nr. 105CI/2017 (PN-III-P2-2.1-CI-2017-0190), Valoare: 50000 lei, Beneficiar: Smoc M. Denis Claudiu, PFA, Autoritate contractantă: UEFISCDI, 2017, Ivanov O. (membru în echipă).
45. Sistem inteligent de predictie si control al congestiilor in retelele de transport si distributie la inalta tensiune, Grant PNCDI II – Parteneriate, Contract nr. 22126 / 01.10.2008, Valoare: 319859 lei, Beneficiar: CNCSIS, 2008-2010, **Ivanov O.** (membru în echipă).

46. Instrument software destinat cresterii securitatii sistemelor electroenergetice prin coordonarea protectiei de distanta, dezvoltat pe baza unor tehnici de inteligenta artificiala, Grant CNCSIS tip A, cod 283, tema nr. 16, Contract nr. 2735/19.05.2006 si tema nr. 28, contract nr. GR80/23.05.2007, Valoare: 84000 lei, Beneficiar: CNCSIS, 2006 – 2007, **Ivanov O.** (membru în echipă).
47. Tehnici de inteligenta artificiala si modele noi pentru dezvoltarea studiilor de sarcina in scopul utilizarii eficiente a energiei electrice in conditiile impuse de functionarea pietei de energie electrica, Grant CNCSIS tip A, cod 241, tema 13 / 2006, contract nr. 63GR/19.05.2006 si tema 26 / 2007, contract nr. GR80/23.05.2007, Valoare: 90430 lei, Beneficiar: CNCSIS, 2006-2007, **Ivanov O.** (membru în echipă).
48. Modele ale inteligentei artificiale pentru prognoza pe termen scurt si mediu a consumului de energie electrica, Grant 6177 / B29 / 2000, Valoare: 1500 lei, Beneficiar: ANSTI, 2000, **Ivanov O.** (membru în echipă).

b. Contracte de cercetare

49. Determinarea anuală şi/sau trimestrială a Prognozei de Consum Propriu Tehnologic, pentru rețeaua de energie electrică din zona de activitate DEGR pentru fiecare an cuprins in perioada 2023- 2028 aferenta judetelor Bacau, Botosani, Iasi, Neamt, Suceava si Vaslui, contract nr. 48734/19.12.2022, valoarea 11128 Euro, 2022, membru în echipă, **O. Ivanov**
50. Prognoza de consum propriu tehnologic pentru reteaua de energie electrica din zona de activitate a Delgaz Grid. S.A. pentru anul 2018., Contract nr. 3105P / 14.02.2018, Valoare: Valoare: 9981 EUR, Beneficiar: Delgaz Grid. S.A , 2018, **Ivanov O.** (membru în echipă)
51. Prognoza de consum propriu tehnologic pentru reaua de energie electrica din zona de activitate a Delgaz Grid. S.A., Contract nr. 448P / 15.03.2017, Valoare: 44888 lei, Beneficiar: Delgaz Grid. S.A., 2017, **Ivanov O.** (membru în echipă).
52. Prestări servicii cercetare: prelucrare MST instantanee şi stabilire locatii MST 1 zi, Contract nr. 12697/05.07.2017, Valoare: 9783 lei, Beneficiar: Delgaz Grid S.A, 2017, **Ivanov O.** (membru în echipă).
53. Elaborare studii - Servicii de consultanta de specialitate in proiectul E.ON Distributie Romania S.A. de reducere a pierderilor tehnice in retelele de distributie a energiei electrice Contract nr. 684P/21.04.2016, Valoare: 48000 lei, Beneficiar: E.On Distribuție Romania S.A., 2016-2017, **Ivanov O.** (membru în echipă).
54. Servicii de consultanţă de specialitate în proiectul E.ON Moldova Distribuţie de reducere a pierderilor tehnice în reţelele de distribuţie – Contract nr. 1398P/08.10.2014, Valoare: 108000 lei, beneficiar E.ON Distribuţie România, 2014 – 2015, **Ivanov O.** (membru în echipă).
55. Norma de consum propriu tehnologic in retelele de distributie pentru anul 2013, Contract nr. 337P/21.03.2014, Valoare: 10000 lei, Beneficiar: E.ON Moldova Distribuţie S.A., 2014, Ivanov O. (membru în echipă).
56. Incarcarea dinamica a liniilor electrice aeriene prin evaluarea on-line a capacitatii de transport, Contract nr. 912P/03.07.2012, Valoare: 65000 lei, Beneficiar: Transelectrica S.A. Sucursala Transport Bacau, 2012, **Ivanov O.** (membru în echipă).
57. Studiu de determinare a consumului propriu tehnologic in retelele de joasa tensiune aferente jud. Bacau, apartinand E.ON Moldova Distributie S.A, Contract de cercetare nr. 3564P/01.11.2011, Valoare: 50000 lei, Beneficiar: E.ON Moldova Distribuţie S.A., 2011, **Ivanov O.** (membru în echipă).
58. Amplasarea surselor de putere în reţelele de distribuţie de 110 kV şi MT ale S.C. E.ON Moldova Distribuţie S.A. după criteriul pierderilor minime de energie şi al apropierii

surselor de consumator şi studiu privind compensarea şi reglarea puterii reactive în scopul optimizării nivelului de tensiune în reţelele de 110 kV ale S.C. E.ON Moldova Distribuţie S.A, Contract de cerectare nr. 7405P/6.10.2007, Valoare: 145440 lei, Beneficiar: E.ON Moldova Distribuţie S.A., 2006-2007, **Ivanov O.** (membru în echipă).

59. Cercetari privind analiza si optimizarea regimurilor de functionare ale retelelor electrice de distributie folosind elemente ale inteligentei artificiale, Contract cercetare nr 4030P/15.11.2004, Valoare: 29750 lei, Beneficiar: F.D.F.E.E. Electrica „Muntenia Sud" Bucuresti, 2004, **Ivanov O.** (membru în echipă).

L. Premii, distincţii.

M. Alte realizări semnificative

27 martie 2025 conf. dr. ing. Ivanov Ovidiu

Lista de lucrări în domeniul de studii universitare de masterat Managementul Sistemelor de Energie

Numele şi prenumele: **Bogdan Constantin Neagu**

A. Teza de doctorat.

1. „ Contribuţii privind optimizarea structurii şi regimurilor de funcţionare ale sistemelor de repartiţie şi distribuţie a energiei electrice”, 2014, Domeniul „Inginerie Electrică”, Universitatea Tehnică „Gheorghe Asachi” din Iași, conducător doctorat: prof. dr. ing. Mircea Dan Gușă.

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

1. Grigoras, G., **Neagu, B. C.,** Noroc, L., Chelaru, E. (2024). New smart devices-based strategies for optimal planning and operation of active electric distribution networks, Chapter in book Power System Strength: Evaluation methods, best practice, case studies, and applications, IET Publisher, ISBN: 978-1-839-53807-0.
2. **Neagu B.C.**, Gheorghe Grigoras, and Florina Scarlatache. "Engineering Applications of Blockchain Based Crowdsourcing Concept in Active Distribution Grids." *Smart Grid 3.0: Computational and Communication Technologies*. Cham: Springer International Publishing, 2023. 57-76.
3. Grigoras, Gheorghe**, Neagu B.C.**, and Florina Scarlatache. "Data Mining-Based Approaches in the Power Quality Analysis." In *Smart Grid 3.0: Computational and Communication Technologies*, pp. 93-119. Cham: Springer International Publishing, 2023.
4. **Neagu B.C.**, Mihai Gavrilaș, Ovidiu Ivanov, Gheorghe Grigoraș, *The Crowdsourcing Concept-Based Data Mining Approach Applied in Prosumer Microgrids*, Capitolul 5 in cartea *The Future of Data Mining*, Editor Cem Ufuk Baytar, Nova Science Publishers, USA, 2022, pp. 77 – 94, ISBN: 978-1-53618-508-9
5. Gheorghe Grigoraș, **Neagu B.C.**, Regression Analysis-Based Load Modelling for Electric Distribution Networks, Capitol in cartea Numerical Methods for Energy Applications, Editori: Naser Mahdavi Tabatabaei, Nicu Bizon, Springer International Publishing, Switzerland, (27 pag.), 2021, pp. ISBN: 978-3-030-62190-2
6. Eduard Lunca, **Neagu B.C.**, Silviu Vornicu, *Finite Element Analysis of Electromagnetic Fields Emitted by Overhead High-Voltage Power Lines, In Numerical Methods for Energy Applications*, Editori: Naser Mahdavi Tabatabaei, Nicu Bizon, Springer International Publishing, Switzerland, Capitolul 29, (26 pag.), 2021, ISBN: 978-3-030-62190-2
7. Mihai Gavrilaș, **Neagu B.C.**, Enhanced metaheuristic search algorithms. Applications in the management of electricity distribution systems, LAP Lambert Academic Publishing, ISBN 978-620-2-51263-3, Riga, Latvia, 2020.
8. **Neagu B.C.**, Gheorghe Grigoraș, Decision-Making Strategies with Clustering Based Unsupervised Learning for Smart Grids Planning, Capitol in cartea An Introduction to Approaches and Modern Applications with Ensemble Learning, Editor: Yi-Tung Chan, Nova Science Publishers, USA, (40 pag.), 2020, ISBN: 978-1-53618-680-2
9. **Neagu B.C.**, Mihai Gavrilaș, Optimal Placement of Energy Storage Systems in Prosumer Microgrids, Capitolul 7 in cartea Advances in Engineering Research, Editor Victoria M. Petrova, Nova Science Publishers, USA, 2020, pp. 253 – 273, ISBN: 978-1-53618-508-9

10. Grigoras G., Ivanov O., **Neagu B.C.**, Kar P., *Smart Metering Based Strategies for Improving Energy Efficiency in Microgrids*, In Microgrid Architectures, Control and Protection Methods. Power Systems, Springer, ISBN 978-3-030-23722-6, 2020, https://link.springer.com/chapter/10.1007/978-3-030-23723-3_19.
11. **Neagu B.,** Grigoraș G., Ivanov O., *The Optimal Operation of Active Distribution Networks with Smart Systems*, in Advanced Communication and Control Methods for Future Smartgrids, InTech Open, London, ISBN 978-1-78984-106-0, 2019. https://mts.intechopen.com/booksprocess/aboutthebook/chapter/ 192699/book/8839
12. **Neagu B.C.**, Grigoraș G., *The Assessment of Power Quality in Electric Distribution Systems from Romania*, Capitol in cartea "Advances in Energy Research", vol. 28, Editor Nova Science Publishers, New York, United States of America, pp. 57-110, 2017, ISBN 978-1-53612-700-3 (54 pag.), access la www.novapublishers.org/catalog/product_info.php?products_id=63323
13. **Neagu B.C.**, *Analyze of Slow Voltage Variations in Electric Distribution Systems*, Chapter in the book "Clustering in Power Systems. Application", Published by Lambert Academic Publishing, GmbH & Co. KG, Germany, pp. 113-126, 2016, ISBN 978-3-330-01545-6, access online la www.morebooks.de/store/gb /book/clustering-in-power-systems-applications/isbn/978-3-330-01545-6.

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS.

1. Ivas Dumitru, **Neagu B.C.**, Atudori Monica, 100 de ani de învățământ electrotehnic la Iași, capitol în cartea Formarea specialiștilor sistemului energiei electrice si termice din Romania, coord. Zonel Vasiliu, Editura AGIR, București, Romania, 2017, ISBN 978-973-720-680-0, (103 pag. Neagu B.C.).
2. Gheorghe Georgescu, **Neagu B.C.,** Analiza regimurilor permanente de funcţionare ale reţelelor electrice din sistemul electroenergetic, Vol. 2, Ed. PIM, Iaşi, 2014, (596 pag), ISBN 978-606-13-2128-5.
3. Gheorghe Georgescu, **Neagu B.C.,** Analiza regimurilor permanente de funcţionare ale reţelelor electrice din sistemul electroenergetic, Vol. 1, Ed. PIM, Iaşi, 2014, (568 pag), ISBN 978-606-13-2127-8.
4. Gheorghe Georgescu, **Neagu B.C.,** Proiectarea şi exploatarea asistată de calculator a sistemelor publice de repartiţie şi distribuţie a energiei electrice, Vol. 2, Editura Pim, Iaşi, 2012, (566 pag.), ISBN 978-606-13-088-6-6.
5. Gheorghe Georgescu, **Neagu B.C.,** Romeo Ciobanu, Proiectarea şi exploatarea asistată de calculator a sistemelor publice de repartiţie şi distribuţie a energiei electrice, Vol. 1, partea a-II-a, Ed. Pim, Iaşi, 2011, (586 pag), ISBN 978-606-13-0148-5.
6. Gheorghe Georgescu, **Neagu B.C.,** Proiectarea şi exploatarea asistată de calculator a sistemelor publice de repartiţie şi distribuţie a energiei electrice, Vol. 1, partea I-a, Ed. Fundaţiei Academice AXIS, Iaşi, 2010, (452 pag), ISBN 978-973-7742-87-2.

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

1. **Neagu B.C.,** , Gheorghe Georgescu, Strategia planificării sistemelor de distribuție, vol. 1, Edit. PIM, Iași, Romania, 2017, ISBN 978-606-13-3994-5, 290 pag.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

-

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

1. Grigoras, G., Livadariu, B., **Neagu, B. C.** (2025). Data Clustering-Driven Fuzzy Inference System-Based Optimal Power Flow Analysis in Electric Networks Integrating Wind Energy. Processes, 13(3), 676.
2. Grigoras G, Gârbea R, **Neagu B-C.** Toward Smart SCADA Systems in the Hydropower Plants through Integrating Data Mining-Based Knowledge Discovery Modules. Applied Sciences. 2024; 14(18):8228. https://doi.org/10.3390/app14188228
3. Ivanov, O., Luca, M. A., **Neagu, B. C.**, Grigoras, G., & Gavrilas, M. (2024). Flexible Energy Storage for Sustainable Load Leveling in Low-Voltage Electricity Distribution Grids with Prosumers. Sustainability, 16(10), 3905.
4. Patel, J., Ruparelia, A., Tanwar, S., Alqahtani, F., Tolba, A., Sharma, R., **Neagu, B. C.** (2023). Deep Learning-Based Model for Detection of Brinjal Weed in the Era of Precision Agriculture. Computers, Materials & Continua, 77(1).
5. Patel, D. H., Shah, K. P., Gupta, R., Jadav, N. K., Tanwar, S., **Neagu, B. C.**, Tolba, A. (2023). Blockchain-based crop recommendation system for precision farming in iot environment. Agronomy, 13(10), 2642.
6. Baiceanu, Florin-Constantin, Ovidiu Ivanov, Razvan-Constantin Beniuga, **Neagu B.-C**., and Ciprian-Mircea Nemes. "A Continuous Multistage Load Shedding Algorithm for Industrial Processes Based on Metaheuristic Optimization." Mathematics 11, no. 12 (2023): 2684, WOS:001017561300001.
7. Banu, Ioan Viorel, Fadila Barkat, Marcel Istrate, Josep M. Guerrero, George Culea, Petru Livinti, Justina G. Motas, **Neagu B.-C**., and Dragos Andrioaia. "Passive anti-Islanding protection for Three-Phase Grid-Connected photovoltaic power systems." International Journal of Electrical Power & Energy Systems 148 (2023): 108946, WOS:001009658800001.
8. Jasim, Ali M., Basil H. Jasim, **Neagu B.-C**., and Simo Attila. "Electric Vehicle Battery-Connected Parallel Distribution Generators for Intelligent Demand Management in Smart Microgrids." Energies 16, no. 6 (2023): 2570, WOS:000957982400001.
9. Jasim, Ali M., Basil H. Jasim, Florin-Constantin Baiceanu, **Neagu B.-C**., "Optimized sizing of energy management system for off-grid hybrid solar/wind/battery/biogasifier/diesel microgrid system." Mathematics 11, no. 5 (2023): 1248, WOS:000947061400001.
10. Grigoraș, Gheorghe, Maria Simona Raboaca, Catalin Dumitrescu, Daniela Lucia Manea, Traian Candin Mihaltan, Violeta-Carolina Niculescu, **Neagu B.-C**., "Contributions to power grid system analysis based on clustering techniques." Sensors 23, no. 4 (2023): 1895., WOS:000942301200001
11. Jasim, Ali M., Basil H. Jasim, **Neagu B.-C**., and Bilal Naji Alhasnawi. "Efficient optimization algorithm-based demand-side management program for smart grid residential load." Axioms 12, no. 1 (2022): 33, WOS:000916714000001
12. Jasim, Ali M., Basil H. Jasim, **Neagu B.-C**., and Bilal Naji Alhasnawi. "Coordination control of a hybrid AC/DC smart microgrid with online fault detection, diagnostics, and localization using artificial neural networks." Electronics 12, no. 1 (2022): 187, WOS:000909939000001.
13. Parekh, Raj, Nisarg Patel, Rajesh Gupta, Nilesh Kumar Jadav, Sudeep Tanwar, Abdullah Alharbi, Amr Tolba, **Neagu B.-C**., and Maria Simona Raboaca. "GEFL: gradient encryption-aided privacy preserved federated learning for autonomous vehicles." IEEE Access 11 (2023): 1825-1839, WOS:000912466100001.
14. Jasim, Ali M., Basil H. Jasim, **Neagu B.-C**., "A new decentralized PQ control for parallel inverters in grid-tied microgrids propelled by SMC-based buck–boost converters." Electronics 11, no. 23 (2022): 3917., WOS:000896559100001
15. Kakkar, Riya, Rajesh Gupta, Smita Agrawal, Sudeep Tanwar, Ravi Sharma, Ahmed Alkhayyat, **Neagu B.-C**., Maria Simona Raboaca. "A Review on Standardizing Electric

Vehicles Community Charging Service Operator Infrastructure." Applied Sciences 12, no. 23 (2022): 12096, WOS:000895667400001.

16. Munshi, Manushi, Manan Patel, Fayez Alqahtani, Amr Tolba, Rajesh Gupta, Nilesh Kumar Jadav, Sudeep Tanwar, **Neagu B.-C**., and Alin Dragomir. "Artificial Intelligence and Exploratory-Data-Analysis-Based Initial Public Offering Gain Prediction for Public Investors." Sustainability 14, no. 20 (2022): 13406, WOS:000875076600001
17. Hathaliya, Jigna, Hetav Modi, Rajesh Gupta, Sudeep Tanwar, Fayez Alqahtani, Magdy Elghatwary, **Neagu B.-C**., Maria Simona Raboaca. "Stacked Model-Based Classification of Parkinson's Disease Patients Using Imaging Biomarker Data." Biosensors 12, no. 8 (2022): 579, WOS:000846329700001
18. Hathaliya, Jigna, Raj Parekh, Nisarg Patel, Rajesh Gupta, Sudeep Tanwar, Fayez Alqahtani, Magdy Elghatwary, Ovidiu Ivanov, Maria Simona Raboaca, **Neagu B.-C**., "Convolutional neural network-based Parkinson disease classification using SPECT imaging data." Mathematics 10, no. 15 (2022): 2566, WOS:000839840600001.
19. Mankodiya, Harsh, Priyal Palkhiwala, Rajesh Gupta, Nilesh Kumar Jadav, Sudeep Tanwar, **Neagu B.-C**., Gheorghe Grigoras, Fayez Alqahtani, and Ahmed M. Shehata. "A Real-Time Crowdsensing Framework for Potential COVID-19 Carrier Detection Using Wearable Sensors." Mathematics 10, no. 16 (2022): 2927, WOS:000846574300001.
20. Kaur, Manpreet, Shikha Gupta, Deepak Kumar, Chaman Verma, **Neagu B.-C**., and Maria Simona Raboaca. "Delegated proof of accessibility (dpoac): A novel consensus protocol for blockchain systems." Mathematics 10, no. 13 (2022): 2336, WOS:000825546600001.
21. Kumar, Sandeep, Shilpa Rani, Arpit Jain, Chaman Verma, Maria Simona Raboaca, Zoltán Illés, **Neagu B.-C**., "Face spoofing, age, gender and facial expression recognition using advance neural network architecture-based biometric system." Sensors 22, no. 14 (2022): 5160, WOS:000832360000001.
22. Sandesara, Mudita, Umesh Bodkhe, Sudeep Tanwar, Mohammad Dahman Alshehri, Ravi Sharma, **Neagu B.-C**., Gheorghe Grigoras, and Maria Simona Raboaca. "Design and Experience of Mobile Applications: A Pilot Survey." Mathematics 10, no. 14 (2022): 2380, WOS:000831458500001.
23. Mankodiya, Harsh, Dhairya Jadav, Rajesh Gupta, Sudeep Tanwar, Abdullah Alharbi, Amr Tolba, **Neagu B.-C**., and Maria Simona Raboaca. "XAI-Fall: Explainable AI for Fall Detection on Wearable Devices Using Sequence Models and XAI Techniques." Mathematics 10, no. 12 (2022): 1990, WOS:000817495000001.
24. Tanwar, Sudeep, Aparna Kumari, Darshan Vekaria, Maria Simona Raboaca, Fayez Alqahtani, Amr Tolba, **Neagu B.-C**., and Ravi Sharma. "GrAb: A deep learning-based data-driven analytics scheme for energy theft detection." Sensors 22, no. 11 (2022): 4048, WOS:000809925300001.
25. Kalariya, Vasu, Pushpendra Parmar, Patel Jay, Sudeep Tanwar, Maria Simona Raboaca, Fayez Alqahtani, Amr Tolba, and **Neagu B.-C**., "Stochastic neural networks-based algorithmic trading for the cryptocurrency market." Mathematics 10, no. 9 (2022): 1456, WOS:000794848300001.
26. Grigoraș, Gheorghe, **Neagu B.-C**., Ovidiu Ivanov, Bogdan Livadariu, and Florina Scarlatache. "A New SQP Methodology for Coordinated Transformer Tap Control Optimization in Electric Networks Integrating Wind Farms." Applied Sciences 12, no. 3 (2022): 1129, WOS:000754870900001.
27. Chelaru, Ecaterina, Livia Noroc, Gheorghe Grigoras, and **Neagu B.-C**., "Energy Losses Estimation in the Electric Distribution Networks Using Clustering-Based Selection of the Representative Feeders." In International Conference Interdisciplinarity in Engineering, pp. 508-521. Cham: Springer International Publishing, 2021, WOS:000773080200047 .

28. Ovidiu Ivanov; **Neagu B.-C**., Gheorghe Grigoras; Scarlatache, Florina; Gavrilas, Mihai, A Metaheuristic Algorithm for Flexible Energy Storage Management in Residential Electricity Distribution Grids. Mathematics 2021, 9, 2375. WOS:000628360103201
29. Gherghe Grigoras, **Neagu B.-C**., Florina Scarlatache, Livia Noroc, Ecaterina Chelaru, Bi-Level Phase Load Balancing Methodology with Clustering-Based Consumers' Selection Criterion for Switching Device Placement in Low Voltage Distribution Networks, Mathematics, vol. 9, nr. 5, 542, 2021, Accession Number: WOS:000628360100001
30. Gheorghe Grigoraș, Livia Noroc, Ecaterina Chelaru, Florina Scarlatache, **Neagu B.-C**., Ovidiu Ivanov, Mihai Gavrilaș, Coordinated Control of Single-Phase End-Users for Phase Load Balancing in Active Electric Distribution Networks, Mathematics, vol. 9, nr. 21, 2662, 2021, Accession Number: WOS:000719474900001 (Q1)
31. Alexandru Kriukov, Mihai Gavrilaș, Ovidiu Ivanov, Gherghe Grigoraș, **Neagu B.-C**., Florina Scarlatache, Novel Decentralized Voltage-Centered EV Charging Control Algorithm Using DSRC System in Low Voltage Distribution Networks, IEEE Access (Early Access), Decembrie 2021, doi: 10.1109/ACCESS.2021.3132419 (Q2)
32. Ovidiu Ivanov, **Neagu B.-C**., Mihai Gavrilas, Gheorghe Grigoraș, A Phase Generation Shifting Algorithm for Prosumer Surplus Management in Microgrids using Inverter Automated Control, Electronics, vol. 10, nr. 22, 2740, 2021, WOS:000727513800001 (Q3)
33. Gheorghe Grigoras, **Neagu B.-C**., An Advanced Decision Support Platform in Energy Management to Increase Energy Efficiency for Small and Medium Enterprises, Applied Sciences, 2020, 10, 3505. Accession Number: WOS:000541440000166
34. Gheorghe Grigoras, **Neagu B.-C**., Mihai Gavrilas, Ion Triștiu, Constantin Bulac, Optimal Phase Load Balancing in Low Voltage Distribution Networks using a Smart Meter Data-based Algorithm, Mathematics, 2020, 8, 549. Accession Number: WOS: 000531824100089
35. Florina Scarlatache, Gheorghe Grigoraș, Vlad-Andrei Scarlatache, **Neagu B.-C**., Ovidiu Ivanov, A Hybrid Methodology Based on Smart Management Energy Consumption in Irrigation Systems, Electronics, vol. 10, nr. 22, 2864, 2021, WOS:000727225500001 (Q3)
36. **Neagu B.-C**., Ovidiu Ivanov, Gheorghe Grigoras, Mihai Gavrilas, Marcel Istrate, New Market Model with Social and Commercial Tiers for Improved Prosumer Trading in Microgrids. Sustainability 2020, 12, 7265, WOS:000584284700001.
37. **Neagu B.-C**., Ovidiu Ivanov, Gheorghe Grigoras, Mihai Gavrilas, A New Vision on the Prosumers Energy Surplus Trading Considering Smart Peer-to-Peer Contracts. Mathematics, 2020, 8, 235. Accession Number: WOS:000519234000090
38. Ovidiu Ivanov, Samiran Chattopadhyay, Soumya Banerjee, **Neagu B.-C**., Gheorghe Grigoras, Mihai Gavrilas, A Novel Algorithm with Multiple Consumer Demand Response Priorities in Residential Unbalanced LV Electricity Distribution Networks, Mathematics, 2020, 8, 1220. Accession Number: WOS:000567310900001.
39. Grigoras G., **Neagu B.-C**., *Smart Meter Data-Based Three-Stage Algorithm to Calculate Power and Energy Losses in Low Voltage Distribution Networks*, Energies, 12, 3008, 2019 (If=2,707).
40. Serițan G.-C., Enache B.-A., Grigorescu S.-D., Pațurcă S. V., Cepișcă C., Vasiliki V., Porumb R., **Neagu B. C.**, Ghiculescu D., *Improvement of Teaching Activities in Higher Education: A Case Study*, Revue roumaine des sciences techniques. Série Électrotechnique et Énergétique, Tome 64, Issue 2, pp. 169-172, 2019 (If=0,763).

G. Lucrări ştiinţifice publicate în reviste din străinătate.

1. Nicusor Toma, Mihai Gavrilaș, Neagu B.C., Application of smart metering systems for energy losses assessment and forecasting in distribution systems, Prace Naukowe Politechniki Śląskiej. Elektryka, Wydawnictwo Politechniki Śląskiej, nr. 1, pp. 51-57, Polonia, 2018, (Index Copernicus, getCITED, Ulrich's).

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

1. Băiceanu, F. C., Nemeș, C. M., **Neagu, B. C.,** & Ilișescu, I. (2022). Overhead Line Swithcing Considering Circuit Breaker Standard Deviation Times. Bulletin of the Polytechnic Institute of Iași. Electrical Engineering, Power Engineering, Electronics Section, 68(4), 77-90. (Index Copernicus), cod CNCSIS: 87: https://sciendo.com/pl/article/10.2478/bipie-2022-0023
2. **Neagu, B. C.,** Gavrilas, M., Tirsu, M., Covalenco, N., & Negura, I. (2021). Environmental Performance Evaluation for a Small Scale Trigeneration System. Bulletin of the Polytechnic Institute of Iași. Electrical Engineering, Power Engineering, Electronics Section, 67(4), 73-85.. (Index Copernicus, getCITED, Ulrich's), cod CNCSIS: 87: https://intapi.sciendo.com/pdf/10.2478/bipie-2021-0023
3. Neagu B.C., Ovidiu Ivanov, Gheorghe Grigoraș, Mihai Gavrilaș, Short-term Load Forecast Approach Based on Artificial Neural Networks, Buletinul Institutului Politehnic din Iasi, Secţia: Electrotehnică, Energetică, Electronică, Volumul 65 (69), Fasc. 2, pp. 9-22, 2019, ISSN 1223-8139 (Index Copernicus, getCITED, Ulrich's), cod CNCSIS: 87 http://www.bulipi-eee.tuiasi.ro/archive/2019/fasc.2/p1_f2_2019.pdf .
4. Vladut Birjar, **Neagu B.C.**, Mugurel Rotariu, A Load Flow Comparative Analysis using Commercial Power Systems Tools, Buletinul Institutului Politehnic din Iaşi, secția Electrotehnică. Energetică. Electronică, Vol. 64 (68), No. 4, 2018, ISSN 1223-8139, p. 139-148 (CNCSIS B+, Index Copernicus, Ulrich's), http://www.bulipi-eee.tuiasi.ro/archive/2018/fasc.4/2018f4contents.pdf.
5. **Neagu B.C.**, Mugurel Rotariu, An Intelligent Solution for Power Losses Minimization in Electric Distribution Systems, Buletinul Institutului Politehnic din Iaşi, secția Electrotehnică. Energetică. Electronică, Vol. 63 (67), No. 4, 2017, ISSN 1223-8139, p. 79-92 (CNCSIS B+, Index Copernicus, Ulrich's), http://www.bulipi-eee.tuiasi.ro/archive/2016/fasc.2/2017f4contents.pdf
6. **Neagu B.C.**, Gheorghe Georgescu, Ovidiu Ivanov, Determining Additional Power and Energy Losses in Low Voltage Electricity Distribution Networks Operated in Distorted and Unbalanced Operation States, Buletinul Institutului Politehnic din Iaşi, secția Electrotehnică. Energetică. Electronică, Vol. 63 (67), No. 1, 2017, ISSN 1223-8139, pp. 97-110 (CNCSIS B+, Index Copernicus, getCITED, Ulrich's), http://www.bulipi-eee.tuiasi.ro/archive/2017/fasc.2/p8_f1_2017.pdf .
7. Gheorghe Georgescu, **Neagu B.C.**, Ovidiu Ivanov, The Evaluation of Active Power Losses in Low Voltage Distribution Systems Operated in Distorting Steady State, Buletinul Institutului Politehnic din Iaşi, secția Electrotehnică. Energetică. Electronică, Vol. 62 (66), No. 2, 2016, ISSN 1223-8139, p. 97-109 (CNCSIS B+, Index Copernicus), http://www.bulipi-eee.tuiasi.ro/archive/2016/fasc.2/2016f2contents.pdf
8. **Neagu B.C.**, Gheorghe Georgescu, Ovidiu Ivanov, Voltage Quality Analysis in Low Voltage Public Electric Distribution Networks Operated in Distorted and Unbalanced Conditions, Buletinul Institutului Politehnic din Iaşi, secția Electrotehnică. Energetică. Electronică, Vol. 62 (66), No. 2, 2016, p. 81-95 (CNCSIS B+, Index Copernicus), http://www.bulipi-eee.tuiasi.ro/archive/2016/fasc.2/2016f2contents.pdf
9. **Neagu B.C.**, Gheorghe Georgescu, Aspecte privind funcţionarea reţelelor electrice de distribuţie de joasă tensiune în regim permanent nesinusoidal, Revista Energetica, nr. 2, pp. 60-64, 2016 (CNCSIS B+, Index Copernicus), http://ire.ro/assets/Resources/2016/Numarul%202/energetica-02-2016.pdf .
10. Gheorghe Grigoraș, **Neagu B.C.**, Market Clearing Price Forecasting in Deregulated Electricity Markets Using a Fuzzy Approach, Acta Electrotehnica, Vo. 56, Nr. 3, pp. 113-116, 2015, ISSN : 1841-3323 (EBSCO) - cod CNCSIS: 576.

11. **Neagu B.C.**, Gheorghe Grigoraș, Data Mining Tools in Electricity Distribution Systems, Acta Electrotehnica, Vol. 56, Nr. 3, pp. 209-212, 2015, ISSN : 1841-3323 (EBSCO) - cod CNCSIS: 576.
12. Mugurel Rotariu, **Neagu B.C.**, Human Factor Modelling Using Markov Method, Buletinul Institutului Politehnic din Iaşi, Tomul LXI (LXV), Fasc. 4, pp. 117-132, 2015. (CNCSIS B+, Index Copernicus, getCITED, Ulrich's), ISSN 1223-8139, http://www.bulipi-eee.tuiasi.ro/archive/2015/fasc.4/p10_f4.pdf .
13. Gheorghe Georgescu, **Neagu B.C.**, Influence of the Thermal Power Plant Withdrawal on 110 kV Network Steady State, Buletinul Institutului Politehnic din Iaşi, Tomul LXI (LXV), Fasc. 2, pp. 103-115, 2015. (CNCSIS B+, Index Copernicus, getCITED, Ulrich's), http://www.bulipi-eee.tuiasi.ro/archive/2015/fasc.2/p10_f
14. Razvan Pricope, **Neagu B.C.**, Optimal Reconfiguration of a Wind Farm Power Distribution Network, Buletinul Institutului Politehnic din Iaşi, Tomul LXI (LXV), Fasc. 2, pp. 91-102, 2015. (CNCSIS B+, Index Copernicus, getCITED, Ulrich's), ISSN 1223-8139, http://www.bulipi-eee.tuiasi.ro/archive/2015/fasc.2/p9_f2_2015.pdf .
15. Gheorghe Georgescu, **Neagu B.C.**, Mathematic Model and Application for Harmonic Steady-State of the Power Transmission Line, Buletinul Institutului Politehnic din Iaşi, Tomul LXI (LXV), Fasc. 1, pp. 79-98, 2015. (CNCSIS B+, Index Copernicus), http://www.bulipi-eee.tuiasi.ro/archive/2015/fasc.1/p8_f1_2015.pdf .
16. **Neagu B.C.,** Gheorghe Grigoraş, Florina Scarlatache, Managementul sarcinii în contextul integrării contorizării inteligente în reţelele electrice de distribuţie, Revista Energetica, nr. 4, vol. 71, pp. 82-88, 2015, ISSN 1453-2360 (CNCSIS B+, Index Copernicus),
17. Florina Scarlatache, Gheorghe Grigoraş, **Neagu B.C.,** Impactul generarii distribuite asupra reglajului de tensiune in retelele electrice de distributie, Revista Energetica, Vol. 62, ISSN: 1453-2360, nr. 3, pp. 105-110, 2014(CNCSIS B+, Index Copernicus).
18. **Neagu B.C.,** Power Flow Optimization Using Booster Transformers in High Voltage Distribution Networks, Buletinul Institutului Politehnic din Iaşi, Tomul LX (LXIV), Fasc. 3, pp. 95-105, 2014. (CNCSIS B+, Index Copernicus, getCITED, Ulrich's), ISSN 1223-8139, http://www.bulipi-eee.tuiasi.ro/archive/2014/fasc.1/p9_f3_2014.pdf .
19. Gheorghe Georgescu, **Neagu B.C.,** Monitoring Possibilities and Stedy-State Analisys of Electric Energy Repartition Networks, Buletinul Institutului Politehnic din Iaşi, Tomul LX (LXIV), Fasc. 2, pp. 93-109, 2014. (CNCSIS B+, Index Copernicus, getCITED, Ulrich's), http://www.bulipi-eee.tuiasi.ro/archive/2014/fasc.2/p6_f22014.pdf.
20. **Neagu B.C.,** Gheorghe Georgescu, Posibilities of Load Curves Modelling in Electric Energy Distribution Networks, Buletinul Institutului Politehnic din Iaşi, Tomul LX (LXIV), Fasc. 1, pp. 89-102, 2014. (CNCSIS B+, Index Copernicus, getCITED, Ulrich's), http://www.bulipi-eee.tuiasi.ro/archive/2014/fasc.1/p8_f1_2014.pdf .
21. **Neagu B.C.,** Gheorghe Georgescu, A Comparative Study Regarding the Efficiency of Technical Losses Evaluation Methods in Low Voltage Electricity Networks, The 4th International Symposium on Electrical Engineering and Energy Converters – WESC 2012, Suceava, Buletinul AGIR nr. 3, pp. 603-610, 2012 (Index Copernicus, getCITED) http://www.agir.ro/buletine/1443.pdf .
22. **Neagu B.C.,**Gheorghe Georgescu, Optimization possibilities for radial electric energy distribution network routes, Buletinul Institutului Politehnic din Iaşi, Tomul LIX (LXIII), Fasc. 1, pp.133-142, 2013 (CNCSIS B+, Index Copernicus, getCITED, Ulrich's), http://www.bulipi-eee.tuiasi.ro/archive/2013/fasc.1/p12_f1_2013.pdf .
23. **Neagu B.C.,** Gheorghe Georgescu, Mircea Dan Guşă, Aspecte privind o serie de modele matematice şi programe de calcul destinate evaluării în exploatare a pierderilor tehnice în elementele reţelelor publice de distribuţie în regimurile simetrice, Revista Tehnologiile Energiei. Producerea, transportul şi distribuţia energiei electrice, nr. 7, pp. 7-17, 2013

(CNCSIS B+, Index Copernicus), http://www.icemenerg.ro/RevistaTehnologiile Energiei/RevTE%20rezrom%202013.htm

24. Gheorghe Georgescu, **Neagu B.C.,** Eduard Pavelescu, The Economic Usability Factor Analysis of Power Transformer from Electric Energy Repartition Systems, Bul. Instit. Politehnic din Iaşi, Tomul LIX (LXIII), Fasc. 1, pp. 119-132, 2013 (CNCSIS B+, Index Copernicus, getCITED, Ulrich's), ISSN 1223-8139, http://www.bulipi-eee.tuiasi.ro/archive/2013/fasc.2/p7_f2_2013.pdf .
25. Gheorghe Georgescu, **Neagu B.C.,** Eduard Pavelescu, The Economic Usability Factor Analysis of 110 kV Lines from Electric Energy Repartition Systems, Buletinul Institutului Politehnic din Iaşi, Tomul LIX (LXIII), Fasc. 2, pp.75-92, 2013 (CNCSIS B+, INSPEC, Index Copernicus, getCITED, Ulrich's), ISSN 1223-8139, http://www.bulipi-eee.tuiasi.ro/archive/2013/fasc.1/p11_f1_2013.pdf .
26. **Neagu B.C.,** Gheorghe Georgescu, Ovidiu Ivanov, A New Approach for Electric Energy Distribution Network Routes Optimization, Buletinul Institutului Politehnic din Iaşi, Tomul LIX (LXIII), Fasc. 3, 2013, ISSN 1223-8139, p. 129-140 (ISI, INSPEC) http://www.bulipi-eee.tuiasi.ro/archive/2013/fasc.3 /2013f3sumar.pdf
27. **Neagu B.C.,** Gheorghe Georgescu, A Comparative Study Regarding the Efficiency of Technical Losses Evaluation Methods in Low Voltage Electricity Networks, The 4th International Symposium on Electrical Engineering and Energy Converters – WESC 2012, Suceava, Buletinul AGIR nr. 3, pp. 603-610, 2012 (CNCSIS B+, Index Copernicus) – (www.buletinulagir.agir.ro/articol.php?id=1443).
28. **Neagu B.C.,** Gheorghe Georgescu, Mircea Dan Guşă, Distorting State Analisys in Electric Energy Distribution Networks, Buletinul Institutului Politehnic din Iaşi, Tomul LVIII (LXII), Fasc. 4, pp. 97-108, 2012 (ISI, Index Copernicus), ISSN 1223-8139, http://www.bulipi-eee.tuiasi.ro/archive/2012/fasc.4/p10_f4 _2012.pdf.
29. Gheorghe Georgescu, **Neagu B.C.,** Power Quality and Reactive Power Sources Management from Distribution Dispatch Point of View at Distribution Operator Level, Buletinul Institutului Politehnic din Iaşi, Tomul LVIII (LXII), F. 1, pp. 125-138, 2012 (CNCSIS B+, Index Copernicus, getCITED, Ulrich's), ISSN 1223-8139, http://www.bulipi-eee.tuiasi.ro/archive/2012/fasc.1/p12_f1_2012.pdf
30. Gheorghe Georgescu, **Neagu B.C.,** Aspects Regarding the Power Quality in Electric Energy Repartition and Distribution Systems, Buletinul Institutului Politehnic din Iaşi, Tomul LVIII (LXII), Fasc. 3, pp. 265-270, 2012 (CNCSIS B+, Index Copernicus), http://www.bulipi-eee.tuiasi.ro/archive/2012/fasc.3/p14 _f3_2012.pdf .
31. **Neagu B.C.,** Gheorghe Georgescu, Mircea Dan Guşă, Mathematical Methods for Technical Active Power and Energy Loss Evaluation in Operation Using Typical Load Profiles of the Consumers from Repartition Systems, 4th International Conference on Modern Power Systems – MPS 2011, pp. 139-142, 2011(Ulrich's) https://ie.utcluj.ro/files/a/2011/Number5/Cuprins%20Proceedings%20MPS%202011.pdf .
32. **Neagu B.C.,** Gheorghe Georgescu, Mircea Dan Guşă, Load Curves Characteristics of Consumers Supplied from Electricity Repartition and Distribution Public Systems, Buletinul Institutului Politehnic din Iaşi, Tomul LVII (LXI), F. 1, 2011, pp. 141-157 (CNCSIS B+, Index Copernicus, getCITED, Ulrich's), ISSN 1223-8139, http://www.bulipi-eee.tuiasi.ro/archive/2011/fasc.1/p12_f1_2011.pdf .
33. **Neagu B.C.,** Gheorghe Georgescu, Issues of Load Forecast and Consumption Profiling Process in Electricity Repartition and Distribution Systems, The 4th International Symposium on Electrical Engineering and Energy Converters – ELS 2011, Suceava, pp. 215-220 (Index Copernicus), http://www.agir.ro/buletine/1071.pdf
34. Gheorghe Georgescu, **Neagu B.C.,** Opportunities Evaluation in Operation of the Technical Losses Under Load from Low Voltage Networks in Symmetric State, Buletinul Institutului

Politehnic din Iaşi, Tomul LVII (LXI), F. 5, pp. 159-174, 2011, (Index Copernicus), www.bulipi-eee.tuiasi.ro/archive/2011/fasc.2/p12_f2_2011.pdf .

35. **Neagu B.C.,**Gheorghe Georgescu, The Load Curves Profiling and their Parameters of Different Consumer Categories Supplied from Electric Energy Repartition and Distribution Systems, Bul.Instit. Polit. Iaşi, Tomul LVII, F. 4, 2011, pp. 167-178 (Index Copernicus), http://www.bulipi-eee.tuiasi.ro/archive/2011/fasc.4/p18_f4_2011.pdf.
36. Gheorghe Georgescu, **Neagu B.C.,**Some Aspects Concerning the Mathematical Models and Software Application for Evaluation of Technical Losses in Operation of Medium Voltage Public Distribution Networks, Buletinul Institutului Politehnic din Iaşi, Tomul LVII (LXI), F. 5, pp.129-144, 2011 (CNCSIS B+, Index Copernicus, getCITED, Ulrich's), ISSN 1223-8139, http://www.bulipi-eee.tuiasi.ro/archive/2011/fasc.5/p15_ f5_2011.pdf .
37. Gheorghe Georgescu, **Neagu B.C.,**, Aspects Regarding the Improvment of Supply Quality in Public Electricity Distribution Systems, Buletinul Institutului Politehnic din Iaşi, Tomul LVI (LX), F. 3, pp. 83-94, 2010 (CNCSIS B+, Index Copernicus), ISSN 1223-8139, http://www.bulipi-eee.tuiasi.ro/archive/2010/fasc.3/en/r9_f3_2010.pdf
38. **Neagu B.C.,** Gheorghe Georgescu, Load and Energy Forecast on a Proximate, Medium and Long Horizon in Public Electricity Repartition and Distribution Systems, Buletinul Institutului Politehnic din Iaşi, Tomul LVI (LX), Fasc. 3, 2010, pp. 71-82 (CNCSIS B+, Index Copernicus, getCITED, Ulrich's), ISSN 1223-8139, http://www.bulipi-eee.tuiasi.ro/archive/2010/fasc.3/en/r8f3 2010en.pdf.
39. Gheorghe Georgescu, Viorel Varvara, **Neagu B.C.,** The Estimation of the Voltage Level in Public Electric Energy Repartition Networks Using Artificial Neuronal Networks, Buletinul Institutului Politehnic din Iaşi, Tomul LV (LIX), F. 3, pp. 111-122, 2009 (CNCSIS B+, Index Copernicus, getCITED, Ulrich's), ISSN 1223-8139, http://www.bulipi-eee.tuiasi.ro/archive/2009/fasc.3/en/r10f3 2009en.pdf
40. Gheorghe Georgescu, Viorel Varvara, **Neagu B.C.,**The Estimation and Time Evolution of the Distortion State in Public Electric Energy Repartition and Distribution Systems, Buletinul Institutului Politehnic din Iaşi, Tomul LV (LIX), F. 4, pp. 99-111, 2009 (CNCSIS B+, Index Copernicus), ISSN 1223-8139,http://www.bulipi-eee.tuiasi.ro/archive/2009/fasc.4/en/r9_f42009 en.pdf
41. **Neagu B.C.,** Georgescu Gh., Aspecte privind funcţionarea reţelelor electrice de distribuţie de joasă tensiune în regim permanent nesinusoidal, Revista Energetica, nr. 2, pp. 60-64, 2016, ISSN1453-2360, www.ire.ro/assets/Resources/2016/Numarul%202/energetica-02-2016.pdf.
42. **Neagu B.C.,** Grigoraş Gh., Scarlatache Fl., Managementul sarcinii în contextul integrării contorizării inteligente în reţelele electrice de distribuţie, Revista Energetica, nr. 4, vol. 71, pp. 82-88, 2015, ISSN 1453-2360.
43. Scarlatache Fl., Grigoraş Gh., **Neagu B.C.,** Impactul generarii distribuite asupra reglajului de tensiune in retelele electrice de distributie, Revista Energetica, Vol. 62, ISSN: 1453-2360, nr. 3, pp. 105-110, 2014.
44. **Neagu B.C.,** Georgescu Gh., Guşă M.D., Aspecte privind o serie de modele matematice şi programe de calcul destinate evaluării în exploatare a pierderilor tehnice în elementele reţelelor publice de distribuţie în regimurile simetrice, Revista Tehnologiile Energiei. Producerea, transportul şi distribuţia energiei electrice, nr. 7, pp. 7-17, 2013 ISSN 1842-7189, (CNCSIS B), http://www.icemenerg.ro/Revista%20Tehnologiile%20Energiei/RevTE%0rezrom%202013.

I. Lucrări științifice publicate în volumele conferințelor.

1. **Neagu, B. C.**, Luca, M. A., Gavrilas, M., Grigoras, G., Ivanov, O., & Scarlatache, F. (2024, October). Leveraging Energy Storage Systems and Virtual Power Lines to Minimize

Curtailment in Future Distribution Grids. In 2024 IEEE International Conference and Exposition on Electric and Power Engineering (EPEi) (pp. 495-500). IEEE.

2. Scarlatache, F., Grigoraş, G., Scarlatache, V. A., **Neagu, B. C.,** & Baciu, M. A. (2024, October). Using Hybrid PV-Hydrogen Storage Systems in Optimal Planning of Microgrids. In 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi) (pp. 556-559). IEEE.
3. Gălbău, Ş., Grigoraş, G., & **Neagu, B. C.** (2024, October). Voltage Quality Pattern Recognition in Microgrids Using a Data-Driven Machine Learning-Based Methodology. In 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi) (pp. 450-455). IEEE.
4. Livadariu, B., Grigoraş, G., **Neagu, B. C.**, Ivanov, O., Scarlatache, F., & Gavrilas, M. (2024, October). Optimal Power Flow with the Clustering-Improved Fuzzy Models for Uncertainty Sources of Wind Power and Nodal Loads. In 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi) (pp. 484-489). IEEE.
5. Bondar, C., **Neagu, B.**, Grigoras, G., & Simo, A. (2024, October). Optimal Recloser Placement in Distribution Networks to Improve Power Quality Indicators. In 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi) (pp. 456-461). IEEE.
6. Livadariu, R., Grigoras, G., & **Neagu, B. C.** (2024, October). Internet of Things and Data Mining: A Comprehensive Analysis of Applications in Energy Consumption Management. In International Conference Interdisciplinarity in Engineering (pp. 467-480). Cham: Springer Nature Switzerland.
7. Despa, C. N., Gugiuman, A. A., **Neagu, B. C.**, & Grigoras, G. (2024, October). Impact of Electrical Vehicle Charging on Developing Cities Power System in Near-Future Scenarios. In International Conference Interdisciplinarity in Engineering (pp. 494-505). Cham: Springer Nature Switzerland.
8. Livadariu, R., Grigoras, G., & **Neagu, B. C.** (2024, October). Internet of Things and Data Mining: A Comprehensive Analysis of Applications in Energy Consumption Management. In International Conference Interdisciplinarity in Engineering (pp. 467-480). Cham: Springer Nature Switzerland.
9. Dandea, V., Gălbău, S., Asavei, N., Scarlatache, F., **Neagu, B. C.**, & Grigoraş, G. (2023, November). Assessing the Impact of Prosumers on the Low-Voltage Electrical Distribution Networks Based on a Scenarios-Based Methodology. In 2023 International Symposium on Fundamentals of Electrical Engineering (ISFEE) (pp. 1-6). IEEE.
10. Grigoraş, G., Gălbău, S., & **Neagu, B. C.** (2023, October). Phase Load Balancing in Active Electric Distribution Networks Using the Phase Swapping Smart Devices on Lateral Branches. In 2023 11th International Conference on ENERGY and ENVIRONMENT (CIEM) (pp. 1-5). IEEE.
11. **Neagu, B. C.**, Grigoras, G., Gavrilas, M., Porumb, R., & Tristiu, I. (2023, October). Technical Losses Estimation in Low Voltage Distribution Network Using Deterministic Methods. In International Conference Interdisciplinarity in Engineering (pp. 546-560). Cham: Springer Nature Switzerland.
12. Livadariu, B., Grigoras, G., & **Neagu, B. C.** (2023, October). Assessing the Trend of Power Quality Indicators in the Electric Distribution Networks Using a Regression Models-Based Approach. Case Study in Romania. In International Conference Interdisciplinarity in Engineering (pp. 561-583). Cham: Springer Nature Switzerland.
13. **Neagu, B. C.,** Grigoras, G., & Livadariu, R. (2023, June). Additional Power Losses Estimation in Harmonic Polluted LV Distribution Grid using a Ward's Hierarchical

Clustering Method. In 2023 15th International Conference on Electronics, Computers and Artificial Intelligence (ECAI) (pp. 1-5). IEEE.

14. Grigoras, G., **Neagu, B. C.,** & Dandea, V. (2023, June). Two-Stage Framework for Steady-State Analysis of Low Voltage Electric Distribution Networks Integrating Photovoltaic Prosumers. In 2023 15th International Conference on Electronics, Computers and Artificial Intelligence (ECAI) (pp. 01-06). IEEE.
15. Luca, M. A., Gavrilaş, M., Ivanov, O., **& Neagu, B. C.** (2023, June). Efficient Operation Approach of Microgrids Enriched with Prosumers and Storage Systems. In 2023 10th International Conference on Modern Power Systems (MPS) (pp. 1-5). IEEE.
16. Pricop, A. I., GavrilaŞ, M., SĂlceanu, A., & **Neagu, B. C.** (2023, June). Power systems resilience against cyber-attacks. A systematic analysis. In 2023 10th International Conference on Modern Power Systems (MPS) (pp. 1-7). IEEE.
17. Livadariu, B., Grigoras, G., Scarlatache, F., & **Neagu, B. C.** (2023, June). Voltage control in electric networks with wind farms connected using a scenario-based optimization framework. In *2023 10th International Conference on Modern Power Systems (MPS)* (pp. 1-6). IEEE.
18. Pradeep, S., Sharma, Y. K., Verma, C., **Neagu, B. C.**, Illés, Z., Raboaca, M. S., & Mihaltan, T. C. (2022, December). Expression of Concern for: Smart Factory Setting Awareness by Noise-Pattern Analysis. In 2022 11th International Conference on System Modeling & Advancement in Research Trends (SMART) (pp. 1-1). IEEE.
19. Pradeep, S., Sharma, Y. K., Verma, C., **Neagu, B. C.**, Illés, Z., Raboaca, M. S., & Mihaltan, T. C. (2022, December). Utilizing WSN and Artificial Intelligence to Detect Fires. In 2022 11th International Conference on System Modeling & Advancement in Research Trends (SMART) (pp. 424-428). IEEE.
20. Chouhan, R. S., Rajawat, A. S., Goyal, S. B., Bedi, P., **Neagu, B. C.**, Raboaca, M. S., & Verma, C. (2022, December). Experimental analysis for position estimation using trilateration and rssi in industry 4.0. In 2022 11th International Conference on System Modeling & Advancement in Research Trends (SMART) (pp. 904-908). IEEE.
21. Rajawat, A. S., Goyal, S. B., Bedi, P., **Neagu, B. C.**, Raboaca, M. S., & Verma, C. (2022, December). Cyber-physical system for industrial automation using quantum deep learning. In 2022 11th International Conference on System Modeling & Advancement in Research Trends (SMART) (pp. 897-903). IEEE.
22. Pant, P., Rajawat, A. S., Goyal, S. B., Singh, D., **Neagu, B. C.**, Raboaca, M. S., & Verma, C. (2022, December). Using machine learning for industry 5.0 efficiency prediction based on security and proposing models to enhance efficiency. In 2022 11th International Conference on System Modeling & Advancement in Research Trends (SMART) (pp. 909-914). IEEE.
23. Pradeep, S., Sharma, Y. K., Verma, C., **Neagu, B. C.**, Illés, Z., Raboaca, M. S., & Mihaltan, T. C. (2022, December). Smart Factory Setting Awareness by Noise-Pattern Analysis. In 2022 11th International Conference on System Modeling & Advancement in Research Trends (SMART) (pp. 880-890). IEEE.
24. Pant, P., Rajawat, A. S., Goyal, S. B., Potgantwar, A., Bedi, P., Raboaca, M. S., **Neagu, B. C.**, Verma, C. (2022, December). AI based technologies for international space station and space data. In 2022 11th International Conference on System Modeling & Advancement in Research Trends (SMART) (pp. 19-25). IEEE.
25. Rajawat, A. S., Goyal, S. B., Bedi, P., Shrivastava, A., **Neagu, B. C.**, Raboaca, M. S., & Verma, C. (2022, December). Security analysis for threats to patient data in the medical internet of things. In 2022 11th International Conference on System Modeling & Advancement in Research Trends (SMART) (pp. 248-253). IEEE.

26. Galbau, S., Grigoras, G., **Neagu, B.,** Scarlatache, F., Lucache, D., & Hustiuc, V. (2022, November). Characterization of the power quality in the electric distribution networks using data mining with K-means clustering. In 2022 10th International Conference on Systems and Control (ICSC) (pp. 131-136). IEEE.
27. Ravi, R. V., Goyal, S. B., **Neagu, B. C.**, Raboaca, M. S., Verma, C., & Kustov, V. (2022, October). Monitoring and control of electrical sub station using iot and cloud. In 2022 International Conference and Exposition on Electrical And Power Engineering (EPE) (pp. 654-657). IEEE.
28. Noroc, L., Grigoras, G., Chelaru, E., Dandea, V., & **Neagu, B. C.** (2022, October). Voltage control strategy using the rule-based reasoning in LV distribution networks with PV penetration integrating OLTC-fitted transformer. In 2022 International Conference and Exposition on Electrical And Power Engineering (EPE) (pp. 354-359). IEEE.
29. Rajawat, A. S., Goyal, S. B., Bedi, P., Malik, S., **Neagu, B. C.,** Raboaca, M. S., & Verma, C. (2022, October). Visual cryptography and blockchain for protecting against phishing attacks on electronic voting systems. In 2022 International Conference and Exposition on Electrical and Power Engineering (EPE) (pp. 663-666). IEEE.
30. Ivanov, O., **Neagu, B. C.,** Toma, N. C., Grigoras, G., Ghilan, P. D., & Gavrilas, M. (2022, October). Metaheuristic Approaches for Distributed Generation Placement Optimization in Electrical Grids: A comparison between PSO, Tiki-Taka and Archimedes Optimzation Algorithms. In 2022 International Conference and Exposition on Electrical And Power Engineering (EPE) (pp. 208-212). IEEE.
31. Ravi, R. V., Goyal, S. B., **Neagu, B. C.,** Raboaca, M. S., & Verma, C. (2022, October). A low-cost industrial automation system using IoT and cloud computing. In 2022 International Conference and Exposition on Electrical And Power Engineering (EPE) (pp. 649-653). IEEE.
32. Rajawat, A. S., Goyal, S. B., Bedi, P., Mihaltan, T. C., **Neagu, B. C.,** Raboaca, M. S., & Verma, C. (2022, October). Electrical fault detection for industry 4.0 using fusion deep learning algorithm. In 2022 International Conference and Exposition on Electrical And Power Engineering (EPE) (pp. 658-662). IEEE.
33. Vornicu, S., Lunca, E., **Neagu, B. C.,** & Baiceanu, F. C. (2022, October). Assessment of extremely low-frequency magnetic field from multiple high-voltage overhead power lines in parallel configuration. In 2022 International Conference and Exposition on Electrical And Power Engineering (EPE) (pp. 723-726). IEEE.
34. Chelaru, E., Grigoraș, G., Noroc, L., Gălbău, Ș., **Neagu, B. C.,** & Ivanov, O. (2022, October). Assessing the modernization process of a transformer fleet in the electric distribution networks. Case study in Romania. In International Conference Interdisciplinarity in Engineering (pp. 631-648). Cham: Springer International Publishing.
35. Zetu, C., Neagu, B. C., Grigoras, G., Ivanov, O., & Gavrilas, M. (2022, October). Overhead Transmission Lines Capacity Management Based on Different Weather Conditions. In International Conference Interdisciplinarity in Engineering (pp. 660-681). Cham: Springer International Publishing.
36. Noroc, L., Grigoras, G., Dandea, V., Chelaru, E., & **Neagu, B. C.** (2022, September). An efficient voltage control methodology in LV networks integrating PV prosumers using distribution transformers with OLTC. In 2022 IEEE 20th International Power Electronics and Motion Control Conference (PEMC) (pp. 150-155). IEEE.
37. Baiceanu, F. C., Acsinte, C. F., Ivanov, O., Nemes, C. M., & **Neagu, B. C.** (2022, June). A Load Shedding Approach for Islanded Operation in Industrial Electrical Systems. In 2022 14th International Conference on Electronics, Computers and Artificial Intelligence (ECAI) (pp. 1-6). IEEE.

38. Chelaru, E., Grigoras, G., Noroc, L., **Neagu, B. C.,** & Ivanov, O. (2022, June). An efficient integration strategy of the prosumers in the active electric distribution networks. In 2022 14th International Conference on Electronics, Computers and Artificial Intelligence (ECAI) (pp. 1-6). IEEE.
39. Zetu, C., **Neagu, B. C.**, Grigoras, G., & Scarlatache, F. (2021, October). A New Approach for the Coexistence Study of Urban Buildings Near High Voltage Overhead Lines. In 2021 10th International Conference on ENERGY and ENVIRONMENT (CIEM) (pp. 1-5). IEEE.
40. Grigoras, G., Dandea, V., **Neagu, B. C.,** & Scarlatache, F. (2021, October). Load Estimation with the Clustering-Based Selection of the Electric Distribution Substations Integrated in SCADA System. In 2021 10th International Conference on ENERGY and ENVIRONMENT (CIEM) (pp. 1-5). IEEE.
41. Ivanov, O., **Neagu, B. C.**, Cibotărică, A., & Gavrilaș, M. (2021, October). Multiobjective Prosumer Surplus Management for Optimal Microgrid Operation. In 2021 10th International Conference on ENERGY and ENVIRONMENT (CIEM) (pp. 1-5). IEEE.
42. **Neagu, B. C.,** Mihai, G., Ivanov, O., & Grigoras, G. (2021, October). Load modeling approaches in smart grids: an overview. In International Conference Interdisciplinarity in Engineering (pp. 533-561). Cham: Springer International Publishing.
43. Chelaru, E., Noroc, L., Grigoras, G., & **Neagu, B. C.** (2021, October). Energy Losses Estimation in the Electric Distribution Networks Using Clustering-Based Selection of the Representative Feeders. In International Conference Interdisciplinarity in Engineering (pp. 508-521). Cham: Springer International Publishing.
44. Chelaru, E., Grigoraș, G., Noroc, L., **Neagu, B. C.**, & Scarlatache, F. (2021, October). Influence of the prosumers on the replacement strategies of the aged transformers from the electric distribution networks. In 2021 International Conference on Electromechanical and Energy Systems (SIELMEN) (pp. 097-102). IEEE.
45. Tirsu, M., Covalenco, N., Zaitsev, D., Negura, I., Gavrilas, M., & **Neagu, B. C.** (2021, October). Photovoltaic-Thermal System for Trigenerating Electricity, Hot Water and Cold. In *2021 International Conference on Electromechanical and Energy Systems (SIELMEN)* (pp. 092-096). IEEE.
46. Luca, M. A., **Neagu, B. C.,** Ivanov, O., Gavrilas, M., & Grigoras, G. (2021, October). A deeper analysis about the impact of prosumers on power losses in low voltage microgrids. In 2021 International Conference on Electromechanical and Energy Systems (SIELMEN) (pp. 155-158). IEEE.
47. **Neagu, B. C.,** Zetu, C., Grigoras, G., & Ivanov, O. (2021, October). Theories about mechanical calculus in the context of coexistence between overhead power lines and buildings from outskirts of cities. In 2021 International Conference on Electromechanical and Energy Systems (SIELMEN) (pp. 159-162). IEEE.
48. Dandea, V., Grigoras, G., **Neagu, B. C.,** & Scarlatache, F. (2021, July). A Clustering-based Knowledge Extraction Methodology for Prosumers' Classification and Injected Power Profiles Grouping. In 2021 13th International Conference on Electronics, Computers and Artificial Intelligence (ECAI) (pp. 1-6). IEEE.
49. Garbea, R., Scarlatache, F., Grigoras, G., & **Neagu, B. C.** (2021, July). Integration of Data Mining techniques in SCADA system for optimal operation of hydropower plants. In 2021 13th International Conference on Electronics, Computers and Artificial Intelligence (ECAI) (pp. 1-6). IEEE.
50. Ivanov, O., **Neagu, B. C.,** Nițu, A. I., & Gavrilaș, M. (2021, June). An Improved Metaheuristic Algorithm for Load Balancing in LV Distribution Networks. In 2021 9th International Conference on Modern Power Systems (MPS) (pp. 1-5). IEEE.

51. Gârbea, R., Scarlatache, F., Grigoraș, G., & **Neagu, B. C.** (2021, June). Extracting the operating characteristics of hydropower plants using a clustering-based efficient methodology. In 2021 9th International Conference on Modern Power Systems (MPS) (pp. 1-4). IEEE.
52. Zetu, C., **Neagu, B. C.,** Grigoras, G., & Scarlatache, F. (2021, June). The risk analisys for the coexistence of overhead lines and urban green areas. In 2021 9th International Conference on Modern Power Systems (MPS) (pp. 1-4). IEEE.
53. Dandea, V., Grigoras, G., **Neagu, B. C.,** & Scarlatache, F. (2021, March). K-means clustering-based data mining methodology to discover the prosumers' energy features. In 2021 12th International Symposium on Advanced Topics in Electrical Engineering (ATEE) (pp. 1-5). IEEE.
54. **Neagu, B. C.,** & Grigoraş, G. (2020, November). A data-mining-based methodology to identify the behavioural characteristics of prosumers within active distribution networks. In 2020 International Symposium on Fundamentals of Electrical Engineering (ISFEE) (pp. 1-6). IEEE.
55. **Neagu, B. C.,** & Grigoraș, G. (2020, June). A fair load sharing approach based on microgrid clusters and transactive energy concept. In *2020 12th international conference on electronics, computers and artificial intelligence (ECAI)* (pp. 1-4). IEEE.
56. **Neagu B. C.**, Ivanov O., Grigoras G., *The Influence of Harmonics on Additional Power Losses at Large Enterprises*, 2019 11th International Symposium on Advanced Topics in Electrical Engineering (ATEE), Bucharest, Romania, 2019, pp. 1-4, doi: 10.1109/ATEE.2019.8724940, WOS:000475904500097.
57. Grigoraș G., **B.C Neagu** and O. Ivanov, "Aggregate Method based on Expert System for Electricity Consumption Forecasting of Small and Medium Enterprises," 2019 11th International Symposium on Advanced Topics in Electrical Engineering (ATEE), Bucharest, Romania, 2019, pp. 1-6., doi: 10.1109/ATEE.2019.8724966, WOS:000475904500123.
58. **Neagu B. C.**, Grigoraş G., Ivanov O., "An Efficient Peer-to-Peer Based Blokchain Approach for Prosumers Energy Trading in Microgrids," 2019 8th International Conference on Modern Power Systems (MPS), Cluj Napoca, Romania, 2019, pp. 1-4, doi: 10.1109/MPS.2019.8759743. https://ieeexplore.ieee.org/document/8759743.
59. Grigoras G., **Neagu B. C.**, Ivanov O., "An Efficient Approach for Flattening the Electricity Consumption Profile at Small and Medium Enterprises," 2019 8th International Conference on Modern Power Systems (MPS), Cluj Napoca, Romania, 2019, pp. 1-4. doi: 10.1109/MPS.2019.8759670, https://ieeexplore.ieee.org/document/8759670.
60. Ivanov O., **Neagu B.C.**, Grigoras G., Gavrilaş M., "Capacitor Banks Placement Optimization Improvement Using the Sperm Whale Algorithm", 2019 11th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Pitești, Arges, Romania, June 27– June 29, 2019, pp. 1-6.
61. Grigoras G., **Neagu B.C.**, "Uncertainty-Based Decision Making in the Planning of Electric Transmission Networks", 2019 11th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), June 27– June 29, 2019, Pitești, Arges, Romania, 2019, pp. 1-6.
62. **Neagu B. C.**, Gavrilaș M., Pentiuc R.D., Hopulele E., "Optimal Placement of Energy Storage Systems in Microgrids Using a PSO Based Approach" IEEE PES Innovative Smart Grid Technologies Europe (ISGT-Europe), September 29 to October 2, 2019, București, Romania, pp. 1-6.
63. Hopulele E., Pentiuc R.D., **Neagu B. C.**, Gavrilaș M., "Optimizing the Operation of a Trigeneration System Designed to Meet Energy Requirements for a Consumer" IEEE PES

Innovative Smart Grid Technologies Europe (ISGT-Europe), September 29 to October 2, 2019, București, Romania, pp. 1-6.

64. Ivanov O., **Neagu B.C.**, Gavrilaș M., Grigoras G., Sfintes C.," Phase Load Balancing in Low Voltage Distribution Networks Using Metaheuristic Algorithms ", 12th International Conference on Electromechanical and Energy Systems – SIELMEN2019, Chișinău, Republica Moldova, 10 – 11 octombrie, 2019, pp. 1-6.
65. **Neagu B.C.**, Grigoras G., "Optimal Voltage Control in Power Distribution Networks Using an Adaptive On-Load Tap Changer Transformers Techniques", 12th International Conference on Electromechanical and Energy Systems – SIELMEN2019, Chișinău, Republica Moldova, 10 – 11 octombrie, 2019, pp. 1-6.
66. **Neagu B.C.**, Gavrilaș M., Grigoras G., Ivanov O., "Voltage Control in Microgrids in the Presence of Small-Scale Renewable Energy Source", 12th International Conference on Electromechanical and Energy Systems – SIELMEN2019, Chișinău, Republica Moldova, 10 – 11 octombrie, 2019, pp. 1-6.
67. **Neagu B.C.**, Grigoras G., "A Decision-Making Approach for Choosing of Electricity Supplier to Improve the Energy Efficiency", 9th International Conference on Energy and Environment – CIEM2019, Timisoara, Romania, 17 – 18 octombrie, 2019, pp. 1-4.
68. Grigoras G., Gavrilaș M., **Neagu B.C.**, Ivanov O., Triștiu I., Bulac C. " An Efficient Method to Optimal Phase Load Balancing in Low Voltage Distribution Network", 9th International Conference on Energy and Environment – CIEM2019, Timisoara, Romania, 17 – 18 octombrie, 2019, pp. 1-6.
69. **Neagu B.C.**, Grigoras G., Scarlatache F., Influence of Outliers on Transformer Power Losses Estimation Using a Statistical Based Data Mining Approach, 2018 10th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Iasi, Romania, 2018, pp. 1-6, WOS:000467734100072.
70. **Neagu B. C.**, Gavrilaș M., Matei G. G., Voltage/VAR Control with Reactive Power Injection in Distribution Networks using a Proper Metaheuristic Approach, 2018 IEEE International Conference on Environment and Electrical Engineering and 2018 IEEE Industrial and Commercial Power Systems Europe (EEEIC / I&CPS Europe), Palermo, Italy, 2018, pp. 1-6.
71. Matei G. G., **Neagu B. C.**, Gavrilaș M., Optimal Voltage Control Based on a Modified Line Drop Compensation Method in Distribution Systems, 2018 IEEE International Conference on Environment and Electrical Engineering and 2018 IEEE Industrial and Commercial Power Systems Europe (EEEIC / I&CPS Europe), Palermo, Italy, 2018, pp. 1-6.
72. Grigoraș G., **Neagu B. C.**, Scarlatache F., Influence of Sampling Size in Profiling Process of Electricity Consumption at Small and Medium Enterprises, 2018 International Conference and Exposition on Electrical And Power Engineering (EPE), Iași, Romania, 2018, pp. 743-748.
73. Gavrilaș M., **Neagu B. C.**, Pentiuc R.D., Hopulele E., Overview on Distributed Generation Integration in Distribution Systems, 2018 International Conference and Exposition on Electrical and Power Engineering (EPE), Iași, Romania, 2018, pp. 1063-1069.
74. Toma N.C., Ivanov O., **Neagu B. C.**, Gavrilaș M., A PSO Algorithm for Phase Load Balancing in Low Voltage Distribution Networks, 2018 International Conference and Exposition on Electrical and Power Engineering (EPE), Iași, Romania, 2018, pp. 857-862.
75. Ivanov O., Grigoraș G., **Neagu B. C.**, Smart Metering based Approaches to Solve the Load Phase Balancing Problem in LV Distribution Networks, 2018 IEEE International Symposium on Fundamentals of Electrical Engineering - ISFEE2018, București, Romania, 2018, pp. 1-6.

76. Grigoraș G., **Neagu B. C.**, Energy Consumption Forecasting to Small and Medium Enterprises Using a Hybrid Method, 2018 IEEE International Symposium on Fundamentals of Electrical Engineering - ISFEE2018, București, Romania, 2018, pp. 1-6.
77. Scarlatache F., Grigoras G., **Neagu B.C.**, Ciobanu R.C., Aided decision making for hybrid energy systems planning in micro-grids, 2018 Smart City Symposium Prague (SCSP), Praga, Cehia, 2018, pp. 1-5., 10.1109/SCSP.2018.8402678, WOS:000443451800033.
78. **Neagu B. C.**, Ivanov O., Gavrilaş M., "Voltage profile improvement in electricity distribution networks — A genetic algorithm benchmark study," 2017 International Conference on Electromechanical and Power Systems (SIELMEN), Iasi, 2017, pp. 560-564. doi: 10.1109/SIELMEN.2017.8123387, https://ieeexplore.ieee.org/abstract/document/ 8123387.
79. Ivanov O., **Neagu B. C.**, Gavrilaş M., "Voltage profile improvement in electricity distribution networks — A genetic algorithm benchmark study," 2017 International Conference on Electromechanical and Power Systems (SIELMEN), Iasi, 2017, pp. 560-564. doi: 10.1109/SIELMEN.2017.8123387, https://ieeexplore.ieee.org/abstract/document/ 8123387.
80. Scarlatache F., Grigoraș G., **Neagu B. C**., "Clustering based data mining in wind power production," 2017 9th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Targoviste, 2017, pp. 1-6. doi: 10.1109/ECAI.2017.8166503.
81. **Neagu B. C.**, Ivanov O., Gavrilaş M., "Voltage profile improvement in distribution networks using the whale optimization algorithm," 2017 9th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Targoviste, 2017, pp. 1-6.
82. Grigoras G., Scarlatache F., Comănescu D., **Neagu B.C.**, Expert system for optimal power allocation in hydropower dispatchable units, 2017 International Conference on Optimization of Electrical and Electronic Equipment (OPTIM) & 2017 Intl Aegean Conference on Electrical Machines and Power Electronics (ACEMP), 25-27 May 2017, pp. 605-610, 2017, INSPEC Accession Number: 17028375, 10.1109/OPTIM.2017.7975035, 978-1-5090-4489-4.
83. Grigoras G., Scarlatache F., **Neagu B.C.**, Analysis of energy saving solutions based on replacement of distribution transformers, 2017 International Conference on Optimization of Electrical and Electronic Equipment (OPTIM) & 2017 Intl Aegean Conference on Electrical Machines and Power Electronics (ACEMP), 25-27 May 2017, pp. 66-71, 2017, INSPEC Accession Number: 17028013, DOI: 10.1109/OPTIM.2017.7974949. http://ieeexplore.ieee.org/ abstract/document/7974949/.
84. Ivanov O., **Neagu B. C.** and Gavrilas M., A parallel PSO approach for optimal capacitor placement in electricity distribution networks, 2017 International Conference on Modern Power Systems (MPS), Cluj-Napoca, 2017, pp. 1-5., ISBN: 978-1-5090-6565-3, doi: 10.1109/MPS.2017.7974387, http://ieeexplore.ieee.org/document/7974387/
85. **Neagu B.C.**, Grigoras G., Scarlatache F., Effects of outliers on calculation of load profile factors, 2017 International Conference on Modern Power Systems (MPS), Cluj-Napoca, 2017, pp. 1-6, 2017, INSPEC Accession Number: 17028375, DOI: 10.1109/MPS.2017. 7974378, ISBN: 978-1-5090-6565-3, http://ieeexplore.ieee.org/abstract/ document/ 7974378/
86. Grigoras Gh., **Neagu B.C.**, Adascalitei A., On the assessment of slow voltage variations in electric distribution networks using k-means clustering algorithm, 22nd IMEKO TC4 International Symposium and 20th International Workshop on ADC Modelling and Testing 2017 (IMEKO 2017), pp. 139-143, ISBN 978-1-5108-4976-1, 14-15 September 2017, Iasi, Romania www.scopus.com/authid/detail.uri ?authorId=86 36105000#top
87. **Neagu B.C.**, Grigoras Gh., Toma N.C., Detection of irregular consumption to load monitoring in smart grids environment, 22nd IMEKO TC4 International Symposium and

20th International Workshop on ADC Modelling and Testing 2017 (IMEKO 2017), pp.185-188, ISBN 978-1-5108-4976-1, 14-15 September 2017, Iasi, Romania.

88. **Neagu. B C.**, Grigoraș G., Scarlatache Fl., Outliers Discovery from Smart Meters Data Using a Statistical Based Data Mining Approach, 10th International Symposium on Advanced Topics in Electrical Engineering (ATEE), Bucharest, ROMANIA, 23 – 25 mar., 2017, pp. 551-554., WOS:000403399400108.
89. Grigoraș G., **Neagu. B C.**, Scarlatache Fl., Smart metering-based approach for phase balancing in low voltage distribution systems, 10th International Symposium on Advanced Topics in Electrical Engineering (ATEE), Bucharest, ROMANIA, 23 – 25 mar., 2017, pp. 555-558., doi: 10.1109/MPS.2017.7974387 (https://ieeexplore.ieee.org/document/7905027).
90. Scarlatache Fl., Grigoraș G., **Neagu. B C.**, Schreiner C., Ciobanu R. C., Influence of hybrid energy systems on micro-grids control, 11th IEEE International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG), Cadiz, Spania, 4 - 6 apr, pp. 313-317, 2017, WOS:000406491800050, ISSN: 2166-9546, (ieeexplore.ieee.org/document/7915189).
91. **Neagu. B C.**, Grigoraș G., Scarlatache F., Schreiner C., Ciobanu R. C., Patterns Discovery of Load Curves Characteristics Using Clustering Based Data Mining, 11th IEEE International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG), Cadiz, Spania, 4 - 6 apr, pp. 83-87, 2017, WOS:000406491800013, ISSN: 2166-9546, https://ieeexplore.ieee.org /document/7915149.
92. Grigoras G., **Neagu B.C.**, Scarlatache F., Ciobanu R.C., Identification of pilot nodes for secondary voltage control using K-means clustering algorithm, IEEE 26th International Symposium on Industrial Electronics (ISIE), Edinburgh, United Kingdom, pp. 106-110, 2017, INSPEC Accession Number: 17096707, DOI: 10.1109/ISIE.2017.8001231, ISSN: 2163-5145, ieeexplore.ieee.org/ abstract/document/8001231/
93. **Neagu B.C.**, Grigoras G., An Efficient Metaheuristic Algorithm for Optimal Capacitor Allocation in Electric Distribution Networks, 2017 2nd International Conference on Software, Multimedia and Communication Engineering (SMCE 2017), ISBN: 978-1-60595-458-5 10.12783/dtcse/ smce2017/12448, http://www.dpi-proceedings.com/index.php/dtcse/article/view/12448.
94. **Neagu B.C.**, Ivanov O., Georgescu G., Reactive power compensation in distribution networks using the bat algorithm, 2016 International Conference and Exposition on Electrical and Power Engineering (EPE 2016), pp.711-714, Iasi, 20-22 Oct. 2016, România.
95. **Neagu B.C.**, Georgescu G., Ivanov O., The impact of harmonic current flow on additional power losses in low voltage distribution networks, 2016 International Conference and Exposition on Electrical and Power Engineering (EPE 2016), pp.719-722, Iași, România, 20-22 Oct. 2016, 10.1109/ICEPE.2016.7781433.
96. Scarlatache Fl., Grigoraș G., **Neagu B.C.**, Decision Making Methodology Based on Fuzzy Logic in Optimal DG Location, 8th International Conference on Electronics Computers and Artificial Intelligence, Ploiesti, Romania, 30 jun - 02 jul, pp.1-4, 2016, WOS:000402541200117, ISBN:978-1-5090-2047-8, ISSN: 2378-7147 (ISI).
97. **Neagu B.C.**, Grigoraș G., Scarlatache Fl., Power Losses Estimation in Harmonic Polluted LV Distribution Networks with a Fuzzy Approach, 8th International Conference on Electronics Computers and Artificial Intelligence, Ploiesti, Romania, 30 jun - 02 jul, pp. 1-6, 2016, WOS:000402541200042, ISBN:978-1-5090-2047-8, ISSN: 2378-7147, (ISI).
98. Grigoraș Gh., **Neagu B.C.,** Scarlatache F., Estimation of energy losses in distribution transformers using a fuzzy approach, International Symposium on Fundamentals of Electrical Engineering (ISFEE 2016), pag. 1-6, București, România, 30 iunie - 2 iulie 2016, http://ieeexplore.ieee.org/abstract/ document/7803183/.

99. **Neagu B.C.**, Grigoraş Gh., Scarlatache F., The influence of harmonics on power losses in urban distribution networks, International Symposium on Fundamentals of Electrical Engineering (ISFEE 2016), pag. 1-4, Bucureşti, România, 30 iunie - 2 iulie 2016, ieeexplore.ieee.org/document/ 7803184/.
100. **Neagu B.C.**, Grigoraş Gh., Assessment of slow voltage variations from the electric distribution systems with fuzzy techniques, 7th International Conference on Electronics, Computers and Artificial Intelligence (ECAI 2015), pag. 61-66, Bucureşti, România, 25-27 iunie 2015.
101. **Neagu B.C.**, Georgescu Gh., Wind Farm Cable Route Optimization Using a Simple Approach, 8th International Conference and Exposition on Electrical and Power Engineering, EPE 2014, p. 1004-1009, Iași, România, 16-18 October 2014, Article number 6970060, Category number CFP1447S-ART; Code 109547 (Scopus), DOI: 10.1109/ICEPE.2014.6970060.
102. **Neagu B.C.,** Georgescu Gh., Aspects regarding the monitoring possibilities and steady-state analysis of electric energy repartition networks, 8th International Conference and Exposition on Electrical and Power Engineering, EPE 2014, pag. 1000-1003, Iași, România, 16-18 October 2014, Article number 6970060, Category numberCFP1447S-ART; Code 109547 (Scopus), DOI: 10.1109/ICEPE.2014.6970060.
103. Kriukov, A.; Grigoras, G.; Gavrilas, M.; Scarlatache, F.; **Neagu B.C.**, An analyze of slow voltage variations from the electric distribution systems with a clustering based approach, Proc. of 2014 16th International Conference on Harmonics and Quality of Power (ICHQP), 2014, pp. 689-693, Bucharest, Romania, 25-28 May 2014, Article number 6842927, Category number CFP14CHP-ART; Code 106304, ISSN: 15406008 (Scopus) DOI: 10.1109/ICHQP.2014.6842927: WOS:000343776100142, ISBN:978-1-4673-6487-4, ISSN: 2164-0610 (ISI Thomson Reuters)
104. Vicol B., Gavrilas M., Ivanov O., **Neagu B.C.**, Grigoras Gh., Synchrophasor measurement method for overhead line parameters estimation in MV distribution networks, Proc. of 2014 16th International Conference on Harmonics and Quality of Power (ICHQP), 2014, pp. 862-865, Bucharest, Romania, 25-28 May 2014, Article number 6842833, Category numberCFP14CHP-ART; Code 106304, ISSN: 15406008 (Scopus) DOI: 10.1109/ICHQP.2014.6842833 (IEEExplore) Accession Number: WOS:000343776100177, ISBN:978-1-4673-6487-4, ISSN: 2164-0610 (ISI Thomson Reuters)
105. Ivanov O., Gavrilaş M., **Neagu B.C.**, Intelligent Monitoring and Control in Transmission and Distribution Networks, Proc. of 14th International Conference on Optimization of Electrical and Electronic Equipment OPTIM 2014, pag. 185-191, Braşov, România, 22-24 May 2014, DOI: 10.1109/OPTIM.2014.6850918 (IEEExplore) Accession Number: WOS:000343551300027, ISBN:978-1-4799-5183-3 (Isi Thomson Reuters)
106. **Neagu B.C.**, Georgescu Gh., A New Tool for Load Monitoring of Consumers Supplied from Public Distribution Networks, The 5th International Conference on Modern Power Systems – MPS 2013, Cluj, pp. 318-324, 2013, https://ie.utcluj.ro/files/acta/2013/Number5/e-journalsummary_ MPS2013.pdf (BDI).
107. Georgescu Gh., **Neagu B.C.**, Astărăstoaie D., Reactive Power Sources Management in Public Repartition and Distribution Systems with the Purpose of Power Quality Improvement, The 7th International Conference on Electrical and Power Engineering, Iaşi., pp. 259 - 264, 2012 (ISI Web of Knoledge).
108. Georgescu Gh., **Neagu B.C.**, Pintea A., Aspects Regarding the Power and Energy Losses Evaluation from Public Electricity Repartition Systems, The 7th International Conference on Electrical and Power Engineering, Iaşi., pp. 253 - 258, 2012.

109. **Neagu B.C.**, Georgescu Gh., The Optimization of Reactive Power Sources Placement in Public Repartition and Distribution Systems for Power Quality Improvement, 12th International Conference on Optimization of Electrical and Electronic Equipment - OPTIM 2012, Brasov, Romania, p. 200-207 (ieeexplore.ieee.org/abstract/document/6231856/).
110. **Neagu B.C.**, Georgescu Gh., Elges A., Monitoring System of Electric Energy Consumption to Users, International Conference and Exposition on Electrical and Power Engineering (EPE), pag. 265-270, Iași, România, 25-27 October 2012, Article number 6463919, Category number CFP1247S-PRT; Code 95870 (Scopus), DOI: 10.1109/ICEPE.2012.6463919 (IEEExplore), Accession Number: WOS:000324685300049.
111. **Neagu B.C.**, Georgescu Gh., Guşă M.D., Mathematical Methods for Technical Active Power and Energy Loss Evaluation in Operation Using Typical Load Profiles of the Consumers from Repartition Systems, The 4th International Conference on Modern Power Systems – MPS 2011, Cluj, pp. 139-142, 2011(BDI).
112. Varvara V., Georgescu Gh., **Neagu B.C.,** Analysis of the Distortion State in Public Electrical Power Supply Systems, The International Conference on Engineering of Modern Electric Systems - EMES'09, Analele Universităţii din Oradea, Fascicula de energetică, vol.15, pp. 148-153, 2009 (http://www.energy-cie.ro/archives/ 2009/p1-29.pdf).
113. Georgescu Gh., **Neagu B.C.**, The Pollution with Harmonics in Public Electric Energy Repartition and Distribution Systems, The 3rd International Symposium on Electrical Engineering and Energy Converters – ELS2009, Suceava, pp. 245-250, 2009.
114. Georgescu Gh., **Neagu B.C.**, Possibilities of Surveying Electric Load and Daily Load Curves for the Profiling of Consumption in Public Energy Repartition and Distribution Systems, The 3rd International Symposium on Electrical Engineering and Energy Converters – ELS2009, Suceava, pp. 245-250, 2009.
115. **Neagu B.C.**, Georgescu Gh., Some Aspects Regarding the Distortion State in Public Power Distribution Systems, The 4th edition of Interdisciplinarity in Engineering International Conference – Inter-Eng 2009, Târgu Mureş, 2009, pp. 25-30 (BDI www.inter-eng.upm.ro/2009/files/ proceedings/papers/paper4.pdf).
116. **Neagu B.C.**, Georgescu Gh., Remarks on Power Flow Optimization in Public Electricity Repartition Systems, The 4th edition of the Interdisciplinary in Engineering International Conference – Inter-Eng 2009, Târgu Mureş, 2009, pp. 31-36, BDI www.inter-eng.upm.ro/2009/files/proceedings /papers/paper5.pdf.
117. Toma N.C., **Neagu B.C.**, Gavrilaș M., Application of Smart Metering Systems for Energy Losse Assessment and Forecasting in Distribution Systems, 41st Conference on Fundamentals of Electrotechnics and Circuit Theory (SPETO2018), Gliwice, Poland, 16-19 may 2018. icspeto.hostingasp.pl/Media/Default/program/PROGRAM%20-%20 SPETO%202018%20-%20PROGRAMME.pdf
118. **Neagu B.C.**, Georgescu Gh., Guşă M.D., Issues Regarding a Series of Mathematical Models and Software Application for Technical Losses Evaluation in Operation of Public Distribution Networks Elements in Symmetric State, FOREN 2012, Neptun - Olimp, România, pp.1-10, 2012(B).
119. **Neagu B.C.**, Georgescu Gh., Guşă M.D., The Profiling of Load Curves and Main Parameters for Different Tertiary Consumer Categories Supplied Through Electricity Repartition and Distribution Systems, The 8th International Conference on Industrial Power Engineering – CIEI 2011, Bacău, pp. 82-87, 2011(B).
120. Georgescu Gh., **Neagu B.C.**, Socotar D., The Evaluation of Additional Active Power Loss in Electrical Distribution Networks Working in Distorting Regimes, The 6th International Conference on Electrical and Power Engineering – EPE2010, Iaşi, pp. 143-146, 2010 (www.epe.tuiasi.ro/2010/pdf/EPE_2010_vol1.pdf).

121. **Neagu B.C.**, Georgescu Gh., Olariu M., Software Package for Elaboration, Storage and Inversion of the Nodal Admittance Matrix, The 6th International Conference on Electrical and Power Engineering, Iaşi, pp. 139-142, 2010 (www.epe.tuiasi.ro/2010/pdf/ EPE_2010_vol1.pdf).
122. Georgescu Gh., **Neagu B.C.**, Optimal Power Flow in Public Electric Energy Repartition and Distribution Systems, The 7th International Conference on Electromechanical and Power Systems, Iasi, pp. 59-62, 2009(B).
123. Georgescu Gh., **Neagu B.C.**, The Estimation and Time Evolution of the Distortion State in Public Electric Energy Repartition and Distribution Systems, The 7th International Conference on Electromechanical and Power Systems, Iasi, pp. 55-58, 2009(B).
124. Georgescu Gh., **Neagu B.C.**, Power Losses in Public Repartition and Distribution Networks in Distortion State, The 7th National Conference on Industrial Energetics with International Participation – CNEI 2009, Bacău, pp. 169-176, 2009 (www.ciei.ub.ro/wp-content/uploads/2016/04/Proceedings CNEI2009.pdf).
125. Georgescu Gh., **Neagu B.C.**, The time Behaviour and Compensation Methods of the Distortion State in Electric Energy Repartition and Distribution Public Networks, The 7th National Conference on Industrial Energetics with International Participation – CNEI 2009, Bacău, pp. 163-168, 2009 (www.ciei.ub.ro/wp-content/uploads/2016/04/Proceedings CNEI2009.pdf).
126. **Neagu B.C.**, Georgescu Gh., Reduction of Power Losses in Public Distribution Systems for Increase the Energetic Efficiency and the Quality of Delivered Energy, The 7th National Conference on Industrial Energetics with International Participation – CNEI 2009, Bacău, pp. 197-202, 2009 (www.ciei.ub.ro/wp-content/uploads/2016/04/Proceedings CNEI2009.pdf).
127. Georgescu Gh., Varvara V., **Neagu B.C.**, The Outline of the Energy Consumers from the Distribution Electric Systems, The Second International Symposium on Electrical and Electronics Engineering, Galaţi, Romania, pp. 150-154, 2008 (www.fie.ugal.ro/ISEEE book/table_articles.html).

J. Invenţii.

1. Grigoraș G., Ivanov O., Neagu B.C., Gavrilaș M., Scarlatache Fl., Platformă software de management și control integrat al consumurilor de energie electrică și gaze naturale în scopul creșterii eficienței energetice la întreprinderile mici și mijlocii, A/00922-13.11.2017 (cerere brevet).
2. Grigoraș G., Ivanov O., Neagu B.C., Scarlatache Fl., Gavrilaș M., Platforma software de asistare a deciziilor în proiectarea ecologică optimă a instalațiilor electrice cu producere si stocare locală a energiei în scopul creșterii eficienței energetice la toate categoriile de consumatori, A/00923-21.11.2018 (cerere brevet).

K. Contracte de cercetare.

1. 2SOFT/1.2/66, din cadrul programului ”Joint Operational Programme Romania – Republic of Moldova 2014 – 2020” finanţat prin ENI CBC, cu titlul “Research and promotion of highly efficient energy generation through trigeneration by using solar renewable resources for getting electricity, heat and cold and purchasing of equipment” 2020-2022.
2. Determinarea anualăşi/sau trimestrială a Prognozei de Consum Propriu Tehnologic, pentru rețeaua deenergie electrică din zona de activitateDEGR pentru fiecare an cuprins in perioada 2023- 2028 aferenta judetelor Bacau, Botosani, Iasi, Neamt, Suceava si Vaslui,contract nr. 48734/19.12.2022, valoarea 11128 Euro.
3. Dezvoltarea institutionala a TUIASI prin cresterea vizibilitatii si a performantei cercetarii, (TUIASI-COMPETE), Grant PNIII-1.2.PDI-PFC-C1-2018, Project Manager,

Prof.univ.dr.ing. Carmen Loghin, Contract nr. 9PFE din 18/10/2018, Beneficiar: UEFISCDI, Valoare: 4530000 lei. Tema: Platformă software de asistență decizională orientată spre eficientizarea managementului activității furnizorilor de energie electrică. Neagu B.C. (Responsabil echipa 9).

4. Holistica impactului surselor regenerabile de energie asupra mediului și climei-HORESEC, Grant PN-III-P1-1.2-PCCDI-2017-0404 / 31PCCDI/2018, Director Proiect Cornel Panait, Coordonator Universitatea Maritimă din Constanța, Durata 33 de luni. Valoare totală 5.287.500 lei. Neagu B.C. (membru).
5. Prognoza de consum propriu tehnologic pentru reteaua de energie electrica din zona de activitate a Delgaz Grid. S.A. pentru anul 2019, Contract nr. 1305P / 14.02.2019; beneficiar: Delgaz Grid. S.A ,Valoare: 7500 euro, Neagu B.C. (membru)
6. Platformă software inovativa pentru managementul energetic al consumatorilor finali in vederea cresterii eficientei energetice și a reducerii emisiilor de carbon, Grant PN-III-P2-2.1-CI-2018-1017, Contract nr. 174CI din 04/07/2018, Beneficiar: UEFISCDI, Valoare: valoare 49990 lei, Neagu B.C. (director)
7. Management inteligent a centralelor electrice virtuale cu ajutorul platformelor software bazate pe inteligenta artificiala, in contextul competitivitatii energetice Europene, Grant PN-III-P2-2.1-CI-2018-1011, Contract nr. 173CI din 02/07/2018, Valoare: 49750 lei, Neagu B.C. (director)
8. Platforma software de asistare a deciziilor în proiectarea ecologică optimă a instalațiilor electrice cu producere si stocare locală a energiei, în contextul creșterii eficienței energetice, Grant PN-III-P2-2.1-CI-2018-1128, Contract 192CI/25.07.2018, Beneficiar: UEFISCDI, Valoare: 50.000 lei, 2018, Neagu B.C. (membru)
9. Prognoza de consum propriu tehnologic pentru reteaua de energie electrica din zona de activitate a Delgaz Grid. S.A. pentru anul 2018., Contract nr. 3105P / 14.02.2018; beneficiar: Delgaz Grid. S.A ,Valoare:9981 euro, Neagu B.C. (membru)
10. Platforma de management si control integrat al fluxurilor purtatorilor de energie in scopul cresterii eficientei energetice la IMM-uri, Grant PN-III-P2-2.1-CI-2017-0190, Contract 105CI/25.07.2017, Beneficiar: UEFISCDI, Valoare: 50.000 lei, 2017, Neagu B.C. (membru)
11. Instrument software pentru gestiunea tranzactiilor pe piata de energie electrica, Grant PN-III-P2-2.1-CI-2017-0328, Contract 45CI/25.07.2017, Valoare: 50.000 lei, 2017, Neagu B.C. (membru)
12. Prognoza de consum propriu tehnologic pentru reaua de energie electrica din zona de activitate a Delgaz Grid. S.A., Contract nr. 448P / 15.03.2017; beneficiar: Delgaz Grid. S.A ,Valoare: 44888 lei, Neagu B.C. (membru)
13. Prestări servicii cercetare: prelucrare MST instantanee și stabilire locatii MST 1 zi, Contract nr. 12697/05.07.2017, beneficiar: Delgaz Grid S.A, valoare 9783 lei, Neagu B.C. (membru).
14. Zone urbane bioclimatice inteligente cu emisii reduse de carbon ca insule inovatoare energetic într-un oraș durabil (SMART URBAN ISLE). Contract 83/2016 - ERA NET Cofund-83/2016-2018. Valoare proiect: 710.968,5 lei, Neagu B.C. (membru).
15. Elaborare studiu - Servicii de consultanță de specialitate în proiectul EON Moldova Distribuție de reducere a pierderilor tehnice în rețelele de distribuție a energiei electrice pentru perioada 2016; Contract nr. 684P / 21.04.2016; beneficiar: EON Distribuție Romania S.A., Valoare: 60000 lei, Neagu B.C. (membru).
16. Nanomateriale și arhitecturi inovatoare pentru aplicații integrate de captare a energiei piezoelectrice (HarvEnPiez), Contract 50/2016, Proiect Era Net.Nivel internațional. Valoare proiect: 447.750 lei, Neagu B.C. (membru).

17. Senzori integrati cu caracteristici microfluidice folosind tehnologia LTCC", (INTCERSEN), Contract 9/2015, Proiect international Era Net. Valoare proiect: 468.000 lei, Neagu B.C. (membru).
18. Servicii de consultanță de specialitate în proiectul EON Moldova Distribuție de reducere a pierderilor tehnice în rețelele de distribuție, Contract nr. 1398P / 08.10.2014, beneficiar: E.ON Moldova Distribuţie S.A., Valoare: 194000 lei, Neagu B.C. (membru).
19. Tehnologii inovative de asamblare – dezasamblare a componentelor nemetalice industriale, bazate pe adezivi electro - activi nano-structuraţi, Contract de cercetare nr. 7-042/09.05.2011 (MAGBOND), beneficiar Universitatea Tehnică „Gheorghe Asachi" din Iaşi, durata contractului 2011-2012. (valoare 1.122.730 RON - 249.496 EUR), Neagu B.C. (membru).
20. Dezvoltarea de bio-senzori prin intermediul unei tehnologii inovative de electro - acoperire a structurilor carbonice cu polimeri activi. Contract de cercetare nr. 7-038/13.05.2011 (CARBIOSENSE), beneficiar Universitatea Tehnică „Gheorghe Asachi" din Iaşi, durata contractului 2011-2013. (valoare 1.079.300 RON - 239.844 EUR), Neagu B.C. (membru)
21. Școala Universitară de formare inițială și continuă a personalului didactic și a trainerilor din domeniul specializărilor tehnice și inginerești – DidaTec, Contract POSDRU / 87 / 1.3 /S /6089, beneficiar Universitatea Tehnică „Gheorghe Asachi" din Iaşi, durata contractului 2012-2013. Neagu B.C. (membru)
22. Specializarea personalului didactic universitar pentru functia de supervizor de practica tehnologica si de cercetare, Cod contract: 57/1.3/S/17884, beneficiar Universitatea Tehnică „Gheorghe Asachi" din Iaşi, durata contractului 2010-2012. Neagu B.C. (membru)
23. Studiu de determinare a consumului propriu tehnologic în rețelele de joasă tensiune aferente jud. Bacău, aparținând E.ON Moldova Distribuție S.A, Contract de cercetare nr. 3564P / 01.11.2011, 2011, beneficiar: E.ON Moldova Distribuţie S.A, Valoare: 50000 lei, Neagu B.C. (membru)
24. Contract cercetare nr. 1265P/2010, Analiza structurii şi a posibilităţilor de reconfigurare în regimurile post avarie a reţelelor electrice, a calităţii energiei electrice livrate consumatorilor, prognoza sarcinilor, dimensionarea optimă din punct de vedere tehnico-economic a elementelor componente, precum şi calculul regimurilor simetrice, a regimurilor de avarie (scurtcircuite) şi a regimurilor deformante care apar în sistemele de repartiţie şi distribuţie a energiei electrice (valoare 3500 RON + TVA). Neagu B.C. (membru).

L. Premii, distincţii.

M. Alte realizări semnificative.

Data,
08.04.2025

Nume, semnătura

Bogdan-Constantin Neagu

* Conform H.G. 1175/ 2006

Anexa A.3.3.c. Lista de lucrari, cadre didactice

Lista de lucrări în domeniul de studii universitare de masterat Managementul sistemelor de energie*

Numele şi prenumele: **Beniugă Oana Cristina**

A. Teza de doctorat.

1. „Studii teoretice şi experimentale privind procesarea numerică a imaginilor în metrologie" – Domeniul Inginerie Electrica, sustinuta public in data de 25.09.2009, in cadrul Universitatii Tehnice "Gheorghe Asachi" din Iaşi, Facultatea de Inginerie Electrică, Energetică şi Informatică Aplicată, conducător de doctorat prof. dr. ing. Mihai Crețu.

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

1. Donciu C., Costea O., Temneanu M., Damian R., Branzila M., New prototype architecture for automated irrigation based on power line communications, Grid Enabled Remote Instrumentation, Book Series: Signals and Communication Technology, Part V, chapter 33, pp. 499-509, 2009; ISSN:1860-4862, Publisher: Springer US, DOI: 10.1007/978-0-387-09663-6_33

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS.

1. Oana Cristina Beniugă, Protecția prin relee – note de curs, editura PIM, ISBN: 978-606-13-7838-8, 176 pag., 2023
2. Oana Cristina Beniugă, Florin Băiceanu - Protecția prin relee – îndrumar de laborator, editura PIM, ISBN: 978-606-13-7837-1, 180 pag., 2023
3. Oana-Maria Asiminicesei, Oana-Cristina Beniugă, Alin Dragomir, Ciprian-Romeo Comșa, Cristian-Gyözö Haba, Constantin-Cătălin Dosoftei, Sebastian-Teodor Arădoaei, Marius-Ciprian Brânzilă, AFACERI DIGITALE 3, seria: Antreprenoriat pentru ingineri și arhitecți, editura PERFORMANTICA, ISBN 978-606-685-932-5, 308 pag., 2022
4. Beniugă Oana Cristina, Automatizarea procesului de măsurare folosind procesarea numerică a imaginilor, editura PIM, format academic, ISBN 978-606-13-7985-9, 186 pag., 2023
5. Beniugă Oana, Emilian Furnică, Tehnologia fabricării aparatelor electrice - principii şi metode, editura PIM, format academic, ISBN 978-606-13-3827-6, 323 pag., 2017
6. Alexandru Sălceanu, Eduard Luncă, Oana Beniugă, Oana Neacşu, Silviu Ursache, Marius Păuleţ, Works and Walks in ESD, developed at the Faculty of Electrical Engineering, Electromagnetic Compatibility/Electromagnetic Field. Research and Development in Romania, Editura Agir, Bucureşti, format academic, Cap 3. EDUCATION, Seria: Electrotehnica – Electroenergetica, ISBN 978-973-720-521-6, 15 pag., 2014

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

1. Set prezentări în format PPT - Protecția prin relee - disponibil la https://edu.tuiasi.ro/course/view.php?id=2066
2. Set prezentări în format PPT - Automatizarea sistemelor electroenergetice disponibil la https://edu.tuiasi.ro/course/view.php?id=3932

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

1. Beniugă, D. Machidon, P. S. Popa, O. Beniugă, F. Băiceanu and M. Istrate, Cost-effectiveness and sustainability analysis of a NZEB house, 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi), Iasi, Romania, 2024, pp. 187-192, doi: 10.1109/EPEi63510.2024.10758113
2. O. Beniugă, R. Beniugă, F. Băiceanu, House heating system thermal dynamics assessment using Petri Net approach, 2023 10th International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 2023, pp. 01-05, doi: 10.1109/MPS58874.2023.10187544
3. R. Beniugă, O. Beniugă, D. Machidon, F. Băiceanu, M. Istrate, NZEB compliance principles in Romania for residential buildings, 2023 10th International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 2023, pp. 01-06, doi: 10.1109/MPS58874.2023.10187523.
4. B. A. Pingescu, V. D. Asmarandei, D. G. Astanei, O. C. Beniugă, C. R. Beniugă and R. Burlică, High conductivity solution treatment by non-thermal plasma T-shaped mini electrochemical reactors, 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi), Iasi, Romania, 2024, pp. 616-619, doi: 10.1109/EPEi63510.2024.10758144
5. Bogdan, Pingescu, Astanei Dragos, Burlică Radu, Asmarandei Vasile Daniel, Beniugă Oana Cristina and Gheorghe Veronica. “Capacitive Power Supplies for Non-Thermal Plasma Electrochemical Mini-Reactors.” 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi) (2024): 632-635.
6. R. Burlica, D.E. Creţu, O. Beniugă, D. Astanei, Nonthermal Plasma Multi-Reactor Scale-Up Using Pulse Capacitive Power Supplies, Applied Sciences – Basel, vol. 12, issue 20, Art. number 10403, WOS: 000872282100001, 2022.
7. D. Astanei, R. Burlică, D.E. Creţu, M. Olariu, I. Stoica, O. Beniugă, Treatment of Polymeric Films Used for Printed Electronic Circuits Using Ambient Air DBD Non-Thermal Plasma, Materials, vol. 15, issue 5, art. number 1919, 2022.
8. R. Burlică, D. Astanei, D.E. Cretu, D. Dirlau, O. Beniugă, S. Padureanu, V. Stoleru, A. Patras, Non-thermal plasma T-shaped reactor for activated water production, Environmental Engineering and Management Journal, vol. 20, issue 3, pp. 397-404, WOS:000637746900009, 2021.
9. Alexandru Sălceanu, Oana Beniugă, Eduard Lunca - Advances in measurement and analysis of electrostatic discharge significance of human body capacitance, Environmental Engineering and Management Journal, Vol.12, No. 6, 1119-1124, ISSN: 1582-9596, WOS:000325632500002, 2013
10. Oana Beniugă, Oana Neacsu, Electrostatic discharge e-field spectrum analysis and graphical interpretation, BDI (B+) - BULETINUL INSTITUTULUI POLITEHNIC DIN IASI, TOME LVII (LXI), FASC. 4, Electrotechnics, Energetics, Electronics, ISSN 1223-8139 - PP.139-146, 2011.
11. Rusu, Ciprian-Cătălin, Crețu, Daniel-Eusebiu, Burlică, Radu, Astanei, Dragoș, Beniugă, Oana. DBD System Operating in Ambient Air for Surface Treatment of Polyethylene Terephthalate Films, Bulletin of the Polytechnic Institute of Iași. Electrical Engineering, Power Engineering, Electronics Section, Volume 68 (2022) - Issue 1 (March 2022), 3922, pp.67-79, https://doi.org/10.2478/bipie-2022-0004, 2022

12. I.D. Dirlau, R. Burlica, D. Astanei, O. Beniugă, Effect of non-thermal plasma on molecular species formed in water based solution, Buletinul Institutului Politehnic din Iaşi, Secţia Electrotehnică, Energetică, Electronică, vol. 63(67), nr. 1, pp. 9 – 20, 2017
13. Oana Neacşu, Oana Beniugă, Alexandru Sălceanu - Assessment on electric charges pollution in the residential area and laboratory environment, Environmental Engineering and Management Journal, , Vol. 11, No. 3, pp. 635-640, ISSN: 1582-9596, 2012.
14. Karol Kováč, Jozef Hallon, Oana Beniugă - Measurement of magnetic wave shape of indirect electrostatic discharge, Journal of ELECTRICAL ENGINEERING, VOL 63. NO 7s, pp.126-129, ISSN 1335-3632, 2012
15. D.E. Cretu, C.C. Rusu, D. Astanei, R. Burlica, O. Beniugă, Assessment of HV Power Supply Efficiency in Plasma Activated Water Production, Proc. of the 2022 International Conference and Exposition on Electrical and Power Engineering, 20-22 oct. 2022, Iasi, Romania, DOI: 10.1109/EPE56121.2022.9959831
16. D.E. Creţu, Ş. Ciauşu, R. Burlică, D. Astanei, O. Beniugă, D. Teşoi, Electromagnetic Field Radiation Generated by Dielectric Barrier Discharge, Proc. of the 2021 9th International Conference on Modern Power Systems (MPS), pp. 1-6, 16-17 iun. 2021, Cluj-Napoca, Romania, DOI: 10.1109/MPS52805.2021.9492635
17. Beniugă, O. Beniugă, F. Băiceanu, M. Istrate, The Influence of Feedwater Preheaters on the Power Plant Thermal Efficiency 2021 9th International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 2021, pp. 1-5, doi: 10.1109/MPS52805.2021.9492627
18. R. Beniugă, O. Beniugă, D. Machidon, M. Istrate, Wind Power in Romania Energy Mix Towards Sustainable Development, 2021 9th International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 2021, pp. 1-4, doi: 10.1109/MPS52805.2021.9492673.
19. F. C. Baiceanu, O. Beniugă, R. C. Beniuga, E. I. Diac, Quality Assessment of Power Transformers Differential Protection Behavior Using Harmonic Restraint Techniques, 2020 International Conference and Exposition on Electrical and Power Engineering (EPE), 2020, pp. 680-684, doi: 10.1109/EPE50722.2020.9305610.
20. F. C. Baiceanu, O. Beniugă, R. Beniugă, F. T. Munteanu, Transient of High Voltage Circuit Breakers Intelligent Switching during Grid Faults, 2021 9th International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 2021, pp. 1-4, doi: 10.1109/MPS52805.2021.9492555.
21. D. Astanei, D. Creţu, R. Burlică, ID Dirau, O. Beniugă, S. Pellerin, M. Wartel, Voltage Polarity Influence on NTP Energy Efficiency of Point-to-Point Reactor, Proceedings of 2019 International Conference on Electromechanical and Energy Systems (SIELMEN 2019), art. number 263, Oct 9 – 11, 2019, Craiova, Romania, WOS:000630287500116
22. Răzvan Beniugă, Marcel Istrate, Oana Beniugă, Dragoș Machidon, Educational Resource for Wind Turbine Behaviour Assessment, Proceedings of the 2018 International Conference and Expositions on Electrical and Power Engineering, pp.395-398 IEEE Catalog Number: CFP1847S-USB ISBN: 978-1-5386-5061-5
23. Gabriel Constantin Sârbu, Oana Beniugă, Evaluating measurement uncertainty of thermocouples calibration, Proceedings of the 2018 International Conference and Expositions on Electrical and Power Engineering, IEEE Catalog Number: CFP1847S-USB ISBN: 978-1-5386-5061-5
24. Răzvan Beniugă, Marcel Istrate, Oana Beniugă - Crowbar protection impact on wind farm behaviour during grid disturbance, Proceedings of the 7th International Conference on Modern Power Systems (MPS 2017), ISBN 978-1-5090-6565-3

25. Oana Beniugă, Razvan Beniuga, 3D Assessment of ESD field level for protection devices safety, Proceedings of the 10th International Symposium on Advanced Topics in Electrical Engineering March 23-25, 2017, ISBN: 978-1-5090-5160-1, pp. 354-357
26. Beniugă Oana, Beniugă Răzvan - Assessing operational planning performance among wind power system based on N-1 criterion (2017) 22nd IMEKO TC4 International Symposium and 20th International Workshop on ADC Modelling and Testing 2017, pp. 435-438
27. Oana Beniugă, Mihai Leca, Razvan Beniuga, Assessment of Influence of Grid Disturbances on Wind Turbine DFIG Converters, Proceedings of the 2016 International Conference and Exposition on Electrical and Power Engineering, ISBN: 978-1-5090-6128-0, pp. 693-696
28. Donciu C., O. Costea (Beniugă) Prototype architecture for automatic control of greenhouse crops irrigation, Acta Electrotehnica, nr. 2, pp.139 – 143, ISSN 1841-3323, Academia de Stiinţe Tehnice din România, Universitatea Tehnică din Cluj-Napoca, 2007
29. Temneanu C., C. Donciu, C. Cristian, O. Costea (Beniugă) Informatic System of Interactive Training for Virtual Laboratory Type Aplications (I). L5-Common Gate Interface (CGI) in Labview environment, Acta Electrotehnica nr. 2, pp.222– 227, ISSN 1841-3323, Academia de Stiinţe Tehnice din Romania, Universitatea Tehnica din Cluj-Napoca, 2008
30. O. Costea (Beniugă) Informatic System of Interactive Training for Virtual Laboratory Type Aplications (I). L1-The study of temperature transducers usimg FileldPoint Module, Acta Electrotehnica nr. 3, pp.213 – 217, ISSN 1841-3323, Academia de Stiinţe Tehnice din Romania, Universitatea Tehnica din Cluj-Napoca, 2007

G. Lucrări ştiinţifice publicate în reviste din străinătate.

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

I. Lucrări ştiinţifice publicate în volumele conferinţelor.

1. Oana Beniugă, Razvan Beniuga, Wind Farms' Grid Connection and Protection Requirements for Sustainable Development International Conference "Energy of Moldova – 2016. Regional aspects of development", 2016 - Chisinau, Republic of Moldova, ENERGY OF MOLDOVA-2016, pp.478 – 481, ISBN 978-9975-4123-5-3
2. Costea (Beniugă) O., Donciu C., Labview based analog and digital instrument's automated calibration, Management of Technological Changes, vol. 1, pp. 473-476, 2009;
3. Beniugă Oana, Neacşu Oana, Sălceanu Alexandru, Aproaches on Pollutant Fields Associated to Electrostatic Discharge over the Working and Electronic Environment – Modelling and Simulation, BDI - Buletinul Ştiinţific al Universităţii "Politehnica" din Timişoara Seria Electronică şi Telecomunicaţii -Transactions on Electronics and Communications Tom 56(70), Fascicola 2, pp.3-6, ISSN 1583-3380, 2011

J. Invenţii.

1. R. Burlică, D. Astanei, I.D. Dirlău, O. Beniugă, M. Andrușcă, M. Adam, Minireactor electrochimic cu plasma non-termica cu geometri in forma de T pentru producerea apei activate, Brevet nr. 134206/29.03.2024, RO 134206 B1
2. Cerere de brevet – R. Burlică, D. Astanei, O. Beniugă, A. Dragomir, R.Beniuga, Sistem de panouri fotovoltaice cu dispersie optică a luminii solare pentru aplicații în agricultură, Cerere de brevet nr. nr. A00557/ 06.10.2023.
3. Cerere de brevet – R. Burlică, D. Astanei, O. Beniugă, D.E. Creţu, C.C. Rusu, Dispozitiv cu plasma non-termica DBD-Corona pentru tratamentul substraturilor polimerice destinate ambalarii produselor alimentare,Cerere de brevet nr. A00493/12.08.2022.

4. Cerere de brevet – R. Burlică, D. Astanei, O. Beniugă, M.A. Olariu, D.E. Creţu, Dispozitiv cu plasma non-termica DBD pentru tratamentul substraturilor polimerice destinate imprimării circuitelor electronice flexibile, Cerere de brevet nr. nr. A00117/11.03.2022.
5. Cerere de brevet – I.D. Dirlău, D. Astanei, O. Beniugă, R. Burlică, Minireactor conic cu plasmă non-termică pentru producerea apei activate, cu aplicaţii în agricultură, Cerere de brevet nr. A01081/11.12.2017, publicată în RO-BOPI RO133404A2 / 28.06.2019.

K. Contracte de cercetare.

1. Membru proiect PN-IV-P8-8.3-PM-RO-BE-2024-0011, Titlu - Evaluarea impactului utilizării tehnologiei cu plasmă non-termică asupra creșterii și dezvoltării plantelor în sere și în spații protejate (Assessment of the impact of using non-thermal plasma technology on plant growth and development in indoor farming), internațional România – Belgia finanțat prin UEFISCDI
2. Membru proiect Bio-tratament aplicat pe ambele suprafețe ale foliei polimerice utilizată pentru împachetarea produselor alimentare utilizând plasma non-termică DBD-Corona, Proiect tip ERANET-MANUNET-III-PlasmaPack, nr. 214/2020, perioada 2020-2022 (24 luni)
3. Membru proiect Reactor cu plasma non-termica la presiune atmosferica pentru pre-tratamentul substraturilor polimerice utilizate in fabricarea circuitelor imprimate flexibile, proiect tip ERANET-MANUNET-III-Treatoflex, nr. 146/2020, perioada 2020-2022 (24 luni)
4. Director proiect - grant intern TUIASI, Titlu: Organic pollutant reformation to green hydrogen using non-thermal plasma technologies REFORM2H2 Proiect finantat de Univ.Tehnica Gheorghe Asachi din Iasi, Grant intern nr. GI/P11_IDEI 2021, Durata de derulare: 01.08.2021 - 15.12.2021
5. Director de proiect s.l.dr.ing. Oana Cristina Beniugă (Costea): Studii teoretice şi experimentale privind utilizarea procesării numerice a imaginilor în metrologie, Proiect finanțat de CNCSIS – PN II Contract TD nr. 92/2008, 2008-2009
6. Membru proiect C8. Centrul pentru Educație digitală - Grant intern de tip top-down cu Tema: Operaționalizarea Centrului de Inovare Digitală al TUIASI în cadrul proiectului ”DigitAll@TUIASI - Transformare digitală pentru profesiile viitorului” Contract tip G.I., nr. GI-TD-DigitAll-1/2022
7. Membru proiect Evaluarea apei activate produse de către diferite reactoare de plasmă non-termică, proiect tip PN-III-P3-3.1-PM-RO-FR, nr. 19BM/2019, perioada 2019-2021 (30 luni)
8. Membru proiect Model experimental pentru demonstrarea fezabilitatii cresterii potentialului terapeutic al germenilor de grau prin tratarea acestora cu apa activata cu plasma non-termica (PAW), proiect tip PN-III-P2-2.1-PED-2019-0556, nr. 361PED/2020, perioada 2020-2022 (24 luni)
9. Membru proiect Creșterea Producției Agricole în Sere Utilizând Irigarea cu Apă Activată cu Plasmă Rece, proiect tip PN III, PCE, nr. 15/12.07.2017, perioada 2017-2019 (30 luni)
10. Membru proiect Dezvoltarea unui ansamblu de senzori de curent şi tensiune şi a unui releu de protecţie pentru monitorizarea parametrilor electrici pe liniile MT/JT Beneficiar: Elecro Alfa International Botosani, nr. contract: 26153/10.12.2020, perioada de implementare: 2021
11. Membru proiect Sistem video inteligent de comandă a semaforizării intersecţiilor destinat diminuării congestiilor rutiere şi reducerii poluării fizico-chimice şi fonice a mediului, proiect finantat de CNCSIS - PN2-Parteneriate, 71-100/2007, 2007-2010
12. Membru proiect Sistem video automatizat cu grad ridicat de interschimbabilitate pentru etalonare metrologică a echipamentelor de măsurare Proiect finantat de CNCSIS - PN2-Parteneriate, contract 72-173/2008, 2008-2011

13. Membru proiect Titlul proiectului: Instrumentație la distanță pentru noile griduri regionale dedicate, PN II CAPACITĂȚI, nr. 62 CB/2008
14. Membru proiect Dezvoltarea parteneriatelor C/D în vederea promovării unor proiecte europene în domeniul sistemelor distribuite de monitorizare a mediului Proiect finantat de CNCSIS - CEEX Modul 3, contract 201/2006, 2006 – 2008
15. Membru proiect Dezvoltarea parteneriatelor C/D în vederea promovării unor proiecte europene în domeniul video-inspecţiei inteligente a materialelor textile Proiect finantat de CNCSIS - CEEX – Modul 3, contract 194/ 2006, 2006-2008
16. Membru proiect Sistem informatic de instruire interactiva bazat pe algoritmi multitask de mare viteza dezvoltat pe platforma reconfigurabila online pentru aplicații de tip laborator virtual Proiect finantat de CNCSIS - CEEX – Modul 1 – Infosoc, contract 137/2006, 2006 – 2008
17. Proiect de mobilități de tip INTERNATIONAL RESEARCH Project (IRP) Titlul proiectului: PLASMEAU - Plasmas non-thermiques pour la dégradation des contaminants émergents dans l'eau", finanțat de CNRS Franța

Perioada de derulare a mobilităților: 2024-2028

L. Premii, distincţii.

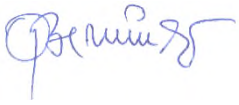
Premiile pentru excelență în cercetarea științifică acordate în 2023 de Universitatea Tehnică „Gheorghe Asachi” din Iași:

✓ Premiul pentru grupul care a contribuit la atragerea celor mai multe fonduri publice pentru cercetarea științifică - Grupul coordonat de Prof. univ. dr. ing. Radu Burlică, Facultatea de Inginerie Electrică, Energetică și Informatică Aplicată, Grup format din: Prof. univ. dr. ing. Radu Burlică, Conf. dr. ing. Dragoș Astanei, s.l.dr.ing. Oana Cristina Beniugă, Suma atrasă în universitate: 1.429.900 lei.

M. Alte realizări semnificative.

Data,
09.04.2025

Nume, semnătura
Beniugă Oana Cristina



* Conform H.G. 1175/ 2006

Anexa A.3.7. Lista de lucrări, cadre didactice

Lista de lucrări în domeniul de studii universitare de masterat „Inginerie Energetică”

Numele şi prenumele: **ISTRATE Dumitru-Marcel**

A. ***Teza de doctorat.***

1. „Contribuţii la coordonarea izolaţiei reţelelor electrice, în vederea compactizării liniilor electrice aeriene”, 1996, Domeniul „Inginerie Energetică”, Universitatea Tehnică „Gheorghe Asachi” din Iași, conducător doctorat: prof. dr. ing. Nicolae Gavrilaș.

B. ***Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.***

C. ***Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).***

1. Oprea Roxana, Istrate Marcel, Machidon Dragos, Solutii pentru cresterea performantelor sistemelor fotovoltaice, Editura PIM, 205 pagini, ISBN 978-606-138696-3, 2024.
2. Machidon Dragoș. Istrate Marcel, Modelel matematice de calcul a zonelor de protecție generate de sistemele de paratrăsnete, Editura Universității Tehnice “Gheorghe Asachi“ din Iași, 182 pag, ISBN 978-973-621-537-7, 2024.
3. Beniuga Razvan, Istrate Marcel, Provocari privind integrarea centralelor eoliene in sistemul energetic, Editura Politehnium (cod CNCSIS 211), Iaşi, 208 pag., (31 rânduri/pagină – coeficient 1,03), ISBN 978-973-621-520-9, 2023
4. Machidon D., Istrate M., Tehnica tensiunilor înalte – Lucrari de laborator, Editura Politehnium, Iaşi, 185 pag., 50 exemplare, ISBN 978-973-621-501-8, 2021.
5. Istrate M., Asandei D., Temneau C., Analiza asistată de calculator a coordonării protecţiei de impedanţă Editura Politehnium (cod CNCSIS 211), Iaşi, 255 pag., ISBN 978-973-621-266-4, 2008
6. Guşă M., Istrate M., Bucă C., Tehnica tensiunilor înalte – Aplicaţii. Ediţia a II-a, revizuită, Casa de Editură Venus (cod CNCSIS 199), Iaşi, 351 pag., 100 exemplare, ISBN 973-756-028-0, 2006.
7. Istrate M., Electrosecuritate, Editura Editura Tehnică, ştiinţifică şi didactică CERMI (cod CNCSIS 181), Iaşi, 384 pag., ISBN 978-973-667-274-3, 2007.
8. Istrate M., Tehnologii şi instalaţii pentru reducerea emisiilor poluante – Controlul poluării în termoenergetică, Editura SETIS, Iaşi, cod CNCSIS 279, 428 pag, ISBN 97386764-0-1, 2004.
9. Adam M., Istrate M., Baraboi A., Guşă M., Echipamente de comutaţie şi izolaţia reţelelor electrice, Editura AGIR, Bucureşti, (cod CNCSIS 140) 185 pag., ISBN – 9738130-38-7, 2001.
10. Georgescu Gh., Varvara V., Istrate M., Sisteme de distribuţie a energiei electrice. Volumul II, partea a I-a, Editura Tehnică, ştiinţifică şi didactică CERMI (cod CNCSIS 181), Iaşi, 453 pag., 200 ex., ISBN 978-973-667-314-6, 2008.

11. Georgescu G., Istrate M., Varvara V., Rădăşanu D., Popa B., Transportul şi distribuţia energiei electrice, Vol. II, Editura "Gh.Asachi" Iaşi, (cod CNCSIS 211), 442 pag, 350 ex., ISBN 973-8292-03-4., 2001.
12. Istrate M., Guşă M., Impactul producerii, transportului şi distribuţiei energiei electrice asupra mediului, Editura AGIR, Bucureşti, (cod CNCSIS 140) 210 pagini, 150 exemplare, ISBN 973-99295-5-9, , 2000.

D. ***Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.***

1. Guşă M., Istrate M., Gavrilaş N., Asaftei C.,Tehnica tensiunilor înalte - Supratensiuni în sistemele electroenergetice, Editura Fundaţiei culturale "Renaşterea Română", Iaşi, 300 pagini, 200 exemplare, ISBN 973-97246-3-9, 1997.
2. Asaftei C., Guşă M., Istrate M., Gavrilaş N., Tehnici de control şi supraveghere a reţelelor de distribuţie, Editura Fundaţiei Culturale "Renaşterea Română", Iaşi, 315 pagini, ISBN 973-97246-1-2, 1998.
3. Gavrilaş N., Istrate M., Guşă M., Asaftei C., Tehnica tensiunilor înalte - Supratensiuni în sistemele electroenergetice, Curs litografiat la Universitatea Tehnică "Gheorghe Asachi" din Iaşi, 210 pag., 1996.

E. ***Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.***

1. Istrate M., Machidon D., Electrosecuritate – curs electronic, www.tti.ieeia.tuiasi.ro
2. Istrate M., Machidon D., Regimuri tranzitorii electromagnetice – curs electronic, www.tti.ieeia.tuiasi.ro
3. Istrate M., Guşă M., Machidon D., High Voltage Enegineering – curs electronic, www.tti.ieeia.tuiasi.ro

F. ***Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.***

1. Dragos Machidon, Marcel Istrate, Razvan Beniuga, Wind Shear Coefficient Estimation Based on LIDAR Measurements to Improve Power Law Extrapolation Performance, Remote Sensing, 2025, Vol 17, Issue 1, 23; DOI: 10.3390/rs17010023, https://doi.org/10.3390/rs17010023, Submission received: 2 November 2024 / Revised: 5 December 2024 / Accepted: 23 December 2024 / Published: 25 December 2024, (This article belongs to the Special Issue New Insights from Wind Remote Sensing), https://www.mdpi.com/journal/remotesensing, Revista ISI - Impact factor la data publicarii 4,2, Citescore 8,3, Q1
2. Costel Boariu, Costică Roman, Marcel Istrate, Tor Haakon Bakken, Atle Harby, Elena Pummer, Georgiana Dunca, Diana Maria Bucur, Peculiarities of the run-off-river hydropower potential in Romania, Environmental Engineering and Management Journa, January 2024, Vol. 23, No. 1, pp. 51-60, Print ISSN: 1582-9596, eISSN: 1843-3707, DOI: 10.30638/eemj.2024.005, http://www.eemj.icpm.tuiasi.ro/issues/vol23/vol23no1.htm, Revista ISI - Impact factor la data publicarii 1,1
3. Fadila Barkat, Ali Cheknane, Josep M. Guerrero, Abderezak Lashab, Marcel Istrate, Mihai Gavrilas, Justina G. Motas, Ioan Viorel Banu, Review, analysis, and performance evaluation of the most common four active methods for islanding detection in gridconnected photovoltaic systems, January 2023, Electric Power Systems Research 214(Part A), DOI: 10.1016/j.epsr.2022.108909, LicenseCC BY 4.0,

https://www.sciencedirect.com/science/article/pii/S0378779622009609?via%3Dihub, Revista ISI - Impact factor 3.9, Q2

4. Dragos Machidon, Marcel Istrate, Tilt Angle Adjustment for Incident Solar Energy Increase: A Case Study for Europe, Sustainability 2023, 15(8), 7015; https://doi.org/10.3390/su15087015, Received: 20 March 2023 / Revised: 19 April 2023 / Accepted: 20 April 2023 / Published: 21 April 2023, https://www.mdpi.com/20711050/15/8/7015, Revista ISI - Impact factor 3.889, Q2
5. Ioan Viorel Banu, Fadila Barkat, Marcel Istrate, Josep M.Guerrerod, GeorgeCulea, PetruLivinti, Justina G.Motasb, Bogdan Neagub, Dragos Andrioaia, Passive antiIslanding protection for Three-Phase Grid-Connected photovoltaic power systems, January 2023, International Journal of Electrical Power & Energy Systems 148:108946, DOI: 10.1016/j.ijepes.2023.108946, journal homepage: www.elsevier.com/locate/ijepes, https://doi.org/10.1016/j.ijepes.2023.108946, Received 16 July 2022; Received in revised form 27 October 2022; Accepted 3 January 2023 https://www.sciencedirect.com/science/article/pii/S0142061523000030?via%3Dihub, Revista ISI - Impact factor 5,2, Q1
6. Fadila Barkat; Ali Cheknane; Josep M. Guerrero; Abderezak Lashab; Marcel Istrate; Ioan Viorel Banu, Hybrid islanding detection technique for single-phase grid-connected photovoltaic multi-inverter systems, IET Renewable Power Generation (factor de impact 3,894), DOI: 10.1049/iet-rpg.2019.1183, Print ISSN 1752-1416, Online ISSN 1752-1424 Available online: 16 February 2021, https://digital-library.theiet.org/content/journals/10.1049/iet-rpg.2019.1183, Revista ISI - Impact factor in 2022 = 2.6, Q3
7. Neagu, B.-C.; Ivanov, O.; Grigoras, G.; Gavrilas, M.; Istrate, D.-M. New Market Model with Social and Commercial Tiers for Improved Prosumer Trading in Microgrids. Sustainability 2020, 12, 7265, doi:10.3390/su12187265.
8. Postolaty, V; Berzan, V; Bykova, E; Bosneaga, V; Suslov, V; Ermurachi, I; Grigoras, Gh; Gavrilas, M; Istrate, M, Estimation of Power Exchange through 110 kV Overhead Power Lines at the Interface of the Romanian and Moldovan Power Systems, PROBLEMELE ENERGETICII REGIONALE, Issue: 2, Pages: 46-61, DOI: 10.5281/zenodo.1343396, Published: 2018, pISSN: 1857-0070, Publisher: INST POWER ENGINEERING ACAD SCIENCES MOLDOVA
9. Banu I, Istrate M., Machidon D., Pantelimon R., Study regarding modeling photovoltaic arrays using test data in matlab/simulink, University Politehnica Of Bucharest Scientific Bulletin Series C-Electrical Engineering And Computer Science, Volume: 77 Issue: 2 Pages: 227-234, Published: 2015, ISSN: 2286-3540, eISSN: 2286-3559, Accession Number: WOS:000421799900019.
10. Nemes C., Istrate M., A clear sky irradiation assessment using the ESRA model and SRTM database, Environmental Engineering and Management Journal, vol. 12 (June 2013), no. 6, pp. 1271-1279. ISSN 1582-9596.
11. Lunca E., Istrate M., Salcean A., Comparative Analysis of The Extremely LowFrequency Magnetic Field Exposure from Overhead Power Lines, Environmental Engineering and Management Journal, vol. 12 (June 2013), no. 6, pp. 1145-1151. ISSN 1582-9596.
12. Ursulean R., Lazar A.M., Istrate M., A New Method to Evidence the P300 Eventrelated Potential based on a Lifting Scheme, Elektronika Ir Elektrotechnika. Electronics, No. 2 Vol.19, 2013, ISSN 1392–1215, pp. 31-36.
13. Nemes C., Istrate M., Statistical Analysis of Wind Turbine's Output Power, Electronics and Electrical Engineering Journal, No. 4 (120), 2012, pp. 31-34, ISSN 1392 – 1215.

14. Ursulean R., Lazar A.M., Istrate M., The Sensitivity of the Fractal Spectrum: a Means of Controlling the Statistical Properties of Chaotic Signals, Elektronika Ir Elektrotechnika. Electronics, No. 8(114), 2011, ISSN 1392–1215, pp. 21-26, Electronic version.
15. Grigoras G, Istrate M., An Efficient Clustering Method In Evaluation Of The Electric Energy Consumption From Water Hydrophore Stations, International Review on Modelling and Simulations (I.RE.MO.S.), Vol. 4, No. 2, April 2011, pp. 813-818, Print ISSN: 1974-9821, Cd-Rom ISSN: 1974-983X.
16. Grigoras G., Cartina G., Istrate M., Rotaru F., The Efficiency of the Clustering Techniques in the Energy Losses Evaluation from Distribution Networks, International Journal Of Mathematical Models And Methods In Applied Sciences, Issue 1, Vol.5, 2011, pp. 133-141, ISSN: 1998-0140.
17. Ursulean R., Lazăr A.-M., Istrate M., Structuring Elements for the P300 Event-related Potential Detection, Elektronika Ir Elektrotechnika. System Engineering, Computer Technology, No. 9(105), 2010, ISSN 1392–1215, pp. 85-88, Electronic version
18. Istrate M., Grigoraş Gh., Energy Consumption Estimation in Water Distribution Systems Using Fuzzy Techniqus, Environmental Engineering and management Journal, Vol. 9, No.2, pp.249-256, February 2010. ISSN 1582-9596.
19. Istrate M., Gusa M., Assessment Of Two Single-End Fault Location Algorithms In An ATP Approach, Revue Roumaine de Sciences Techniques – Électrotechique et Énergétique, Tome 54, 4, pp. 345-354, ISSN: 0035-4066.
20. Istrate M., Miron A., Istrate C., Gusa M., Machidon D., Single-phased Fault Location on Transmission Lines Using Unsynchronized Voltages, Advances in Electrical and Computer Engineering, Issue 3, 2009, pages 51-56, ISSN: 1582-7445, e-ISSN: 18447600, Digital Object Identifier: 10.4316/AECE.2009.03010, Accession Number: WOS:000271872000010.

G. ***Lucrări ştiinţifice publicate în reviste din străinătate.***

1. Istrate M., Gavrilaş N., Guşă M., Asaftei C., Calculul supratensiunilor temporare datorate efectului capacitiv pe liniile de foarte înaltă tensiune, cu considerarea descărcării corona, Analele Institutului de Energetică al Academiei de Ştiinţe a Republicii Moldova, pag. 213 – 218, 1996.
2. Asaftei C., Gavrilaş N., Guşă M., Istrate M., Cu privire la transmiterea şi recepţia semnalelor emise de indicatoarele de defect, Analele Institutului de Energetică al Academiei de Ştiinţe a Republicii Moldova, Chişinău, pag. 229 – 237, 1996.
3. Guşă M., Gavrilaş N., Asaftei C., Istrate M., Supratensiuni provocate de scurtcircuitul monofazat în reţele de medie tensiune având neutrul tratat cu inductanţă Analele Institutului de Energetică al Academiei de Ştiinţe a Republicii Moldova, Chişinău, pag. 203 – 212, 1996.
4. Asaftei C., Guşă M., Gavrilaş N., Istrate M., Semnalizarea locală a zonelor cu defect de izolaţie a reţelelor electrice de medie tensiune, Upravlemie Electroperedaci, editat de Academia de Ştiinţe a Republicii Moldova, Vol. 7, pag. 56 – 60, 1993.
5. Asaftei C., Guşă M., Gavrilaş N., Istrate M., Telesemnalizarea zonelor cu defect în liniile de medie tensiune, Buletinul Academiei de Ştiinţe a Republicii Moldova, Seria Fizică şi tehnică, Chişinău, nr.3 (9), pag.101-106, 1992.

H. ***Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.***

21. Machidon D., Istrate M., Oprea R., Some considerations on the photovoltaic conversion of the solar energy in Romania, Bulletin of the Polytechnic Institute of Iasi, Section

Electrotehnica. Energetica. Electronica Volume 62(66), Fasc.3, pg.21-30, ISSN 12238139, (CNCSIS, code 87, http://www.cncsis.ro/, http://www.bulipieee.tuiasi.ro/archive/2016/fasc.3/p2_f3_2016.pdf), 2016.
22. Machidon D., Istrate M., Weather Influence Analysis on the Lightning Protection Current Estimation, Acta Electrotehnica, Number 3-2015, Proceedings of The 6th
23. International Conference on Modern Power Systems, MPS 2015, 18-21 mai 2015 ClujNapoca, Romania, pp.161-164, ISSN 1841-3323, (Indexed in VINITI, DOAJ Lund University Lybraries).
24. Machidon D., Istrate M., Power Station Protection Zones Estimation Using the Rolling Sphere Method and the Elliptic Model, Acta Electrotehnica, Special Issue "Proceedings
25. of The 5th International Conference on Modern Power Systems MPS 2013, ClujNapoca, Romania, Vol. 54, No., 5, 2013, pp.256-261, ISSN 1841-3323, (Indexed in VINITI, DOAJ Lund University Lybraries http://www.doaj.org)
26. Banu I.V., Beniuga R., Istrate M., Study of Temperature for Modeling of Photovoltaic Solar Array using Experimental Test Data, Acta Electrotehnica, Special Issue "Proceedings of The 5th International Conference on Modern Power Systems MPS
27. 2013, Cluj-Napoca, Romania, Vol. 54, No., 5, 2013, pp.51-54, ISSN 1841-3323, (Indexed in VINITI, DOAJ Lund University Lybraries http://www.doaj.org), Revista BDI
28. Beniuga R., Banu I.V., Istrate M., Behaviour od Double-Feed Induction Generatyor Wind Turbines with Crowbar System during Grid Faults, Acta Electrotehnica, Special Issue "Proceedings of The 5th International Conference on Modern Power Systems MPS 2013, Cluj-Napoca, Romania, Vol. 54, No., 5, 2013, pp.59-63, ISSN 1841-3323, (Indexed in VINITI, DOAJ Lund University Lybraries http://www.doaj.org), Revista BDI
29. Machidon D., Istrate M., Guşă M., Dragomir M., The Elliptic Model Implementation For The Estimation Of The Vertical Rod's Protection Zones, World Energy System Conference.Towards Sustainable and Integrated Energy Systems, Suceava, 28-30 iunie 2012, Buletinul AGIR, nr.3/2012, An.XVII, Index Copernicus International, ISSN-L 1224-7928, Online: ISSN 2247-3548, pp.477-482, http://www.buletinulagir.agir.ro/articol.php?id=1426.
30. Istrate M., Machidon D., ATP Analysis Of Transmission Lines Behaviour On Direct Lightning Strokes, World Energy System Conference.Towards Sustainable and Integrated Energy Systems, Suceava, 28-30 iunie 2012, Buletinul AGIR, nr.3/2012, An.XVII, Index Copernicus International, ISSN-L 1224-7928, Online: ISSN 2247-3548, pp.471-476, http://www.buletinulagir.agir.ro/articol.php?id=1425
31. Banu I.V., Istrate M., Modelling And Simulation Of Photovoltaic Arrays, World Energy System Conference.Towards Sustainable and Integrated Energy Systems, Suceava, 28-30 iunie 2012, Buletinul AGIR, nr.3/2012, An.XVII, Index Copernicus International, ISSN-L 1224-7928, Online: ISSN 2247-3548, pp.161-166, http://www.buletinulagir.agir.ro/articol.php?id=1378, Revista BDI
32. Beniugă R., Istrate M., DFIG Wind Turbina Dynamic Under The Stress Of Power System Faults, World Energy System Conference.Towards Sustainable and Integrated Energy Systems, Suceava, 28-30 iunie 2012, Buletinul AGIR, nr.3/2012, An.XVII,
33. Index Copernicus International, ISSN-L 1224-7928, Online: ISSN 2247-3548, pp.429-434, http://www.buletinulagir.agir.ro/articol.php?id=1418, Revista BDI
34. Dragomir M., Istrate M., Beniugă R., Machidon D., Assessment Of Two-End Data Fault Location Algorithms For Transmission Grids, World Energy System Conference.Towards Sustainable and Integrated Energy Systems, Suceava, 28-30 iunie 2012, Buletinul AGIR,

nr.3/2012, An.XVII, Index Copernicus International, ISSN-L 1224-7928, Online: ISSN 2247-3548, pp.435-438.
35. Nemes C., Istrate M., Overview of Optimal Wind Turbine Selecting, Acta Electrotehnica, Vol.52, No.5, 2011, pp.323-326, ISSN 1841-3323.
36. Dragomir M., Istrate M., Gusa M., Machidon D., The Influence of The Power Frequency on the Accuracy of Two-Enda data fault Location Algorithm, Acta Electrotehnica, Vol.52, No.5, 2011, pp.143-146, ISSN 1841-3323.
37. Machidon D., Istrate M., Gusa M., Dragomir M., Lightning Protection Current determination Using ATP Simulations and Leader Progression Model, Acta Electrotehnica, Vol.52, No.5, 2011, pp.243-246, ISSN 1841-3323.
38. Dragomir M., Istrate M., Evaluation of Two-End Data Fault Location Algorithms Used in Fault Location, Buletinul Institutului Politehnic Iaşi, Tomul LVII (LXI), Fasc.3, pag.17-22, ISSN 1223-8139, (Clasificare B+ (CNCSIS cod 87); Indexari BDI: Index Copernicus, getCITED, Ulrich's), http://www.tuiasi.ro/facultati/eth/index.php?page=820 , 2011, Revista BDI
39. Dragomir M., Istrate M., The Influence of the Fault Resistance on The Accuracy of The One-end data Fault Location Algorithms, Buletinul Institutului Politehnic Iaşi, Tomul LVII (LXI), Fasc.3, pag.117-122, ISSN 1223-8139, (Clasificare B+ (CNCSIS cod 87);
40. Indexari BDI: Index Copernicus, getCITED, Ulrich's), http://www.tuiasi.ro/facultati/eth/index.php?page=820 , 2011. Revista BDI
41. Machidon D., Istrate M., Gusa M., Dragomir M., Rolling Sphere Method Application for HV Lines, Acta Electrotechnica, Proceedings of the 3rd International Conference on Modern Power Systems MPS 2010, pp 221-224, Vol. 51, No. 5, 2010, ISSN 1841-3323 (CNCSIS, cod 576 – http://www.cncsis.ro/articole/1901/Arhiva-2005-2008.html, indexata in doua BDI – Rusia VINITI http://catalog.viniti.ru/ si Suedia DOAJ http://www.doaj.org), 2010
42. Istrate M., Varvara V., Dragomir M., The Influence of the Power Frequency on the Accuracy of the Synchrophasors Measurements, Acta Electrotechnica, Proceedings of the 3rd International Conference on Modern Power Systems MPS 2010, pp 196-199, Vol. 51, No. 5, 2010, ISSN 1841-3323 (De categ. B+ CNCSIS, cod 576 – http://www.cncsis.ro/articole/1901/Arhiva-2005-2008.html, indexata in doua BDI – Rusia VINITI http://catalog.viniti.ru/ si Suedia DOAJ http://www.doaj.org), 2010. Revista BDI
43. Dragomir M., Istrate M., Gusa M., Asandei D., Machidon D., Alternative Transients Program Model of The Protection Based on Incremental Signals, Buletinul Institutului Politehnic Iaşi, Tomul LVI (LX), Fasc.3, pag.101-109, ISSN 1223-8139, (CNCSIS, cod 87, http://www.cncsis.ro/ articole/1901/Arhiva-2005-2008.html), 2010.
44. Hriscu I., Gusa M., Istrate M., Some Aspects Concerning the Influence of Surge Arresters upon Lightning Behaviour of Overhead Lines, Scientific Bulletin of the Electrical Engineering Faculty (Valahia University of Targovioste), Year 10, No. 3(14), pp. 64-70, ISSN 1843-6188, http://www.buletinfie.ro
45. Istrate M., Fault Location In Distribution Grids In An ATP Approach, Buletinul Institutului Politehnic Iaşi, Tomul LIV (LVIII), Fasc.3, pag.173-178, ISSN 1223-8139, (Categ. C-CNCSIS, cod 87, http://www.cncsis.ro/ articole/1901/Arhiva-20052008.html), 2008.
46. Istrate M., Gusa M., Analysis of Lightning's Strokes on HV Lines in an ATP Approach, Acta Electrotechnica, Proceedings of the 2nd International Conference on Modern Power Systems MPS 2008, pp 162-165, ISSN 1841-3323 (De categ. B+ CNCSIS, cod 576 – http://www.cncsis.ro/articole/1901/Arhiva-2005-2008.html, indexata in doua BDI – Rusia si Suedia http://catalog.viniti.ru/si.asp), 2008, Revista BDI

47. Istrate M., Guşă M., Simularea ATP a localizării scurtcircuitelor în reţele de transport a energiei electrice, Revista Energetica, anul 56, nr.8, august 2008, pag. 304 –309, ISSN 1453-2360, 2008.
48. Ivanov O., Gavrilaş M., Istrate M., A Radial Basis Function Neural Network With Pruning Strategy for Distance Relaying Systems, Analele Universităţii din Craiova, seria Inginerie Electrică, anul 31, nr.31, 2007, Vol. II, pag. 345-348 ISSN 1842-4805, (Categ. C-CNCSIS, cod 174, http://www.cncsis.ro/ articole/1901/Arhiva-2005-2008.html), 2007.
Istrate M., Guşă M., Aspects Of The Power Grids' Impedance Relaying In An AtpModels Approach, Analele Universităţii din Craiova, seria Inginerie Electrică, anul 31, nr.31, 2007, Vol. II, pag. 327-330 ISSN 1842-4805, (Categ. C-CNCSIS, cod 174, http://www.cncsis.ro/articole/1901/Arhiva-2005-2008.html), 2007., Paratrăsnete verticale sau orizontale pentru protecţia staţiilor de transformare, Revista Energetica, anul 55, nr.7, iulie 2007, pag. 243 –247, ISSN 14532360, (Categ. B-CNCSIS, cod 512, http://www.cncsis.ro/ articole/1901/Arhiva-20052008.html), 2007.
50. Istrate M., Guşă M., Hriscu I., Miron A., First Tripping Zone of Distance Relaying in an ATP-MODELS Approach, Acta Electrotehnica, Volume 47, Number 50, pag. 65-68, ISSN 1841 – 3323, (Categ. B-CNCSIS, cod 576, http://www.cncsis.ro/ articole/1901/Arhiva-2005-2008.html), 2006.
51. Guşă M., Istrate M., Hriscu I., Overhead Lines Lightning Behaviour Improving with Metal-Oxide Arresters, Acta Electrotehnica, Volume 47, Number 50, pag. 61-64, ISSN 1841 – 3323, (Categ. B-CNCSIS, cod 576, http://www.cncsis.ro/ articole/1901/Arhiva2005-2008.html), 2006.
52. Guşă M., Istrate M., Protection of Overhead Lines with Metal_oxide Arresters, Analele Universităţii din Craiova, Seria Inginerie Electrică, Anul 30, nr. 30, pag. 218-222, ISSN 1842 – 4805, (Categ. C-CNCSIS, cod 174, http://www.cncsis.ro/ articole/1901/Arhiva2005-2008.html), 2006.
53. Istrate M., Guşă M., Hriscu I., ATP Models Of Impedance Relays Simulation. Part I: Theory And Algorithms, Buletinul Institutului Politehnic Iaşi, Tomul LII (LVI), Fasc. 5B, pag. 703-708, ISSN 1223-8139, (Categ. B-CNCSIS, cod 87, http://www.cncsis.ro/articole/1901/Arhiva-2005-2008.html), 2006.
54. Istrate M., Guşă M., Miron A., Hriscu I., ATP Models Of Impedance Relays Simulation. Part II: Models Implementation, Buletinul Institutului Politehnic Iaşi, Tomul LII (LVI), Fasc. 5B, pag.709-714, ISSN 1223-8139, (Categ. B-CNCSIS, cod 87, http://www.cncsis.ro/articole/1901/Arhiva-2005-2008.html), 2006.
55. Istrate M., Guşă M., Hriscu I., Miron A., Single End Algorithms for Distance Relaying Coordination in an ATP Approach, Buletinul Institutului Politehnic Iaşi, Tomul LII (LVI), Fasc.5C, pag.1396 - 1401, ISSN 1223-8139, (Categ. B-CNCSIS, cod 87, http://www.cncsis.ro/articole/1901/ Arhiva-2005-2008.html), 2006.
56. Istrate M., Guşă M., ATP Approach of a Double End Algorithm in HV Grids' Fault Location Estimation, Buletinul Institutului Politehnic Iaşi, Tomul LII (LVI), Fasc. 5C, pag. 1402-1407, ISSN 1223-8139, (Categ. B-CNCSIS, cod 87, http://www.cncsis.ro/articole/1901/Arhiva-2005-2008. html), 2006.
57. Guşă M., Istrate M., Hriscu I., Switching Overvoltages on Overhead Lines Protected with Metal-Oxide Arresters, Buletinul Institutului Politehnic Iaşi, Tomul LII (LVI), Fasc. 5C, pag. 1373-1379, ISSN 1223-8139, (Categ. B-CNCSIS, cod 87, http://www.cncsis.ro/articole/1901/Arhiva-2005-2008. html), 2006.

58. Istrate M., Guşă M., Bucă C., Educational ATP Approach Of Distance Protection Coordination In High Voltage Grids, Buletinul Ştiinţific al Universităţii "Politehnica" Timişoara, Tom 50(64), fasc.1-2, pag. 295-302, ISSN 1582-7194, 2005.
59. Guşă M., Istrate M., Aspecte ale protecţiei liniilor electrice aeriene cu descărcătoare cu oxizi metalici, Revista Energetica, vol. 53, nr. 8, 2005, pag. 283 – 288, ISSN 1453-2360, (Categ. B-CNCSIS, cod 512, http://www.cncsis.ro/ articole/1901/Arhiva-20052008.html), 2005.
60. Istrate M., Guşă M., Bucă C., Lişman C, Miron A., ATP Approach of Distance Relaying Coordination in a High Voltage Network, Buletinul Institutului Politehnic Iaşi, Tomul L(LIV), Fasc. 5A, pag. 284-290, ISSN 1223-8139, 2004.
61. Istrate M., Guşă M., Bucă C., Advanced Technologies for SO2 Scrubbing, Buletinul Institutului Politehnic Iaşi, Tomul L(LIV), Fasc. 5A, pag. 348-353, ISSN 1223-8139, 2004.
62. Bucă C., An Analysis of Overhead Electric Lines Lightning Behaviour, Buletinul Institutului Politehnic Iaşi, Tomul L(LIV), Fasc. 5A, pag. 278283, ISSN 1223-8139, 2004.
63. Guşă M., Istrate M., Bucă C., Analiza comparativă a protecţiei realizate de descărcătoarele cu rezistenţă variabilă în staţiile de transformare, Revista Energetica, vol. 51, nr. 10, pag. 428 – 432, ISSN 1453-2360, 2003.
64. Istrate M., Guşă M., Bucă C., Patriciu A., Didactical software dedicated to overhead line's behaviour analysis on lightning overvoltages, Buletinul Ştiinţific al Universităţii "Politehnica" Timişoara, Tom 48(62), fasc.1-2, pag. 287-295, ISSN 1582-7194, 2003.http://www.et.upt.ro/cee/ro/psc/works03/index.htm
65. Istrate M., Guşă M., Patriciu A., Miron A., Didactical Software for High Voltage Networks' Classical Distance Relaying Coordination, Buletinul Institutului Politehnic Iaşi, Tom XLVIII (LII), fasc.5A, pag 211-214, ISSN 1223-8139, 2002.
66. Guşă M., Istrate M., Popa T., Lightning Overvoltages Protection of Transfformer Points Connected to Overhead Lines Via Cable Segments, Buletinul Institutului Politehnic Iaşi, Tom XLVIII (LII), fasc.5A, pag.221-226, ISSN 1223-8139, 2002.
67. Guşă M., Istrate M., Spatariu A., Surge Arresters to Overhead Line Protection Against Lightning Overvoltages, Buletinul Institutului Politehnic Iaşi, Tom XLVIII (LII), fasc.5A, pag 215-220, ISSN 1223-8139, 2002.
68. Miron A, Viziteu I., Istrate M., Guşă M., Some Considerations Regarding The Differential Busbar Protections Fulfilled By Analogical And Numerical Relays And Conventional Current Transformers Effects On Their Operating, Buletinul Institutului Politehnic Iaşi, Tom XLVIII (LII), fasc.5A, pag.257-262, ISSN 1223-8139, 2002.
69. Guşă M., Istrate M., Gavrilaş N., Viziteu I., Aspecte privind protecţia staţiilor de transformare împotriva loviturilor directe de trăsnet, Buletinul Ştiinţific al Universităţii "Politehnica" Timişoara, Tom 46(60), fasc. 1-2, pag. 187-192, ISSN 1582-7194, 2001.
70. Guşă M., Istrate M., Gavrilaş N., Ciobanu C., Solicitarea izolaţiei posturilor de transformare datorită supratensiunilor de trăsnet, Revista Producerea transportul şi distribuţia energiei electrice şi termice, nr.4 /2001, pag. 32-37, ISSN 1224-1113, (publicată şi în volumele de lucrări ale Simpozionului Naţional al Reţelelor Electrice, Iaşi, 2000, vol. II, pag. 396-402).
71. Istrate M., Guşă M., Gavrilaş N., Ciobanu C., EMTP Study of Internal Overvoltages in Very High Voltage Networks with Compact Lines , Buletinul Institutului Politehnic Iaşi, Tom XLV (IL), Fasc.5B, pag. 322-325, ISSN 1223-8139, 1999.
72. Gavrilaş N., Istrate M., Guşă M., Ciobanu C., Concerning The Protective zones of The Vertical Lightning Protection Systems usig The "Rolling Sphere" Method, Buletinul

Ştiinţific al Universităţii "Politehnica"Timişoara, Tom 44 (58), Fasc. 2, vol. I, pag. 6166, ISSN 1582-7194, 1999.

73. Asaftei C., Gabura A., Guşă M., Gavrilaş N., Istrate M., Sistem inteligent pentru supravegherea şi localizarea defectelor în reţelele electrice de distribuţie aeriene, Revista Energetica, nr. 8 – 9, pag. 364 – 368, ISSN 1453-2360, 1999.
74. Istrate M., Guşă M., Miron Al., Asaftei C., Gavrilaş N., A method to generate information transmitting signals in overhead medium voltage networks, Buletinul Ştiinţific al Universităţii "Politehnica" Timişoara, tom 42(56), Fasc.2, vol. III, pag. 107112, ISSN 1582-7194, 1997.
75. Guşă M., Istrate M., Gavrilaş N., Asaftei C., Popa C., Single-phase faults detection in compensated networks using zero-sequence current phase measurement, Buletinul Ştiinţific al Universităţii "Politehnica" Timişoara, tom 42(56),Fasc.2, vol. II, pag. 97– 102, ISSN 1582-7194, 1997.
76. , Asaftei C., Gavrilaş N., Contribuţii la creşterea observabilităţii reţelelor aeriene de medie tensiune, Revista Energetica, seria B, nr.6/1995, pag. 288-293, ISSN 1453-2360, 1995.
77. Istrate M., Guşă M., Gavrilaş N., Asaftei C., Popa C., Possibility of Simulating the Corona Discharge under Transient Regimes determinated by the Switchings in the UHV Networks, Buletinul Institutului Politehnic Iaşi, tom XLI(XLV), Fasc.5, secţia III, pag.527-534, ISSN 1223-8139, 1995.
78. Istrate M., Gavrilaş N., Guşă M., Asaftei C., Popa C., Modelling the Influence of the Corona on the Level of the Temporary Overvoltages, Buletinul Institutului Politehnic Iaşi, tom XLI(XLV), Fasc.5, secţia III, pag.519-526, ISSN 1223-8139, 1995.
79. Guşă M., Istrate M., Asaftei C., Gavrilaş N., Grigoruţ M., Surtensions transitoires creés par les défauts monophasés simples et répétés dans les réseaux moyenne tension, Buletinul Institutului Politehnic Iaşi, tom XLI(XLV), Fasc.5, secţia III, pag.513-518, ISSN 1223-8139, 1995.
80. Asaftei C., Guşă M., Istrate M., Gavrilaş N., Sur la signalisation à distance des courtcircuits dans les réseaux de moyenne tension, Buletinul Institutului Politehnic Iaşi, tom XLI(XLV), Fasc. 1-2, secţia III, pag. 111-116, ISSN 1223-8139, 1995.
81. Asaftei C., Gavrilaş N., Guşă M., Istrate M., Quelques aspects théoriques concernant la propagation des signaux émis par les indicateurs de défaut sur les lignes moyenne tension, Buletinul Institutului Politehnic Iaşi, tom XL(XLIV), Fasc.1-4, secţia III, pag. 111-114, ISSN 1223-8139, 1994.
82. Gavrilaş N., Asaftei C., Guşă M., Istrate M., General Considerations on the Detecting and the Location of the Short-Circuits on Overhead Distribution Lines, Buletinul Institutului Politehnic Iaşi, tom XL(XLIV), Fasc.1-4, secţia III, pag. 123-126, ISSN 1223-8139, 1994.
83. Asaftei C., Guşă M., Gavrilaş N., Istrate M., Construcţia şi funcţionarea unui dispozitiv de semnalizare a defectelor pe linii electrice aeriene de medie tensiune, Revista Energetica, nr.6-B/1992, pag.282-286, ISSN 1453-2360, 1992.
84. Asaftei C., Guşă M., Gavrilaş N., Istrate M., Sur la sensibilité d'un indicateur local des courcircuits pour réseaux aériens, Buletinul Institutului Politehnic Iaşi, tom XXXVIII (XLII), Fasc. 1-4, secţia III, pag.91-97, ISSN 1223-8139, 1992.
85. Guşă M., Asaftei C., Gavrilaş N., Istrate M., Contribuţii privind semnalizarea locală a scurtcircuitelor în reţelele electrice aeriene de medie tensiune, Revista Energetica, nr.1012/1990, pag.425-429, ISSN 1453-2360, 1990.(http://www.engineeringvillage.org/; Database – Inspec)

I. ***Lucrări ştiinţifice publicate în volumele conferinţelor.***

1.Dragos Machidon; Marcel Istrate; Constantin Razvan Beniuga, Wind Speed Estimation based on Power Law Extrapolation Technique, Paper ID:72, Proceedings of the 13th International Conference and Exposition on Electrical and Power Engineering, EPEi 2024, October 2024, Iasi, Romania, IEEE Conferences, https://ieeexplore.ieee.org/document/10758142.
2.Paul-Sergiu Popa; Răzvan Beniugă; Marcel Istrate, Comparing the concept of Nearly Zero-Energy Buildings between EU countries in terms of required renewable energy share, Paper ID:48, Proceedings of the 13th International Conference and Exposition on Electrical and Power Engineering, EPEi 2024, October 2024, Iasi, Romania, IEEE Conferences, https://ieeexplore.ieee.org/document/10758182
3.Constantin Razvan Beniuga; Popa Sergiu-Paul; Oana Cristina Beniuga; Dragos Machidon; Florin C Băiceanu; Dumitru-Marcel Istrate, Cost-effectiveness and sustainability analysis of a NZEB house, Paper ID:64, Proceedings of the 13th International Conference and Exposition on Electrical and Power Engineering, EPEi
4.2024, October 2024, Iasi, Romania, IEEE Conferences, https://ieeexplore.ieee.org/document/10758113
5.Ioan Viorel Banu; Fadila Barkat; Marcel Istrate; Josep M. Guerrero; Nicolay Mihailov; Boris I Evstatiev; Nikolay Valov; George Culea; Petru Gabriel Puiu, Three-Phase GridConnected Electric Vehicles Charging Station with Photovoltaic Panels, Paper ID:131, Proceedings of the 13th International Conference and Exposition on Electrical and Power Engineering, EPEi 2024, October 2024, Iasi, Romania, IEEE Conferences, https://ieeexplore.ieee.org/document/10758069
6.Razvan BENIUGA, Oana BENIUGA, Dragos MACHIDON, Florin C. BAICEANU, Marcel ISTRATE, NZEB Compliance Principles in Romania for Residential Buildings, Modern Power Systems Conference, 10th Edition, Cluj-Napoca, 21st - 23rd of June 2023, https://ieeexplore.ieee.org/xpl/conhome/10187192/proceeding
7.Dragos MACHIDON, Marcel ISTRATE, Razvan BENIUGA, An Application of LIDAR Technology for Wind Speed Measurement, Modern Power Systems Conference, 10th Edition, Cluj-Napoca, 21st - 23rd of June 2023, https://ieeexplore.ieee.org/xpl/conhome/10187192/proceeding
8. Georgiana Dunca, Diana Maria Bucur, Tor Haakon Bakken, Atle Harby, Elena Pummer, Marcel Istrate, Costel Boariu,Costica Roman, Mapping Sites for Retrofitting non-Powered Dams in Romania as Renewable Power Sources, THE 13th INTERNATIONAL SYMPOSIUM ON ADVANCED TOPICS IN ELECTRICAL ENGINEERING, March 23-25, 2023, Bucharest, Romania, ATEE https://ieeexplore.ieee.org/xpl/conhome/10108076/proceeding
9.Machidon, Dragos; Istrate, Marcel, Impact of the Electric Vehicle Sector's Development on Romania's National Power System, EPE 2022, ID 80, https://ieeexplore.ieee.org/search/searchresult.jsp?newsearch=true&contentType=conferences&queryText=Impact%20of%20the%20Electric%20Vehicle%20Sector%E2%80%99s%20Development%20on%20Romania%E2%80%99s%20National%20Power%20Syst em
10. Dragos Machidon, Marcel Istrate, Analysis of Romania's Transmission Power Lines Behavior under Direct Lightning Strikes, ID 47, sesiunea PETD2, SIELMEN 2021, https://ieeexplore.ieee.org/search/searchresult.jsp?newsearch=true&contentType=conferences&queryText=Analysis%20of%20Romania%E2%80%99s%20Transmission%20Power%20Lines%20Behavior%20under%20Direct%20Lightning%20Strikes
11. Razvan BENIUGA, Oana BENIUGA, Florin C. BAICEANU, Marcel ISTRATE, The Influence of Feedwater Preheaters on the Power Plant Thermal Efficiency, 2021 9th

12. International Conference on Modern Power Systems MPS 2021, paper ID 038, 978-16654-3382-2/21/$31.00 ©2021 IEEE, DOI: 10.1109/MPS52805.2021.9492578, https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9492627
13. Razvan BENIUGA, Oana BENIUGA, Dragos MACHIDON, Marcel ISTRATE, Wind Power in Romania Energy Mix Towards Sustainable Development, 2021 9th International Conference on Modern Power Systems MPS 2021, paper ID 107, 978-16654-3382-2/21/$31.00 ©2021 IEEE, DOI: 10.1109/MPS52805.2021.9492578, https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9492673
14. Dragos MACHIDON, Marcel ISTRATE, Roxana OPREA, Razvan BENIUGA, Performance Analysis of Double-Axis Orientating Low Concentration Photovoltaic Systems, 2021 9th International Conference on Modern Power Systems MPS 2021, paper ID 024, 978-1-6654-3382-2/21/$31.00 ©2021 IEEE, DOI: 10.1109/MPS52805.2021.9492578, https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9492623
15. Anca-Teona S. SOLOMON, Marcel ISTRATE, Dragos MACHIDON, Study of Lightning Strokes on HV Overhead Power Lines, 2021 9th International Conference on Modern Power Systems MPS 2021, paper ID 066, 978-1-6654-3382-2/21/$31.00 ©2021 IEEE, DOI: 10.1109/MPS52805.2021.9492578, https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9492600
16. Dragos Machidon, Roxana Oprea, Istrate Marcel, Razvan Beniuga, Energy output increase by using a periodic orientation system for fixed photovoltaic panels, Paper ID:4062, Proceedings of the 10th International Conference and Exposition on Electrical and Power Engineering, EPE 2020, October 2020, Iasi, Romania, IEEE Conferences.
17. Claudiu Buca, Marcel Istrate, Implementation of the Automatic Line Reclosure using PLC and Petri Nets Modelling, Paper ID:3968, Proceedings of the 10th International Conference and Exposition on Electrical and Power Engineering, EPE 2020, October 2020, Iasi, Romania, IEEE Conferences
18. Alexandru Salceanu, Silviu Vornicu, Eduard Lunca, Marcel Istrate, Influence of High Voltage Bundle Configurations on Human Exposure, Proceedings of the 10th International Conference and Exposition on Electrical and Power Engineering, EPE 2020, October 2020, Iasi, Romania, IEEE Conferences
19. D.D. Lucache, M.A. Boukli Hacene, Marcel Istrate, Lotfi Karaouzene, Energy Retroffiting of a Faculty Building:Difference between simulation and implementation, Conference Alternative Energy Source, Materials & Technologies (AESMT ‘ 20), Vol, 2, pp.47-86, 2020, ISSN2603-364X
20. Dragoș Machidon, Roxana Oprea, Marcel Istrate, Power output experimental evaluation of fixed photovoltaic systems when using adjustable tilt angles, 2019 International Conference on Electromechanical and Energy Systems (SIELMEN), Year: 2019 | Conference Paper | Publisher: IEEE, https://ieeexplore.ieee.org
21. Roxana Oprea, Marcel Istrate, Dragos Machidon, Razvan Beniuga, Determination of Optimum Tilt Angle for Fixed Photovoltaic Modules in Iasi, Romania, Proceedings of the 8th International Conference on Modern Power Systems, MPS 2019, 21-23 May 2019, ISBN: 978-1-7281-0750-9, Cluj-Napoca, Romania, DOI:10.1109/MPS.2019.8759661.
22. Roxana Oprea, Marcel Istrate, Dragos Machidon, Analysis of V-trough reflector's geometry influence on Low Concentration Photovoltaic Systems, Proceedings of the 8th International Conference on Modern Power Systems, MPS 2019, 21-23 May 2019, ISBN: 978-1-7281-0750-9, Cluj-Napoca, Romania, DOI: 10.1109/MPS.2019.8759789.

23. Marian Dragomir, Anamaria Iamandi, Marcel Istrate, Alin Dragomir, Dragos Machidon, Estimation of Line Zero Sequence Impedance using Real Field Fault Data for Fault Location Application, Proceedings of the 8th International Conference on Modern Power Systems, MPS 2019, 21-23 May 2019, ISBN: 978-1-7281-0750-9, Cluj-Napoca, Romania, DOI: 10.1109/MPS.2019.8759762.
24. Teona Solomon, Marcel Istrate, Dragos Machidon, Case study on the protection of power stations against ligthning strokes, Proceedings of the 8th International Conference on Modern Power Systems, MPS 2019, 21-23 May 2019, ISBN: 978-1-7281-0750-9, Cluj-Napoca, Romania, DOI: 10.1109/MPS.2019.8759787.
25. Liviu Eduard PUNGARU, Georgiana A. MORARU, Marcel ISTRATE, Energy Management on Water Supply Systems, 2019 International Conference on Modern Power Systems (MPS), Year: 2019, Conference Paper | Publisher: IEEE, https://ieeexplore.ieee.org
26. Georgiana A. MORARU, Liviu Eduard PUNGARU, Marcel ISTRATE, Lighting System of a Commercial Space in an Energy Efficiency Approach, 2019 International Conference on Modern Power Systems (MPS), Year: 2019, Conference Paper | Publisher: IEEE, https://ieeexplore.ieee.org
27. Machidon D., Istrate M., Oprea R., Analysis of the Renewable Energy Sector's Development Impact on the CO2 Emissions in Romania, Proceedings of the 10th International Conference and Exposition on Electrical and Power Engineering, EPE 2018, 18-19 October 2018, Iasi, Romania, pp.578-582.
28. Oprea R., Istrate M., Machidon D., Dragos Achiteni, Efficiency Analysis of Solar Radiation Concentration Technique for a Low Concentration Photovoltaic System, Proceedings of the 10th International Conference and Exposition on Electrical and Power Engineering, EPE 2018, 18-19 October 2018, Iasi, Romania, pp. 589-593.
29. Oprea R., Istrate M., Machidon D., Beniuga R., Experimental Evaluation of the Optimum Tilt Angle for Fixed Photovoltaic Modules, Proceedings of the 10th International Conference and Exposition on Electrical and Power Engineering, EPE 2018, 18-19 October 2018, Iasi, Romania, pp. 594-598.
30. Beniuga R., Istrate M., Beniuga O., Machidon D., Educational Resource for Wind Turbine Behaviour Assessment, Proceedings of the 10th International Conference and Exposition on Electrical and Power Engineering, EPE 2018, 18-19 October 2018, Iasi, Romania, pp.395-398.
31. Trofinov A., Istrate M., New Techniques Used to Implement Transformation Stations and Protection Functions in Transformation Stations, Proceedings of the 10th International Conference and Exposition on Electrical and Power Engineering, EPE 2018, 18-19 October 2018, Iasi, Romania, pp. 296-298.
32. Trofinov A., Istrate M., New Solution for Impedance Protection Intertripping Schemes Implementation, Proceedings of the 10th International Conference and Exposition on Electrical and Power Engineering, EPE 2018, 18-19 October 2018, Iasi, Romania, pp. 299-302.
33. Dragomir M., Istrate M., Dragomir A., Review of Error Sources in One-End Data Impedance-Based Fault Location Algorithms, Proceedings of the 10th International Conference and Exposition on Electrical and Power Engineering, EPE 2018, 18-19 October 2018, Iasi, Romania, pp. 315-320.
34. Mihaes S., Istrate M., Influence of Photovoltaic Power Plants on Single-Phase Faults in Medium Voltage Electrical Networks, Proceedings of the 10th International Conference and Exposition on Electrical and Power Engineering, EPE 2018, 18-19 October 2018, Iasi, Romania, pp. 433-437.

35. Elia Y., Istrate M., Lucache D., Nita V., Technical risks for solar tower CSP plant: A study case, 2017 International Conference on Electromechanical and Power Systems (SIELMEN), Year: 2017, Pages: 327 – 333, IEEE Conferences, https://ieeexplore.ieee.org/search/searchresult.jsp?newsearch=true&queryText=Istrate
36. Iftime S., Istrate M., Special situations regarding the transition of district heating systems. Technical and economic analysis regarding the use of different technologies in transition sources, 2017 International Conference on ENERGY and ENVIRONMENT (CIEM), Year: 2017, Pages: 528 – 532, IEEE Conferences.
37. Moraru G., Istrate M., Elements of energy efficiency in water supply systems. A case study, 2017 International Conference on Modern Power Systems (MPS), Year: 2017, Pages: 1 – 4, IEEE Conferences.
38. Beniuga R., Istrate M., Beniuga O., Crowbar protection impact on wind farm behaviour during grid disturbance, Proceedings of the 7th International Conference on Modern Power Systems, MPS 2017, 6-9 June 2017 Cluj-Napoca, Romania, ISBN 978-1-50906565-3, DOI: 10.1109/MPS.2017.7974374, Pages: 1 – 4, IEEE Conferences.
39. Elia Y., Istrate M., Lucache D., Nita V., "Challenges in the Practical Implementation of Concentrating Solar Thermal Power Projects", Proceeding of 10TH International Conference on Sustainable Energy and Environmental Protection. Vol. Renewable Energy Sources. June 27TH – 30TH, 2017, Bled, Slovenia. University of Maribor Press, ISBN-13: 978-961-286-061-5, DOI: https://doi.org/10.18690/978-961-286-061-5, pp.527-537 (ISI Proceedings Thomson Reuters), Date of first publication: 2017-07-05, Series: SEEP.
40. Oprea R., Istrate M., Machidon D., Electricity output analysis of a small photovoltaic power plant, Proceedings of the 7th International Conference on Modern Power Systems, MPS 2017, 6-9 June 2017 Cluj-Napoca, Romania, ISBN 978-1-5090-6565-3, DOI: 10.1109/MPS.2017.7974374, INSPEC Accession Number: 17028390, WOS:000428462600005.
41. Oprea R., Istrate M., Machidon D., Assessments on the ENERED photovoltaic power plant electricity production, Proceedings of the 7th International Conference on Modern Power Systems, MPS 2017, 6-9 June 2017 Cluj-Napoca, Romania, ISBN 978-1-50906565-3, DOI: 10.1109/MPS.2017.7974375, INSPEC Accession Number: 17028436, . Accession Number: WOS:000428462600006.
42. Elia Y., Istrate M., Lucache D., Nita V., Photovoltaic Luz Flat Tracker Power Plants, Proceedings of the 9th International Conference and Exposition on Electrical and Power Engineering, EPE 2016, 20-22 October 2016, Publisher IEEE, 345 E 47TH ST, NEW YORK, NY 10017 USA, Accession Number: WOS: 000390706300103, ISBN:978-15090-6128-0, ISSN: 2471-6855, Pages: 514 – 519.
43. Dragomir M., Miron A., Istrate M., Dragomir A., A Solution to Obtain Precise Fault Location Using a Two-End Data Algorithm, Proceedings of the 9th International Conference and Exposition on Electrical and Power Engineering, EPE 2016, 20-22 October 2016, Publisher IEEE, 345 E 47TH ST, NEW YORK, NY 10017 USA, Accession Number: WOS: 000390706300103, ISBN:978-1-5090-6128-0, ISSN: 24716855, Pages: 703 – 706.
44. Machidon D., Istrate M., Operating regime efficiency analysis of a small photovoltaic power plant, Proceedings of the 9th International Conference and Exposition on Electrical and Power Engineering, EPE 2016, 20-22 October 2016, Iasi, Romania, Accession Number: WOS:000390706300172, ISBN:978-1-5090-6128-0, pp.880-883.
45. Machidon D., Istrate M., Photovoltaic power plant on the ENERED research platform of the electrical engineering faculty of Iasi, Proceedings of the 9th International Conference and Exposition on Electrical and Power Engineering, EPE 2016, 20-22 October 2016, Iasi,

Romania, Accession Number: WOS:000390706300173, ISBN:9781-5090-6128-0, pp.884-887.
46. Dragos-Lucian Machidon, Istrate M., Implementation of the Attractive Radius Method for the Estimation of the Lightning Protection Zones for a 110 kV Power Substation, Proceedings of the 8th International Conference and Exposition on Electrical and Power Engineering, EPE 2014, 16-18 October 2014, Iasi, Romania, ISBN 978-1-4799-5849-8, IEEE Catalog Number CFP1447S-USB, Accession Number: WOS:000353565300181, pp.989-994.
47. Dragomir M., Miron A., Istrate M., Dragomir A., A review of impedance-based fault location approaches for transmission lines, Electrical and Power Engineering (EPE), 2014 International Conference and Exposition, DOI: 10.1109/ICEPE.2014.6970063, WOS:000353565300186, Pages: 1021 – 1024.
48. Banu I, Istrate M., Machidon D., Pantelimon R., Study regarding modeling photovoltaic arrays using test data in matlab/simulink, University Politehnica Of Bucharest Scientific Bulletin Series C-Electrical Engineering And Computer Science, Volume: 77 Issue: 2 Pages: 227-234, Published: 2015, ISSN: 2286-3540, eISSN: 2286-3559, Accession Number: WOS:000421799900019.
49. Banu I., Istrate M., Diaconu C., Study on three-phase photovoltaic systems under grid faults, Electrical and Power Engineering (EPE), 2014 International Conference and Exposition, DOI: 10.1109/ICEPE.2014.6970086, WOS:000353565300206, Pages: 1132 - 1137,
50. Banu I., Istrate M., Islanding Prevention Scheme for Grid-Connected Photovoltaic Systems in Matlab/Simulink, 49th International Universities Power Engineering Conference (UPEC) Location: Cluj Napoca, ROMANIA Date: SEP 02-05, 2014, DOI: 10.1109/UPEC.2014.6934698, WOS: 000364087800100, ISBN:978-1-4799-6557-1.
51. Pungaru L., Istrate M., Diaconu C., Management and energy efficiency study case concerning CHP implementation, Electrical and Power Engineering (EPE), 2014 International Conference and Exposition, DOI: 10.1109/ICEPE.2014.6970064, WOS:000353565300187, Pages: 1025 - 1029,
52. Machidon D., Istrate M., Banu I., Algorithm Based On Attractive Radius For Estimating The Lightning Protection Efficiency, 14th International Conference on Optimization of Electrical and Electronic Equipment OPTIM 2014 May 22-24, 2014,
53. Brasov, Romania, Book of Abstracts, pp. 5, pp. 27-32, DOI: 10.1109/OPTIM.2014.6850883 Publisher: IEEE
54. Banu I, Istrate M., Machidon D., Pantelimon R., A study on anti-islanding detection algorithms for grid-tied photovoltaic systems, 14th International Conference on Optimization of Electrical and Electronic Equipment OPTIM 2014 May 22-24, 2014, Brasov, Romania, Book of Abstracts, pp. 109, pp. 655-660, DOI: 10.1109/OPTIM.2014.6850940, Publisher: IEEE
55. Banu I., Beniuga R., Istrate M., Comparative Analysis of the Perturb-and-Observe and Incremental Conductance MPPT Methods, Published in Advanced Topics in Electrical Engineering (ATEE), 2013 8th International Symposium, May, Bucharest, pp.1-4, Print ISBN: 978-1-4673-5979-5, Print ISBN: 978-1-4673-5979-5, Digital Object Identifier : 10.1109/ATEE.2013.6563483,
56. Machidon D. Istrate M., A new model based on electro-geometrical theory for estimating the lightning protection zones, Published in Advanced Topics in Electrical Engineering (ATEE), 2013 8th International Symposium, May, Bucharest, pp.1-5, Print ISBN: 978-1-4673-5979-5, Digital Object Identifier : 10.1109/ATEE.2013.6563470

57. Grigoras Gh., Istrate M., Scarlatache F., Electrical energy consumption estimation in water distribution systems using a clustering based method, Published in Electronics, Computers and Artificial Intelligence (ECAI), 2013 International Conference, Pitesti, Romania, Pp: 1 – 6, Print ISBN: 978-1-4673-4935-2,Digital Object Identifier : 10.1109/ECAI.2013.6636174
58. Machidon D., Istrate M., Gusa M., Tibuliac St., Lightning protection zones estimation for a power station using the elliptic model, Electrical and Power Engineering (EPE), 2012 International Conference and Exposition, Digital Object Identifier : 10.1109/ICEPE.2012.6463925, Print ISBN: 978-1-4673-1173-1, Pages: 225 – 230.
59. Lunca E., Istrate M., Salceanu Al., Tibuliac St., Computation of the magnetic field exposure from 110 kV overhead power lines, Electrical and Power Engineering (EPE), 2012 International Conference and Exposition, Digital Object Identifier : 10.1109/ICEPE.2012.6463925, Print ISBN: 978-1-4673-1173-1, Pages: 628 – 631,
60. Banu I.V., Istrate M., Modeling of maximum power point tracking algorithm for photovoltaic systems, Electrical and Power Engineering (EPE), 2012 International Conference and Exposition, Digital Object Identifier : 10.1109/ICEPE.2012.6463925, Print ISBN: 978-1-4673-1173-1, Pages: 953 – 957,
61. Nemes C., Istrate M., Probabilistic assessment of annual energy production from wind farms, 35th International Conference on Fundamentals of Electrotechnics and Circuit Theory (35th IC-SPETO), 23-26.05.2012, Gliwice-Ustron, Poland, pp. 71-72, ISBN 978-83-85940-34-0.
62. Nemes C., Istrate M., Effects of wind profile in the wind energysystems performance, DEMSEE 2011, 6th International Workshop on Deregulated Electricity Market Issues in South-Eastern Europe, 20.-21. September, 2011, Bled, Slovenia, CD-ROM, ISBN 978961-243-183-9, http://www.demsee2011.org/Programme.htm
63. Istrate M., Varvara V., Gusa M., Machidon D., The Effect of the Automatic Singlephased Reclosing on the Fault Location Error, Proceedings of the 6th International Conference on Electrical & Power Engineering (EPE 2010), Vol. I, pp. 121-123, ISBN vol.I:978-606-13-077-8, ISBN general: 978-606-13-0079-2
64. Machidon D., Istrate M., Gusa M, Dragomir M., Power Station Buildings Protection Against Direct Lightning Strokes, Proceedings of the 6th International Conference on Electrical & Power Engineering (EPE 2010), Vol. I, pp. 131-133, ISBN vol.I:978-60613-077-8, ISBN general: 978-606-13-0079-2.
65. Dragomir M., Istrate M., Gusa M., Machidon D., Voltage Phasor Estimation Techniques Used in Fault Location, Proceedings of the 6th International Conference on Electrical & Power Engineering (EPE 2010), Vol. I, pp. 194-197, ISBN vol.I:978-60613-077-8, ISBN general: 978-606-13-0079-2
66. Varvara V., Istrate M., About the Power factor Compensation in the Networks thar Supply Non-Linear Receivers, Proceedings of the 6th International Conference on Electrical & Power Engineering (EPE 2010), Vol. I, pp. 221-223, ISBN vol.I:978-60613-077-8, ISBN general: 978-606-13-0079-2
67. Varvara V., Istrate M., Some Aspects Regarding the Influence of the Non-Symmetrical Receivers upon the Quality of the Electric Energy, Proceedings of the 6th International Conference on Electrical & Power Engineering (EPE 2010), Vol. I, pp. 224-226, ISBN vol.I:978-606-13-077-8, ISBN general: 978-606-13-0079-2
68. Varvara V., Istrate M., Aspects Regarding Power Quality In Networks Operating Under Non-Symmetrical Conditions, 33-th International Conference on Fundamentals of

Electrotechnics and Circuit Theory, Gliwice, Polonia, IC-SPETO 2010, pag. 39-40, ISBN 978-83-85940-32-6; publicată în extenso pe CD-ROM, 2010, (http://vls.icm.edu.pl).
69. Istrate M., Varvara V., Machidon D., Dragomir M., The Effect of The Automatic Reclosing on The fault Location in The Transmission Lines, Proceedings of The 7th National Conference on Industrial Energetics – With International Participation, pp. 183188, ISBN 978-606-527-050-3.
70. Dragomir M., Istrate M., Guşă M., Machidon D., Assessment of PS-based Method and Combined Iterative Algorithm with FCDFT for Elimination of The DC componet from fault Current, Proceedings of The 7th National Conference on Industrial Energetics – With International Participation, pp. 107-112, ISBN 978-606-527-050-3.
71. Machidon D., Istrate M., Guşă M., Dragomir M., Rolling Sphere Method Application to 400 kV Overhead Line, Proceedings of The 7th National Conference on Industrial Energetics – With International Participation, pp. 127-130, ISBN 978-606-527-050-3.
72. Hriscu I., Guşă M., Istrate M., Some Aspects Concerning The Lightning Behaviour of Overhead Lines, Proceedings of The 7th National Conference on Industrial Energetics – With International Participation, pp. 121-126, ISBN 978-606-527-050-3.
73. Dragomir M., Istrate M., Guşă M., Asandei D., Machidon D., ATP/EMTP Model of the Protection based on Incremental Signals, Proceedings of The 7th International Conference of Electromechanical and Power Systems SIELMEM 2009, Vol. I, pp 63-66, ISBN 978-606-520-618-2, ISBN Vol I 978-606-520-617-5
74. Machidon D., Istrate M., Guşă M., Dragomir M., Protective Zone DimensionsDetermination Using Rolling Sphere, Proceedings of The 7th International Conference of Electromechanical and Power Systems SIELMEM 2009, Vol. I, pp 67-70, ISBN 978-606-520-618-2, ISBN Vol I 978-606-520-617-5
75. Hriscu I., Guşă M., Istrate M., Lightning Stroke Against Overhead Electric Lines: A Comparison Between Analytical and Simulation Methods of Study, 32-th International Conference on Fundamentals of Electrotechnics and Circuit Theory, Gliwice, Polonia, IC-SPETO 2009, pp. 85-86, ISBN 978-83-85940-30-2; publicată în extenso pe CDROM, 2009 (http://vls.icm.edu.pl).
76. Varvara V., Istrate M., Active Powers On Harmonics And On Symmetrical Components In Electric Networks, 32-th International Conference on Fundamentals of Electrotechnics and Circuit Theory, Gliwice, Polonia, IC-SPETO 2009, pag. 93-94, ISBN 978-83-85940-31-9; publicată în extenso pe CD-ROM, 2009, (http://vls.icm.edu.pl).
77. Istrate M., Guşă M., Tibuliac S., Assesment of fault Location Algorithms in Transmission Grids, IEEE Bucharest PowerTech 2009, IEEE Catalog number: CFP01895-CDR, ISBN 978-1-4244-2235-7, Library of Congress: 2008901840.
78. Istrate M, Gavrilaş M., Istrate C., Ursulean R., Assessment of Two Double-end Data fault Location Algorithms in Transmission Grids using ATP Simulations, Proceedings of the 9th WSEAS/IASME International Conference on Electric Power Systems, High Voltage, Electric Machines (POWER ’09), pp. 109-114, Publisehd by WSEAS Press (www.wseas.org) ISSN: 1790-5117, ISBN: 978-960-474-130-4
79. Istrate M., Guşă M., ATP-Models Double Terminal data Fault Location in Transmission Grids, 31-th International Conference on Fundamentals of Electrotechnics and Circuit Theory, Gliwice, Polonia, IC-SPETO 2008, pag. 85-86, ISBN 978-8385940-30-2; publicată în extenso pe CD-ROM. (http://vls.icm.edu.pl).
80. Istrate M., Guşă M., ATP-Model of a Faul Locator for Transmission Lines, Proceedings of The 7th International Worls Energy System Conference, 2008, Iasi, Romania,

Paper B083, Section I, 5 pages, Published on Conference's CD-ROM, ISSN 1198-0729 (CIWES Canada).
81. Hriscu I., Guşă M., Istrate M., Analysis of Overhead Lines Behavior To Direct Lightning Strokes, Proceedings of The 7th International Worls Energy System Conference, 2008, Iasi, Romania, Paper B153, Section I, 6 pages, Published on Conference's CD-ROM, ISSN 1198-0729 (CIWES Canada)
82. Gavrilas M., Istrate M., Ivanov O., Estimation of Fundamental Frequency Components of Voltage and Current for Digital Distance Relays, 30-th International Conference on Fundamentals of Electrotechnics and Circuit Theory, Gliwice, Polonia, IC-SPETO 2007, pag. 129-130, ISBN 978-83-85940-29-6; publicată în extenso pe CD-ROM., 2007, (http://www.icspeto. polsl.pl/download/speto-inspec.doc - 6 puncte, http://vls.icm.edu.pl).
83. Temneanu C., Istrate M., Fast Neural Network Based Fault Location Modules used in Distance Relays, 30-th International Conference on Fundamentals of Electrotechnics and Circuit Theory, Gliwice, Polonia, IC-SPETO 2007, pp. 219-220, ISBN 978-83-85940-29-6; 2007, publicată în extenso pe CD-ROM. (http://www.icspeto.polsl.pl/download/speto-inspec.doc - 6 puncte, http://vls.icm.edu.pl).
84. Istrate M., Guşă M., Hriscu I., ATP Models of Impedance Relays as Fault Locators in VHV Grids on Basis on Single End data Algorithms, 30-th International Conference on Fundamentals of Electrotechnics and Circuit Theory, Gliwice, Polonia, IC-SPETO 2007, pp. 229-230, ISBN 978-83-85940-29-6; publicată în extenso pe CD-ROM, 2007, (http://www.icspeto. polsl.pl/download/speto-inspec.doc - 6 puncte, http://vls.icm.edu.pl).
85. Istrate M., Guşă M., ATP Analysis of Lightning's Direct Strokes in Very High Voltage Overhead Lines, 29-th International Conference on Fundamentals of Electrotechnics and Circuit Theory, Gliwice, Polonia, IC-SPETO 2006, Vol. II, pp. 605-608, ISBN-10: 83-85940-28-6; ISBN-13: 978-83-85940-28-9, (http://www.icspeto.polsl.pl/download/speto-inspec.doc, http://vls.icm.edu.pl).
86. Guşă M., Istrate M., Protection of Overhead Lines Against Lightning with MetalOxide Arresters, 29-th International Conference on Fundamentals of Electrotechnics and Circuit Theory, Gliwice, Polonia, IC-SPETO 2006, Vol. I, pp. 179-182, ISBN-10: 8385940-28-6; ISBN-13: 978-83-85940-28-9 ((http://vls.icm.edu.pl)).
87. Istrate M., Guşă M., Bucă C. ATP Approach of HVAC Overhead Lines' Behavior at Direct Lightning Strokes, The 5-th International Conference on Electromecanical and Power Systems, SIELMEN 2005, Chisinau, Vol.1, pp.402-405, ISBN 973-716-208-0; 973-716-209-9.
88. Istrate M., Guşă M., Bucă C., An Analysis of Hybrid and Integrated Technologies to Control Fossil Fuels' Combustion Air Pollution, The 5-th International Conference on Electromecanical and Power Systems, SIELMEN 2005, Chisinau, Vol. 2, pp.739-742, ISBN 973-716-208-0; 973-716-230-7.
89. Guşă M., Istrate M., Bucă C., Comparative Study Regarding Overhead Lines' Behavior at Direct Lightning Strokes, The 5-th International Conference on Electromecanical and Power Systems, SIELMEN 2005, Chisinau, Vol.1, pp.387-390, ISBN 973-716-208-0; 973-716-209-9.
90. Bucă C., Guşă M., Istrate M., Application of The Electrogeometrical Method for The Protection of a Substation Against The Lightning, The 5-th International Conference on Electromecanical and Power Systems, SIELMEN 2005, Chisinau, Vol.1, ppg.406-409, ISBN 973-716-208-0; 973-716-209-9.

91. Istrate M., Guşă M., Bucă C., Analiză prin simulare ATP a nivelului supratensiuniulor de comutaţie într-o reţea de transport a energiei electrice, Conferinţa Internaţională Energetica Moldovei - 2005, Chisinau, sept 2005, A21, pag. 226-235, Institutul de Energetică al Academiei de Ştiinţe a Moldovei, ISBN 9975-62-145-7.
92. Guşă M., Istrate M., Bucă C., Partial Protection of Overhead Lines with Metal-Oxide Arresters, Lucrările Conferinţei Internaţionale Energie - Mediu, CIEM 2005, Bucureşti, Section I, pag. 1.60-1.65, Editura Universul Energiei.
93. Guşă M., Istrate M., Bucă C., Influence of Surge Arrester Parameters on Overhead Lines Protection Against Lightning Strokes, Proceedings of 7th International Conference of Applied and Theoretical Electricity ICATE 2004, pag.270-275, Editura Universitaria, Craiova, ISBN 973-8043-554-4.
94. Istrate M., Guşă M., Bucă C., In Furnace Reduction of NOx Emissons of Coal Fired Power Plants, The 4-th International Conference on Electromecanical and Power Systems, SIELMEN 2003, Chisinau, Vol. I, pp. 247-250, ISBN 9975-9704-9-4; 99759771-0-3.
95. Guşă M., Istrate M., Bucă C., Metal Oxide Arresters on Overhead Lines, The 4-th International Conference on Electromecanical and Power Systems, SIELMEN 2003, Chisinau, Vol. III, pag. 115-118, ISBN 9975-9704-9-4; 9975-9771-0-3.
96. Istrate M., Guşă M., Bucă C., The Perspectives of Particulate Filtering Systems, Lucrările Conferinţei Internaţionale Energie - Mediu, CIEM 2003, Bucureşti, Vol. II, pag.4-67 - 4.73, Editura Academiei Române, ISBN 973-27-1032-2.
97. Guşă M., Istrate M., Bucă C., Reabilitarea protecţiilor staţiilor de transformare împotriva trasnetelor, Lucrările Conferinţei Internaţionale Energie - Mediu, CIEM 2003, Bucureşti, Vol. I, pag.1-120 - 1-126, Editura Academiei Române, ISBN 973-27-1032-2.
98. Guşă M., Istrate M., Supratensiuni în linii de joasă tensiune transmise din LEA medie tensiune, A 3-a Conferinţă internaţională de sisteme electromecanice şi energetice SIELMEN 2001, Chişinău, oct. 2001, Vol II, pag.91 –95.
99. Asaftei C., Voinea E., Istrate M., Cu privire la analiza financiară, pe baza criteriului DRI, a soluţiei de retehnologizare a cazanelor de 420 t/h aferente CET, A 3-a Conferinţă internaţională de sisteme electromecanice şi energetice SIELMEN 2001, Chişinău, oct. 2001, Vol II, pag.19 –22.
100. Asaftei C., Istrate M., Guşă M., Gabură A., Cu privire la un sistem de semnalizare centralizat a defectelor de izolaţie pe LEA de medie tensiune, Universitatea Tehnică a Moldovei, Conferinţa Naţională de Energetică “CNE-M-2000”, Chişinău, 2000, Vol. I, pag. 196-199.
101. Asaftei C., Guşă M. Istrate M., Evoluţii în aplicarea metodei încercării şi erorii de identificare şi izolare a zonelor cu defect de izolaţie pe o linie electrică de medie tensiune, Universitatea Tehnică a Moldovei, Conferinţa Naţională de Energetică “CNEM-2000”, Chişinău, 2000, Vol. I, pag. 200-205.
102. Istrate M., Guşă M., Gavrilaş N., Ciobanu C., EMTP Study of Complex Unsymmetrical Faults in Distribution Networks, 22-st Seminar on Fundamentals of Electrotechnics and Circuit Theory, Gliwice, Polonia, 1999, pag. 383÷386, ISBN 83-85940-21-9.
103. Guşă M., Istrate M., Gavrilaş N., Ciobanu C., A Model Study of Lightning Overvoltages Transmission in Low Voltage Lines Through MV/LV Transformer Points, 22-st Seminar on Fundamentals of Electrotechnics and Circuit Theory, Gliwice, Polonia, 1999, pag. 369÷372, ISBN 83-85940-21-9.
104. Kiorsac M., Boshneaga V., Guşa M., Istrate M., Calculation and Analysis of Electromagnetic Transients at Short Circuits in the Line with Controlled Series Compensation,

Proceedings of the 3-rd International Conference “New Trends in Automation of Energetic Processes”, Technical University of Brno, Cehia, 1998, pag. 185-189.
105. Istrate M., Guşă M., Asaftei C., Gavrilaş N., Miron A., Low Frequency Signals for Remote Control in Distribution Networks, 21-st Seminar on Fundamentals of Electrotechnics and Circuit Theory, Gliwice, Polonia, 1998, pag. 477÷480, ISBN 8385940-20-0.
106. Istrate M., Gavrilaş N., Guşă M., Asaftei C., Phase-to-Phase overvoltages in VHV networks, Proceedings of The International Conference on Applied and Theoretical Electricity ICATE –1998, Craiova, 1996, vol.II, pag.117-122.
107. Guşă M., Istrate M., Gavrilaş N., Asaftei C., Martinaş E., The Selectivity of Zerosequence Current Protection in Underground Distribution Networks, International Conference on Applied and Theoretical Electricity ICATE –1998, Craiova, iunie 1998 – vol. II, pg. 317÷322
108. Gavrilaş N., Istrate M., Guşă M., Asaftei C., Supratensiuni temporare în reţele cu linii compacte de foarte înaltă tensiune, Lucrările simpozionului internaţional “Electro ‘96”, Chişinău, Editura Tehnică Chişinău, 1997, vol.II, pag.13 - 18.
109. Guşă M., Gavrilaş N., Istrate M., Asaftei C., Popa C., Posibilităţi de detectare a defectelor monofazate în reţele aeriene de medie tensiune, Lucrările simpozionului internaţional “Electro ‘96”, Editura Tehnică Chişinău, 1997, vol.II, pag.93 - 98.
110. Istrate M., Gavrilaş N., Guşă M., Asaftei C., Evaluation Method for Switching Overvoltages for Compact Three-phase Overhead Lines, Proceedings of Very High Voltage Networks Symposium, Sibiu 1995, vol. III, pag. 30-33.
111. Istrate M., Guşă M., Gavrilaş N., Asaftei C., Phase-to-Phase Switching Overvoltages for Compact Transmission Lines, Proceedings of Very High Voltage Networks Symposium, Sibiu 1995, vol. III, pag. 62-66.
112. Istrate M., Guşă M., Assessment of Two Single-end Fault Location Algorithms in an ATP Approach, Volumul Conferinţei SNET 2008, Universitatea Politehnica Bucureşti, pag. 305-310, ISBN 978-606-521-045-5, 2008.
113. Guşă M., Istrate M., Popa C., Brumă N., Riscul de avarie în staţiile de transformare datorită loviturilor de trăsnet, Al XVIII-lea simpozion naţional “Siguranţa în funcţionare a sistemului energetic” - SIG 2003, Oradea, septembrie 2003, pag.148-154.
114. Istrate M., Guşă M., Gavrilaş N., Popa Coculeana, Pachet de programe pentru calculul supratensiunilor temporare cu considerarea unor pierderi şi neliniarităţi, Al VII-
115. lea simpozion naţional de tehnica tensiunilor înalte, Craiova, octombrie 2001, pag.255260.
116. Guşă M., Istrate M., Gavrilaş N., Ciobanu C., Brumă N., Comportarea transformatoarelor de distribuţie la tensiune de impuls de trăsnet, Al VII-lea simpozion naţional de tehnica tensiunilor înalte, Craiova, octombrie 2001, pag.45-51.
117. Istrate M., Guşă M., Ciobanu C., Gavrilaş N., Miron A., Simularea EMTP a funcţionării unor protecţii din reţelele electrice, Simpozionul Naţional al Reţelelor Electrice, Iaşi, 2000, vol. I, pag. 645-654.
118. Gavrilaş N., Ciobanu C., Istrate M., Guşă M., Determinarea zonelor de protecţie ale unor sisteme de paratrăsnete verticale prin metoda mo-delării electrogeometrice, Simpozionul Naţional al Reţelelor Electrice, Iaşi, 2000, vol. I, pag. 655-658.
119. Gabură A., Asaftei C., Guşă M., Istrate M., Popa C., Sistem inteligent de monitorizare a defectelor pe liniile electrice de distribuţie, Simpozionul Naţional al Reţelelor Electrice, Iaşi, 2000, vol. II, pag. 555-559.

120. Istrate M., Guşă M., Gavrilaş N., Ciobanu C., Studiu prin simulare EMTP a supratensiunilor de comutaţie în reţele de transport a energiei electrice cu linii compacte, Volumul celui de al VI-lea Simpozion Naţional "Tehnica Tensiunilor Inalte", Bucureşti, 1999.
121. Guşă M., Istrate M., Gavrilaş N., Ciobanu C., Aspecte privind protecţia posturilor de transformare din liniile aeriene de distribuţie împotriva supratensiunilor de trăsnet, Volumul celui de al VI-lea Simpozion Naţional "Tehnica Tensiunilor Inalte", Bucureşti, 1999.
122. Gavrilaş N., Istrate M., Guşă M., Ciobanu C., Folosirea metodei sferei fictive la construirea zonelor de protecţie ale unor sisteme de paratrăsnete, Volumul celui de al VI-lea Simpozion Naţional "Tehnica Tensiunilor Inalte", Bucureşti, 1999.
123. Istrate M., Guşă M., Gavrilaş N., Asaftei C., Popa C., Aplicaţie de calcul a supratensiunilor temporare în reţele cu pierderi, Simpozionul Naţional al Reţelelor Electrice, Piteşti, septembrie 1998, vol. II, pag. 710-716.
124. Guşă M., Istrate M., Gavrilaş N., Asaftei C., Martinaş E., Protecţia homopolară de curent temporizată în reţelele de medie tensiune având neutrul tratat prin resistor, Simpozionul Naţional al Reţelelor Electrice, Piteşti, septembrie 1998, vol. II, pag. 1056÷1064.
125. Asaftei C, Istrate M., Guşă M., Gavrilaş N., Popa C., Cu privire la un sistem de testare a indicatoarelor de defect, Simpozionul Naţional al Reţelelor Electrice, ediţia a VIII-a, Cluj-Napoaca, 1996, pag. 211-212.
126. Istrate M., Gavrilaş N., Guşă M., Asaftei C., Posibilităţi de calcul a supratensiunilor de comutaţie în reţele trifazate, Simpozionul Naţional al Reţelelor Electrice, ediţia a VIIa, Suceava 1994, Editura Licurici Suceava, vol. I, pag. 330-338, ISBN 973-95737-1-1.
127. Istrate M., Pompaş F., Gavrilaş N., Guşă M., Asaftei C., Studiul comportării liniilor electrice aeriene compactizate la supratensiuni atmosferice, Simpozionul Naţional al Reţelelor Electrice, ediţia a VII-a, Suceava 1994, Editura Licurici Suceava, vol. II, pag. 183-191, ISBN 973-95737-2-X.
128. Guşă M., Istrate M., Asaftei C., Gavrilaş N., Câmpul magnetic al liniilor electrice de medie tensiune, Simpozionul Naţional al Reţelelor Electrice, ediţia a VII-a, Suceava 1994, Editura Licurici Suceava, vol. II, pag. 200-208, ISBN 973-95737-2-X.
129. Istrate M., Gavrilaş N., Guşă M., Asaftei C., Metodă de evaluare a supratensiunilor la reconectarea liniilor lungi de construcţie compactă, Conferinţa de electroenergetică, Facultatea de Electrotehnică din Timişoara, 1994, Editura Helicon - Timişoara, pag. 618-625, ISBN 973-9159-98-2.
130. Guşă M., Istrate M., Asaftei C., Gavrilaş N., Detectarea magnetică a scurtcircuitelor pe liniile electrice aeriene de medie tensiune, Conferinţa de electroenergetică, Facultatea de Electrotehnică din Timişoara, 1994, Editura Helicon - Timişoara, pag. 335-341, ISBN 973-9159-98-2.
131. Istrate M., Asaftei C., Guşă M., Dispozitiv trifazat de semnalizare centralizată a zonelor cu defect în reţelele electrice de medie tensiune, Simpozionul Naţional al Reţelelor Electrice, ediţia a VI-a, Bacău 1992, Editura Helicon - Timişoara, vol. II, pag. 193-198, ISBN 973-9133-20-7.
132. Asaftei C., Istrate M., Gavrilaş N., Guşă M., Contribuţii privind semnalizarea locală şi la distanţă a zonelor cu defect de izolaţie, Simpozionul Naţional al Reţelelor Electrice, ediţia a VI-a, Bacău 1992, Editura Helicon - Timişoara, vol. II, pag. 199202, ISBN 973-9133-20-7.

J. ***Invenţii.***

1. Guşă M., Istrate M., Asaftei C., Gavrilaş N., Procedeu de autodeclanşare selectivă şi semnalizare pentru separatoare de sarcină, Brevet România, 116988/2001. International Patent Classification H02J-013/00,http://apps.isiknowledge.com

2. Asaftei C., Istrate M., Guşă M., Gavrilaş N, Popa C., Dispozitiv de semnalizare cu bloc de testare, Brevet Romania 114197B1/1998, Inter-national Patent Classification G01R031/08, http://apps.isiknowledge.com
3. Asaftei C., Istrate M., Guşă M., Gavrilaş N, Popa C., Sistem de testare cu autoalimentare, Brevet Romania 114048/1998, International Patent Classification G01R031/08, http://apps.isiknowledge.com
4. Istrate M., Asaftei C., Guşă M., Gavrilaş N., Sistem de testare a semnalizatoarelor locale de scurtcircuit din reţelele electrice de medie tensiune, Brevet România, 113907B/30.11.1998. International Patent Classification G01R-031/02, http://apps.isiknowledge.com
5. Asaftei C., Guşă M., Istrate M., Gavrilaş N., Vorobchevici M., Indicator local pentru scurtcircuit, Brevet România, nr.106621 C1/1996, Interna-tional Patent Classification G01R-031/02, http://apps.isiknowledge.com
6. Asaftei C., Guşă M., Istrate M., Gavrilaş N, Ciutea I., Sistem de semna-lizare locală şi la distanţă, Brevet România nr. 105862 C1/1992, Interna-tional Patent Classification G01R031/02, http://apps.isiknowledge.com
7. Asaftei C., Guşă M., Gabură A., Istrate M., Gavrilaş N., Tărăboanţă I., Receptor pilotat cu cuarţ, Brevet România, nr. 105747 C1/1992, Interna-tional Patent Classification H02J013/00, http://apps.isiknowledge.com
8. Asaftei C., Guşă M., Gabură A., Istrate M., Gavrilaş N., Tărăboanţă I., Emiţător pilotat cu cuarţ, Brevet România, nr. 105754 C1/1992. Interna-tional Patent Classification H04B-003/54 http://apps.isiknowledge.com
9. Asaftei C., Guşă M., Istrate M., Gavrilaş N., Instalaţie pentru emiterea semnalelor electrice pe linii de medie tensiune, Brevet România, nr.105638 B1/1992. International Patent Classification H04B-003/54, http://apps.isiknowledge.com
10. Guşă M., Gavrilaş N., Asaftei C., Istrate M., Regulator automat pentru bobine de stingere, Brevet România, nr. 104711/1991. International Patent Classification H02J003/18, http://apps.isiknowledge.com.Acest brevet a fost medaliat cu argint la la Salonul internaţional al invenţiilor şi tehnicii noi, Iaşi 1994 şi medaliat cu aur la Salonul internaţional al invenţiilor "EUREKA '94"- Bruxelles, 1994.
11. Istrate M., Guşă M., Asaftei C., Gavrilaş N., Dispozitiv trifazat de semnalizare locală şi la distanţă, Brevet România nr. 104650/1991, Inter-national Patent Classification H02H007/26, http://apps.isiknowledge.com
12. Istrate M., Guşă M., Asaftei C., Gavrilaş N., Releu de semnalizare locală şi la distanţă, Brevet România, nr.104649/1991, International Patent Classification H02H-007/26, http://apps.isiknowledge.com
13. Asaftei C., Guşă M., Istrate M., Gavrilaş N., Botez C., Receptor de semnale codificate, Brevet România, nr. 104264/1991, International Patent Classification G08B-025/00, http://apps.isiknowledge.com
14. Guşă M., Asaftei C., Istrate M., Gavrilaş N., Instalaţie de semnalizare centralizată, Brevet România, nr. 103783/1991, International Patent Classification G08B-025/00, http://apps.isiknowledge.com
15. Asaftei C., Guşă M., Istrate M., Gavrilaş N., Ciutea I., Receptor pentru semnalizarea centralizată a zonelor cu defect de izolaţie pe linii electrice de medie tensiune, Brevet România, nr. 103548/1991, International Patent Classification H02J-013/00, http://apps.isiknowledge.com
16. Istrate M., Guşă M., Asaftei C., Gavrilaş N., Sufleţel N., Botez C., Metodă şi dispozitiv emiţător pentru stabilirea zonelor cu defect de izolaţie, Brevet România,

nr.103448/1991, International Patent Classification G01N-031/03, http://apps.isiknowledge.com

17. Asaftei C., Guşă M., Gavrilaş N., Istrate M., Sufleţel N., Dispozitiv de semnalizare a depăşirii unui curent maxim într-un conductor, Brevet România, nr. 103490/1990, International Patent Classification H02H-003/04, http://apps.isiknowledge.com

K. ***Contracte de cercetare/granturi.***

1. Grant Dezvoltarea Instituțională a TUIASI Prin Creșterea Performanței in Cercetare, Dezvoltare si Inovare COMPETE 2.0, https://www.compete.tuiasi.ro/, finanțat prin Contractul nr. 27PFE/30.12.2021– Proiecte de finanțare a excelenței în CDI din cadrul PNCDI III. Domeniul 3 – Energie, mediu, schimbari climatice, Suma bugetata = 6.578.117 lei, in trei etape anuale, astfel: anul 2022 – 2.466.918 lei; anul 2023 – 3.546.772 lei; anul 2024 – 546.427 lei, Istrate M – Responsabil stiintific.
2. Contractul nr. 11155/06.04.2022 TUIASI, Innovation Norway No. 2021/332809 din 24.03.2022, EEA and Norway Grants 2014-2021, „Energy Generation from NonPowered Dams - ENERGYDAM", Implementare iunie 2022-decembrie 2023, Sume; Total proiect: 346958 Euro, din care in 2022 – 154175 Euro si in 2023 – 192783 Euro, Istrate M. – Manager proiect si membru in echipa de cercetare pe anumite pachete de lucru.
3. Grant Dezvoltarea Instituțională a TUIASI Prin Creșterea Vizibilității și a Performanței Cercetării TUIASI-COMPETE, https://www.compete.tuiasi.ro/, finanțat prin Contractul nr. 9PFE/2018 în cadrul Programului 1 - Dezvoltarea sistemului național de cercetaredezvoltare, Subprogramul 1.2 – Performanță instituțională – Proiecte de dezvoltare instituțională – Proiecte de finanțare a excelenței în CDI din cadrul PNCDI III. Domeniul 3 – Energie, mediu, schimbari climatice, Suma bugetata = 4.530.000 lei, in trei etape anuale, astfel: anul 2018 – 203750 lei; anul 2019 -2090769 lei; anul 2020 – 2235481 lei; Istrate M – Responsabil stiintific
4. Analiza regimurilor tranzitorii electromagnetice în rețele de medie tensiune în vederea implementării automaticii de reanclanșare rapidă monofazată, Contractul de cercetare nr. 1264P/21.01.2019, Istrate M.- Director tema, Beneficiar: beneficiarului SC EXIMPROD GRUP SA, cu sediul în Buzău, contract obtinut prin negociere directa – suma 10000 lei +TVA
5. Analiza și interpretarea datelor, întocmirea algoritmilor de prelucrarea datelor, simularea asistată de calculator și întocmirea rapoartelor de simulare, cod CPV 71335000-5; Beneficiar: Societatea pentru Servicii de Mentenață a Rețelei Electrice de Transport "SMART" S.A. București Sucursala de Mentenanță SIBIU, 2015-2018, tema 27373/22.12.2015, Istrate M.- Responsabil contract, Machidon D. Contract obţinut prin procedura de licitaţie deschisă – publicată pe SEAP. Valoare studiu: 185.000 lei +TVA
6. Studiu privind verificarea schemelor de protecţie împotriva loviturilor directe de trăsnet în cazul staţiei 220/110/20 kV Munteni. Analiză comparată a metodei normate şi a metodei electrogeometrice", cod CPV 71335000-5; Beneficiar: CN Transelectrica SA, Sucursala de Transport Bacău, 2013, tema 8795/17.05.2013, Istrate M.- Director tema, Machidon D. Valoare 57000+TVA RON; Contract obţinut prin procedura de licitaţie deschisă – publicată pe SEAP; Cursul de schimb valutar BNR la data semnarii contractului a fost de 4,4111 lei/Euro (echivalentul in Euro al sumei contractate este de 12922 Euro fara TVA sau 16023 Euro cu TVA). Asimilat grant de cercetare obținut prin competiție, conform Ordin MECT nr. 5896, din 11.11.2008
7. Analiza asistată de calculator a riscului producerii loviturilor directe de trăsnet în echipamentele de 400/110 kV ale staţiei de transformare Roman Nord. Analiza comparată a metodei normate şi a metodei electrogeometrice; Beneficiar: CN Transelectrica SA, Sucursala de Transport Bacău, 2012, tema 8731/25.05.2012, Istrate M.- Director tema, Machidon D.

Valoare 77000+TVA RON; Contract obţinut prin procedura de licitaţie deschisă – publicată pe SEAP; Cursul de schimb valutar BNR la data semnarii contractului a fost de 4,45 lei/Euro (echivalentul in Euro al sumei contractate este de 17300 Euro fara TVA sau 21400 Euro cu TVA). Asimilat grant de cercetare obținut prin competiție, conform Ordin MECT nr. 5896, din 11.11.2008

8. Studiu privind analiza asistată pe calculator a riscului producerii loviturilor de trăsnet în echipamente de 220 kV şi 400 kV ale staţiei de transformare Suceava. Analiza comparată a metodei normate şi a metodei electrogeometrice; Beneficiar: CN Transelectrica SA, Sucursala de Transport Bacău, 2011, tema 1090P/03.05.2011, Istrate M.- Director tema, Guşă M, Machidon D. Valoare 70000+TVA RON; Contract obţinut prin procedura de licitaţie deschisă – publicată pe SEAP; Cursul de schimb valutar BNR la data semnarii contractului a fost de 4,1073 lei/Euro (echivalentul in Euro al sumei contractate este de 17042,8 Euro fara TVA sau 21133,1 Euro cu TVA). Asimilat grant de cercetare obținut prin competiție, conform Ordin MECT nr. 5896, din 11.11.2008

9. Studiu privind expertizarea instalaţiilor de 110 şi 220 kV din staţia FAI, urmare modificării schemelor de conexiuni, prin metoda electrogeometrică, privind riscul producerii loviturilor directe de trăsnet în echipamentele staţiei; Beneficiar: CN Transelectrica SA, Sucursala de Transport Bacău, 2009, tema 9958P/15.07.2009, Istrate M.- Director tema, Guşă M, Machidon D. Valoare 48000+TVA RON; Contract obţinut prin procedura de licitaţie deschisă – publicată pe SEAP; Cursul de schimb valutar BNR la data semnarii contractului a fost de 4,2175 lei/Euro (echivalentul in Euro al sumei contractate este de 11381,5 Euro fara TVA sau 13543,6 Euro cu TVA). Asimilat grant de cercetare obținut prin competiție, conform Ordin MECT nr. 5896, din 11.11.2008.

10. Instrument software destinat creşterii securităţii sistemelor electroenergetice prin coordonarea protecţiei de distanţă, dezvoltat pe baza unor tehnici de inteligenţă artrificială. Grant CNCSIS, A, contract nr. GR 77/11.06.2008, tema nr. 20, cod CNCSIS 283; Istrate M.-Director grant, Guşă M., Gavrilas M., Asandei D., Temnenau C. Valoare 36000 RON

11. Sistem inteligent de predicţie şi control al congestiilor în reţelele de transport şi distribuţie la înaltă tensiune, Grant PN2-Parteneriate, contract 22-126 / 2008, membru în echipa de cercetare; Valoare UTI: 1.800.000 lei, Valoare UTI 2008: 67779, 5 membri/2008 în echipa de cercetare, Director proiect: Mihai Gavrilaş, Istrate M.. – responsabil partener UTI.

12. Sistem video automatizat cu grad ridicat de interschimbabilitate pentru etalonare metrologică a echipamentelor de măsurare; Grant PN2-Parteneriate, contract 72173/2008, director C. Donciu; Valoare UTI: 1.130.000 lei; 17 membri în echipa de cercetare, Istrate M.. – membru echipa partener UTI.

13. Sistem informatic de instruire interactiva bazat pe algoritmi multitask de mare viteza, dezvoltat pe platforma reconfigurabila online pentru aplicatii de tip laborator virtual., Proiect CEEX Modul 1 – INFOSOC, Contract nr. 137 / 02.10.2006, Director proiect: Codrin Donciu, Durata proiect 1 an si 11 luni (predare etapa finala 30.08.2008), Valoare totala proiect: 880.000 lei, Valoare UTI: 606.164 lei, Istrate M.. – membru echipă partener UTI.

14. Instrument software destinat creşterii securităţii sistemelor electroenergetice prin coordonarea protecţiei de distanţă, dezvoltat pe baza unor tehnici de inteligenţă artrificială. Grant CNCSIS, A, contract nr. GR 80 /23.05.2007, tema nr. 28, cod CNCSIS 283; Istrate M.-Director grant, Guşă M., Gavrilas M., Asandei D., Temnenau C. Valoare 44000 RON. (Medie grant CNCSIS-UTI 2007 – 41408).

15. Analiza asistată de calculator a influenţei defectelor din reţeaua de 110 kV asupra funcţionării reţelei de transport a ST Bacău, Beneficiar: CN Trans-electrica SA, Sucursala de Transport Bacău, tema 2220P/02.06.2006, Istrate M., Guşă M.. Valoare 35700 RON cu TVA,

contract obţinut prin procedura de licitaţie deschisă. Cursul de schimb valutar BNR la data semnarii contractului a fost de 3.5309 lei/Euro (echivalentul in Euro al sumei contractate este de 10110.7 Euro cu TVA)

16. Analiza asistată de calculator a riscului producerii loviturilor directe de trăsnet în echipamantele staţiei 220/110 kV Dumbrava. Aplicaţie a metodei electrogeometrice, Beneficiar: CN Transelectrica SA, Sucursala de Transport Bacău, tema 2219P/02.06.2006 Istrate M., Guşă M. Valoare 23800 RON cu TVA, contract obţinut prin procedura de licitaţie deschisă. Cursul de schimb valutar BNR la data semnarii contractului a fost de 3.5309 lei/Euro (echivalentul in Euro al sumei contractate este de 6740,5 Euro cu TVA)

17. Instrument software destinat creşterii securităţii sistemelor electroenergetice prin coordonarea protecţiei de distanţă, dezvoltat pe baza unor tehnici de inteligenţă artrificială. Grant CNCSIS, A, contract nr. 2735/ 19.05.2006, tema nr. 16, cod CNCSIS 283; Istrate M.-Director grant, Guşă M., Gavrilas M., Asandei D., Temnenau C.; Valoare 46000 RON.

18. Cercetări privind oportunitatea instalării de descărcătore cu rezistenţă variabilă pe liniile electrice aeriene; Grant CNCSIS, contract 2741/ 19.05.2006, tema 40, cod CNCSIS 483, Colectiv: Guşă M., Istrate M., Valoare contract: 10000 RON

19. Cercetări privind oportunitatea instalării de descărcătore cu rezistenţă variabilă pe liniile electrice aeriene; Grant CNCSIS, A, contract 27637/2005, tema 28, cod CNCSIS 483, Colectiv: Guşă M., Istrate M., Bucă C., Valoare contract: 100000000 lei

20. Studiul zonelor de protecţie prin metoda sferei fictive aplicată staţiei de transformare 400(220)/110 kV Munteni. Beneficiar: C.N. Transelectrica SA, S.T. Bacău, Tema 61P/2003. Colectiv: Guşă M., Istrate M., Bucă C., Valoare contract 71400000 lei cu TVA

21. Aplicaţie software pentru analiza regimurilor electromagnetice tranzitorii generate de funcţionarea unor protecţii şi instalaţii automate din RET 220/400 kV. Beneficiar: CN Transelectrica SA, Sucursala de Transport Bacău (contract obţinut prin procedura de licitaţie deschisă, la care au fost şi alţi participanţi - TRAPEC Bucureşti), Tema 61P/2003. Istrate M. – Director temă, Guşă M. Valoare contract 77350000 lei cu TVA.

22. Analiza modului de realizare a protecţiei împotriva loviturilor directe de trăsnet în staţia de transformare Iaşi - Sud. Beneficiar: S.D.F.E.E. Iaşi Tema 965P/2002. Colectiv: Guşă M., Istrate M., Valoare contract 47600000 lei cu TVA.

23. Studiul zonelor de protecţie împotriva loviturilor directe de trăsnet prin metoda sferei fictive – Aplicaţie pentru staţia de transformare Suceava. Beneficiar: S.D.E.E. Bacău, Tema 422P/2002. Col.: Guşă M., Istrate M. Valoare contract 50000000 lei cu TVA.

24. Analiza asistată a regimurilor tranzitorii din reţelele de joasă tensiune. Beneficiar: Electrica S.A. – S.D.E.E. Bacău, Tema 807P/2001. Asaftei C., Istrate M., Guşă M. Valoare contract 65000000 lei cu TVA.

25. Studiul zonelor de protecţie împotriva loviturilor directe de trăsnet prin metoda sferei fictive–Aplicaţie pentru staţia de transformare Roman Nord. Beneficiar: SDEE Bacău, Tema 194P/2001. Colectiv: Guşă M., Istrate M. Valoare contract 40000000 lei cu TVA

26. Analiza asistată de calculator a funcţionării protecţiilor de distanţă în reţeaua de transport 220/400 kV a S.T. Bacău. Beneficiar: CN Transelectrica - ST Bacău, 2001. Istrate M. – Director temă, Guşă M. Valoare contract 48 milioane lei.

27. Protecţia reţelelor de distribuţie de JT împotriva supratensiunilor transmise din reţelele de MT. Grant ANSTI, contract nr. 6177/2000, număr temă: B-50. Două etape: 2000 şi 2001. Colectiv: Guşă M., Istrate M. Valoare contract: 43100000 lei

28. Evaluarea nivelului de ţinere la impuls de trăsnet a izolaţiei echipamentelor de joasă tensiune din posturile de transformare MT/JT. Beneficiar: S.D.E.E. Bacău, Tema 1627P/2000. Col.: Guşă M., Istrate M., Asaftei C. Valoare contract: 50000000 lei

29. Soluţii pentru evitarea incendiilor determinate de trăsnet la rezervoarele metalice cu capac flotant pentru produse petroliere. Beneficiar: S.C. “Oil Terminal” S.A. Constanţa, Tema 1633P/2000. Col.: Guşă M., Istrate M. Valoare contract: 15500000
30. Studiul asistat de calculator al protecţiei staţiilor de transformare împotriva loviturii directe de trăsnet. Beneficiar: Sucursala de Transport a Energiei Electrice Constanţa; Tema 1740P/1999(2000). Colectiv: Gavrilaş N., Istrate M., Guşă M., Valoare contract: 60000000
31. Transmiterea supratensiunilor de trăsnet prin transformatoarele de distribuţie de medie tensiune/joasă tensiune. Beneficiar: S.D.E.E. Iaşi, Tema 567P/2000. Colectiv: Guşă M., Istrate M., Asaftei C. Valoare contract: 45000000 lei
32. Studiu privind modelarea pe calculator a regimurilor de defect monofazat în reţeaua de distribuţie de 20 kV a municipiului Galaţi, având neutrul tratat prin rezistor. Beneficiar: S.D.E.E. Galaţi, Tema 849P/2000. Colectiv: Asaftei C., Istrate M., Guşă M. Valoare contract: 40000000 lei
33. Analiza regimurilor complexe de avarie şi postavarie în reţeaua de transport a STD Bacău. Beneficiar: Sucursala Transport Dispecer Bacău, Tema 303P/1999. Colectiv: Guşă M., Istrate M.Valoare contract: 45000000 lei.
34. Protecţia împotriva supratensiunilor atmosferice a posturilor de transformare MT/JT şi a reţelei de joasa tensiune aferente. Beneficiar: S.D.E.E. Bacău, Tema 283P/1998. Colectiv: Guşă M., Istrate M., Asaftei C. Valoare contract: 30000000
35. Analiza tensiunilor de regim tranzitoriu în zona de reţea de medie tensiune a municipiului Sibiu. Beneficiar: S.D.E.E. Sibiu, Tema 147P/1998. Colectiv: Guşă M., Istrate M., Gavrilaş N. Valoare contract: 30000000 lei
36. Sistem de autodeclanşare selectivă, telecomandă şi telesemnalizare centralizată pentru reţelele aeriene de 20 kV. Beneficiar: F.T.D.E.E. Suceava, Tema 3587/1997. Colectiv: Asaftei C., Istrate M., Guşă M., Gavrilaş N. Valoare contract: 15000000 lei.
37. Studiu privind asigurarea selectivităţii şi sensibilităţii protecţiei în reţelele de medie tensiune aferente staţiilor cu neutrul tratat prin rezistenţă din municipiul Botoşani. Beneficiar: F.D.E.E. Botoşani, Tema 11941/1997. Colectiv: Guşă M., Istrate M., Gavrilaş N. Valoare contract: 12000000
38. Realizarea unui tester de verificare a indicatoarelor de defect pe LEA de medie tensiune şi montarea unor astfel de indicatoare în zona Tg.Frumos. Beneficiar: F.R.E. Iaşi, Tema 9397/1996. Colectiv: Asaftei C., Istrate M., Guşă M., Gavrilaş N. Valoare contract: 4000000 lei
39. Optimizarea funcţionării reţelelor compensate prin implementarea unor mijloace de detectare a defectelor monofazate. Beneficiar: F.R.E. Iaşi, Tema 4730/1996. Colectiv: Guşă M., Istrate M., Gavrilaş N., Asaftei C. Valoare contract: 6000000 lei
40. Analiza supratensiunilor interne în reţelele de 110 kV şi 220 kV cu considerarea unor fenomene nelineare. Beneficiar: Filiala de Reţele Electrice Iaşi, Teama 6147/1996.
41. Istrate M. – Director temă, Guşă M, Gavrilaş N., Asaftei C. Valoare contract: 4000000 lei, Determinarea supratensiunilor în reţele de înaltă tensiune cu considerarea unor pierderi şi neliniarităţi. Beneficiar: Filiala de Reţele Electrice Iaşi, 1995, Tema 6456, Istrate M. – Director temă, Guşă M, Gavrilaş N., Asaftei C.; Valoare contract: 3000000 lei.
42. Studiul posibilităţilor de detectare a zonelor de defect pe LEA de medie tensiune cu neutrul tratat cu bobină de stingere. Beneficiar: F.R.E. Iaşi, 1995; Tema 6455; Colectiv: Guşă M., Istrate M., Gavrilaş N., Asaftei C. Valoare contract: 4000000 lei
43. Determinarea supratensiunilor interne şi atmosferice în reţele de înaltă tensiune. Beneficiar: Filiala de Reţele Electrice Iaşi, 1994. Tema 3745/1994; Istrate M. – Director temă, Guşă M, Gavrilaş N., Asaftei C. Valoare contract: 1500000 lei

44. Studiul posibilităţilor de realizare şi realizarea unui tester de verificare a indicatoarelor de defect pe LEA de medie tensiune. Beneficiar: F.R.E. Iaşi, 1994. Tema 3850; Colectiv: Asaftei C., Istrate M., Guşă M., Gavrilaş N. Valoare contract: 4000000 lei
45. Autodeclanşarea selectivă a separatoarelor de sarcină în SF6 de pe derivaţii şi de pe axele de MT, cu semnalizare în staţia de alimentare, prin transmisie pe conductoarele LEA. Beneficiar: F.R.E. Suceava; Tema 6630/1994, 1995 şi 1996. Tema 6630/1994,1995,1996 Colectiv: Asaftei C., Istrate M., Guşă M., Gavrilaş N. Valoare totala contract: 32000000 lei
46. Solicitarea izolaţiei liniilor electrice debuclate. Beneficiar: F.R.E. Bacău, 1994, Colectiv: Guşă M., Istrate M., Gavrilaş N., Asaftei C. Valoare contract: 1500000 lei.
47. Studiul comportării în exploatare a descărcătoarelor cu rezistenţă variabilă din instalaţiile FRE Iaşi. Beneficiar: Filiala de Reţele Electrice Iaşi, 1993. Tema 2540. Istrate M. – Director temă, Guşă M, Gavrilaş N., Asaftei C. Valoare contract: 900000 lei
48. Comanda declanşării întrerupătoarelor din reţelele aeriene de 20 kV cu neutrul tratat prin rezistenţă şi semnalizarea centralizată a funcţionării acestuia. Beneficiar: F.R.E. Suceava, 1993, Tema 6360; Colectiv: Guşă M., Gavrilaş N., Istrate M., Asaftei C. Valoare contract: 1000000 lei
49. Cercetări teoretice şi încercări experimentale privind rezistenţa la oboseală mecanică a izolatoarelor de tip IsNs. Beneficiar: F.R.E. Bacău, 1993, Colectiv: Guşă M., Istrate M., Gavrilaş N., Asaftei C. Valoare contract: 1000000 lei
50. Cercetări privind implementarea şi funcţionarea unui sistem de semnalizare centralizată a defectelor în reţelele aeriene de distribuţie de medie tensiune. Beneficiar: RENEL, Divizia Strategie şi Retehnologizare, Bucureşti 1992, Tema 1433/1992; Colectiv: Asaftei C., Guşă M., Gavrilaş N., Istrate M.; Valoare contract: 700000 lei
51. Controlul stării izolaţiei LEA de medie şi înaltă tensiune. Beneficiar: F.R.E. Bacău, 1992. Tema 9223; Guşă M., Gavrilaş N., Istrate M.,, Asaftei C. Valoare contract: 400000 lei
52. Proiectarea prototipului de sistem de semnalizare centralizată a defectelor în reţele electrice de distribuţie. Beneficiar: Ministerul Învăţământului şi Ştiinţei, 1992. Tema 1433; Colectiv: Asaftei C., Guşă M., Gavrilaş N., Istrate M. Valoare contract: 700000 lei
53. Cercetarea comportării în exploatare a descărcătoarelor cu rezistenţă variabilă din instalaţiile de transport electric feroviar. Beneficiar: Regionala de Căi Ferate Iaşi, 1991. Tema 896; Istrate M. – Director temă, Guşă M, Gavrilaş N.; Valoare contract: 24705 lei
54. Studiul posibilităţilor de realizare a detectării şi semnalizării centralizate a defectelor în reţelele electrice de distribuţie. Beneficiar: Ministerul Învăţământului şi Ştiinţei, 1991. Tema 2439 (1541); Colectiv: Asaftei C., Guşă M., Gavrilaş N., Istrate M. Valoare contract: 300000 lei
55. Realizarea şi testarea sistemului de semnalizare centralizată a defectelor într-o reţea aeriană de 20 kV cu un singur emiţător. Beneficiar: I.R.E. Iaşi, 1991. Tema 6156; Colectiv: Asaftei C., Guşă M., Gavrilaş N., Istrate M. Valoare contract: 380000 lei
56. Proiectarea, realizarea şi experimentarea echipamentului pentru semnalizarea centralizată a defectelor într-o reţea aeriană de 20 kV. Beneficiar: I.R.E. Iaşi, 1990. Tema 229; Colectiv: Asaftei C., Guşă M., Gavrilaş N., Istrate M. Valoare contract: 230000 lei
57. Cercetarea posibilităţilor de localizare de la distanţă a scurtcircuitelor monofazate în reţelele aeriene de medie tensiune având neutrul tratat prin rezistor. Beneficiar: I.R.E. Iaşi, 1989., Tema 80; Colectiv: Asaftei C., Guşă M., Gavrilaş N., Istrate M. Valoare contract: 220000 lei.

L. ***Premii, distincţii.***

1. Brevetul de invenţie Regulator automat pentru bobine de stingere, Brevet România, nr. 104711/1991. International Patent Classification H02J-003/18, http://apps.isiknowledge.com a fost medaliat cu argint la la Salonul internaţional al

invenţiilor şi tehnicii noi, Iaşi 1994 şi medaliat cu aur la Salonul internaţional al invenţiilor “EUREKA ‘94”- Bruxelles, 1994.

2. Premiul pentru grupul care a contribuit la atragerea celor mai multe fonduri private pentru cercetare,– Contractul de 185000 lei din 27373/22.12.2015 cu Transelectrica/Smart Sibiu, premiu acordat pe 15 noiembrie 2019, la nivelul TUIASI.

M. ***Alte realizări semnificative.***

1. Grant FDI, mai-decembrie 2019, proiect nr. CNFIS-FDI-2019-0120, cu titlul „CONSILIERE ȘI ORIENTARE PENTRU STUDENȚII TUIASI – C.O.S.T.”, Competitie nationala interuniversitara, Istrate M. - Director grant, Valoare finantare = 400000 lei.
2. Proiect POR „Consolidare si reabilitare termica imobil EN”, depus la data de 16.04.2018, codul SMIS al cererii de finanțare 120774., contract semnat in mai 2020, suma=8.831.866,83 lei , Istrate M. - manager proiect.
3. Proiect "Reabilitare termică corp TEX2 din cadrul Facultății de Textile, Pielărie și Management Industrial", depus la data de 16.04.2018, codul SMIS al cererii de finanțare 120773, contract semnat in mai 2020, suma=3.654.667,21lei, Istrate M. - manager proiect.
4. Proiect "Reabilitare termică imobil CH", depus la data de 16.04.2018, codul SMIS al cererii de finanțare 120775., contract semnat in august 2019, suma=17.526.985,81 lei, Istrate M. - manager proiect.
5. Titlul de Profesor Bolgna, acordat de ANOSR, in anul 2012.

Data,

02.04.2025

Prof. dr. ing. Istrate Dumitru-Marcel

Lista de lucrări în domeniul de studii universitare de masterat Inginerie Energetică

Numele şi prenumele: **Prof. dr. ing. Mihai GAVRILAȘ**

A. Teza de doctorat.

1. Cercetări privind optimizarea structurii şi regimurilor liniilor de transport a energiei electrice compacte, 1994, Domeniul „Inginerie Energetică", Universitatea Tehnică „Gheorghe Asachi" din Iași, conducător doctorat: prof. dr. ing. Alexandru Poeată.

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

1. Neagu B.C., **Gavrilaș M.**, Ivanov O., Grigoraș, The Crowdsourcing Concept-Based Data Mining Approach Applied in Prosumer Microgrids, Chapter in The Future of Data Mining, editor C.U. Baytar. Nova Science Publisher, 18 pag., 2022, 978-1-53618-508-9
2. **Gavrilaș M.**, Neagu B.C., Enhanced metaheuristic search algorithms; Applications in the management of electricity distribution systems, Lambert Academic Publishing, Riga, Lituania, 140 pag., 2020, 978-620-2-51263-3
3. Neagu B.C., **Gavrilaș M.**, Optimal Placement of Energy Storage Systems in Prosumer Microgrids, Chapter in Advances in Engineering Research, editor V.M. Petrova, Nova Science Publisher, 48 pag., 2020, 978-1-53618-508-9
4. Grigoraş G., Neagu B.C., Ivanov O., **Gavrilaș M.,** Scarlatache F., Smart Meter Data-based Strategies in the Optimal Operation of Electric Distribution Systems, Lambert Academic Publishing, Riga, Lituania, 256 pg., 2019, 978-620-0-50306-0 (30 pag. Gavrilaș M.)

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS.

1. Ivanov O., **Gavrilaș M.**, Algoritmi metaeuristici cu aplicații în energetică, Editura PIM Iași, 2018, 210 pag, ISBN 978-606-13-4698-1 (21% contribuție)
2. **Gavrilaș M.,** Aplicatii ale inteligentei artificiale si calculului inteligent in energetica; capitol in EMERG 2017 (Energie, Mediu, Eficienta, Resurse, Globalizare), Editura AGIR, pp. 73-118.
3. **Gavrilaș M.,** Piata de energie electrică, Editura PIM Iasi, 2017, 188 pag., ISBN 978-606-13-4144-3.
4. **Gavrilaș M.**, Stabilitatea si controlul sistemelor electroenergetice, Editura Politehnium, Iasi, 2011, 300 pag., ISBN 978-973-621-329-8.
5. **Gavrilaș M.**, Aspecte moderne în modelarea sistemelor electroenergetice, Casa de editura Venus, Iasi, 2008, 258 pag., ISBN 978-973-756-033-9.
6. **Gavrilaș M.**, Cartina Gh., Alexandrescu V., Grigoras Gh., Ivanov O., Modelarea sarcinilor din retelele electrice – Vol. 2, Editura Cermi Iasi, 2008, 116 pag., ISBN 978-973-667-315-3
7. **Gavrilaș M.**, Cartina Gh., Alexandrescu V., Grigoras Gh., Ivanov O., Modelarea sarcinilor din retelele electrice - Vol. 1, Editura PIM Iasi, 2006, 124 pag., ISBN 973-716-433-4, ISBN 978-973-716-433-4
8. **Gavrilaș M.**, Inteligenta artificiala si aplicatii in energetica; Vol. II – Teorie si aplicatii, Editura Polytechnium, 2005, 194 pag., ISBN 973-8292-20-4, ISBN 973-621-116-9
9. **Gavrilaș M.**, Inteligenta artificiala si aplicatii in energetica; Vol. I – Teorie, Editura „Gh. Asachi‖ Iasi, 2002, 320 pag., ISBN 973-8292-20-4, ISBN 973-8292-21-2

10. **Gavrilaș M.**, Filimon M.N., Tendinte moderne in distributia energiei electrice, Editura AGIR Bucuresti, 2001, 163 pag., ISBN 973-8130-47-6
11. **Gavrilaș M**., Calcul numeric cu aplicatii in Turbo Pascal, Editura "Gh. Asachi" Iasi, 1999, 502 pag., ISBN 973-9178-65-0
12. Cartina Gh., Georgescu Gh., **Gavrilaș M**., Bonciu Cl., Retele neuronale artificiale si sisteme expert in energetica, Editura „Gh. Asachi" Iasi, 1994, 195 pag., ISBN 973-9178-06-5

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

1. Georgescu Gh., **Gavrilaș M.**, Radasanu D., Calculul si reducerea pierderilor de putere si energie in retelele electrice, Editura SPECTRUM Iasi, 1997, 165 pag., ISBN 973-98335-1-9
2. **Gavrilaș M.,** Utilizarea calculatoarelor in proiectarea si exploatarea retelelor electrice - Metode numerice, Litografia Universitatii Tehnice "Gh. Asachi" Iasi, 200 pag., 1995
3. Georgescu Gh., **Gavrilaș M.,** Transportul energiei electrice; Analiza asistata de calculator a regimurilor de functionare a liniilor lungi, Litografia Universitatii Tehnice "Gh. Asachi" Iasi, 174 pag., 1992

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

1. **Gavrilaș M.**, Sisteme electroenergetice I – note de curs (83 pag.), http://www.mihai-gavrilas.ieeia.tuiasi.ro/SEE_1/Sisteme_1.htm
2. **Gavrilaș M.**, Sisteme electroenergetice II – note de curs (44 pag.), http://www.mihai-gavrilas.ieeia.tuiasi.ro/SEE_2/Sisteme_2.htm
3. **Gavrilaș M.**, Stabilitatea și controlul sistemelor electroenergetice – note de curs (121 pag.), http://www.mihai-gavrilas.ieeia.tuiasi.ro/SCSEE/SCSEERom.html
4. **Gavrilaș M.**, Sisteme cu inteligență artificială – note de curs (95 pag.), http://www.mihai-gavrilas.ieeia.tuiasi.ro/SIA/AI.htm
5. **Gavrilaș M.**, Piețe de enrgie – management și reglementare – note de curs (32 pag.), http://www.mihai-gavrilas.ieeia.tuiasi.ro/PEMR/PEMRRom.html **Gavrilaș M.**, Piața de energie și politici energetice – note de curs (14 pag.), http://www.mihai-gavrilas.ieeia.tuiasi.ro/PEPE/PEPERom.html
6. **Gavrilaș M.**, Computational Intelligence and Applications – course notes (99 pag.), http://www.mihai-gavrilas.ieeia.tuiasi.ro/CIA/CIA.htm

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

1. Barkat F., Cheknane A., Guerrero J.M., Lashab A., Istrate M., **Gavrilas M.,** Motas J.G., Banu I.V., 2023. Review, analysis, and performance evaluation of the most common four active methods for islanding detection in grid-connected photovoltaic systems. Electric Power Systems Research, 214, p.108909, DOI: 10.1016/j.epsr.2022.108909**.]**.
2. Kriukov A., **Gavrilaș M.**, Ivanov O., Grigoraș G., Neagu B.-C., Scarlatache F., Novel Decentralized Voltage-Centered EV Charging Control Algorithm Using DSRC System in Low Voltage Distribution Networks, IEEE Access (Early Access), Decembrie 2021, 9, pp. 164779-164800, doi: 10.1109/ACCESS.2021.3132419
3. Ivanov O., Neagu B.-C., **Gavrilaș M.**, Grigoraș G., A Phase Generation Shifting Algorithm for Prosumer Surplus Management in Microgrids using Inverter Automated Control, Electronics, vol. 10, nr. 22, 2740, 2021, WOS:000727513800001

4. Grigoraș G., Noroc L., Chelaru E., Scarlatache F., Neagu B.-C., Ivanov O., **Gavrilaș M.**, Coordinated Control of Single-Phase End-Users for Phase Load Balancing in Active Electric Distribution Networks, Mathematics, vol. 9, nr. 21, 2662, 2021, Accession Number: WOS:000719474900001
5. Ivanov, O., Neagu B.C., Grigoras G., Scarlatache F., **Gavrilas M.**, 2021. A metaheuristic algorithm for flexible energy storage management in residential electricity distribution grids. Mathematics, 9(19), p.2375. https://doi.org/10.3390/math9192375
6. **Gavrilas M.**, Toma R., Flexible Alternating Current Transmission System Optimisation In The Context Of Large Disturbance Voltage Stability. Revue Roumaine Des Sciences Techniques—Série Électrotechnique Et ÉnergétiquE, 2021, 66(1), pp.21-26, WOS:000645139100004
7. Banerjee A., Chattopadhyay S., **Gavrilas M.** Grigoras, G., Optimization and estimation of reliability indices and cost of Power Distribution System of an urban area by a noble fuzzy-hybrid algorithm. *Applied Soft Computing*, 2021, *102* p.107078235, DOI: 10.1016/j.asoc.2021.107078, WOS:000632598600011
8. Neagu B.C., Ivanov O., Grigoras Ghg., **Gavrilaș M.**, A New Vision on the Prosumers Energy Surplus Trading Considering Smart Peer-to-Peer Contracts, Mathematics 2020, 8(2), 235; https://doi.org/10.3390/math8020235
9. Ivanov O., Chattopadhyay S., Banerjee S., Neagu B.C., Grigoras Gh., **Gavrilas M.,** A Novel Algorithm with Multiple Consumer Demand Response Priorities in Residential Unbalanced LV Electricity Distribution Networks, Mathematics 2020, 8(8), 1220; https://doi.org/10.3390/math8081220
10. Neagu, B.C., Ivanov O., Grigoras Gh., **Gavrilaș M**., Istrate D.M., New Market Model with Social and Commercial Tiers for Improved Prosumer Trading in Microgrids, Sustainability 2020, 12(18), 7265; https://doi.org/10.3390/su12187265
11. Grigoraș Gh., Neagu B.C., **Gavrilaș M.,** Triștiu I., Bulac C., Optimal Phase Load Balancing in Low Voltage Distribution Networks Using a Smart Meter Data-Based Algorithm, Mathematics 2020, 8(4), 549; https://doi.org/10.3390/math8040549
12. Ivanov O., Neagu B.C., Grigoras Gh., **Gavrilas M.**, Optimal Capacitor Bank Allocation in Electricity Distribution Networks Using Metaheuristic Algorithms. Energies 2019, 12, 4239, Accession Number: WOS:000504898500017 (FI =2.702, JCR 2019)
13. Postolaty V., Berzan V. Bykova E., Bosnaega V., Suslov V., Ermurachi Iu., Grigoras Gh., **Gavrilas M.,** Istrate M., Estimation of Power Exchange through 110 kV Overhead Power Lines at the Interface of the Romanian and Moldovan Power Systems, PROBLEMELE ENERGETICII REGIONALE, Issue 2, 2018, pp. 46-61, ISSN: 1857-0070, DOI:10.5281/zenodo.1343396
14. Banerjee A., Chattopadhyay S., Grigoras Gh., **Gavrilas M.**, Minimization of reliability indices and cost of power distribution systems in urban areas using an efficient hybrid meta-heuristic algorithm, Soft Computing, 2017, pp. 1-25, 1432-7643, DOI: https://doi.org/10.1007/s00500-017-2846-6
15. Coroama I., Chicco G., **Gavrilas M.**, Russo A., Distribution system optimisation with intra-day network reconfiguration and demand reduction procurement, Electric Power Systems Research, Vol. 98, 2013, pp. 29-38, ISSN: 0378-7796, DOI: https://doi.org/10.1016/j.epsr.2013.01.004
16. **Gavrilas, M**., Stahie, V., Cascade hydropower plants optimization with Honey Bee Mating Optimization algorithm**,** *International Review of Electrical Engineering, Vol.* 6, No. 5, 2011, pp. 2456-2466
17. **Gavrilaş M.,** Rusu I., Gavrilaş G., Ivanov O., Synchronized Phasor Measurements for State Estimation, Revue Roumaine des Sciences Techniques-Serie Electrotechnique et Energetique, Oct – Dec. 2009, Vol.54, No.4, pp. 335-344, ISSN: 0035-4066

18. **Gavrilas M.**, Ivanov O., Load profiling by self organization with affinity control strategy; Revue Roumaine des Sciences Techniques-Serie Electrotechnique et Energetique, Oct – Dec. 2008, Vol.53, No.4, pp. 413-421, ISSN: 0035-4066
19. **Gavrilas M.**, Gavrilas G., Improving energy efficiency in water distribution systems based on water consumption profiling; Environmental Engineering and Management Journal, May/June 2008, Vol.7, No.3, pp. 321-327, ISSN: 1582-9596, DOI: 10.30638/eemj.2008.035
20. **Gavrilas M.**, Gavrilas G., Ivanov O., Electricity load prediction for water supply systems; Environmental Engineering and Management Journal, July/August 2008, Vol.7, No.4, pp. 453-458, ISSN: 1582-9596, DOI: 10.30638/eemj.2008.067
21. Kriukov A., **Gavrilaș M.,** Smart Charging of Multiple EVs in Smart Grid Radial Low Voltage Distribution Networks. Bulletin of the Polytechnic Institute of Iași. Electrical Engineering, Power Engineering, Electronics Section, 2021. 67 (3), pp. 9-20, (**Index Copernicus, getCITED, Ulrich's, cod CNCSIS: 87**)
22. Neagu, B.C., **Gavrilas, M.,** Tirsu, M., Covalenco, N. and Negura, I., 2021. Environmental Performance Evaluation for a Small Scale Trigeneration System. *Bulletin of the Polytechnic Institute of Iași. Electrical Engineering, Power Engineering, Electronics Section*, *67*(4), pp.73-85 (**Index Copernicus, getCITED, Ulrich's, cod CNCSIS: 87**)
23. Neagu B.C., Ivanov O., Grigoraș G., **Gavrilaș M.,** Short-term Load Forecast Approach Based on Artificial Neural Networks, Buletinul Institutului Politehnic din Iasi, Secţia: Electrotehnică, Energetică, Electronică, Volumul 65 (69), Fasc. 2, pp. 9-22, 2019, ISSN 1223-8139 (**Index Copernicus, getCITED, Ulrich's, cod CNCSIS: 87**)

G. Lucrări ştiinţifice publicate în reviste din străinătate.

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

1. **Gavrilaș M.,** Grigoraș Gh., Cazacu M., Carp C.O., Andrei I., Reducing Active Energy Losses in Low Voltage Distribution Grids, Journal of Sustainable Energy, Vol. 8, No. 3, pp. 113 – 120, ISSN: 2067-5534, 2017 (**cod CNCSIS 817**)
2. Grigoras Gh., **Gavrilaș M.**, Scarlatache Fl., Cazacu M., Cosarca G., Assessing Energy Losses in Unbalanced Low Voltage Electric Distribution Networks, Energetica, Vol. 64, Nr. 2, pp. 53 – 59, ISSN: 1453-2360, 2016 (**cod CNCSIS 512**)
3. Kriukov Al., **Gavrilas M.,** Managing a multi-purpose parking lot for electric vehicles, Buletinul AGIR, nr. 3, 2013, ISSN 1224-7928 si ISSN online 2247-3548, pp. 307-312 (**cod CNCSIS 415**)
4. Stativa A., **Gavrilas M.,** Small signal stability enhancement using supplementary signals from PMU, Buletinul AGIR, nr. 3, 2013, ISSN 1224-7928 si ISSN online 2247-3548, pp. 261-267 (**cod CNCSIS 415**)
5. Stativa A., **Gavrilas M.,** Using DIGSILENT in small signal stability studies, Buletinul AGIR, nr. 3, 2013, ISSN 1224-7928 si ISSN online 2247-3548, pp. 269-274 (**cod CNCSIS 415**)
6. Vicol B., **Gavrilas M**., Ivanov O., Modern technologies for power systems monitoring, Buletinul AGIR, nr. 3, 2013, ISSN 1224-7928 si ISSN online 2247-3548, pp. 299-305 (**cod CNCSIS 415**)
7. Coroama I., **Gavrilas M.,** Chicco G., Multiobjective Optimization for Smart Grids, Revista Energetica, Vol. 61, Nr. 5, pag. 178-183, 2013, ISSN 1453-2360 (**cod CNCSIS 512**)
8. Coroama I., **Gavrilas M**., Chicco G., Multiobjective Optimization for Smart Grids, Revista Energetica, Vol. 61, Nr. 5, pag. 178-183, 2013, ISSN 1453-2360 (**cod CNCSIS 512**)
9. Ivanov O., **Gavrilas M**., Static Power Systems State Estimation. A Neural Network Software Approach, Revista Energetica, Vol. 61, Nr. 5, pag. 184-188, 2013, ISSN 1453-2360 (**cod CNCSIS 512**)
10. Vicol B., **Gavrilas M.,** Ivanov O., Estimation f Electrical Overhead Lines Parameters using Synchro-Phasor Measurements, Revista Energetica, Vol. 61, Nr. 5, pag. 194-198, 2013, ISSN 1453-2360 (**cod CNCSIS 512**)

11. **Gavrilas M.,** Cazacu M., Cosarca G., Postolache D., Assessement of Technical Energy Losses for Low Voltage Distribution Networks with Uncertain Load Characteristics, Revista Energetica, Vol. 61, Nr. 6, pag. 221-227, 2013, ISSN 1453-2360 (**cod CNCSIS 512**)
12. Ivanov O., **Gavrilaş M.,** Vicol B., New models for power systems state estimation, UPB Scientific Bulletin, Series C: Electrical Engineering, Volume 74, Issue 1, 2012, Pages 181-188, ISSN: 2286-3540 (**Scopus**)
13. Coroamă I.**, Gavrilaş M.**, Ivanov O.**,** Multi-objective Pareto Network Optimization Problem for Technical, Economical and Environmental Objectives, Buletinul AGIR nr. 3/2012, iunie-august, ISSN 1224-7928 si ISSN online 2247-3548, pag 587-594, iunie 2012 (**cod CNCSIS 415**)
14. Stativă A., **Gavrilaş M.**, A metaheuristic approach for power system stability enhancement, Buletinul AGIR nr. 3/2012, iunie-august, ISSN 1224-7928 si ISSN online 2247-3548, pag 483-488, iunie 2012 (**cod CNCSIS 415**)
15. Kriukov Al., Vicol B., **Gavrilaş M.**, Ivanov O., A stochastic method for calculating energy losses in low voltage distribution networks using genetic algorithms, Buletinul AGIR nr. 3/2012, iunie-august, ISSN 1224-7928 si ISSN online 2247-3548, pag 595-602, iunie 2012 (**cod CNCSIS 415**)
16. Ivanov O., **Gavrilas M.,** Enhanced REI Equivalents with Phasor Measurements, Buletinul Institutului Politehnic Iasi, Tom LVII (LXI), Fasc. 1, 2011, Electrotehnica, Energetica, Electronica, pp.129-136,2007,ISSN 1223-8139 (**cod CNCSIS 87**)
17. **Gavrilas M**., Ivanov O., Gavrilas G., *REI equivalent design for electric power systems with genetic algorithms*, WSEAS Transactions on Circuits and Systems, v 7, n 10, 2008, p 911921, ISSN: 1109-2734 (**Compendex, Scopus)**
18. Dragoi C., Csulak F., Anisie D., **Gavrilas M.**, Ivanov O., Analiza CPT in reteaua de 110 kV a E.ON Moldova distributie in conditiile realizarii insulei Stanca-Costesti, Revisa Energetica, nr. 3, pp. 96-103, 2008, ISSN 1453-2360 (**cod CNCSIS 512**)
19. **Gavrilas M**., Rusu I., Ivanov O., Estimarea stării sistemelor electroenergetice folosind măsurări fazoriale, Revisa Energetica, nr. 8, pp. 334-340, 2008, ISSN 1453-2360 (**cod CNCSIS 512**)
20. Ivanov O., **Gavrilas M.**, Istrate M., A Radial Basis Function Neural Network with Pruning Strategy for Distance Relaying Systems, Analele Universităţii din Craiova, Seria Inginerie electrica, Transportul şi distribuţia energieie electrice, pp. 345-348, 2007, ISSN 1842-4805 (**cod CNCSIS 174)**
21. Gavrilas G., **Gavrilas M.**, Chirila C., Energetic efficiency in the environmental politics, element of sustainable development, Revista de cadastru, RevCAD – Journal of Geodesy and Cadastre, No. 7, pp. 193-196, 2007, ISSN 1583-2279 (**cod CNCSIS 634**)
22. **Gavrilas M.**, Ivanov O., Sfintes C.V. – Electricity Costs Optimization by Customer Activity Scheduling; Buletinul Institutului Politehnic Iasi, Tom LIII (LVII), Fasc. 3-4, 2007, Electrotehnica, Energetica, Electronica, pp.129-136,2007,ISSN 1223-8139 (**cod CNCSIS 87**)
23. **Gavrilas M**., Ivanov O. – *Medium Term Load Forecasting in Distribution Systems Using Load Profiling*; Buletinul Institutului Politehnic Iasi, Tom LIII (LVII), Fasc. 3-4, 2007, Electrotehnica, Energetica, Electronica, pp. 137-143., 2007, ISSN 1223-8139 (**cod CNCSIS 87**)
24. **Gavrilas M.**, Sfintes C.V., Ivanov O., Demand Response Modeling Under Electricity Market Conditions Using an Object-Oriented Approach, Analele Universităţii din Craiova, Seria Inginerie electrica, Transportul şi distribuţia energieie electrice, pp. 339-344, 2007, ISSN 1842-4805 (**cod CNCSIS 174**)
25. **Gavrilas M**., Cartina Gh., Grigoras Gh., Ivanov O., *Integrated Model for Electric Load Profiling*; Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Electronica, Tom LII (LVI), Fasc. 5, pp. 1187-1192, 2006, ISSN 1223-8139, (**cod CNCSIS 87**)
26. **Gavrilas M.**, Ivanov O., G. Ivaniciuc, O. Braisteanu, 2006, *Load Profiling by SelfOrganization*; Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Electronica, Tom LII (LVI), Fasc. 5, pp. 1193-1198, 2006, ISSN 1223-8139, (**cod CNCSIS 87**)
27. **Gavrilas M.**, Sfintes C.V., *Fuzzy Self-Organizing Approach to Electric Load Profiling*; Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Electronica, Tom LII (LVI), Fasc. 5, pp. 1181-1186, 2006, ISSN 1223-8139, (**cod CNCSIS 87**)

28. **Gavrilas M.**, Ivanov O., Distribution systems optimization with computational intelligence algorithms; The Annals of „Dunarea de Jos" University of Galati, Fascicle III, Electrotechnics, Electronics, Automatic control, Informatics, pp. 49-55, 2006, ISSN 1221-454X (**cod CNCSIS 482**)
29. Ivanov O., **Gavrilas M.**, *Finding the optimal path of electrical distribution networks using cooperating agents*, Proceedings EPE 2004, Iasi, Romania, Tom L (LIV), Fasc. 5A, Electrotehnica-Energetica-Electronica, pag. 163-168, 2004, ISSN 1223-8139, (**cod CNCSIS 87**)
30. **Gavrilas M.**, Raileanu C., *Model hibrid statistic neuronal pentru prognoza pe termen mediu a consumului de energie electrica*; Revista Energetica, Nr.6, pag. 214-219, 2003, ISSN 14532360 (**cod CNCSIS 512**)
31. **Gavrilas M.**, Hongu D., *Profilarea sarcinii, o componenta majora a politicilor de marketing ale furnizorilor de energie electrica – aplicatii ale inteligentei artificiale*; Revista Energetica, Nr. 7, pp. 298-303, 2002, ISSN 1453-2360 (**cod CNCSIS 512**)
32. **Gavrilas M.**, Filimon M.N., Sfintes C.V., *Prognoza pe termen mediu, instrument pentru fundamentarea contractelor cadru de portofoliu intre producatori si furnizori*; Revista Energetica, Nr. 12, pp. 532-537, 2001, ISSN 1453-2360 (**cod CNCSIS 512**)
33. **Gavrilas M.**, Coca D., Stefanovici C., *Prognoza pe termen scurt a consumului de energie electrica la S.D. Suceava cu un model bazat pe inteligenta artificiala*, Revista Energetica, nr. 8-9, pag. 407-415, 2000, ISSN 1453-2360 (**cod CNCSIS 512**)
34. **Gavrilas M.**, *Medium-term load forecasting using a mixed fuzzy-neural networks approach,* Buletinul Institutului Politehnic Iasi, Tom XLVI (L), Fasc. 1-2, pag. 407-415, 2000, ISSN 1223-8139, (**Inspec**)
35. Georgescu Gh. , Radasanu D., **Gavrilas M.**, *A technical-economical approach for optimal capacitor placement using simulating methods and genetic algorithms*, Buletinul Institutului Politehnic Iasi, Tom XLV (XLIX), Fasc. 1-2, pag. 120-124, 1999, ISSN 1223-8139, (**Inspec**)
36. **Gavrilas M.**, Georgescu Gh., Radasanu D., *Load profile identification using the adaptive resonance theory*, Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Tomul XLV (XLIX), Fasc. 1-2, pag. 231-236, 1999, ISSN 1223-8139, (**Inspec**)
37. **Gavrilas M.**, Georgescu Gh., *Multiobjective optimization in power distribution networks using an evolutionary computation approach,* Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Electronica, Tomul XLV (IL), Fasc. 3-4, pag. 183-188, 1999, ISSN 1223-8139, (**Inspec**)
38. Georgescu Gh., **Gavrilas M.**, Radasanu D., *Previziunea pe termen scurt si mediu a puterii folosind retele neuronale artificiale*, Revista Energetica, Nr. 8-9, pag. 351-356, 1999, ISSN 1453-2360 (**cod CNCSIS 512**)
39. **Gavrilas M.**, Georgescu Gh., Radasanu D., *Optimal selection of capacitors for reactive power compensation in distribution systems using genetic algorithms*, Buluetinul Institutului Politehnic Iasi, Fasc. 1-2, Sectia III, Electrotehnica, Energetica, Tomul XLIV (XLVIII), Fasc. 1-2, pag. 139-146, 1998, ISSN 1223-8139, (**cod CNCSIS 87**)
40. Radasanu D., Georgescu Gh., **Gavrilas M**., Poeata T., *Tehnici noi de estimare a pierderilor de putere in retelele electrice folosind inteligenta artificiala*; Revista Energetica, Nr. 10, pag. 490-496, 1998, ISSN 1453-2360 (**cod CNCSIS 512**)
41. Georgescu Gh., **Gavrilas M.**, Radasanu D., *An artificial neural network approach for medium and short-term forecasting of electric load*, Buluetinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Tomul XLIV (XLVIII), Fasc. 3-4, pag. 115-120, 1998, ISSN 1223-8139, (**cod CNCSIS 87**)
42. Radasanu D., **Gavrilas M.**, Georgescu Gh., *An artificial neural network approach for the evaluation of active losses in power transmission systems*, Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Tomul XLIII (XLVII), Fasc. 3-4, pag. 115-120, 1997, ISSN 1223-8139, (**cod CNCSIS 87**)
43. **Gavrilas M.**, Georgescu Gh., *Real-time control of switching operations in electric substations using a connectionist approach*, Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Tomul XLI I (XLVI), Fasc. 3-4, pag. 139-144, 1996, ISSN 12238139, (**Inspec**)

44. Georgescu Gh., **Gavrilas M.**, *Optimal design of the rural electric distribution networks*, Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Tomul XLII (XLVI), Fasc. 1-2, pag. 151-153, 1996, ISSN 1223-8139, (**cod CNCSIS 87**)
45. **Gavrilas M.**, Georgescu Gh., *Utilizarea algoritmilor genetici pentru determinarea schemei optime de functionare a retelelor de distributie urbana*, Revista Energetica, Nr. 6, pag. 249256, 1996, ISSN 1453-2360 (**cod CNCSIS 512**)
46. Georgescu Gh., **Gavrilas M.**, Cartina Gh., Luchian I., Tibuleac St., *Aspects concerning the computation of energy losses in distribution networks*, Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Tomul XLI (XLV), Fasc. 5, pag. 487-492, 1995, ISSN 1223-8139, (**cod CNCSIS 87**)
47. Cartina Gh., **Gavrilas M.**, Georgescu Gh., Vasiliu Z.H., Federenciuc D., *L'utilisation des reseaux neuronaux artificiels a la planification et a la conduite previsionnelle des systemes energetiques*, Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Tomul XLI (XLV), Fasc. 5, pag. 557-562, 1995, ISSN 1223-8139, (**cod CNCSIS 87**)
48. Georgescu Gh., Poeata Al., **Gavrilas M.**, *Calculul pierderilor de energie in retelele de distributie folosind descompunerea graficelor de sarcina in serii Fourier*, Revista Energetica, Nr.5, pag. 223-226, 1995, ISSN 1453-2360 (**cod CNCSIS 512**)
49. Georgescu Gh., **Gavrilas M.**, Cartina Gh., Alexandrescu V., *The optimal planning of medium voltage power distribution networks*, Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Tomul XLI (XLV), Fasc. 1-2, pag. 117-123, 1995, ISSN 12238139, (**cod CNCSIS 87**)
50. **Gavrilas M.**, Georgescu Gh., *Consumer category identification in distribution networks using Hopfield nets*, Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Tomul XLI (XLV), Fasc. 3-4, pag. 161-166, 1995, ISSN 1223-8139, (**cod CNCSIS 87**)
51. **Gavrilas M.**, Georgescu Gh., Cartina Gh., Bruma N., Popa C., *A connectionist approach to real-time control of power system substations*, Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Tomul XLI (XLV), Fasc. 5, pag. 551-556, 1995, ISSN 12238139, (**cod CNCSIS 87)**
52. Georgescu Gh., **Gavrilas M.**, *Some aspects about the spectral analysis of load curves of electric distribution networks*, Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Electronica, Tomul XL (XLIV), Fasc. 1-4, pag. 115-121, 1994, ISSN 1223-8139, (**cod CNCSIS 87**)
53. **Gavrilas M.**, Georgescu Gh., *Consumer category identification of the loads from electric distribution systems using artificial neural networks*, Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Electronica, Tomul XL (XLIV), Fasc. 1-4, pag. 127133, 1994, ISSN 1223-8139, (**cod CNCSIS 87**)
54. **Gavrilas M.**, *Remarks about the study of self-compensated overhead lines with bundled conductors*, Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Electronica, Tom XXXIX (XLIII), Fasc. 1-4, pag. 121-127, 1993, ISSN 1223-8139, (**cod CNCSIS 87**)
55. Georgescu Gh., **Gavrilas M.**, *Optimizarea dezvoltarii si exploatarii instalatiilor energetic*, Raport sectiunea I, Revista Energetica, Seria B, nr. 1, pag. 42-44, 1992, ISSN 1453-2360 (**cod CNCSIS 512)**
56. Poeata Al., **Gavrilas M.**, *Remarks about the study of compact overhead electric power transmission lines*, Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Electronica, Tom XXXVIII (XLII), Fasc. 1-4, pag. 85-89, 1992, ISSN 1223-8139, (**cod CNCSIS 87**)

I. Lucrări științifice publicate în volumele conferințelor.

1. B. -C. Neagu, M. -A. Luca, **M. Gavrilas**, G. Grigoras, O. Ivanov and F. Scarlatache, "Leveraging Energy Storage Systems and Virtual Power Lines to Minimize Curtailment in Future Distribution Grids," *2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi)*, Iasi, Romania, 2024, pp. 495-500, doi: 10.1109/EPEi63510.2024.10758096 (**IEEE Proceedings**).
2. M. Nastase and **M. Gavrilaș**, "Load Shifting as a Demand Side Management Technique," *2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi)*, Iasi, Romania, 2024, pp. 585-590, doi: 10.1109/EPEi63510.2024.10758065 (**IEEE Proceedings**).

3. M. -A. Luca, **M. Gavrilaş**, O. Ivanov and B. -C. Neagu, "Efficient Operation Approach of Microgrids Enriched with Prosumers and Storage Systems," *2023 10th International Conference on Modern Power Systems (MPS)*, Cluj-Napoca, Romania, 2023, pp. 1-5, doi: 10.1109/MPS58874.2023.10187493 (**IEEE Proceedings**).
4. A. -I. Pricop, **M. Gavrilaş**, A. SĂlceanu and B. -C. Neagu, "Power systems resilience against cyber-attacks. A systematic analysis," *2023 10th International Conference on Modern Power Systems (MPS)*, Cluj-Napoca, Romania, 2023, pp. 1-7, doi: 10.1109/MPS58874.2023.10187420 (**IEEE Proceedings**).
5. M. Nastase and M. Gavrilaş, "Prosumer Concept Considering the Building Energy Efficiency Situation," *2022 International Conference and Exposition on Electrical And Power Engineering (EPE)*, Iasi, Romania, 2022, pp. 583-588, doi: 10.1109/EPE56121.2022.9959820 (**IEEE Proceedings**).
6. O. Ivanov, B. -C. Neagu, N. -C. Toma, G. Grigoras, P. -D. Ghilan and **M. Gavrilas**, "Metaheuristic Approaches for Distributed Generation Placement Optimization in Electrical Grids : A comparison between PSO, Tiki-Taka and Archimedes Optimzation Algorithms," *2022 International Conference and Exposition on Electrical And Power Engineering (EPE)*, Iasi, Romania, 2022, pp. 208-212, doi: 10.1109/EPE56121.2022.9959077 (**IEEE Proceedings**).
7. B. Livadariu, G. Grigoraş, B. -C. Neagu, O. Ivanov, F. Scarlatache and **M. Gavrilas**, "Optimal Power Flow with the Clustering-Improved Fuzzy Models for Uncertainty Sources of Wind Power and Nodal Loads," *2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi)*, Iasi, Romania, 2024, pp. 484-489, doi: 10.1109/EPEi63510.2024.10758170 (**IEEE Proceedings**).
8. Ivanov O., Neagu B.C., Grigoras G., **Gavrilaș M.,** Capacitor Banks Placement Optimization Improvement Using the Sperm Whale Algorithm, 2019 11th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Pitești, Arges, Romania, June 27– June 29, 2019, pp. 1-6. (**WoS Proceedings**)
9. Neagu B. C., **Gavrilaș M**., Pentiuc R.D., Hopulele E., Optimal Placement of Energy Storage Systems in Microgrids Using a PSO Based Approach, IEEE PES Innovative Smart Grid Technologies Europe (ISGT-Europe), September 29 to October 2, 2019, București, Romania, pp. 1-6. (**WoS Proceedings**)
10. Hopulele E., Pentiuc R.D., Neagu B. C., **Gavrilaș M**., Optimizing the Operation of a Trigeneration System Designed to Meet Energy Requirements for a Consumer, IEEE PES Innovative Smart Grid Technologies Europe (ISGT-Europe), September 29 to October 2, 2019, București, Romania, pp. 1-6 (**WoS Proceedings**)
11. **Gavrilaș M.,** Neagu B.C., Pentiuc R., Hopulele E., Overview on Distributed Generation Integration in Distribution Systems, Proceedings of 2018 International Conference and Exposition on Electrical and Power Engineering (EPE 2018), Iasi, Romania, 18-19 Oct. 2018, pp. 1063-1069, WOS:000458752200208 (**WoS Proceedings**)
12. Matei Gh., Neagu B.C., **Gavrilaș M.,** Optimal Voltage Control Based on a Modified Line Drop Compensation Method in Distribution Systems, Proc. 2018 IEEE International Conference on Environment and Electrical Engineering and 2018 IEEE Industrial and Commercial Power Systems Europe (EEEIC/I&CPS Europe, Palermo, Italy, 12-15 June 2018, WOS:000450163702009 (**WoS Proceedings**)
13. Neagu B.C., **Gavrilaș M.,** Matei Gh., Voltage/VAR Control with Reactive Power Injection in Distribution Networks using a Proper Metaheuristic Approach, Proc. 2018 IEEE International Conference on Environment and Electrical Engineering and 2018 IEEE Industrial and Commercial Power Systems Europe (EEEIC/I&CPS Europe, Palermo, Italy, 12-15 June 2018, WOS:000450163701095 (**WoS Proceedings**)
14. Toma N., Ivanov O., Neagu B.C., **Gavrilaș M.,** A PSO Algorithm for Phase Load Balancing in Low Voltage Distribution Networks, Proceedings of 2018 International Conference and Exposition on Electrical and Power Engineering (EPE 2018), Iasi, Romania, 18-19 Oct. 2018, pp. 857-862, WOS:000458752200167 (**WoS Proceedings**)
15. Toma R., **Gavrilaș M.,** Voltage Stability Assessment based on a Load Flow Sensitivity Method, Proceedings of 2018 International Conference and Exposition on Electrical and Power Engineering

(EPE 2018), Iasi, Romania, 18-19 Oct. 2018, pp. 712-717, WOS:000458752200140 (**WoS Proceedings**)

16. P. Kar, Chattopadhyay S., Ivanov O., **Gavrilaș M.,** Optimal Demand Response Allocation in LV Distribution Networks Using the PSO Algorithm, Proceedings of 2018 International Conference and Exposition on Electrical and Power Engineering (EPE 2018), Iasi, Romania, 18-19 Oct. 2018, pp. 697-702, WOS:000458752200137 (**WoS Proceedings**)
17. Grigoraș Gh., **Gavrilaș M.,** An Improved Approach for Energy Losses Calculation in Low Voltage Distribution Networks based on the Smart Meter Data, Proceedings of 2018 International Conference and Exposition on Electrical and Power Engineering (EPE 2018), Iasi, Romania, 18-19 Oct. 2018, pp. 749-754, WOS:000458752200146 (**WoS Proceedings**)
18. Ivanov O., Neagu B.C., **Gavrilaș M.**, A Parallel PSO Approach for Optimal Capacitor Placement in Electricity Distribution Networks, Proc. 7th International Conference on Modern Power Systems (MPS), Cluj Napoca, Romania, June 06-09, 2017, pp.1-5, ISBN:978-1-5090-6565-3, Accession Number: WOS:000428462600018 (Clarivate/ISI) (**WoS Proceedings**)
19. Neagu B. C., Ivanov O., **Gavrilaș M.**, Voltage profile improvement in distribution networks using the whale optimization algorithm, Proc. 9th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Targoviste, Romania, 29 June-1 July 2017, ISBN:978-1-5090-6458-8, ISSN: 2378-7147, Accession Number: WOS:000425865900081 (ISI/Clarivate) (**WoS Proceedings**)
20. Ivanov O., Neagu B.C., **Gavrilaș M.**, Voltage Profile Improvement in Electricity Distribution Networks - A Genetic Algorithm Benchmark Study, Proc. International Conference on Electromechanical and Power Systems (SIELMEN), Iasi, ROMANIA, October 11-13, 2017, pp.560-564, ISBN:978-1-5386-1846-2, Accession Number: WOS:000426906000107 (ISI/Clarivate) (**WoS Proceedings**)
21. Neagu B.C., Ivanov O., **Gavrilaș M.,** A Comprehensive Solution for Optimal Capacitor Allocation Problem in Real Distribution Networks, Proc. International Conference on Electromechanical and Power Systems (SIELMEN), Iasi, ROMANIA, October 11-13, 2017, pp.565-570, ISBN:978-1-5386-1846-2, Accession Number: WOS:000426906000107 (ISI/Clarivate) (**WoS Proceedings**)
22. Banerjee A., **Gavrilas M.**, Grigoras Gh., Chattopadhyay S., A fuzzy hybrid approach for reliability optimization problem in power distribution systems, Proc. 2016 International Conference and Exposition on Electrical and Power Engineering (EPE 2016), Iasi, Romania, 20-22 Oct. 2016, pp. 809-814, DOI: 10.1109/ICEPE.2016.7781449 (**WoS Proceedings**)
23. Hopulele E., Atanasoae P., **Gavrilas M.**, The influence of the tariff charged by electricity suppliers on the optimal running of a trigeneration plant, Proc. 2016 International Conference and Exposition on Electrical and Power Engineering (EPE 2016), Iasi, Romania, 20-22 Oct. 2016, pp. 792 – 797, DOI: 10.1109/ICEPE.2016.7781446 (**WoS Proceedings**)
24. Matei G., **Gavrilas M.**, Voltage regulation in distribution networks with distributed generation — A review, Proc. 2016 International Conference and Exposition on Electrical and Power Engineering (EPE 2016), Iasi, Romania, 20-22 Oct. 2016, pp. 728 – 732, DOI: 10.1109/ICEPE.2016.7781435 (**WoS Proceedings**)
25. Banerjee A., **Gavrilas M.**, Grigoras Gh., Chattopadhyay S., Decision making in assessment of RRAP of WSN using fuzzy-hybrid approach, Trans. 2015 IEEE International Conference on Advanced Networks and Telecommuncations Systems (ANTS), Kolkata, India, 15-18 Dec. 2015 , pp. 1-6, DOI: 10.1109/ANTS.2015.7413655 (**WoS Proceedings**)
26. Banerjee A., **Gavrilas M.**, Ivanov O., Chattopadhyay S., Reliability improvement and the importance of power consumption optimization in wireless sensor networks, Proc. 9th International Symposium on Advanced Topics in Electrical Engineering (ATEE), Bucharest, Romania, 7-9 May 2015, pp. 735-740, DOI: 10.1109/ATEE.2015.7133902 (**WoS Proceedings**)
27. Hopulele E., **Gavrilas M.**, Atanasoae P., Optimal design of a hybrid distributed generation system, Proc. 49th International Universities Power Engineering Conference (UPEC 2014), Cluj-Napoca, Romania, 2-5 Sept. 2014, pp. 1-6, ISBN 978-1-4799-6556-4 (**WoS Proceedings**)
28. Kriukov Al., Vicol B., **Gavrilas M.**, Applying a micro-market inside an electric vehicles parking facility, Proc. 49th International Universities Power Engineering Conference (UPEC 2014), Cluj-Napoca, Romania, 2-5 Sept. 2014, pp. 1-6, ISBN 978-1-4799-6556-4 (**WoS Proceedings**)

29. Toma R., **Gavrilas M.**, The impact on voltage stability of the integration of renewable energy sources into the electricity grids, Proc. 2014 International Conference and Exposition on Electrical and Power Engineering (EPE 2014), Iasi, Romania, 16-18 Oct. 2014, pp. 1051-1054, ISBN 10.1109/ICEPE.2014.6970069 (**WoS Proceedings**)
30. Ivanov O., **Gavrilas M.**, State estimation with Neural Networks and PMU voltage measurements, Proc. 2014 International Conference and Exposition on Electrical and Power Engineering (EPE 2014), Iasi, Romania, 16-18 Oct. 2014, pp. 983-988, ISBN 10.1109/ICEPE.2014.6970056 (**WoS Proceedings**)
31. Ivanov O., **Gavrilas M.**, Neagu B., Intelligent monitoring and control in transmission and distribution networks, Proc. Conference on Optimization of Electrical and Electronic Equipment OPTIM 2014, Bran, Romania, 22-24 May, 2014, pp. 185-191, ISBN 978-1-4799-5183-3 (**WoS Proceedings**)
32. Stativa A., **Gavrilas M.**, Ivanov O., Optimal Power System Stabilizer design using multiple wide-area input signals, Proc. 14th International Conference on Environment and Electrical Engineering (EEEIC 2014), Krakow, Poland , 10-12 May 2014, pp. 34-39, ISBN 978-1-4799-4660-0 (**WoS Proceedings**)
33. Kriukov Al., Grigoras Gh., **Gavrilas M.**, Scarlatache F., An analyze of slow voltage variations from the electric distribution systems with a clustering based approach, Proc. 16th International Conference on Harmonics and Quality of Power (ICHQP), Bucharest, Romania , 25-28 May 2014, pp. 689-693, ISBN 978-1-4673-6487-4 (**WoS Proceedings**)
34. Vicol B., **Gavrilas M.**, Ivanov O., Neagu B., Grigoras Gh., Synchrophasor measurement method for overhead line parameters estimation in MV distribution networks, Proc. 16th International Conference on Harmonics and Quality of Power (ICHQP), Bucharest, Romania , 25-28 May 2014, pp. 862-865, ISBN 978-1-4673-6487-4 (**WoS Proceedings**)
35. **Gavrilas M.**, Ivanov O., Gavrilas G., Electricity load forecasting based on a mixed statistical-neural-computational intelligence approach, Proc. 12th Symposium on Neural Network Applications in Electrical Engineering (NEUREL 2014), Belgrade, Serbia, 25-27 Nov. 2014, pp. 61-66, ISBN 978-1-4799-5887-0 (**WoS Proceedings**)
36. Grigoras Gh., **Gavrilas M.**, Ivanov O., Customer classification and load profiling using data from Smart Meters, Proc. 12th Symposium on Neural Network Applications in Electrical Engineering (NEUREL 2014), Belgrade, Serbia, 25-27 Nov. 2014, pp. 73-78, ISBN 978-1-4799-5887-0 (**WoS Proceedings**)
37. Ivanov O., **Gavrilas M.**, State Estimation for Power Systems with Multilayer Perceptron Neural Networks, Proc. 11th Symposium on Neural Network Applications in Electrical Engineering (NEUREL 2012), Belgrade, SERBIA, 20-22 Sep., 2012, pp. 243-246, ISBN: 978-1-4673-1572-2 (**WoS Proceedings**)
38. **Gavrilas M.,** Gavrilas G., Needs of Higher Education for Future Power Engineers; Proceedings of 6th International Seminar on the Quality Management in Higher Education, JUL 08-09, 2010 Tulcea, ROMANIA, pp. 427-430, ISBN: 978-973-662-567-1 (**WoS Proceedings**)
39. Coroama I., **Gavrilas M.**, A study on wind energy generation forecasting using connectionist models, Poceedings of the 12-th International Conference on Optimization of Electrical and Electronic Equipment, OPTIM 2010, pp. 1257 – 1262, ISBN: 978-973-131-7018-1 **(WoS Proceedings)**
40. Ivanov O., **Gavrilas M.**, Intelligent distributed state estimation using REI system equivalents and phasor measurements, Poceedings of the 12-th International Conference on Optimization of Electrical and Electronic Equipment, OPTIM 2010, pp. 1263 – 1268, ISBN: 978-973-1317018-1 **(WoS Proceedings)**
41. Ivanov O., **Gavrilas M.,** Applying Genetic Algorithms to REI system equivalents, 2009 IEEE PowerTech Conference, Bucuresti, 28 Iunie-2 Iulie 2009, ISBN 978-1-4244-2235-7, Library of Congress 2008901840, IEEE Catalog Number: CFP09815-CDR, CD-ROM (**WoS Proceedings**)
42. **Gavrilas M.,** Gavrilas G., Impact of renewable energy sources over the existing electrical network, Proceedings of the 6-the International Conference on Management of Technological Changes, Alexandropoulis, Grecia, 2-5 Sept. 2009, ISBN: 978-960-89832-8-1, (**WoS Proceedings**)
43. **Gavrilas M.,** Recent Advances and Applications of Synchronized Phasor Measurements in Power Systems, Poceedings of the 9-th WSEAS/IASME International Conference on Electric Power Systems,

High Voltage, Electric Machines (POWER '09), Genova, Italy, Oct. 17-19, 2009, Book Series: Recent Advances in Electrical Engineering, pp. 82-91, ISBN:978-960474-130-4, ISSN: 1790-5117. (**WoS Proceedings**)

44. **Gavrilas M.,** Gavrilas G., Ivanov O., A Network Reduction Method with Synchronized Phasor Measurements, Poceedings of the 9-th WSEAS/IASME International Conference on Electric Power Systems, High Voltage, Electric Machines (POWER '09), Genova, Italy, Oct. 17-19, 2009, Book Series: Recent Advances in Electrical Engineering**,** pp. 92-97, ISBN:978960-474-130-4, ISSN: 1790-5117. (**WoS Proceedings**)
45. Ivanov O., **Gavrilas M.,** Improving WLS estimation results using PMU measurements, Poceedings of the 9-th WSEAS/IASME International Conference on Electric Power Systems, High Voltage, Electric Machines (POWER '09), Genova, Italy, Oct. 17-19, 2009, Book Series: Recent Advances in Electrical Engineering**,** pp. 98-103, ISBN:978-960-474-130-4, ISSN: 1790-5117. (**WoS Proceedings**)
46. Grigoras Gh., Cartina Gh., **Gavrilas M.,** Using of Clustering Techniques in Optimal Placement of Phasor Measurements Units, Poceedings of the 9-th WSEAS/IASME International Conference on Electric Power Systems, High Voltage, Electric Machines (POWER '09), Genova, Italy, Oct. 17-19, 2009, Book Series: Recent Advances in Electrical Engineering**,** CD-ROM, în curs de pp. 104-108, ISBN:978-960-474-130-4, ISSN: 17905117. (**WoS Proceedings**)
47. Istrate M., **Gavrilas M.,** Istrate C., Ursulean R., Assessment of Two Double-end Data Fault Location Algorithms in Transmission Grids using ATP simulations, Poceedings of the 9-th WSEAS/IASME International Conference on Electric Power Systems, High Voltage, Electric Machines (POWER '09), Genova, Italy, Oct. 17-19, 2009, Book Series: Recent Advances in Electrical Engineering**,** pp. 109-114, ISBN:978-960-474-130-4, ISSN: 1790-5117. (**WoS Proceedings**)
48. **Gavrilas M.**, Ivanov O., Gavrilas G., Load Profiling with Fuzzy Self-Organizing, 9th Symposium on Neural Network Applications in Electrical Engineering NEUREL 2008**,** Sept. 25–27, 2008, Belgrade, Serbia, CD-ROM, ISBN: 978-1-4244-2903-S (**WoS Proceedings**)
49. **Gavrilas M**., Ivanov O., Gavrilas G., A New Static Network Reduction Technique Based on REI Equivalents and Genetic Optimization, Poceedings of the 8th WSEAS International Conference on Power Systems and Power Technology (PS '08), Santander, Cantabria, Spain, Sept. 23-25, 2008, Book Series: Recent Advances in Electrical Engineering**,** pp. 106 – 111, ISBN 978-960-474-006-2 (**WoS Proceedings**)
50. **Gavrilas M.**, Sfintes C.V., Ivanov O., Comparison of Neural and Evolutionary Approaches to Peak Load Estimation in Distribution Systems; EUROCON 2005, Nov. 22-24, Belgrade, Serbia & Montenegro, 2005, CD-ROM, ISBN: 1-4244-0049-X (**WoS Proceedings**)
51. **Gavrilas M.**, Sfintes C.V., Filimon M.N., Identifying typical load profiles using neural-fuzzy models; Proceedings of the 2001 IEEE / PES Transmission and Distribution Conference, Oct. 28 – Nov. 2, Atlanta, Georgia, 2001, CD-ROM, ISBN 07803-7287-5/01 (**WoS Proceedings**)
52. **Gavrilas M.**, Georgescu Gh., Cartina Gh., A Connectionist Approach to Real-Time Control and Simulation of Switching Operations in Power Systems Substations; Proceedings of the 8th Mediterranean Electrotechnical Conference MELECON'96, Vol. III, May 13-16, 1996, Bari, Italy, pp. 1431-1434, 1996, (**WoS Proceedings**)
53. Zetu C., Neagu B.C., Grigoras G., Ivanov O., **Gavrilas M.** Overhead Transmission Lines Capacity Management Based on Different Weather Conditions. In The 16th International Conference Interdisciplinarity in Engineering: Inter-Eng 2022 Conference Proceedings 2022 Dec 16 (pp. 660-681). Cham: Springer International Publishing. DOI: 10.1007/978-3-031-22375-4_53.
54. Nastase M, **Gavrilaş M.** Prosumer Concept Considering the Building Energy Efficiency Situation. In2022 International Conference and Exposition on Electrical and Power Engineering (EPE) 2022 Oct 20 (pp. 583-588). IEEE. DOI: 10.1109/EPE56121.2022.9959820.
55. Ivanov O, Neagu BC, Toma NC, Grigoras G, Ghilan PD, **Gavrilas M.** Metaheuristic Approaches for Distributed Generation Placement Optimization in Electrical Grids: A comparison between PSO, Tiki-Taka and Archimedes Optimzation Algorithms. In2022 International Conference and Exposition on Electrical And Power Engineering (EPE) 2022 Oct 20 (pp. 208-212). IEEE. DOI: 10.1109/EPE56121.2022.9959077.

56. Ivanov O., Neagu B.C., Cibotărică A., **Gavrilaş M.** Multiobjective Prosumer Surplus Management for Optimal Microgrid Operation. In2021 10th International Conference on ENERGY and ENVIRONMENT (CIEM) 2021 Oct 14 (pp. 1-5). IEEE. DOI: 10.1109/CIEM52821. 2021.9614729.
57. Kriukov A., **Gavrilas M.** EV Charging Control Using DSRC System in LVDN with DG Penetration. In2021 10th International Conference on ENERGY and ENVIRONMENT (CIEM) 2021 Oct 14 (pp. 1-5). IEEE. DOI: 10.1109/CIEM52821.2021.9614837.
58. Sanduleac M., Eremia M., Toma L., Damian C., **Gavrilas M.**, Grigoras G., Stratan I., Gropa V. Islanded Microgrids control by using Grid Former and Synthetic Slack Bus concept-A preliminary analysis. In2021 International Conference on Electromechanical and Energy Systems (SIELMEN) 2021 Oct 6 (pp. 231-236). IEEE. DOI: 10.1109/SIELMEN53755.2021.9600347.
59. Luca, M.A., Neagu, B.C., Ivanov, O., **Gavrilas, M.** and Grigoras, G., 2021, October. A Deeper Analysis about the Impact of Prosumers on Power Losses in Low Voltage Microgrids. In *2021 International Conference on Electromechanical and Energy Systems (SIELMEN)* (pp. 155-158). IEEE DOI: 10.1109/SIELMEN53755.2021.9600366.
60. Tirsu M., Covalenco N., Zaitsev D., Negura I., **Gavrilas M.**, Neagu B.C. Photovoltaic-Thermal System for Trigenerating Electricity, Hot Water and Cold. In2021 International Conference on Electromechanical and Energy Systems (SIELMEN) 2021 Oct 6 (pp. 092-096). IEEE DOI: 10.1109/SIELMEN53755.2021.9600378.
61. Ivanov, O., Neagu, B.C., Nițu, A.I. and **Gavrilaş, M.**, 2021, June. An Improved Metaheuristic Algorithm for Load Balancing in LV Distribution Networks. In 2021 9th International Conference on Modern Power Systems (MPS), pp. 1-5, IEEE, DOI: 10.1109/MPS52805.2021.9492680
62. Ivanov O., Neagu B.C., **Gavrilaş M.,** Grigoras G., Sfintes C., Phase Load Balancing in Low Voltage Distribution Networks Using Metaheuristic Algorithms, 12th International Conference on Electromechanical and Energy Systems – SIELMEN2019, Chișinău, Republica Moldova, 10 – 11 octombrie, 2019, (**IEEE Xplore**)
63. Neagu B.C., **Gavrilaş M.,** Grigoras G., Ivanov O., Voltage Control in Microgrids in the Presence of Small-Scale Renewable Energy Source, 12th International Conference on Electromechanical and Energy Systems – SIELMEN2019, Chișinău, Republica Moldova, 10 – 11 octombrie, 2019, pp. 1-6. (**IEEE Xplore**)
64. Grigoras G., **Gavrilaş M.,** Neagu B.C., Ivanov O., Triștiu I., Bulac C., An Efficient Method to Optimal Phase Load Balancing in Low Voltage Distribution Network, 9th International Conference on Energy and Environment – CIEM2019, Timisoara, Romania, 17 – 18 octombrie, 2019, pp. 1-6. (**IEEE Xplore**)
65. Ivanov O., **Gavrilas M.**, A hybrid GA-PSO algorithm for static VAR compensation, Proc. 2016 International Conference and Exposition on Electrical and Power Engineering (EPE 2016), Iasi, Romania, 20-22 Oct. 2016, pp. 681-686, DOI: 10.1109/ICEPE.2016.7781425 (**IEEE Xplore**)
66. Toma R., **Gavrilas M.**, Voltage stability assessment for wind farms integration in electricity grids with and without consideration of voltage dependent loads, Proc. 2016 International Conference and Exposition on Electrical and Power Engineering (EPE 2016), Iasi, Romania, 20-22 Oct. 2016, pp. 754-759, DOI: 10.1109/ICEPE.2016.7781440 (**IEEE Xplore**)
67. Grigoras Gh., **Gavrilas M.**, Phase swapping of lateral branches from low-voltage distribution networks for load balancing, Proc. 2016 International Conference and Exposition on Electrical and Power Engineering (EPE 2016), Iasi, Romania, 20-22 Oct. 2016, pp. 715 – 718, DOI: 10.1109/ICEPE.2016.7781432 (**IEEE Xplore**)
68. Toma R., **Gavrilas M.**, Study on voltage dynamics in power grids with renewable energy sources integration, Proc. 2016 International Conference and Exposition on Electrical and Power Engineering (EPE 2016), Iasi, Romania, 20-22 Oct. 2016, pp. 760 – 765, DOI: 10.1109/ICEPE.2016.7781441 (**IEEE Xplore**)
69. Kriukov Al., **Gavrilas M.**, Smart energy management in distribution networks with increasing number of electric vehicles, Proc. 2014 International Conference and Exposition on Electrical and Power Engineering (EPE 2014), Iasi, Romania, 16-18 Oct. 2014, pp. 1069-1044, ISBN 10.1109/ICEPE.2014.6970067 (**IEEE Xplore**)
70. Hopulele E., **Gavrilas M.**, Optimization of a combined cool, heat and power plant based on genetic algorithms and specialized software, Proc. 2014 International Conference and Exposition on Electrical

and Power Engineering (EPE 2014), Iasi, Romania, 16-18 Oct. 2014, pp. 1030-1033, ISBN 10.1109/ICEPE.2014.6970065 (**IEEE Xplore**)

71. Ivanov O., **Gavrilas M.**, Multilayer Perceptron architecture optimization for peak load estimation, Proc. 12th Symposium on Neural Network Applications in Electrical Engineering (NEUREL 2014), Belgrade, Serbia, 25-27 Nov. 2014, pp. 67-72, ISBN 978-1-4799-5887-0 (**IEEE Xplore**)
72. **Gavrilas M.**, Coroama I., Optimal VAR Compensation with DG Penetration Using an Enhanced Gravitational Search Algorithm, Proc. 4th International Symposium on Electrical and Electronics Engineering ISEEE 2013, Galati, Romania, 11-13 Oct., 2013, pp. 1-6, ISBN: 978-1-4799-2441-7 (**IEEE Xplore**)
73. **Mihai Gavrilaş,** Enhanced Evolutionary Search Algorithms for Multiobjective Optimization in Power System, Proceedings of 13th WSEAS International Conference on Evolutionary Computing, publicată în volumul Latest advance in information science, circuits and systems cu ISSN 1790-5109 si ISBN:978-1-61804-099-2, pag. 77-86, 2012 (**Google Scholar**)
74. Liva Graffin Rakotoarimanana, **Mihai Gavrilaş**, Ovidiu Ivanov, Multiobjective optimization of Capacitor Banks Placement in Distribution Networks, , Proceedings of 13th WSEAS International Conference on Evolutionary Computing, publicată în volumul Latest advance in information science, circuits and systems cu ISSN 1790-5109 si ISBN:978-1-61804-099-2, pag. 87-92, 2012 (**Google Scholar**)
75. Iulia Coroamă**, Mihai Gavrilaş**, Ovidiu Ivanov**,** A hybrid Differential Evolution – Analytic Hierarchy Process Method for Multi-objective Optimization, Proceedings of 13th WSEAS International Conference on Evolutionary Computing 2012, publicată în volumul Latest advance in information science, circuits and systems cu ISSN 1790-5109 si ISBN:978-161804-099-2, pag. 93-99 (**Google Shcolar**)
76. Stativa A., **Gavrilas M.**, Stahie V., Optimal tuning and placement of Power System Stabilizer using Particle Swarm Optimization algorithm, Proceedings of the 2012 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, 25-27 Oct. 2012, pp. 242 – 247 (**IEEE Xplore**)
77. Aparaschivei E.D., Ivanov O., **Gavrilas M.**, Load flow estimaton in electrical systems using artificial neural networks, Proceedings of the 2012 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, 25-27 Oct. 2012, pp. 276 – 279 (**IEEE Xplore**)
78. Coroama I., **Gavrilas M.**, Ivanov O., Stahie V., Meta-heuristic-based methods for multiobjective non-conflicting optimization of distribution networks operation, Proceedings of the 2012 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, 25-27 Oct. 2012, pp. 280 – 285 (**IEEE Xplore**)
79. **Gavrilas M.**, Gavrilas G., An Enhanced ANN Wind Power Forecast Model Based on a Fuzzy Representation of Wind Direction, Proceedings of the 10th Symposium on Neural Network Applications in Electrical Engineering, NEUREL 2010, Sept. 23-25, 2010, Belgrade, Serbia, pp. 31-36, ISBN: 978-1-4244-8818-6 **(IEEE Xplore)**
80. **Gavrilas M.**, Heuristic and Metaheuristic Optimization Techniqoes with Applications to Power Systems, Proceedings of the 12-th WSEAS International Conference on Mathematical Methods and Computational Techniques in Electrical Engineering (MMACTEE ,10), October 21-23, 2010, Timisoara, Romania, pp.95-103, ISBN: 978-960-474-238-7 **(Scopus)**
81. **Gavrilas M.**, Stahie V., A Metaheuristic Approach to Hydropower Reservoir Optimization Based on Honey Bee Mating Algorithm, Proceedings of the 12-th WSEAS International Conference on Mathematical Methods and Computational Techniques in Electrical Engineering (MMACTEE ,10), October 21-23, 2010, Timisoara, Romania, pp.110-115, ISBN: 978-960-474-238-7 **(Scopus)**
82. Coroama I., **Gavrilas M.**, Ivanov O., A Genetic Algorithm Approach to Voltage-VAR Control in Systems with Distributed Generation, Proceedings of the 12-th WSEAS International Conference on Mathematical Methods and Computational Techniques in Electrical Engineering (MMACTEE ,10), October 21-23, 2010, Timisoara, Romania, pp.104109, ISBN: 978-960-474-238-7 **(Scopus)**
83. **Gavrilas M.,** Gavrilas G., Sfintes C.V., Application of Honey Bee Mating Optimization algorithm to load profile clustering, Proceedings of 2010 IEEE International Conference on Computational

Intelligence for Measurement Systems and Applications (CIMSA), 6-8 Sept. 2010, Taranto, Itally, pp. 113-118, ISBN: 978-1-4244-7229-1 (**IEEE Xplore**)

84. **Gavrilas M.**, Istrate M., Ivanov O., Estimation of fundamental frequency components of voltage and current for digital distance relays, Proc. 30-th International Conference of Electrotechniques and Circuit Theory, IC-SPETO 2007, Gliwice, Poland, 23-25 May 2007, pp. 129-130, ISBN 978-83-85940-29-6 (**Inspec on OvidSP**)
85. **Gavrilas M.**, Sfintes C., Ivanov O., Load profiling methodology for electricity market, Proc. 30-th International Conference of Electrotechniques and Circuit Theory, IC-SPETO 2007, Gliwice, Poland, 23-25 May 2007, pp. 223-224, ISBN 978-83-85940-29-6 (**Inspec on OvidSP**)
86. **Gavrilas M.**, Ciutea I., Tanasa C., Medium-term load forecasting with artificial neural network models; 16th International Conference on Electricity Distribution, CIRED 2001, 1821 June, Amsterdam, Olanda, 2001, CD-ROM, ISBN 0-85296-735-7/0-85296-734-9 (**Inspec, Compendex, Scopus**)
87. Georgescu Gh., **Gavrilas M.**, Cartina Gh., Aspects Concerning Power Distribution Networks Planning Using the Artificial Intelligence, 14th International Conference on Electricity Distribution, CIRED '97, 2-5 June, Birmingham, England, pp. 876-881, 1997, ISBN: 085296-674-1, (**Inspec, Scopus**)

J. Invenţii.

1. Grigoraș G., Ivanov O., Neagu B.C., **Gavrilaș M.,** Scarlatache Fl., Platformă software de management și control integrat al consumurilor de energie electrică și gaze naturale în scopul creșterii eficienței energetice la întreprinderile mici și mijlocii, A/00922-13.11.2017 (cerere brevet).
2. Grigoraș G., Ivanov O., Neagu B.C., Scarlatache Fl., **Gavrilaș M.**, Platforma software de asistare a deciziilor în proiectarea ecologică optimă a instalațiilor electrice cu producere si stocare locală a energiei în scopul creșterii eficienței energetice la toate categoriile de consumatori, A/00923-21.11.2018 (cerere brevet).

K. Contracte de cercetare.

Granturi / proiecte câștigate prin competiție

1. „Cercetarea și promovarea generării eficiente de energie prin trigenerare și utilizare a resurselor solare regenerabile pentru obținerea energiei electrice, căldurii și frigului și achiziționare de echipamente", cod 2SOFT/1.2.66, (2020-2022). în cadrul Programului Operaţional Comun România – Republica Moldova 2014–2020 **Gavrilaș M.** (director grant din partea TUIASI)
2. Sistem inteligent de predictie si control al congestiilor in retelele de transport si distributie la inalta tensiune, Grant PNCDI II – Parteneriate, contract nr. 22126 / 01.10.2008, valoare 86911 Euro, 2008-2010, **Gavrilaș M.** (director grant)
3. Amplasarea surselor de putere în reţelele de distribuţie de 110 kV şi MT ale S.C. E.ON Moldova Distribuţie S.A. după criteriul pierderilor minime de energie şi al apropierii surselor de consumator şi studio privind compensarea şi reglarea puterii reactive în scopul optimizării nivelului de tensiune în reţelele de 110 kV ale S.C. E.ON Moldova Distribuţie S.A., Contract de cerectare nr. 7405 P / 26.10.2007, valoare 43627 Euro, 2007-2008, **Gavrilaș M.** (director contract)
4. Tehnici de inteligenta artificiala si modele noi pentru dezvoltarea studiilor de sarcina in scopul utilizarii eficiente a energiei electrice in conditiile impuse de functionarea pietei de energie electrica, Grant CNCSIS tip A, cod 241, tema 13 / 2006, contract nr. 63GR/19.05.2006 si tema 26 / 2007, contract nr. GR80/23.05.2007, valoare 25648 Euro, 2006-2007, **Gavrilaș M.** (director grant)
5. Modele ale inteligentei artificiale pentru prognoza pe termen scurt si mediu a consumului de energie electrica, Grant nr. 6177 / B29 / 2000, valoare 753 Euro, Benficiar: Ministerul Educatiei și Cecetarii, 2000, **Gavrilaș M.** (coordonator grant).
6. Managementul inteligent al centralelor electrice virtuale cu ajutorul platformelor software bazate pe inteligenta artificiala, in contextul competitivității energetice Europene, Contract nr. 173CI din 02/07/2018 (PN-III-P2-2.1-CI-2018-1011), UEFISCDI, valoare 10672 Euro, 2018, **Gavrilaș M.** (membru echipa)

7. Platforma software de asistare a deciziilor în proiectarea ecologică optimă a instalațiilor electrice cu producere si stocare locală a energiei, în contextul creșterii eficienței energetice, Grant PN-III-P2-2.1-CI-2018-1128, Contract 192CI/25.07.2018, UEFISCDI, valoarea 10803 Euro, 2018, **Gavrilaș M.** (membru echipa)
8. Platforma de management si control integrat al fluxurilor purtatorilor de energie in scopul cresterii eficientei energetice la IMM-uri, Grant PN-III-P2-2.1-CI-2017-0190, Contract 105CI/25.07.2017, UEFISCDI, valoare 10961 Euro, 2017, **Gavrilaș M.** (membru echipa)
9. Instrument software pentru gestiunea tranzacțiilor pe piața de energie electrică (GTMarket), Contract PNCDI III nr.45CI/2017, cod PN-III-P2-2.1-CI-2017-0328, UEFISCDI, valoare 10959 Euro, 2017, **Gavrilaș M.** (membru echipa)
10. Platformă software inovativa pentru managementul energetic al consumatorilor finali in vederea cresterii eficientei energetice și a reducerii emisiilor de carbon, Contract nr. 174CI din 04/07/2018 (PN-III-P2-2.1-CI-2018-1017), UEFISCDI, valoarea 10724 Euro, 2018, **Gavrilaș M.** (membru echipa)
11. Instrument software destinat cresterii securitatii sistemelor electroenergetice prin coordonarea protectiei de distanta, dezvoltat pe baza unor tehnici de inteligenta artificiala, Grant CNCSIS tip A, cod 283, tema nr. 16, contract nr. 2735/19.05.2006 si tema nr. 28, contract nr. GR80/23.05.2007, valoare 23824 Euro, 2006-2007, **Gavrilaș M.** (membru echipa)

Contracte de cercetare / consultanță

1. Prognoza de consum propriu tehnologic pentru reteaua de energie electrica din zona de activitate a Delgaz Grid. S.A. pentru anul 2018, contract nr. 3105/ 14.02.2018, valoare 9981 Euro, 2018, **Gavrilaș M.** (director contract)
2. Prognoza de consum propriu tehnologic pentru reteaua de energie electrica din zona de activitate a Delgaz Grid. S.A., contract nr. 448P / 15.03.2017, valoare 9881 Euro, 2017, **Gavrilaș M.** (director contract)
3. Servicii de consultanta de specialitate in proiectul EON Moldova Distributie de reducere a pierderilor tehnice in retelele de distributie, contract nr. 684P / 21.04.2016, valoare 13396 Euro, 2016, **Gavrilaș M.** (director contract)
4. Servicii de consultanta de specialitate in proiectul EON Moldova Distributie de reducere a pierderilor tehnice in retelele de distributi, contract nr. 1398P / 08.10.2014, valoare 43654 Euro, 2014-2015, **Gavrilaș M.** (director contract)
5. Norma de consum propriu tehnologic in retelele de distributie pentru anul 2013, contract de cercetare nr. 337P / 21.03.2014, valoare 2250 Euro, Beneficiar: E.ON Moldova Distribuţie S.A., 2014, **Gavrilaș M.** (director contract)
6. Incarcarea dinamica a liniilor electrice aeriene prin evaluarea on-line a capacitatii de transport, contract nr. 912P / 03.07.2012, valoare 14583 Euro, 2012, **Gavrilaș M.** (director contract)
7. Studiu de determinare a consumului propriu tehnologic in retelele de joasa tensiune aferente jud. Bacau, apartinand E.ON Moldova Distributie S.A., contract de cercetare nr. 3564P / 01.11.2011, valoare 11799 Euro, 2011, **Gavrilaș M.** (director contract)
8. Cercetari privind analiza si optimizarea regimurilor de functionare ale retelelor electrice de distributie folosind elemente ale inteligentei artificiale, Contract de cercetare nr 4030P/15.11.2004, valoare 7482 Euro, Beneficiar: F.D.F.E.E. Electrica „Muntenia Sud" Bucuresti, 2004, **Gavrilaș M.** (director contract).
9. Studiu privind planificarea tranzactiilor cu energie electrica la nivelul furnizorilor – prognoze pe termen scurt si mediu, Contract de cercetare nr. 966P/2002, valoare 1885 Euro, Beneficiar: S.D.F.E.E. Iasi, 2002, **Gavrilaș M.** (director contract).
10. Controlul si conducerea retelelor electrice cu modele ale inteligentei artificiale, Contract de cercetare nr. 915P/2000, valoare 2007 Euro, Beneficiar: Transelectrica, S.T. Bacau, 2000, **Gavrilaș M.** (director contract)
11. Aplicatii software ale sistemelor hibride de inteligenta artificiala pentru proiectarea si dezvoltarea retelelor electrice, Contract de cercetare nr. 557P/2000, valoare 2685 Euro, Beneficiar: S.D.F.E.E. Iasi, 2000, **Gavrilaș M.** (director contract)

12. Prognoza consumului de energie electrica pe termen scurt pentru S.D. Iasi, Contract de cercetare 742P / 1999, valoare 2450 Euro, Beneficiar: S.D. Iasi, 1999, **Gavrilaș M.** (director contract)
13. Studiu privind regimurile de scurtcircuit din reteaua de transport exploatata de Sucursala de Transport Constanta, Contract de cercetare nr. 1739P/1999, valoare 3676 Euro, Beneficiar: Transelectrica, S.T. Constanta, 1999, **Gavrilaș M.** (director contract)
14. Studiu privind prognoza pe termen scurt a consumului de energie electrica la S.D. Buzau, Contract de cercetare 735P / 1999, valoare 1838 Euro, Beneficiar S.D. Buzău, 1999, **Gavrilaș M.** (director contract).
15. Studiu privind prognoza pe termen scurt a consumului de energie electrica la S.D. Botoșani, Contract de cercetare 730P / 1999, valoare 1838 Euro, Beneficiar S.D. Botoșani, 1999, **Gavrilaș M.** (director contract).
16. Utilizarea retelelor neuronale artificiale in previziunea sarcinii pe termen scurt si mediu la nivelul F.R.E. Suceava., act aditional 1 / 1999 la contractul de cercetare 3625 / 1997, valoare 1838 Euro, Beneficiar: F.R.E. Suceva, 1999, **Gavrilaș M.** (director contract).
17. Utilizarea retelelor neuronale artificiale in previziunea sarcinii pe termen scurt si mediu la nivelul F.R.E. Suceava., act aditional 1 / 1998 la contractul de cercetare 3625 / 1997, valoare 924 Euro, Beneficiar: F.R.E. Suceva, 1998, **Gavrilaș M.** (director contract).
18. Previziunea pe termen scurt a puterii absorbite si a consumului de energie folosind elemente ale inteligentei artificiale, Contract de cercetare 6760 /1998, valoare 973 Euro, Beneficiar F.R.E. Vaslui, 1998, **Gavrilaș M.** (director contract).
19. Utilizarea retelelor neuronale artificiale in previziunea sarcinii pe termen scurt si mediu, Contract de cercetare nr. 3625/1997, valoare 1586 Euro, Beneficiar F.R.E. Suceava, 1997, **Gavrilaș M.** (director contract).
20. Cercetari privind optimizarea multicriteriala a structurii si regimurilor de functionare ale retelelor electrice de distributie in vederea cresterii calitatii energiei electrice si reducerii consumurilor proprii tehnologice, Contract de cercetare nr. 6685/1996, valoare 1604 Euro, Beneficiar F.R.E. Iași, 1996, **Gavrilaș M.** (director contract).
21. Utilizarea retelelor neuronale in supravegherea si conducerea retelelor electrice, Contract de cercetare nr. 5857/1995, valoarea 1475 Euro, Beneficiar: F.R.E. Iași, 1995, **Gavrilaș M.** (director contract).
22. Utilizarea retelelor neuronale in supravegherea si conducerea retelelor electrice, Contract de cercetare 2443 / 1994, Beneficiar: F.R.E. Iași, 1994, **Gavrilaș M.** (director contract).
23. Studiu pentru reconfigurarea retelelor de distributie de medie si joasa tensiune tinand seama de incarcarea optima a retelelor si de caderile de tensiune, in vederea scaderii consumului propriu tehnologic, contract de cercetare nr. 3624/1997, valoare 2018 Euro, Beneficiar: F.R.E. Focsani, 1997, **Gavrilaș M.** (membru echipă)
24. Utilizarea inteligentei artificiale in supravegherea si conducerea retelelor electrice, tema nr. 31 / 557, grant nr. 7002/1997, valoare 2096 Euro, 1997, **Gavrilaș M.** (membru echipa)
25. Utilizare inteligentei artificiale (algoritmi genetici) in vederea optimizarii structurii si regimurilor de functionare ale retelelor electrice de distributie, Contract de cercetare nr. 4027/1997, valoare 836 Euro, Beneficiar: F.R.E. Galați, 1997, **Gavrilaș M.** (membru echipă).
26. Cresterea calitatii supravegherii si conducerii retelelor electrice prin utilizarea metodelor moderne ale inginerii datelor si inteligentei artificiale; Contract de cercetare nr. 6726/1996, valoare 963 Euro, Beneficiar: F.R.E. Galați, 1996, **Gavrilaș M.** (membru echipă).
27. Utilizarea inteligentei artificiale in controlul si conducerea optimala a regimurilor retelelor electrice, Contract de cercetare nr. 6686/1996, valoare 723 Euro, Beneficiar: F.R.E. Iași, 1996, **Gavrilaș M.** (membru echipă).
28. Estimarea nivelului de tensiune, a consumului propriu tehnologic si cai de reducere a acestuia, folosind inteligenta artificiala, Contract de cercetare nr. 5856/1995, valoare 922 Euro, Beneficiar: F.R.E. Iași, 1996, **Gavrilaș M.** (membru echipă).
29. Cresterea calitatii supravegherii si conducerii retelelor electrice prin utilizarea metodelor moderne ale inginerii datelor si inteligentei artificale, Contract de cercetare nr. 5842/1995, valoare 1327 Euro, Beneficiar: F.R.E. Galați, 1995, **Gavrilaș M.** (membru echipă).
30. Evaluarea consumului propriu tehnologic in retelele de distributie si stabilirea eficientei diferitelor metode de reducere a acestora, Contract de cercetare nr. 3610/1995, valoare 1106 Euro, Beneficiar: F.R.E. Botoșani, 1995, **Gavrilaș M.** (membru echipă).

31. Optimizarea regimurilor de functionare ale retelelor de distributie urbana si rurala, Contract de cercetare nr. 1827/1994, Beneficiar: F.R.E. Bistrița Năsăud, 1994, **Gavrilaș M.** (membru echipă).
32. Planificarea optimala a retelelor de distributie rurala, Contract de cercetare nr. 2444/1994, Beneficiar: F.R.E. Iași, 1994, **Gavrilaș M.** (membru echipă).
33. Dezvoltarea optimala a retelelor de distributie de medie si joasa tensiune, in cazul zonelor de munte, cu densitate redusa de consum, Contract de cercetare 6296 / 1993, Beneficiar: F.R.E. Suceava, 1993, **Gavrilaș M.** (membru echipă).
34. Planificarea optimala a retelelor de distributie urbana si rurala, Contract de cercetare 3763 / 1993, Beneficiar: F.R.E. Iași, 1993, **Gavrilaș M.** (membru echipă).
35. Posibilitati de extindere a utilizarii tehnicii de calcul in conducerea retelelor electrice de distributie, Contract de cercetare 2437 / 1991, Beneficiar: Ministerul Invatamantului si Stiintei, 1991, **Gavrilaș M.** (membru echipă).
36. Optimizarea regimurilor de functionare ale retelelor de distributie de medie si joasa tensiune ale F.R.E. Iași, Contract de cercetare 4167 / 1990, Beneficiar: F.R.E. Iași, 1993, **Gavrilaș M.** (membru echipă).
37. Optimizarea regimurilor de functionare ale retelelor de distributie de medie tensiune ale I.R.E. Iasi, Contract de cercetare 11693 / 1989, Beneficiar: I.R.E. Iași, 1989, **Gavrilaș M.** (membru echipă).
38. Cresterea capacitatii de transport si micsorarea pierderilor in retele prin modificarea geometriei si a parametrilor LEA, contract de cercetare 2161 / 1989, contract de cercetare 2889 / 1989, Beneficiar: F.R.E. Iași, 1993, **Gavrilaș M.** (membru echipă).
39. Cercetari privind conducerea optimala a regimurilor retelelor din gestiunea I.R.E. Iasi in scopul ameliorarii indicatorilor tehnico-economici, Contract de cercetarea 10681 / 1987, **Gavrilaș M.** (membru echipă).

L. Premii, distincţii.

1. IEEE Senior Member din 2012 (http://ewh.ieee.org/ieee/tv/MGA/SMUpdates/2012/March.xls)
2. Best Paper Award of EC'12 (13th WSEAS International Conference on Evolutionary Computing 2012): Enhanced Evolutionary Search Algorithms for multiobjective Optimization in Power Systemby Mihai Gavrilas (web site: http://www.wseas.org/cms.action?id=2816)
3. Premiu UEFISCDI prin programul Planul National de Cercetare, Dezvoltare si Inovare pentru perioada 2015-2020, PNCDI III, Programul Dezvoltarea sistemului national de cercetare-dezvoltare, Subprogramul 1.1. – Resurse Umane, Premierea rezultatelor cercetarii – articole, in anul 2020 pentru lucrarea A Novel Algorithm with Multiple Consumer Demand Response Priorities in Residential Unbalanced LV Electricity Distribution Networks publicata in jurnalul Mathematics https://uefiscdi.gov.ro/resource-824820-precisi_lista-1_partial-2_rezultate-eligibilitate_articole-2020_.pdf?&wtok=&wtkps=XU5ZasMwEL2LvhtHIyFkjX9yghDICVyP7A5YcbC8pATfPZJb6PI1b97Gq9HiM6JGEZlEFdEoFLCo1nL3HqDt2a2h7uZxpttipPL9oJye3KcfDxTuztoDPZT70DkLKDjfVGHgG5wmUdVJee5y+P0kL2MJ0lXbtk9oKGbKaJPLLAqi++1yPWorValKacq9NEV/mDcFYDSAhq8JZk+d/2VAovhrTNNWn4FOKAw0974Yxq6YfcuxIS4W9mtRjxM3Qy+q7QU=&wchk=20b953a24c2cc61b474b8ca651f69217f6bacb92
4. Premiu UEFISCDI prin programul Planul National de Cercetare, Dezvoltare si Inovare pentru perioada 2015-2020, PNCDI III, Programul Dezvoltarea sistemului national de cercetare-dezvoltare, Subprogramul 1.1. – Resurse Umane, Premierea rezultatelor cercetarii – articole, in anul 2020 pentru lucrarea An Advanced Decision Support Platform in Energy Management to Increase Energy Efficiency for Small and Medium Enterprisespublicata in jurnalul Applied Sciences https://uefiscdi.gov.ro/resource-824820-precisi_lista-1_partial-2_rezultate-eligibilitate_articole-2020_.pdf?&wtok=&wtkps=XU5ZasMwEL2LvhtHIyFkjX9yghDICVyP7A5YcbC8pATfPZJb6PI1b97Gq9HiM6JGEZlEFdEoFLCo1nL3HqDt2a2h7uZxpttipPL9oJye3KcfDxTuztoDPZT70DkLKDjfVGHgG5wmUdVJee5y+P0kL2MJ0lXbtk9oKGbKaJPLLAqi++1yPWorValKacq9NEV/mDcFYDSAhq8JZk+d/2VAovhrTNNWn4FOKAw0974Yxq6YfcuxIS4W9mtRjxM3Qy+q7QU=&wchk=20b953a24c2cc61b474b8ca651f69217f6bacb92
5. Premiu UEFISCDI prin programul Planul National de Cercetare, Dezvoltare si Inovare pentru perioada 2015-2020, PNCDI III, Programul Dezvoltarea sistemului national de cercetare-dezvoltare, Subprogramul 1.1. – Resurse Umane, Premierea rezultatelor cercetarii – articole, in anul 2020 pentru lucrarea A New Vision on the Prosumers Energy Surplus Trading Considering Smart Peer-to-Peer

Contracts publicata in jurnalul Mathematics https://uefiscdi.gov.ro/resource-824820-precisi_lista-1_partial-2_rezultate-eligibilitate_articole-2020_.pdf?&wtok=&wtkps=XU5ZasMwEL2LvhtHIyFkjX9yghDICVyP7A5YcbC8pATfPZJb6PI1b97Gq9HiM6JGEZlEFdEoFLCo1nL3HqDt2a2h7uZxpttipPL9oJye3KcfDxTuztoDPZT70DkLKDjfVGHgG5wmUdVJee5y+P0kL2MJ0lXbtk9oKGbKaJPLLAqi++1yPWorValKacq9NEV/mDcFYDSAhq8JZk+d/2VAovhrTNNWn4FOKAw0974Yxq6YfcuxIS4W9mtRjxM3Qy+q7QU=&wchk=20b953a24c2cc61b474b8ca651f69217f6bacb92

6. Premiu UEFISCDI prin programul Planul National de Cercetare, Dezvoltare si Inovare pentru perioada 2015-2020, PNCDI III, Programul Dezvoltarea sistemului national de cercetare-dezvoltare, Subprogramul 1.1. – Resurse Umane, Premierea rezultatelor cercetarii – articole, in anul 2020 pentru lucrarea Optimal Phase Load Balancing in Low Voltage Distribution Networks Using a Smart Meter Data Based Algorithm, publicata in jurnalul Mathematics https://uefiscdi.gov.ro/resource-824264-precisi_lista-1_partial-3_rezultate-eligibilitate_articole-2020_.pdf?&wtok=&wtkps=XU5LDsIgEL0La61MkRSnG09gTDxBA2hIQUhpbbTp3YVq4mc1b94vr8EKp4gMSTSK1BF5giA6N0LzMPJupXNuEJWzAe6hfUQXwAtOdditobetHOxabWXwLIcBicm3RMLhDfY9qZukTIvsvp/kNSiA7up5XjZIFTPFGc9lFRKlwvV42rCKlqIUlIulNEU/zKoE4AyAwWsCX1KHvwxQJL/GNG3UGbCEnFeD1YXvLsWgzyZKZYqb0WPRdL2R3pJ6fgI=&wchk=172db632aeb47c7292fcf3a0408dde5be7d69c0f**.).**

M. Alte realizări semnificative.

Citări în reviste WOS și volumele conferințelor WOS

1. Lucrarea citata [11]

Gavrilas M., Sfintes C.V., Filimon M.N., Identifying typical load profiles using neural-fuzzy models; Proceedings of the 2001 IEEE / PES Transmission and Distribution Conference, Oct. 28 – Nov. 2, Atlanta, Georgia, 2001, CD-ROM, ISBN 07803-7287-5/01.

Lucrarea care citeaza

1. Chung-Chian Hsu – Generalizing Self-Organizing Map for Categorial Data ; IEEE Transactions on Neural Networks, Vol. 17, No. 2, March 2006, pp. 294-304 (**revistă WoS**).
2. Garcia Ramon J.I. et al., Method of assessment of the state of charge and voltage level in the electric power distribution network. Implementation in the improvement of supply quality, international Journal of Electrical Power & Energy Systems, Vol. 28, 2006, pp. 496-502 (**revistă WoS**).
3. Wolter M., Reactive Power Profiles, PROCEEDINGS OF THE 8TH WSEAS INTERNATIONAL CONFERENCE ON POWER SYSTEMS AND POWER TECHNOLOGY, Book Series: Recent Advances in Electrical Engineering, 2008, Pages: 81-88 (**revistă WoS**).
4. Baharudin, Z., Kamel, N., Autoregressive method in short term load forecast, IEEE 2nd International Power and Energy Conference, 2008. PECon 2008, 1-3 Dec. 2008, Page(s):1597 – 1602 (**conferință WoS**).
5. Bobric E.C., Cartina Gh., Grigoras Gh., Clustering Techniques in Load Profile Analysis for Distribution Stations, ADVANCES IN ELECTRICAL AND COMPUTER ENGINEERING, Vol. 9, Issue 1, 2009, Pages: 63-66 – 2 citări (**revistă WoS**).
6. Reese, C.; Hofmann, L., Determination of load and generation composition in distribution grids, Power Systems Conference and Exposition, 2009. PES '09. IEEE/PES, 15-18 March 2009, Page(s):1 – 7 (**conferință WoS**).
7. Zakaria Z., Lo KL, Two-stage Fuzzy Clustering Approach for Load Profiling, Proceedings of the 44-th International Universities Power Engineering Conference, UPEC 2009, pp. 976-980, Glasgow, England, Sept. 01-04, 2009 (**conferință WoS**).
8. Reese, C.; Buchhagen, C.; Hofmann, L., Enhanced method for voltage range controlled OLTC-equipped distribution transformers, Proceedings of the IEEE Power and Energy Society General Meeting, 2012 IEEE, San Diego, California, July 22-26, pp. 1-8 (**conferință WoS**
9. Murata N., Wakao S., Hayashi Y., A Versatile Clustering Method for Electricity Consumption Pattern Analysis in Households, IEEE Transactions on Smart Grids, Vol. 4, Issue 2, 2013, pp. 1048-1057, 2 citări (**revistă WoS**).
10. Zhong S., Tam K.S., Hierarchical Classification of Load Profiles Based on Their Characteristic Attributes in Frequency Domain, IEEE Transactions on Power Systems, Vol. 30, No. 5, pp. 2434-2441, Sept. 2015, DOI: 10.1109/TPWRS.2014.2362492 (**revistă WoS**).

11. Pan B.R., Zhang Y., Wan Y., et al., Strategic Study on Reduction of Loading Rate of the Distributing Line based on Demand Response, Proc. of International Conference on Industrial Technology and Management Science (ITMS), Tianjin, CHINA, MAR 27-28, 2015, pp. 1521-1526 (**conferință WoS**).

2. Lucrarea citata [**6**]

Gavrilas M., Ciutea I., Tanasa C., Medium-term load forecasting with artificial neural network models; 16th International Conference on Electricity Distribution, CIRED 2001, 18-21 June, Amsterdam, Olanda, 2001, CD-ROM, ISBN 0-85296-735-7/0-85296-734-9.

Lucrarea care citeaza

1. Ghiassi M., Zimbra D.K., Saidane H., Medium term system load forecasting with a dynamic artificial neural network model, Electric Power Systems Research, Vol. 76, issue 5, March 2006, pp. 302-316 (**revistă WoS**).
2. Falvo M.C. et al, A Knowledge Based system for Medium Term Load Forecasting, PES Transmission and Distribution Conference, May 21-24 2006, pp. 1291-1295 – 2 citări (**conferință WoS**).
3. Terra G.S., Lopes M.C.S., Ebecken N.F.F., A Data Mining Approach for Medium-Term Demand Forecasting, Management Information Systems, Vol. 7, 2003, pp. 437-446 (**conferință WoS**).
4. Maia MR, Veloso KDOG, Okamoto MT, et al., A data mining approach to support the development of long-term load forecasting, 7th International Conference on Data, Text and Web Mining and Their Business Application and Management Information Engineering, JUL 11-13, 2006 Prague, CZECH REPUBLIC, Book Series: WIT TRANSACTIONS ON INFORMATION AND COMMUNICATION TECHNOLOGIES, Volume: 37, Pages: 339-348 (**conferință WoS).**
5. Liang, J.J.; Song, H.; Qu, B.Y.; Liu, W.; Qin, A.K.; Neural Network Based on Dynamic Multi-swarm Particle Swarm Optimizer for Ultra-Short-Term Load Forecasting; Lecture Notes in Computer Science, Advances in Swarm Intelligence, Volume: 8795, 2014, Springer Int Publishing Ag, ISSN: 0302-9743 pp. 384-391 (**revistă WoS**).
6. Khuntia S.R., Rueda J.L., van der Meijden M.A.M.M., Forecasting the load of electrical power systems in mid- and long-term horizons: a review, IET Generation Transmission & Distribution, Vol. 10, No. 16, pp. 3971-3977, DOI: 10.1049/iet-gtd.2016.0340, Dec. 2016 (**revistă WoS**).

3. Lucrarea citata [**6**]

Gavrilas M., Ciutea I., Tanasa C., Medium-term load forecasting with artificial neural network models; 16th International Conference on Electricity Distribution, CIRED 2001, 18-21 June, Amsterdam, Olanda, 2001, CD-ROM, ISBN 0-85296-735-7/0-85296-734-9.

Lucrarea care citeaza

1. Ghiassi M., Zimbra D.K., Saidane H., Medium term system load forecasting with a dynamic artificial neural network model, Electric Power Systems Research, Vol. 76, issue 5, March 2006, pp. 302-316 (**revistă WoS**).
2. Falvo M.C. et al, A Knowledge Based system for Medium Term Load Forecasting, PES Transmission and Distribution Conference, May 21-24 2006, pp. 1291-1295 – 2 citări (**conferință WoS**).
3. Terra G.S., Lopes M.C.S., Ebecken N.F.F., A Data Mining Approach for Medium-Term Demand Forecasting, Management Information Systems, Vol. 7, 2003, pp. 437-446 (**conferință WoS**).
4. Maia MR, Veloso KDOG, Okamoto MT, et al., A data mining approach to support the development of long-term load forecasting, 7th International Conference on Data, Text and Web Mining and Their Business Application and Management Information Engineering, JUL 11-13, 2006 Prague, CZECH REPUBLIC, Book Series: WIT TRANSACTIONS ON INFORMATION AND COMMUNICATION TECHNOLOGIES, Volume: 37, Pages: 339-348 (**conferință WoS**).
5. Liang, J.J.; Song, H.; Qu, B.Y.; Liu, W.; Qin, A.K.; Neural Network Based on Dynamic Multi-swarm Particle Swarm Optimizer for Ultra-Short-Term Load Forecasting; Lecture Notes in Computer Science, Advances in Swarm Intelligence, Volume: 8795, 2014, Springer Int Publishing Ag, ISSN: 0302-9743 pp. 384-391 (**revistă WoS**).
6. Khuntia S.R., Rueda J.L., van der Meijden M.A.M.M., Forecasting the load of electrical power systems in mid- and long-term horizons: a review, IET Generation Transmission & Distribution, Vol. 10, No. 16, pp. 3971-3977, DOI: 10.1049/iet-gtd.2016.0340, Dec. 2016 (**revistă WoS**).

4. Lucrarea citata [**1**]

Gavrilas M., Sfintes C.V., Ivanov O., Comparison of Neural and Evolutionary Approaches to Peak Load Estimation in Distribution Systems; EUROCON 2005, Nov. 22-24, Belgrade, Serbia & Montenegro, 2005, CD-ROM, ISBN: 1-4244-0049-X.

Lucrarea care citeaza

1. Jian Zhou Wang, Liang Wu, Hai-Yan Lu, Special periods peak load analysis and superior forecasting method based on LS-SVM ; Proceendings of the International Conference on Wavelet Analysis and Pattern Recognition, ICWAPR'07, Vol. 1, 2007, pp. 249-253 (**conferință WoS**).

5. Lucrarea citata [**2**]

Gavrilas M., Coca D., Stefanovici C., Prognoza pe termen scurt a consumului de energie electrica la S.D. Suceava cu un model bazat pe inteligenta artificiala, Revista Energetica, nr. 8-9, pag. 407-415, 2000, ISSN 1453-2360

Lucrarea care citeaza

1. Mihai P, Matei M, Popescu CL, et al., Artificial intelligency methods used for electrical energy consumption forecasting, PROCEEDINGS OF THE 9TH WSEAS INTERNATIONAL CONFERENCE ON AUTOMATION AND INFORMATION Book Series: Recent Advances in Electrical Engineering, 2008, Pages: 309-314 (**conferință WoS**)
2. Mihai P., Popescu C.L., Popescu M.O., Mid Term Load Forecasting Using Analog Neural Networks, Revue Roumaine des Sciences Techniques-Serie Electrotechnique et Energetique, Vol. 54, No. 2, APR-JUN 2009, pp. 147-155 – 4 citări (**revistă WoS**).

6. Lucrarea citata [**1**]

Gavrilas M., Calcul numeric cu aplicatii in Turbo Pascal, Editura "Gh. Asachi" Iasi, 502 pag., 1999 (ISBN 973-9178-65-0).

Lucrarea care citeaza

1. Enescu D, Coanda HG, Virjoghe EO, et al., Numerical investigation by means of polynomial regression method for determining the temperature fields in a medium with phase transition, PROCEEDINGS OF THE 8TH WSEAS INTERNATIONAL CONFERENCE ON SYSTEMS THEORY AND SCIENTIFIC COMPUTATION (ISTAC'08), Book Series: Mathematics and Computers in Science and Engineering, Pages: 88-93 (**conferință WoS**).

7. Lucrarea citata [**2**]

Gavrilas M., Cartina Gh., Alexandrescu V., Grigoras Gh., Ivanov O., Modelarea sarcinilor din retelele electrice - Vol. 1, Editura PIM Iasi, 124 pag., 2006 (ISBN 973-716-433-4, ISBN 978-973-716-433-4).

Lucrarea care citeaza

1. Bobric E.C., Cartina Gh., Grigoras Gh., Clustering Techniques in Load Profile Analysis for Distribution Stations, ADVANCES IN ELECTRICAL AND COMPUTER ENGINEERING, Vol. 9, Issue 1, 2009, Pages: 63-66 – 2 citări (**revistă WoS**).
2. Mihai P., Popescu C.L., Popescu M.O., Mid Term Load Forecasting Using Analog Neural Networks, Revue Roumaine des Sciences Techniques-Serie Electrotechnique et Energetique, Vol. 54, No. 2, APR-JUN 2009, pp. 147-155 – 4 citări (**revistă WoS**).

8. Lucrarea citata [**4**]

Gavrilas M., Inteligenta artificiala si aplicatii in energetica; Vol. I – Teorie, Editura „Gh. Asachi" Iasi, 320 pag., 2002 (ISBN 973-8292-20-4, ISBN 973-8292-21-2).

Lucrarea care citeaza

1. Mihai P., Popescu C.L., Popescu M.O., Mid Term Load Forecasting Using Analog Neural Networks, Revue Roumaine des Sciences Techniques-Serie Electrotechnique et Energetique, Vol. 54, No. 2, APR-JUN 2009, pp. 147-155 – 4 citări (**revistă WoS**).
2. Felea, I; Dan, F; Dzitac, S, Consumers Load Profile Classification Corelated to the Electric Energy Forecast, Proceedings of the Romanian Academy Series A-Mathematics Physics Technical Sciences Information Science, Volume: 13 Issue: 1 Pages: 80-88, JAN-MAR 2012 (**revistă WoS**).
3. Dragomir O.E., Dragomir F., Radulescu M., Matlab Application of Kohonen Self- Organizing Map to Classify Consumers' Load Profiles, Proc. of 2nd International Conference on Information Technology and Quantitative Management (ITQM), Natl Res Univ, Higher Sch Econ, Moscow, RUSSIA, JUN 03-05, 2014, pp. 474-479 (**conferință WoS**).
4. Neagu B., Georgescu Gh., Wind Farm Cable Route Optimization Using a Simple Approach, Proc. of 8th International Conference And Exposition On Electrical And Power Engineering (EPE), Iasi, ROMANIA, OCT 16-18, 2014, pp. 1004-1009 (**conferință WoS**).

9. Lucrarea citata [**2**]

Gavrilas M., Inteligenta artificiala si aplicatii in energetica; Vol. II – Teorie si aplicatii, Editura Polytechnium, 194 pag., 2005 (ISBN 973-8292-20-4, ISBN 973-621-116-9).

Lucrarea care citeaza

1. Mihai P., Popescu C.L., Popescu M.O., Mid Term Load Forecasting Using Analog Neural Networks, Revue Roumaine des Sciences Techniques-Serie Electrotechnique et Energetique, Vol. 54, No. 2, APR-JUN 2009, pp. 147-155 – 4 citări (**revistă WoS**).
2. Andrusca M., Adam M., Baraboi A., et al., Using Fuzzy Logic for Diagnosis of Technical Condition of Power Circuit Breakers, Proc. of 8th International Conference And Exposition On Electrical And Power Engineering (EPE), Iasi, ROMANIA, OCT 16-18, 2014, pp. 268-273 (**conferință WoS**).

10. Lucrarea citata [**2**]

Gavrilas M., Gavrilas G., Ivanov O., Electricity load prediction for water supply systems; Environmental Engineering and Management Journal, July/August 2008, Vol.7, No.4, pp. 453-458, ISSN: 1582-9596 (revistă cotată ISI– ISI Web of Knowledge).

Lucrarea care citeaza

1. Jaliu C, Diaconescu D, Neagoe M, et al., The eco-impact of small hydro implementation, Environmental Engineering and Management Journal, Volume 8, Issue 4, JUL-AUG 2009, Pages: 837-841 – 2 citări (**revistă WoS**).
2. Bunea F., Ciocan G.D., Oprina G., Baran G., Babutanu C.A.; Hydropower Impact on Water Quality, Environmental Engineering and Management Journal, Vol. 9, Issue 11, Nov. 2010, pp. 1459-1464, 2 citări (**revistă WoS**)

11. Lucrarea citata [**3**]

Gavrilas M., Gavrilas G., Improving energy efficiency in water distribution systems based on water consumption profiling; Environmental Engineering and Management Journal, May/June 2008, Vol.7, No.3, pp. 321-327, ISSN: 1582-9596

Lucrarea care citeaza

1. Jaliu C, Diaconescu D, Neagoe M, et al., The eco-impact of small hydro implementation, Environmental Engineering and Management Journal, Volume 8, Issue 4, JUL-AUG 2009, Pages: 837-841 – 2 citări (**revistă WoS**).
2. Bunea F., Ciocan G.D., Oprina G., Baran G., Babutanu C.A.; Hydropower Impact on Water Quality, Environmental Engineering and Management Journal, Vol. 9, Issue 11, Nov. 2010, pp. 1459-1464, 2 citări (**revistă WoS**)
3. Magadan Marta ; Rivas Jesus; The Impact of Energy Consumption on the Benefit Functions of Enterprises: Proposal of an Energy Efficiency Indicator; Environmental Engineering and Management Journal, Volume 10, Issue 12, Dec. 2011, pp. 1831-1834 (**revistă WoS**).

12. Lucrarea citata [**2**]

Gavrilas M., Ivanov O., Gavrilas G., REI equivalent design for electric power systems with genetic algorithms, WSEAS Transactions on Circuits and Systems, v 7, n 10, 2008, p 911-921, ISSN: 1109-2734.

Lucrarea care citeaza

1. Gabriel Nicolae Popa, Sorin Deaconu, Corina Maria Dinis, Angela Iagar, Implementation of a numerical distance relay for the 110kV electric lines, Proceedings of the 13th WSEAS International Conference on Systems Mathematics and Computers in Science Engineering, 22-24 July 2009, Rodos, Greece, ISBN ~ ISSN:1790-2769 , 978-960-474-097-0, pp. 271-276, 2009 (**conferință WoS**).
2. Haji M.M., Xu W., Online Determination of External Network Models Using Synchronized Phasor Data, IEEE Transactions on Smart Grid, Vol. PP, Issue 99, 2016, pp.1-1, DOI: 10.1109/TSG.2016.2559486, to be published (**revista WoS**).

13. Lucrarea citata [**2**]

Gavrilas M., O. Ivanov, C. V. Sfintes, Enhanced Particle Swarm Optimization Method for Power Loss Reduction in Distribution Systems, 19th International Conference on Electricity Distribution, Paper 0088, Session 5, Austria, 2007.

Lucrarea care citeaza

1. Secui D.C., Dzitac S., Bendea G.V., et al, An ACO Algorithm for Optimal Capacitor Banks Placement in Power Distribution Networks, Studies in Informatics and Control, Vol.18, Issue 4, pp: 305-314, December 2009 (**revista WoS**).

2. Secui D.C., Felea I., Dzitac S., et al, A Swarm Intelligence Approach to the Power Dispatch Problem, International Journal of Computers Communications & Control, Vol. 5, Issue 3, pp. 375-384, Sept. 2010. (**revista WoS**).

14. Lucrarea citata [**1**]

Georgescu Gh., **Gavrilas M.,** Radasanu D., "The Computation of Energy and Power Losses in Electric Networks and their Minimization" (in Romanian), Spectrum Printing House, Iasi, 1998, Romania.

Lucrarea care citeaza

1. Porumb R., Toader C., Golovanov N., et al., Energy Efficiency Rating of Transformers under Unbalanced Linear Regime, Proc. of Int Aegean Conference on Electrical Machines and Power Electronics (ACEMP) / Int Conference on Optimization of Electrical and Electronic Equipment (OPTIM) / Int Symposium on Advanced Electromechanical Motion Systems (ELECTROMOTION), Side, TURKEY, Sept. 02-04, 2015, pp. 538-544 (**conferință WoS**).

15. Lucrarea citata [**1**]

Georgescu Gh., **Gavrilas M.,** Cartina Gh., Aspects Concerning Power Distribution Networks Planning Using the Artificial Intelligence, 14th International Conference on Electricity Distribution, CIRED '97, 2-5 June, Birmingham, England, pp. 876-881, 1997, ISBN: 0-85296-674-1.

Lucrarea care citeaza

1. Sudhakar T.D., Srinivas K.N., Restoration of power network – a bibliographic survey, European Transactions on Electrical Power, Vol. 21, Issue 1, Jan. 2011, pp. 635-655, ISSN:1430-144X (**revista WoS**).

16. Lucrarea citata [**1**]

Gavrilas M., Georgescu Gh., Cartina Gh., A Connectionist Approach to Real-Time Control and Simulation of Switching Operations in Power Systems Substations; Proceedings of the 8th Mediterranean Electrotechnical Conference MELECON'96, Vol. III, May 13-16, 1996, Bari, Italy, pp. 1431-1434, 1996.

Lucrarea care citeaza

1. Tang, Z., Graph theory based expert system to form de-icing route in Changsha power grid, International Journal of Electrical PoVII.83wer and Energy Systems, 43 (1) , pp. 1318-1321, 2012 (**revista WoS**).

17. Lucrarea citata [**5**]

Grigoras Gh., Cartina Gh., **Gavrilas M.,** Using of Clustering Techniques in Optimal Placement of Phasor Measurements Units, Poceedings of the 9-th WSEAS/IASME International Conference on Electric Power Systems, High Voltage, Electric Machines (POWER '09), Genova, Italy, Oct. 17-19, 2009, Book Series: Recent Advances in Electrical Engineering, pp: 104-108, ISBN 978-960474130-4.

Lucrarea care citeaza

1. Fl. Scarlatache, Gh. Grigoras, Gh. Cartina, G. Chicco, A Comparative Study Regarding the Optimal Placement of the DG Sources, Proceedings of the 2012 International Conference and Exposition on Electrical and Power Engineering, EPE'2012, Iasi, Romania, Oct. 2012, pp. 231-236 (**conferință WoS**).
2. Scarlatache, F., Grigoras, G., Optimal Coordination of Wind and Hydro Power Plants in Power Systems, Transactions of 2014 International Conference on Optimization of Electrical and Electronic Equipment (OPTIM), Brasov, Romania, May 22-24, 2014, Pages: 689-694 (**conferință WoS**).
3. Takata M., Miyata Y., Nishikawa N., Proposal of analytics software architecture with data preparation layer for fast event identification in wide-area situational awareness, Proc. of IEEE International Conference on Industrial Technology (ICIT), Seville, SPAIN, MAR 17-19, 2015, pp. 1741-1746 (**conferință WoS**).
4. Scarlatache Fl., Grigoras Gh., Placement of DG Sources Using a Clustering Based Partitioning Method in Distribution Systems, Proc. of 9th International Symposium on Advanced Topics in Electrical Engineering (ATEE), Univ Politehnica Bucharest, ROMANIA, MAY 07-09, 2015, pp. 868-872 (**conferință WoS**).
5. Priyadharshini M., Meenakumari R., Probabilistic approach based Optimal placement of Phasor Measurement Units via the estimation of Dynamic Vulnerability Assessment, Proc. of International Conference on Green Computing Communication and Electrical Engineering (ICGCCEE), Coimbatore, INDIA, MAR 06-08, 2014 (**conferință WoS**).

18. Lucrarea citata [**5**]

Gavrilas M., Gavrilas G., Ivanov O., A Network Reduction Method with Synchronized Phasor Measurements, Poceedings of the 9-th WSEAS/IASME International Conference on Electric Power Systems, High Voltage, Electric Machines (POWER '09), Genova, Italy, Oct. 17-19, 2009, Book Series: Recent Advances in Electrical Engineering, CD-ROM, ISBN:978-960-474-130-4, ISSN: 1790-5117.

Lucrarea care citeaza

1. Georgiev, Georgi; Zicmane, Inga; Antonov, Eduard, Elimination of Load Nodes of Power System with Dynamic Characteristics, Book Editor(s): Kolcun, M; Kolcunova, I; Kurimsky, J, Proceedings of the 6th International Scientific Symposium on Electrical Power Engineering (ELEKTROENERGETIKA 2011), Stara Lesna, SLOVAKIA, SEP 21-23, 2011, pp. 48-51 (**conferință WoS**).
2. Georgiev, Georgi; Zicmane, Inga; Functional accuracy of static and dynamic models of electrical systems obtained after an elimination of several nonlinear loads, Book Editor(s): Kolcun, M; Kolcunova, I; Kurimsky, J, Proceedings of the 6th International Scientific Symposium on Electrical Power Engineering (ELEKTROENERGETIKA 2011), Stara Lesna, SLOVAKIA, SEP 21-23, 2011, pp. 81-84 (**conferință WoS**).
3. Georgi GEORGIEV, Inga ZICMANE, Eduard ANTONOV, Sergejs KOVALENKO, An aggregate analytical load model with voltage dependant characteristics, The 6th International Conference on Electrical and Control Technologies, Kaunas, Lithuania, May 5-6, 2011, pp. 196-201 (**conferință WoS**)
4. Georgi Georgiev, Inga Zicmane, Eduard Antonov, Comparison of two Methodologies for Power System Nodal Model Reduction presenting Nonlinear Load Elimination, Proc. of Electric Power Engineering EPE 2012, Brno, Czech Republic, pp. 109-113 (ISI Conference Proceedings Citation Index- Science).
5. Georgiev, Georgi; Zicmane, Inga; Antonov, Eduard, Transformation algorithm of complex power system by means of load nodes elimination, represented as its static and dynamic characteristics, Proceedings of the 2012 International Conference and Exposition on Electrical and Power Engineering, EPE'2012, Iasi, Romania, Oct. 2011, pp. 732-737 (**conferință WoS**).

19. Lucrarea citata [6]

Gavrilas M., Gavrilas G., Sfintes C.V., Application of Honey Bee Mating Optimization algorithm to load profile clustering, Proceedings of 2010 IEEE International Conference on Computational Intelligence for Measurement Systems and Applications (CIMSA), 6-8 Sept. 2010, Taranto, Itally, pp. 113-118, ISBN: 978-1-4244-7229-1

Lucrarea care citeaza

1. Jalili, H., Amirzadeh, A., Noorafkan, A., Jalili, G., A new evolutionary algorithm based on data sharing concept for solving optimization problems, Scientific Research and Essays, Volume 6, Issue 23, 16 October 2011, Pages 5082-5090, ISSN: 1992-2248 (**revista WoS**).
2. Kai-le Zhou, Shan-lin Yanga, Chao Shena, A review of electric load classification in smart grid environment, Renewable and Sustainable Energy Reviews, Volume 24, August 2013, Pages 103–110, 2 citări (**revista WoS**).
3. Verma A., Asadi A., Yang K., et al. A data-driven approach to identify households with plug-in electrical vehicles (PEVs), APPLIED ENERGY, Vol. 160, pp. 71-79, Dec. 15 2015, DOI: 10.1016/j.apenergy.2015.09.013 (**revista WoS**).
4. Gonzalez-Pardo A., Del Ser J., Camacho D., On the Applicability of Ant Colony Optimization to Non-Intrusive Load Monitoring in Smart Grids, Proc. of 16th Conference of the Spanish-Association-for-Artificial-Intelligence (CAEPIA), Albacete, SPAIN, NOV 09-12, 2015, pp. 312-321 (**conferință WoS**).
5. Azad S., Ali A. B. M. Shawkat, Wolfs P., Identification of Typical Load Profiles using K-Means Clustering Algorithm, Proc. of Asia Pacific World Congress Computer Science Engineering, Nadi, FIJI, NOV 04-05, 2014 (**conferință WoS**).
6. R Damayanti, A G Abdullah, W Purnama1 and A B D Nandiyanto, Electrical Load Profile Analysis Using Clustering Techniques, IOP Conference Series: Materials Science and Engineering, Volume 180, Number 1, pp. 1-7 (**conferință WoS**).

20. Lucrarea citata [3]

Gavrilas M., Recent Advances and Applications of Synchronized Phasor Measurements in Power Systems, Poceedings of the 9-th WSEAS/IASME International Conference on Electric Power Systems, High Voltage, Electric Machines (POWER '09), Genova, Italy, Oct. 17-19, 2009, Book Series: Recent Advances in Electrical Engineering, ISBN: 978-960-474-130-4.

Lucrarea care citeaza

1. Abdolkhalig, A; Zivanovic, R, Phasor measurement based on IEC 61850-9-2 and Kalman-Filtering, MEASUREMENT, Elsevier, ISSN: 0263-2241, Vol. 50, Pages: 126-134, Apr. 2014 (**revista WoS**)
2. Stogov Al. Yu., Belyaev A.N., The Autonomous Power System Control on the Basis of the Wide Area Measurement System Data, Proc. of IEEE North-West-Russia-Section Young Researchers in Electrical and Electronic Engineering Conference (ElConRusNW), Saint Petersburg Electrotechn Univ LETI, St Petersburg, RUSSIA, Feb. 02-03, 2016, pp. 694-698 (**conferință WoS**).

3. Yang T.C., Zolotas A.C., Wren T., et al., Exploring future directions of Control, Proc. of United-Kingdom-Automatic-Control-Council (UKACC) 10th International Conference on Control (CONTROL), Loughborough, UNITED KINGDOM, JUL 09-11, 2014, pp. 525-530. (**conferință WoS**).

21. Lucrarea citata [**2**]

M. Gavrilas. "Heuristic and metaheuristic optimization techniques with application to power systems", In Proceedings of the 12th WSEAS international conference on Mathematical methods and computational techniques in electrical engineering (MMACTEE'10), WSEAS Press, Stevens Point, Wisconsin, USA, 2005, pp. 95-103.

Lucrarea care citeaza

1. Gavela, P., Rueda, J. L., Vargas, A. and Erlich, I. (2014), Performance comparison of heuristic optimization methods for optimal dynamic transmission expansion planning. International Transactions on Electrical Energy Systems. doi: 10.1002/etep.1785, Volume: 24 Issue: 10 Pages: 1450-1472 (**revista WoS**)
2. Bhatia N., Kumar V., Rana, K. P. S.; et al. Development of a Flower Pollination Algorithm Toolkit in LabVIEW (TM), Proc. of 3rd International Conference on Computing for Sustainable Global Development (INDIACom), New Delhi, INDIA, March 16-18, 2016, pp. 309-314 (**conferință WoS**).

22. Lucrarea citata [**2**]

Gavrilas M., Gavrilas G., An Enhanced ANN Wind Power Forecast Model Based on a Fuzzy Representation of Wind Direction, Proceedings of the 10th Symposium on Neural Network Applications in Electrical Engineering, NEUREL 2010, Sept. 23-25, 2010, Belgrade, Serbia, pp. 31-36, ISBN: 978-1-4244-8818-6.

Lucrarea care citeaza

1. Ata R., Artificial neural networks applications in wind energy systems: a review, Renewable & Sustainable Energy Reviews, Vol. 49, pp. 534-562, Sept. 2015, DOI: 10.1016/j.rser.2015.04.166 (**revista WoS**).
2. Ozkan M.B., Karagoz P., A Novel Wind Power Forecast Model: Statistical Hybrid Wind Power Forecast Technique (SHWIP), IEEE Transactions on Industrial Informatics, Vol. 11, No. 2, pp. 375-387, Apr. 2015, DOI: 10.1109/TII.2015.2396011 (**revista WoS**).

23. Lucrarea citata [**1**]

Ivanov O., Gavrilas M., Intelligent distributed state estimation using REI system equivalents and phasor measurements, Poceedings of the 12-th International Conference on Optimization of Electrical and Electronic Equipment, OPTIM 2010, pp. 1263 – 1268, ISBN: 978-973-131-7018-1.

Lucrarea care citeaza

1. Dos Angelos, E.W.S. , Asada, E.N., Multi-area state estimation with PMU and external system modeling, Proceedings of IEEE Power and Energy Society General Meeting, PES 2012;San Diego, CA, pp. 1-7 (**conferință WoS**).

24. Lucrarea citata [2]

Coroama I., Gavrilas M., A study on wind energy generation forecasting using connectionist models, Poceedings of the 12-th International Conference on Optimization of Electrical and Electronic Equipment, OPTIM 2010, pp. 1257 – 1262, ISBN: 978-973-131-7018-1

Lucrarea care citeaza

1. Hagan K.E., Oyebanjo O.O., Masaud T.M. et al. A Probabilistic Forecasting Model for Accurate Estimation of PV Solar and Wind Power Generation, Proc. of IEEE Power and Energy Conference at Illinois (PECI), Urbana, IL, Feb. 19-20, 2016 (**conferință WoS**).
2. Maheswaran N.S., SSSC based SSR mitigation in hybrid system using optimized fuzzy logic controller, Optoelectronics and Advanced Materials-Rapid Communications, Vol. 9, No. 3-4, pp.424-430, MAR-APR 2015 (**revista WoS**).

25. Lucrarea citata [1]

Mihai Gavrilaş, Enhanced Evolutionary Search Algorithms for Multiobjective Optimization in Power System, Proceedings of 13th WSEAS International Conference on Evolutionary Computing, publicată în volumul Latest advance in information science, circuits and systems cu ISSN 1790-5109 si ISBN:978-1-61804-099-2, pag. 77-86, 2012

Lucrarea care citeaza

1. G. Chicco, A. Mazza and A. Russo, Optimization and Decision-Making in Electrical Distribution Networks, Proceedings of the 2012 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, 25-27 Oct. 2012, pp. 297 – 306, 2 citari (**conferință WoS**)

26. Lucrarea citata [2]

Gavrilas M., Ivanov O., Load profiling by self organization with affinity control strategy; Revue Roumaine des Sciences Techniques-Serie Electrotechnique et Energetique, Oct – Dec. 2008, Vol.53, No.4, pp. 413-421, ISSN: 0035-4066

Lucrarea care citeaza

1. Bornoiu, I.V., Grigore, O., Evaluation of multiple levels of psychological stress using only electrodermal activity data, Revue Roumaine des Sciences Techniques-Serie Electrotechnique et Energetique, Vol. 59, Issue: 3, JUL-SEP 2014, Pages: 325-334 (**revista WoS**)
2. Hino H., Shen H., Murata N., Wakao S., Hayashi Y., A Versatile Clustering Method for Electricity Consumption Pattern Analysis in Households, IEEE Transactions on Smart Grids, Vol. 4, Issue 2, 2013, pp. 1048-1057, 2 citări (**revista WoS**).

27. Lucrarea citata [1]

Gavrilas M., Ivanov O., Gavrilas G., Load Profiling with Fuzzy Self-Organizing Algorithm, 9th Symposium on Neural Network Applications in Electrical Engineering NEUREL 2008, Sept. 25–27, 2008, Belgrade, Serbia, CD-ROM, ISBN: 978-1-4244-2903-S

Lucrarea care citeaza

1. Kai-le Zhou, Shan-lin Yanga, Chao Shena, A review of electric load classification in smart grid environment, Renewable and Sustainable Energy Reviews, Volume 24, August 2013, Pages 103–110, 2 citări (**revista WoS**).

28. Lucrarea citata [3]

Gavrilas, M., Stahie, V., Cascade hydropower plants optimization with Honey Bee Mating Optimization algorithm, International Review of Electrical Engineering, Vol. 6, No. 5, 2011, pp. 2456-2466

Lucrarea care citeaza

1. Karami, H.A. Shayanfara, J. Aghaeib, A. Ahmadic, Scenario-based security-constrained hydrothermal coordination with volatile wind power generation, Renewable and Sustainable Energy Reviews, Volume 28, December 2013, Pages 726–737 (**revista WoS**)
2. Karami, M.; Shayanfar, H. A.; Aghaei, J.; et al., Mixed integer programming of security-constrained daily hydrothermal generation scheduling (SCDHGS); SCIENTIA IRANICA Volume: 20 Issue: 6 Pages: 2036-2050, DEC 2013 (**revista WoS**).
3. Aghaei, J., Shiraz, Iran. ; Karami, M. ; Muttaqi, K.M. ; Shayanfar, H.A., MIP-Based Stochastic Security-Constrained Daily Hydrothermal Generation Scheduling, IEEE Systems Journal, Vol. 9 , Issue: 9, 2015, pp. 615-628, 10.1109/JSYST.2013.2289771 (**revista WoS**).

29. Lucrarea citata [1]

Coroama I., Gavrilas M. and Ivanov O., Multi-objective Pareto network optimization problem for technical, economical and environmental objectives, Proc. 9th World Energy System Conference (WESC 2012), Suceava, Romania, 28-30 June 2012, pp. 587-594.

Lucrarea care citeaza

1. G. Chicco, A. Mazza and A. Russo, Optimization and Decision-Making in Electrical Distribution Networks, Proceedings of the 2012 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, 25-27 Oct. 2012, pp. 297 – 306, 2 citari (**conferință WoS**)

30. Lucrarea citata [12]

Coroamă, I., Chicco, G., Gavrilaş, M., Russo, A., Distribution system optimisation with intra-day network reconfiguration and demand reduction procurement, Electric Power Systems Research, Vol. 98, 2013, pp. 29-38

Lucrarea care citeaza

1. Giaourisa D, Papadopoulosa A.I., Ziogoua Ch, et al, Performance investigation of a hybrid renewable power generation and storage system using systemic power management models, Energy, ISSN: 0360-5442, Volume 61, 1 November 2013, Pages 621–635 (**revista WoS**).

2. Mistry, K.D., Roy, R., Impact of demand response program in wind integrated distribution network, Electric Power Systems Research, Volume 108, March 2014, Pages 269-281 (**revista WoS**).
3. Tomoiaga, B., Micu, D.D., A comparative study of pareto optimal approaches for distribution system reconfiguration, 49th International Universities Power Engineering Conference, UPEC 2014; Cluj-Napoca; Romania; 2 September 2014 through 5 September 2014; Category number CFP14569-ART; Code 108773; Article number 6934784 (SCOPUS).
4. Paterakis N.G., Mazza A., Santos S.F., et al., Multi-Objective Reconfiguration of Radial Distribution Systems Using Reliability Indices, IEEE Transactions on Power Systems, Vol. 31, No. 2, pp. 1048-1062, Mar. 2016 (**revista WoS**).
5. Jabbari-Sabet R., Moghaddas-Tafreshi S.M., Mirhoseini S.S., Microgrid operation and management using probabilistic reconfiguration and unit commitment, International Journal of Electrical Power & Energy Systems, Vol. 75, pp. 328-336, Feb. 2016 (**revista WoS**).
6. Garcia E., Isaac I., Demand response systems for integrating energy storage batteries for residential users, Proc. of IEEE Ecuador Technical Chapters Meeting (ETCM), Guayaquil, ECUADOR, Oct. 12-14, 2016 (**conferință WoS**).
7. Li Guang-Ming; Peng Min-Fang; Zhu Liang; et al. Multi-period Reconfiguration of the Distribution Network Based on the Improved EM Algorithm, Proc. of International Conference on Artificial Intelligence - Techniques and Applications (AITA), Shanghai, CHINA, Sept. 25-26, 2016, pp. 215-219 (**conferință WoS**).
8. Jordehi A.R., Optimisation of electric distribution systems: A review, RENEWABLE & SUSTAINABLE ENERGY REVIEWS, Vol. 51, pp. 1088-1100, Nov. 2015, DOI: 10.1016/j.rser.2015.07.004 (**revista WoS**).
9. Mazza A., Chicco G., Andrei H., et al. Determination of the relevant periods for intraday distribution system minimum loss reconfiguration, International Transactions on Electrical Energy Systems, Vol. 25, No. 10, pp. 1992-2023, Oct 2015, DOI: 10.1002/etep.1941 (**revista WoS**).
10. Silvente J., Aguirre A.M., Zamarripa M.A., et al. Improved time representation model for the simultaneous energy supply and demand management in microgrids, Energy, Vol. 87, pp. 615-627, July 1 2015, DOI: 10.1016/j.energy.2015.05.028 (**revista WoS**).
11. Giaouris D., Papadopoulos A., Voutetakis S., et al. A power grand composite curves approach for analysis and adaptive operation of renewable energy smart grids, Clean Technologies and Environmental Policy, Vol. 17, No. 5, Special Issue: SI, pp. 1171-1193, June 2015, DOI: 10.1007/s10098-015-0940-y (**revista WoS**).
12. Paterakis N.G., Santos S.F., Catalao J.P.S., et al., Multi-Objective Optimization of Radial Distribution Networks using an Effective Implementation of the epsilon-constraint Method, Proc. of Australasian Universities Power Engineering Conference (AUPEC), Perth, AUSTRALIA, SEP 28-OCT 01, 2014 (**conferință WoS**).
13. Beenish Sultana, Distribution system loss minimization with network reconfiguration and cost-benefit price based demand reduction modeling, Journal of Engineering Research, Vol 5, No 1 (2017), pp. 140-162 (**revista WoS**).

31. Lucrarea citata [1]

Coroama I., Gavrilaş M., Ivanov O., Stahie V.,Meta-heuristic-based methods for multi-objective non-conflicting optimization of distribution networks operation, Proceedings of the 2012 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, 25-27 Oct. 2012, pp. 280 - 285, ISBN: 978-1-4673-1171-7.

Lucrarea care citeaza

1. Naz M.N., Mushtaq M.I., Naeem M., Iqbal M., Altaf M.W., Haneef M., Multicriteria decision making for resource management in renewable energy assisted microgrids, RENEWABLE & SUSTAINABLE ENERGY REVIEWS, Volume: 71, Pages: 323-341, DOI: 10.1016/j.rser.2016.12.059, May 2017 (**revista WoS**).

32. Lucrarea citata [2]

Kriukov Al., Gavrilaş M., Smart energy management in distribution networks with increasing number of electric vehicles, Proceedings of the 2014 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, Oct. 2014, pp. 1039 - 1044, DOI: 10.1109/ICEPE.2014.6970067.

Lucrarea care citeaza

1. Manbachi M., Farhangi H., Palizban A., Arzanpour S., Smart grid adaptive volt-VAR optimization: Challenges for sustainable future grids, Sustainable Cities and Society, Vol. 28, pp. 242-255, May 2017, DOI: 10.1016/j.scs.2016.09.014. (**revista WoS**).

2. Manbachi M., Sadu A., Farhangi H. et al., Impact of EV penetration on Volt-VAR Optimization of distribution networks using real-time co-simulation monitoring platform, Applied Energy, Vol. 169, pp. 28-39, May 1 2016, DOI: 10.1016/j.apenergy.2016.01.084 (**revista WoS**).

33. Lucrarea citata [6]

Stativa A., Gavrilas M., Stahie V., Optimal Tuning and Placement of Power System Stabilizer using Particle Swarm Optimization Algorithm, Proceedings of the 2012 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, 25-27 Oct. 2012, pp. 242-247, ISBN: 978-1-4673-1171-7.

Lucrarea care citeaza

1. Velasquez M.A., Quijano N. Cadena A.I., Optimal placement of switches on DG enhanced feeders with short circuit constraints, Electric Power Systems Research, Vol. 141, pp. 221-232, Dec. 2016, DOI: 10.1016/j.epsr.2016.08.001 (**revista WoS**).
2. Quevedo A.D., Santamaria F.A., Jorge A., Analysis of Plug-in electric vehicles penetration in residential buildings under deterministic and stochastic scenarios, Proc. of IEEE PES Transmission & Distribution Conference and Exposition-Latin America (PES T&D-LA), Morelia, MEXICO, Sept. 20-24, 2016 (**conferință WoS**).
3. Ruglheck S., Wangdee W., Power System Stabilizer Tuning Comparison for WECC Standard-based and PSO-based Methods, Proc. of 13th International Conference on Electrical Engineering / Electronics, Computer, Telecommunications and Information Technology (ECTI-CON), Chiang Mai, THAILAND, June 28-July 01, 2016 (**conferință WoS**).
4. Latif A., Shahzad M., Palensky P., et al., An Alternate PowerFactory Matlab Coupling Approach, Proc. of 2015 International Symposium on Smart Electric Distribution Systems and Technologies (EDST), Vienna, AUSTRIA, SEP 07-11, 2015, pp. 486-491 (**conferință WoS**).
5. Kharrazi Ali,Tuning of Power System Stabilizer in Single Machine Infinite Bus (SMIB) using Genetic Algorithm and Power Factory Modal Analysis, Proc. of Australasian Universities Power Engineering Conference (AUPEC), Wollongong, AUSTRALIA, Sept. 27-30, 2015 (**conferință WoS**).
6. Velasquez M.A., Quijano N., Cadena A.I., Multi-Objective Planning of Recloser-Based Protection Systems on DG Enhanced Feeders, Proc. of IEEE PES Innovative Smart Grid Technologies Latin America (ISGT LATAM) Conference, Montevideo, TURKEY, OCT 05-07, 2015, pp. 822-827 (**conferință WoS**).

34. Lucrarea citata [3]

Stativa A., Gavrilas M., Ivanov O., Optimal Power System Stabilizer Design Using Multiple Wide-Area Input Signals, Proceedings of the 14th International Conference on Environment and Electrical Engineering (EEEIC) Location: Krakow, Poland, May 10-12, 2014, pp. 34-39.

Lucrarea care citeaza

1. Shakarami M.R., Davoudkhani I.F., Wide-area power system stabilizer design based on Grey Wolf Optimization algorithm considering the time delay, Electric Power Systems Research, Vol. 133, pp. 149-159, Apr. 2016, DOI: 10.1016/j.epsr.2015.12.019 (**revista WoS**).
2. Alshimmari A. M., Damping Control Loops for Mitigating Power System Oscillation with Wind Parks Support, Proc. of IEEE PES Transmission & Distribution Conference and Exposition-Latin America (PES T&D-LA), Morelia, MEXICO, Sept. 20-24, 2016 (**conferință WoS**).
3. Zeyad Assi Obaida, L.M. Cipcigana, Mazin T. Muhssina, Power system oscillations and control: Classifications and PSSs' design methods: A review, Renewable and Sustainable Energy Reviews, Volume 79, November 2017, Pages 839–849, doi.org/10.1016/j.rser.2017.05.103 (**revista WoS**).

35. Lucrarea citata [2]

Ivanov O., Gavrilas M., State estimation for power systems with multilayer perceptron neural networks, Proc. of 11th Symposium on Neural Network Applications in Electrical Engineering, NEUREL 2012, Belgrade, Serbia, 20-22 Sep., 2012, pp. 243-246.

Lucrarea care citeaza

1. Fainti R., Alamaniotis M., Tsoukalas L.H., Three-Phase Congestion Prediction Utilizing Artificial Neural Networks, Proc. of 7th International Conference on Information, Intelligence, Systems & Applications (IISA), Chalkidiki, Greece, July 13-15, 2016 (**conferință WoS**).
2. Mosbah H., El-Hawary M., Multilayer Artificial Neural Networks for Real Time Power System State Estimation, Proc. of IEEE Electrical Power and Energy Conference (EPEC), Ontario, CANADA, OCT 26-28, 2015, pp. 344-351 (**conferință WoS**).

36. Lucrarea citata [2]

Ivanov O., Gavrilas M., Neagu B., Intelligent Monitoring and Control in Transmission and Distribution Networks, Proc. of International Conference on Optimization of Electrical and Electronic Equipment (OPTIM 2014), Brasov, Romania, May 22-24, 2014, pp. 185-191.

Lucrarea care citeaza

1. Fainti R., Alamaniotis M., Tsoukalas L.H., Three-Phase Congestion Prediction Utilizing Artificial Neural Networks, Proc. of 7th International Conference on Information, Intelligence, Systems & Applications (IISA), Chalkidiki, Greece, July 13-15, 2016 (**conferință WoS**).
2. Ali, S.M; Jawad, M; Khan, B. et al. - Wide area smart grid architectural model and control: A survey, Renewable and Sustainable Energy Reviews. Volume 64, October 2016, Pages 311–328, DOI: 10.1016/j.rser.2016.06.006 (Elsevier), ISSN: 1364-0321, Accession Number: WOS:000381833200022 (**revista WoS**)

37. Lucrarea citata [1]

Ivanov O., Gavrilas M., Applying genetic algorithms to REI system equivalents, Proc. of 2009 IEEE Bucharest PowerTech Conference, Bucharest, Romania, 28 June-2 July 2009, pp. 1-6, DOI: 10.1109/PTC.2009.5281875

Lucrarea care citeaza

1. Klein D., Spieker C., Rueberg S., et al. Aggregation of Large-Scale Electrical Energy Transmission Networks, Proc. of IEEE International Energy Conference (ENERGYCON), Leuven, Belgium, Apr. 04-08, 2016 (**conferință WoS**).

38. Lucrarea citata [1]

Hopulele E., Gavrilas M., Optimization of a Combined Cool, Heat and Power Plant Based on Genetic Algorithms and Specialized Software, Proc. of 8th International Conference and Exposition on Electrical And Power Engineering (EPE), Iasi, ROMANIA, Oct. 16-18, 2014, pp. 1030-1033.

Lucrarea care citeaza

1. Cenusa V.E., Darie G., Energetic Analysis of the Subcritical Low-Temperature ORC by Imposing the Hot Source Outlet Temperature, Proc. of 9th International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, ROMANIA, Oct. 20-22, 2016, pp. 766-770. (**conferință WoS**).

39. Lucrarea citata [1]

Stativa A., Gavrilas M., Small Signal Stability Enhancement Using Supplementary Signals From PMU, Buletinul AGIR, nr. 3, 2013, pp. 261-267

Lucrarea care citeaza

1. Ruglheck S., Wangdee W., Power System Stabilizer Tuning Comparison for WECC Standard-based and PSO-based Methods, Proc. of 13th International Conference on Electrical Engineering / Electronics, Computer, Telecommunications and Information Technology (ECTI-CON), Chiang Mai, THAILAND, June 28-July 01, 2016 (**conferință WoS**).

40. Lucrarea citata [1]

Stativa A., Gavrilas M., Using DIgSILENT in Small Signal Stability Studies, Buletinul AGIR, nr. 3, 2013, pp. 269-274.

Lucrarea care citeaza

1. Ruglheck S., Wangdee W., Power System Stabilizer Tuning Comparison for WECC Standard-based and PSO-based Methods, Proc. of 13th International Conference on Electrical Engineering / Electronics, Computer, Telecommunications and Information Technology (ECTI-CON), Chiang Mai, THAILAND, June 28-July 01, 2016 (**conferință WoS**).

41. Lucrarea citata [1]

Toma R., Gavrilas M., The Impact on Voltage Stability of the Integration of Renewable Energy Sources into the Electricity Grids, Proc. of 8th International Conference and Exposition on Electrical And Power Engineering (EPE), Iasi, ROMANIA, Oct. 16-18, 2014, pp. 1051-1054.

Lucrarea care citeaza

1. Abd M.K., Cheng S.J., Sun H.S., Optimal Placement and Optimal Mix of RDGs for Improving Voltage Stability and Maximum Loadability Using PSAT, Proc. of IEEE 11th Conference on Industrial Electronics and Applications (ICIEA), Hefei, China, June 05-07, 2016, pp. 1574-1578 (**conferință WoS**).

42. Lucrarea citata [1]

Kriukov Al., Vicol B., Gavrilas M., Applying a micro-market inside an electric vehicles parking facility, Proc. of 49th International Universities Power Engineering Conference (UPEC 2014), Cluj-Napoca, Romania, 2-5 Sept. 2014, pp. 1-6

Lucrarea care citeaza

1. Longo M., Zaninelli D., Viola F., et al. How is the Spread of the Electric Vehicles?, Proc. of IEEE 1st International Forum on Research and Technologies for Society and Industry (RTSI 2015), Torino, ITALY, Sept. 16-18, 2014 (**conferință WoS**).

43. Lucrarea citata [1]

Ivanov O., Gavrilas M., State estimation with Neural Networks and PMU voltage measurements, Proc. of 2014 International Conference and Exposition on Electrical and Power Engineering (EPE 2014), Iasi, Romania, 16-18 Oct. 2014, pp. 983-988.

Lucrarea care citeaza

1. Mosbah H., El-Hawary M., Multilayer Artificial Neural Networks for Real Time Power System State Estimation, Proc. of IEEE Electrical Power and Energy Conference (EPEC), Ontario, CANADA, OCT 26-28, 2015, pp. 344-351. (**conferință WoS**).

44. Lucrarea citata [4]

Gavrilas M., Ivanov O., Gavrilas G., Electricity Load Forecasting Based on a Mixed Statistical-Neural-Computational Intelligence Approach, Proc. of 12th Symposium on Neural Network Applications in Electrical Engineering (NEUREL 2014), Belgrade, Serbia, 25-27 Nov. 2014, pp. 61-66.

Lucrarea care citeaza

1. Mustapha M., Mustafa M.W., Khalid S. N., et al., Classification of Electricity Load Forecasting Based on the Factors Influencing the Load Consumption and Methods Used: An-overview, Proc. of IEEE Conference on Energy Conversion (CENCON), Johor Bahru, MALAYSIA, OCT 19-20, 2015, pp. 442-447. (**conferință WoS** Science).
2. Gavrilescu M., Noise robust Automatic Speech Recognition system by integrating Robust Principal Component Analysis (RPCA) and Exemplar-based Sparse Representation, Proc. of 7th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Bucharest, ROMANIA, JUN 25-27, 2015, pp. S29-S33 (**conferință WoS**).
3. Gavrilescu M., Improved Automatic Speech Recognition System by using Compressed Sensing Signal Reconstruction based on L0 and L1 estimation algorithms, Proc. of 7th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Bucharest, ROMANIA, JUN 25-27, 2015, pp. S23-S27. (**conferință WoS**).
4. Gavrilescu M., Recognizing emotions from videos by studying facial expressions, body postures and hand gestures, Proc. of 20th Telecommunications Forum (TELFOR), Belgrade, SERBIA, NOV 24-26, 2015, pp. 720-723 (**conferință WoS**).

45. Lucrarea citata [1]

Kriukov A., Grigoras G., Gavrilas M., Scarlatache Fl., An Analyze of Slow Voltage Variations from the Electric Distribution Systems with a Clustering Based Approach, Proc. of International Conference on Harmonics and Quality of Power (ICHQP), Bucharest, Romania, May, 2014, pp. 689-693.

Lucrarea care citeaza

1. Neagu B., Grigoras Gh., Assessment of Slow Voltage Variations from the Electric Distribution Systems with Fuzzy Techniques, Proc. of 7th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Bucharest, ROMANIA, JUN 25-27, 2015, pp. P61-P66. (**conferință WoS**).

46. Lucrarea citata [1]

Grigoras G., Ivanov O., Gavrilas M., Customer classification and load profiling using data from Smart Meters, Proc. of 12th Symposium on Neural Network Applications in Electrical Engineering, NEUREL 2014, Belgrade, Serbia, 25-27 November 2014, pp. 73-78.

Lucrarea care citeaza

1. Grigoras Gh., Scarlatache Fl., Processing of Smart Meters Data for Peak Load Estimation of Consumers, Proc. of 9th International Symposium on Advanced Topics in Electrical Engineering (ATEE), Univ Politehnica Bucharest, ROMANIA, MAY 07-09, 2015, pp. 864-867. (**conferință WoS**).

47. Lucrarea citata [1]

Georgescu Gh., Poeata A., Gavrilas M., Energy Losses Computation using Fourier Series Load Curves Decomposition, in Romanian, Energetica, No. 5, 1995.

Lucrarea care citeaza

1. Georgescu Gh., Neagu B., Pintea A., Aspects Regarding the Power and Energy Losses Evaluation from Public Electricity Repartition Systems, Proc. of International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, ROMANIA, Oct. 25-27, 2012, pp. 253-258. (**conferință WoS**).

48. Lucrarea citata [1]

Matei Gh., Gavrilas M., Voltage regulation in distribution networks with distributed generation — A review, 2016 International Conference and Exposition on Electrical and Power Engineering (EPE 2016), Iasi, Romania, 20-22 Oct. 2016, pp. 728 - 732, DOI: 10.1109/ICEPE.2016.7781435.

Lucrarea care citeaza

1. N. Shaukata, et al., A survey on electric vehicle transportation within smart grid system, Renewable and Sustainable Energy Reviews, Available online 16 June 2017, In Press, DOI: https://doi.org/10.1016/j.rser.2017.05.092 (**revista WoS**).

Citări în reviste și volumele conferințelor BDI

1. Lucrarea citata [**4**]

Gavrilas M., Sfintes C.V., Filimon M.N., Identifying typical load profiles using neural-fuzzy models; Proceedings of the 2001 IEEE / PES Transmission and Distribution Conference, Oct. 28 – Nov. 2, Atlanta, Georgia, 2001, CD-ROM, ISBN 07803-7287-5/01.

Lucrarea care citeaza

1. Lo K.L., Zakaria Z., Sohod M.H, Application of Two-Stage Fuzzy C-means in Load profiling; WSEAS Transactions on Infromation Science and Applications, Vol. 2, Issue 11, November 2005, pp. 1905-1912 (**conferință SCOPUS**).
2. Kohan N.M., Moghaddam M.P., Bidaki S.M., Yousefi G.R., Comparison of Modified K-Means and Hierachical Algorithms in Custormes Load Curves Clustering for Designing Suitable Tariffs in Electricity Markets, Proceedings of the 43rd International Universities Power Engineering Conference, UPEC 2008; Padova; 1 - 4 September 2008, ISBN: 978-888988409-6 (**conferință SCOPUS**)
3. C. Reese, C. Buchhagen and L. Hofmann, Voltage Range as Control Input for OLTC-equipped Distribution Transformers, 2012 IEEE PES Transmission and Distribution Conference and Exposition (T&D), 7-10 May 2012, pp. 1-6 (**conferință IEEE Xplore**).
4. C. Reese, L. Hofmann, Synthetic Three-Phase Load Profiles, 22nd International Conference on Electricity Distribution, C I R E D 2013, Stockholm, 10-13June 2013, paper 1392 (**conferință IEEE Xplore**)

2. Lucrarea citata [**6**]

Gavrilas M., Ciutea I., Tanasa C., Medium-term load forecasting with artificial neural network models; 16th International Conference on Electricity Distribution, CIRED 2001, 18-21 June, Amsterdam, Olanda, 2001, CD-ROM, ISBN 0-85296-735-7/0-85296-734-9.

Lucrarea care citeaza

1. Haque M.T., Kashtiban A.M., Application of Neural Networks in Power Systems; A Review, Proceedings – WEC 05, Fourth World Enformatika Conference, Vol. 6, 2005, pp. 53-57 (**conferință SCOPUS**).
2. Baharudin, Z., Kamel, N., AR modified covariance in one week ahead short term load forecast, Proceedings of the 4th IASTED Asian Conference on Power and Energy Systems, AsiaPES 2008, 2008, Pages 204-209 (**conferință SCOPUS**).
3. Osofisan P.B., Nwaeke C.N., Application of Artificial Neural Network (ANN) for Short-Term Load Forecasting (Case Study on National Control Centre (PHCN) Oshogbo, Osun State, Nigeria), Journal of Engineering and Applied Sciences, Vol. 5, No. 2, 2010, pp. 78-83, ISSN:1814-949X (**revista SCOPUS**).
4. Men De-yue, Liu Wen-ying, Application of Least Squares Support Vector Machine(LS-SVM) Based on Time Series in Power System Monthly Load Forecasting, Proceedings of the Power and Energy Engineering Conference (APPEEC), 2011 Asia-Pacific, Wuhan, China, ISSN: 2157-4839, Print ISBN: 978-1-4244-6253-7 (**conferință SCOPUS** , **IEEE Xplore**).

5. Oliveira, M. O., Marzec, D. P., Bordin, G., Bretas, A. S., Bernardon, D., Climate change effect on very short-term electric load forecasting, Proceedings of PowerTech, 2011 IEEE Conference, Trondheim, 2011, pp. 1-7, 2 citări, (**conferință IEEE Xplore**)
6. Qingming Wang ; Buxiang Zhou ; Zuo Li ; Jian Ren ; Forecasting of short-term load based on fuzzy clustering and improved BP algorithm, Proceedings of the 2011 International Conference on Electrical and Control Engineering Conference (ICECE), 16-18 Sept. 2011, pp. 4519 – 4522, ISBN: 978-1-4244-8162-0 (**conferință IEEE Xplore**).

3. Lucrarea citata [**6**]

Gavrilas M., Ciutea I., Tanasa C., Medium-term load forecasting with artificial neural network models; 16th International Conference on Electricity Distribution, CIRED 2001, 18-21 June, Amsterdam, Olanda, 2001, CD-ROM, ISBN 0-85296-735-7/0-85296-734-9.

Lucrarea care citeaza

1. Haque M.T., Kashtiban A.M., Application of Neural Networks in Power Systems; A Review, Proceedings – WEC 05, Fourth World Enformatika Conference, Vol. 6, 2005, pp. 53-57 (**conferință SCOPUS**).
2. Baharudin, Z., Kamel, N., AR modified covariance in one week ahead short term load forecast, Proceedings of the 4th IASTED Asian Conference on Power and Energy Systems, AsiaPES 2008, 2008, Pages 204-209 (**conferință SCOPUS**).
3. Osofisan P.B., Nwaeke C.N., Application of Artificial Neural Network (ANN) for Short-Term Load Forecasting (Case Study on National Control Centre (PHCN) Oshogbo, Osun State, Nigeria), Journal of Engineering and Applied Sciences, Vol. 5, No. 2, 2010, pp. 78-83, ISSN:1814-949X (**revista SCOPUS**).
4. Men De-yue, Liu Wen-ying, Application of Least Squares Support Vector Machine(LS-SVM) Based on Time Series in Power System Monthly Load Forecasting, Proceedings of the Power and Energy Engineering Conference (APPEEC), 2011 Asia-Pacific, Wuhan, China, ISSN: 2157-4839, Print ISBN: 978-1-4244-6253-7 (**conferință SCOPUS**).
5. Oliveira, M. O., Marzec, D. P., Bordin, G., Bretas, A. S., Bernardon, D., Climate change effect on very short-term electric load forecasting, Proceedings of PowerTech, 2011 IEEE Conference, Trondheim, 2011, pp. 1-7, 2 citări, (**conferință IEEE Xplore**)
6. Qingming Wang ; Buxiang Zhou ; Zuo Li ; Jian Ren ; Forecasting of short-term load based on fuzzy clustering and improved BP algorithm, Proceedings of the 2011 International Conference on Electrical and Control Engineering Conference (ICECE), 16-18 Sept. 2011, pp. 4519 – 4522, ISBN: 978-1-4244-8162-0 (**conferință IEEE Xplore**).

4. Lucrarea citata [**2]**

Gavrilas M., Coca D., Stefanovici C., Prognoza pe termen scurt a consumului de energie electrica la S.D. Suceava cu un model bazat pe inteligenta artificiala, Revista Energetica, nr. 8-9, pag. 407-415, 2000, ISSN 1453-2360

Lucrarea care citeaza

1. Bindiu R., Chindris M., Gecan C.O., Pop G.V., Vasiliu R., Gheorghe D., Short term load forecasting for a distribution operator in Romania, Journal of Sustainable Energy, Vol. 1, No. 2, June 2010, pp. 1- 7 , ISSN: 2067-5538 (**Index Copernicus**).

5. Lucrarea citata [**1**]

Gavrilas M., Calcul numeric cu aplicatii in Turbo Pascal, Editura "Gh. Asachi" Iasi, 502 pag., 1999 (ISBN 973-9178-65-0).

Lucrarea care citeaza

1. Diana Enescu, Elena Otilia Virjoghe, Numerical modeling of heat transfer phenomena in bodies with mobile boundaries, Proceedings of the 14th WSEAS international conference on Systems: part of the 14th WSEAS CSCC multiconference - Volume II, July 2010, ISBN: 978-960-474-214-1, pp. 651-656 (**ACM Digital Library**).

6. Lucrarea citata [**1**]

Gavrilas M., Inteligenta artificiala si aplicatii in energetica; Vol. I – Teorie, Editura „Gh. Asachi" Iasi, 320 pag., 2002 (ISBN 973-8292-20-4, ISBN 973-8292-21-2).

Lucrarea care citeaza

1. E. Hopulele, A modeling and optimization approach based on genetic algorithms for a hybrid trigeneration system with stirling engine, Buletinul AGIR nr. 3/2012, iunie-august, ISSN 1224-7928 si ISSN online 2247-3548, CNCSIS categoria B+, cod 415, pag 579-586, iunie 2012 (2 citări) (**revista CNCSIS, B+**).

7. Lucrarea citata [**1**]

Gavrilas M., Inteligenta artificiala si aplicatii in energetica; Vol. II – Teorie si aplicatii, Editura Polytechnium, 194 pag., 2005 (ISBN 973-8292-20-4, ISBN 973-621-116-9).

Lucrarea care citeaza

1. Miron A., Chindriş M.D., Cziker A.C,Complex electric signals analysis using virtual instrumentation, International Review on Computers and Software, Volume 6, Issue 5, September 2011, Pages 667-677, ISSN: 1828-6003 (**revistă Scopus**)

8. Lucrarea citata [**7**]

Georgescu Gh., **Gavrilas M.,** Radasanu D., Calculul si reducerea pierderilor de putere si energie in retelele electrice, Editura SPECTRUM Iasi, 165 pag., 1997 (ISBN 973-98335-1-9).

Lucrarea care citeaza

13. Stanescu, D., Rosca, I., Blagu, I., PQ indices evaluation in distribution networks using AMR database, 20th International Conference and Exhibition on Electricity Distribution (CIRED 2009),Prague, Czech Republic, 8-11 June 2009, ISBN: 978 1 84919 126 5, pp. 564, doi:10.1049/cp.2009.0844, IET Conference Publications (550 CP) (**conferinţă SCOPUS**)
14. Golovanov, C. Toader, P. Postolache, R. Porumb, Influence of the unbalance factors on power and energy losses for electric lines under harmonic regime, Buletinul AGIR nr. 3/2012, iunie-august, ISSN 1224-7928 si ISSN online 2247-3548, CNCSIS categoria B+, cod 415, pag 803-809, iunie 2012 (**revista CNCSIS, B+).**
15. B.C. Neagu, Gh. Georgescu, A comparative study regarding the efficiency of technical losses evaluation method in low voltage electricity networks, Buletinul AGIR nr. 3/2012, iunie-august, ISSN 1224-7928 si ISSN online 2247-3548, CNCSIS categoria B+, cod 415, pag 603-610, iunie 2012 (**revista CNCSIS, B+**).
16. Gh. Georgescu, B. Neagu, Some aspects concerning the mathematical models ans software application for evaluation of technical losses in operation of medium voltage public distribution networks, Buletinul Institutului Politehnic din Iaşi, Secţia Electrotehnică, Energetică, Electronică, Tom LVII (LXI), Fasc. 2, 2011, pp. 129-142, ISSN 1223-8139 (2 citări) (**revistă CNCSIS, B+**).
17. Gh. Georgescu, B. Neagu, Opportunities evaluation in operation of the technical losses under load from low voltage networks which opperate in symmetric state, Buletinul Institutului Politehnic din Iaşi, Secţia Electrotehnică, Energetică, Electronică, Tom LVII (LXI), Fasc. 5, 2011, pp. 159-173, ISSN 1223-8139 (**revistă CNCSIS, B+**).
18. B. Neagu,Gh. Georgescu, The load curves profiling and their parameters of different consumer categories supplied from electric energy repartition and distribution systems, Buletinul Institutului Politehnic din Iaşi, Secţia Electrotehnică, Energetică, Electronică, Tom LVII (LXI), Fasc. 4, 2011, pp. 167-177, ISSN 1223-8139 (2 citări) (**revistă CNCSIS, B+**).
19. Golovanov, C. Toader, P. Postolache, R. Porumb, Influence of the unbalance factors on power and energy losses for electric lines under harmonic regime, Buletinul AGIR nr. 3/2012, iunie-august, ISSN 1224-7928 si ISSN online 2247-3548, CNCSIS categoria B+, cod 415, pag 803-809, iunie 2012 (**revista CNCSIS, B+**)

9. Lucrarea citata [**11**]

Gavrilas M., Ivanov O., Gavrilas G., REI equivalent design for electric power systems with genetic algorithms, WSEAS Transactions on Circuits and Systems, v 7, n 10, 2008, p 911-921, ISSN: 1109-2734.

Lucrarea care citeaza

1. Kala, Z., Kala, J., Sensitivity analysis of stability problems of steel structures using shell finite elements and nonlinear computation methods, WSEAS Transactions on Applied and Theoretical Mechanics 4 (3), 2009, pp. 105-114 (**revistă SCOPUS**).
2. Popa G.N., Deaconu S., Dinis C.M., Iagar A., A Case Study of an Analogical Distance Relay for the 110 kV Electric Power Lines, WSEAS TRANSACTIONS on SYSTEMS, ISSN: 1109-2777, Issue 10, Volume 9, October 2010, pp. 1063-1072 (**revista SCOPUS**).
3. Li Z., Yang H., Application of REI Equivalent in Reactive Power Optimization Control in Regional Power Grid, Proceedings of the Power and Energy Engineering Conference (APPEEC), 2011 Asia-Pacific, Wuhan, China, ISSN: 2157-4839, Print ISBN: 978-1-4244-6253-7 (**conferinţă IEEE Xplore**).
4. Popa, G.N., Deaconu, S., Diniş, C.M., Iagăr, A., An analogical distance relay for the 110kV electric lines, Proceedings of 14th WSEAS International Conference on Systems, Part of the 14th WSEAS CSCC Multiconference; Corfu Island; 22 -24 July 2010, Vol. 1, pp: 165-170, ISBN: 978-960474199-1 (**conferinţă SCOPUS**)

5. Li Z., Yang H., Application of REI equivalent and varying-intercept linear regression in voltage and reactive power optimization control in regional power grid, Power System Protection and Control, ISSN: 1674-3415, Vol. 40, Issu e, Jan. 2012, pp. 18-22+42 (**revista SCOPUS**).
6. Li, Z., Yang, H., Reactive power optimization of regional power grid considering voltage and reactive power characteristics of boundary buses, Power System Technology 36 (9) , pp. 126-132, 2012 (**revista SCOPUS**).
7. Li Z., Yang H., Li W., Reactive power optimization of regional power grid considering voltage and reactive power characteristics of boundary buses, Proceedings of Asia-Pacific Power and Energy Engineering Conference, APPEEC 2012; Shanghai; pp.1-4 (**conferință IEEE Xplore**).
8. Goh, H.H., Chua, Q.S. ; Kok, B.C. ; Goh, K.C. ; Lee, S.W. ; Teo, K.T.K., Early warning and prevention of potential wide-area voltage instability problem, Proceedings of 12th International Conference on Environment and Electrical Engineering (EEEIC), 5-8 May 2013, pp. 479 – 484 (**conferință IEEE Xplore**).
9. Goh, H.H., Chua, Q.S., Lee, S.W., Goh, K.C., Teo, K.T.K., Power stability monitoring based on voltage instability prediction approach through wide area system, American Journal of Applied Sciences, ISSN:1546-9239, 11 (5), 2014, pp. 717-731(**revista SCOPUS**).
10. Sarić A.T., Transtrum M.K., Stanković A.M., Dynamic model estimation for power system areas from boundary measurements, Proc. of 2016 IEEE Power and Energy Society General Meeting (PESGM), Boston, MA, USA, 17-21 July 2016, pp. 1 - 5, DOI: 10.1109/PESGM.2016.7741214 (**conferință IEEE Xplore**).
11. Gunadin, Indar Chaerah; Said, Sri Mawar; Irsan, Muhammad, Determination of Stability Index of Electrical Power System Using REI-Dimo Methods, Journal of Theoretical and Applied Information Technology; Islamabad Vol. 90, No. 1 (Aug 2016), ISSN: 1992-8645, pp.161-167 (**revista SCOPUS**).

10. Lucrarea citata [**2**]

Georgescu Gh., **Gavrilas M.,** Radasanu D., "The Computation of Energy and Power Losses in Electric Networks and their Minimization" (in Romanian), Spectrum Printing House, Iasi, 1998, Romania.

Lucrarea care citeaza

1. Toader, C. ; Scutariu, M. ; Dumitriu, C., The analysis of optimal energy losses in two-windings transformers, Proc. of 10th Mediterranean Electrotechnical Conference, 2000. MELECON 2000, 29-31 May 2000, Volume: 3, pp. 1072 – 1075, DOI: 10.1109/MELCON.2000.879720 (**conferință IEEE Xplore**)
2. Marinescu, C.; Deaconu, A.; Ciurea, E.; Marinescu, D.; From Microgrids to Smart Grids: Modeling and simulating using graphs part II optimization of reactive power flow, Poceedings of the 12-th International Conference on Optimization of Electrical and Electronic Equipment, OPTIM 2010, pp. 1251 - 1256 (**conferință IEEE Xplore**).

11. Lucrarea citata [**2**]

Georgescu Gh., **Gavrilas M.,** Radasanu D., "The Computation of Energy and Power Losses in Electric Networks and their Minimization" (in Romanian), Spectrum Printing House, Iasi, 1998, Romania.

Lucrarea care citeaza

1. Toader, C. ; Scutariu, M. ; Dumitriu, C., The analysis of optimal energy losses in two-windings transformers, Proc. of 10th Mediterranean Electrotechnical Conference, 2000. MELECON 2000, 29-31 May 2000, Volume: 3, pp. 1072 – 1075, DOI: 10.1109/MELCON.2000.879720 (**conferință IEEE Xplore**)
2. Marinescu, C.; Deaconu, A.; Ciurea, E.; Marinescu, D.; From Microgrids to Smart Grids: Modeling and simulating using graphs part II optimization of reactive power flow, Poceedings of the 12-th International Conference on Optimization of Electrical and Electronic Equipment, OPTIM 2010, pp. 1251 - 1256 (**conferință IEEE Xplore**).

12. Lucrarea citata [**1**]

Georgescu Gh., **Gavrilas M.,** Cartina Gh., Aspects Concerning Power Distribution Networks Planning Using the Artificial Intelligence, 14th International Conference on Electricity Distribution, CIRED '97, 2-5 June, Birmingham, England, pp. 876-881, 1997, ISBN: 0-85296-674-1.

Lucrarea care citeaza

2. B. Neagu,Gh. Georgescu, The load curves profiling and their parameters of different consumer categories supplied from electric energy repartition and distribution systems, Buletinul Institutului Politehnic din Iaşi, Secţia Electrotehnică, Energetică, Electronică, Tom LVII (LXI), Fasc. 4, 2011, pp. 167-177, ISSN 1223-8139 (2 citări) (**revistă CNCSIS, B+**).

13. Lucrarea citata [**1**]

Gavrilas M., Georgescu Gh., Cartina Gh., A Connectionist Approach to Real-Time Control and Simulation of Switching Operations in Power Systems Substations; Proceedings of the 8th Mediterranean Electrotechnical Conference MELECON'96, Vol. III, May 13-16, 1996, Bari, Italy, pp. 1431-1434, 1996.

Lucrarea care citeaza

1. Tang Z., Guo W., Graph Theory Based Expert System to form De-icing Route in the Power Grid, Journal of Computational Information Systems , Vol. 6. No.8, 2010, pp. 2651-2657, ISSN: 1553-9105 (**revistă** Scopus).

14. Lucrarea citata [**2**]

Istrate M., **Gavrilas M.,** Istrate C., Ursulean R., Assessment of Two Double-end Data Fault Location Algorithms in Transmission Grids using ATP simulations, Poceedings of the 9-th WSEAS/IASME International Conference on Electric Power Systems, High Voltage, Electric Machines (POWER '09), Genova, Italy, Oct. 17-19, 2009, Book Series: Recent Advances in Electrical Engineering, CD-ROM

Lucrarea care citeaza

1. Istrate, Assessemnt of power-frequency based algorithms for fault location in power grids, Proceedings of the 12-th WSEAS International Conference on Mathematical Methods and Computational Techniques in Electrical Engineering (MMACTEE ,10), October 21-23, 2010, Timisoara, Romania, pp. 37-46, ISBN: 978-960-474-238-7 (**conferință Scopus**).
2. Toader, D., Haragus, S., Blaj, C., Cata, I., Numerical simulation of single phase faults in medium voltage electrical networks, WSEAS Transactions on Power Systems, Vol. 5, Issue 2, 2010, pp. 64-74 (revista SCOPUS).

15. Lucrarea citata [**6**]

Grigoras Gh., Cartina Gh., **Gavrilas M.,** Using of Clustering Techniques in Optimal Placement of Phasor Measurements Units, Poceedings of the 9-th WSEAS/IASME International Conference on Electric Power Systems, High Voltage, Electric Machines (POWER '09), Genova, Italy, Oct. 17-19, 2009, Book Series: Recent Advances in Electrical Engineering, pp: 104-108, ISBN 978-960474130-4.

Lucrarea care citeaza

1. Grigoras, G., Cartina, G., Istrate, M., Rotaru, F., The efficiency of the clustering techniques in the energy losses evaluation from distribution networks, International Journal of Mathematical Models and Methods in Applied Sciences, Volume 5, Issue 1, 2011, Pages 133-141 (**revista SCOPUS**).
2. Florina Scarlatache, Gheorghe Grigoraş, Gianfranco Chicco, Gheorghe Cârţină, Using k-means clustering method in determination of the optimal placement of distributed generation sources in electrical distribution systems, 13-th International Conference on Optimization of Electrical and Electronic Equipment (OPTIM 2012), Brasov, Romania, 24-26 May 2012, pp. 953-958 (**conferință IEEE Xplore**).
3. Grigoraş, G., Cârtină, G., Impact on the fuzzy modeling in operation of electric distribution systems, WSEAS Transactions on Circuits and Systems, Volume 11, Issue 4, April 2012, Pages 105-114 (**revista SCOPUS**).
4. Scarlatache Fl., Grigoraş Gh., An approach regarding the placement of distributed generation sources in electric distribution systems using Hurwitz criterion, Buletinul Institutului Politehnic din Iaşi, Tomul LVIII (LXII), Fasc. 4, 2012, Secţia Electrotehnică. Energetică. Electronică, pp. 109-117 (**revista CNCSIS, B+**).
5. Scarlatache Fl., Grigoraş Gh., The influence of the DG sources in the optimal operation of the electrical distribution systems, Proceedings of the 8th International Symposium on Advanced Topics in Electrical Engineering ATEE 2013, 23-25 May 2013, Bucharest, ISBN: 978-1-4673-5979-5 (**conferință IEEE Xplore**).
6. Cepeda, J. C.; Colomé, D. G., Evaluación de la Vulnerabilidad del Sistema Eléctrico de Potencia en Tiempo Real usando Tecnología de Medición Sincrofasorial, Revista Técnica Energía, 2014, pp. 91-101. 11p (**revistă EBSCO**).

16. Lucrarea citata [**1**]

Gavrilas M., Gavrilas G., Ivanov O., A Network Reduction Method with Synchronized Phasor Measurements, Poceedings of the 9-th WSEAS/IASME International Conference on Electric Power Systems, High Voltage, Electric Machines (POWER '09), Genova, Italy, Oct. 17-19, 2009, Book Series: Recent Advances in Electrical Engineering, CD-ROM, ISBN:978-960-474-130-4, ISSN: 1790-5117.

Lucrarea care citeaza

1. Georgiev, Georgi; Zicmane, Inga; Antonovs, Eduards; Sergey, Kovalenko; Elimination of nodes with voltage dependent load characteristics in electrical network models, Proceedings of the 10th International Conference on Environment and Electrical Engineering (EEEIC), 8-11 May, 2011, Rome, Italy, Pages 1-4, ISBN: 978-1-4244-8779-0 (**conferință IEEE Xplore**).

17. Lucrarea citata [2]

Gavrilas M., Gavrilas G., Sfintes C.V., Application of Honey Bee Mating Optimization algorithm to load profile clustering, Proceedings of 2010 IEEE International Conference on Computational Intelligence for Measurement Systems and Applications (CIMSA), 6-8 Sept. 2010, Taranto, Itally, pp. 113-118, ISBN: 978-1-4244-7229-1

Lucrarea care citeaza

1. P. Panapakidis, M. C. Alexiadis, and G. K. Papagiannis, Load Profiling in the Deregulated Electricity Markets: A Review of the Applications, 9-th International Conference on the European Energy Market (EEM 2012), Florence, Italy, 10-12 May 2012, pp. 1-8 (**conferință IEEE Xplore**).
2. Kalyani, K; Chakravarthy, T - Load Profile Clustering: An Algorithmic Approach With Improved Replacement In Bee Optimization Algorithm, ICTACT Journal On Soft Computing: Special Issue On Soft Computing Theory, Application And Implications In Engineering And Technology, January 2015, Vol. 05, Issue 02, pp. 905-910 (**revistă DOAJ**)

18. Lucrarea citata [1]

Gavrilas M., Georgescu Gh., Consumer category identification in distribution networks using Hopfield nets, Buletinul Institutului Politehnic Iasi, Sectia III, Electrotehnica, Energetica, Tomul XLI (XLV), Fasc. 3-4, pag. 161-166, 1995, ISSN 1223-8139.

Lucrarea care citeaza

1. Zhang, M., Lo, K.L., Zakaria, Z., Research on load profiling in distribution system operation, Proceedings of 2006 China International Conference on Electricity Distribution, CICED 2006; Beijing; 17 September 2006 through 20 September 2006; IET Conference Publications Issue 527 CP, 2006, Pages 141-148, ISBN: 978-086341638-5 (**conferință SCOPUS**).

19. Lucrarea citata [2]

Gavrilaş M., Rusu I., Gavrilaş G., Ivanov O., Synchronized Phasor Measurements for State Estimation, Revue Roumaine des Sciences Techniques-Serie Electrotechnique et Energetique, Oct – Dec. 2009, Vol.54, No.4, pp. 335-344, ISSN: 0035-4066.

Lucrarea care citeaza

1. Manousakis, N.M. , Korres, G.N. , Georgilakis, P.S., Optimal placement of phasor measurement units: A literature review, Proceedings of the 16th International Conference on Intelligent System Applications to Power Systems, ISAP 2011; Hersonisos, Crete; 25 - 28 September 2011 (**conferință SCOPUS**).
2. Chouhan, Dolly; Jaiswal, Varsha - A Literature Review on Optimal Placement of PMU and Voltage Stability, Indian Journal of Science and Technology, Vol 9(47), DOI: 10.17485/ijst/2016/v9i47/101724, December 2016, ISSN (Print) : 0974-6846 ISSN (Online) : 0974-5645 (**revistă DOAJ, IndexCopernicus**)

20. Lucrarea citata [1]

Gavrilas M., Recent Advances and Applications of Synchronized Phasor Measurements in Power Systems, Poceedings of the 9-th WSEAS/IASME International Conference on Electric Power Systems, High Voltage, Electric Machines (POWER '09), Genova, Italy, Oct. 17-19, 2009, Book Series: Recent Advances in Electrical Engineering, ISBN: 978-960-474-130-4.

Lucrarea care citeaza

1. Rihan, Mohd; Ahmad, Mukhtar; Beg, M. Salim; Phasor measurement units in the Indian smart grid, Proceedings of 2011 IEEE PES Innovative Smart Grid Technologies - India (ISGT India), ISBN: 978-1-4673-0316-3, 1-3 Dec. 2011, pp. 261 - 267 (**conferință IEEE Xplore**).

21. Lucrarea citata [3]

M. Gavrilas. "Heuristic and metaheuristic optimization techniques with application to power systems", In Proceedings of the 12th WSEAS international conference on Mathematical methods and computational techniques in electrical engineering (MMACTEE'10), WSEAS Press, Stevens Point, Wisconsin, USA, 2005, pp. 95-103.

Lucrarea care citeaza

1. Jumaat S.A., Musirin, I., Othman M.M., Mokhlis H., A Hybrid Meta-heuristis Optimization Technique for Loss Minimization and Cluster Identification in Power System Network, Proceedings of 8-th IEEE International Power Engineering and Optimization Conference, PEOCO 2014, Langkawi, Malaysia, 24-25 March 2014, pp. 568-572 (**conferință IEEE Xplore**)

2. Jumaat S.A., Musirin, I., Othman M.M., Mokhlis H., Rahmat N.A., Developed Cluster of SVC Installation in Power System Network via Hybrid Meta-Heuristic Method, Proceedings of IEEE Jordan Conference on Applied Electrical Engineering and Computing Technologies, AEECT 2013, pp. 1-6, (**conferință IEEE Xplore**)
3. Hany A. Abdelsalam, et al., Impact of distribution system reconfiguration on optimal placement of phasor measurement units, Proceedings of Power Systems Conference (PSC), 2014 Clemson University, Date 11-14 March 2014, pp. 1-6, ISBN 978-1-4799-3960-2, DOI 10.1109/PSC.2014.6808114 (**conferință IEEE Xplore**)

22. Lucrarea citata [**2**]

Coroama I., Gavrilas M., A study on wind energy generation forecasting using connectionist models, Poceedings of the 12-th International Conference on Optimization of Electrical and Electronic Equipment, OPTIM 2010, pp. 1257 – 1262, ISBN: 978-973-131-7018-1

Lucrarea care citeaza

1. Chiang, Ching-Tsan, Chien Hsin, Zhongli City, Lu, Wen-Lung ; Jhuang, Hao-An, Extremely short-term wind speed prediction based on RSCMAC, Proceedings of the 9th Asian Control Conference ASCC 2013, 23-26 June 2013, Istanbul, Turkey, pp. 1-6, ISBN: 978-1-4673-5767-8, DOI: 10.1109/ASCC.2013.6606189 (**conferință IEEE Xplore**).
2. Yavanoglu U, Kaplan O, et al., Intelligent Decision Support System for energy Investments, Proceedings of the 12-th IEEE International Conference on Machine Learning and Applications, 4-7 Dec. 2013, Miami, Florida, DOI 10.1109/ICMLA.2013.127, pp. 224-231, (**conferință IEEE Xplore**)

23. Lucrarea citata [3]

Gavrilas M., Ivanov O., Gavrilas G., Load Profiling with Fuzzy Self-Organizing Algorithm, 9th Symposium on Neural Network Applications in Electrical Engineering NEUREL 2008, Sept. 25–27, 2008, Belgrade, Serbia, CD-ROM, ISBN: 978-1-4244-2903-S

Lucrarea care citeaza

1. Zhang, T.; Gu, M - Overview of electricity customer load pattern extraction technology and its application, Dianwang Jishu/Power System Technology, Volume 40, Issue 3, 5 March 2016, Pages 804-811, ISSN: 10003673, DOI: 10.13335/j.1000-3673.pst.2016.03.021 (**revistă SCOPUS**)
2. Kalyani, K; Chakravarthy, T - Load Profile Clustering: An Algorithmic Approach With Improved Replacement In Bee Optimization Algorithm, ICTACT Journal On Soft Computing: Special Issue On Soft Computing Theory, Application And Implications In Engineering And Technology, January 2015, Vol. 05, Issue 02, pp. 905-910 (**revistă DOAJ, EBSCO**)
3. Chakaravarthy, T.; Kalyani, K. - A brief survey of Honey Bee mating optimization algorithm to efficient data clustering, Indian Journal of Science and Technology, Volume 8, Issue 24, September 01, 2015, 7p, ISSN: 09746846, DOI: 10.17485/ijst/2015/v8i24/5921 (**revistă SCOPUS**)

24. Lucrarea citata [1]

Gavrilas, M., Stahie, V., Cascade hydropower plants optimization with Honey Bee Mating Optimization algorithm, International Review of Electrical Engineering, Vol. 6, No. 5, 2011, pp. 2456-2466

Lucrarea care citeaza

1. Nakib A., Talbi El-G., Fuser A., Hybrid Metaheuristic for Annual Hydropower Generation Optimization, Proc. of 2014 IEEE International Parallel & Distributed Processing Symposium Workshops, Phoenix, AZ, USA, 19-23 May 2014, pp. 412 - 419, DOI: 10.1109/IPDPSW.2014.53 (**conferință IEEE Xplore**).

25. Lucrarea citata [1]

Coroamă, I., Chicco, G., Gavrilaş, M., Russo, A., Distribution system optimisation with intra-day network reconfiguration and demand reduction procurement, Electric Power Systems Research, Vol. 98, 2013, pp. 29-38

Lucrarea care citeaza

1. Tomoiaga, B., Micu, D.D., A comparative study of pareto optimal approaches for distribution system reconfiguration, 49th International Universities Power Engineering Conference, UPEC 2014; Cluj-Napoca; Romania; 2 September 2014 through 5 September 2014; Category number CFP14569-ART; Code 108773; Article number 6934784 (**conferință SCOPUS**).

26. Lucrarea citata [2]

Gavrilas M., Ivanov O., Optimization in Distribution Systems Using Particle Swarm Optimization and Immune Algorithms; First International Symposium on Electrical and Electronics Engineering – ISEEE,13-14 Oct., Galati, pp. 86-91, 2006, ISBN 973-627-325-3.

Lucrarea care citeaza

1. Jumaat S.A., Musirin, I., Othman M.M., Mokhlis H., A Hybrid Meta-heuristis Optimization Technique for Loss Minimization and Cluster Identification in Power System Network, Proceedings of 8-th IEEE International Power Engineering and Optimization Conference, PEOCO 2014, Langkawi, Malaysia, 24-25 March 2014, pp. 568-572 (**conferință IEEE Xplore**)
2. Jumaat S.A., Musirin, I., Othman M.M., Mokhlis H., Rahmat N.A., Developed Cluster of SVC Installation in Power System Network via Hybrid Meta-Heuristic Method, Proceedings of IEEE Jordan Conference on Applied Electrical Engineering and Computing Technologies, AEECT 2013, pp. 1-6, (**conferință IEEE Xplore**)

27. Lucrarea citata [2]

Gavrilas M., Sfintes C.V., Ivanov O., Loss Reduction in Distribution Systems Using Ant Colony Algorithms; The 2-nd CIRED Regional Conference on Electricity Distribution, 17-20 Oct., Zlatibor, Serbia, CD-ROM, 2006, ISBN 86-83171-13-2.

Lucrarea care citeaza

1. Jumaat S.A., Musirin, I., Othman M.M., Mokhlis H., A Hybrid Meta-heuristis Optimization Technique for Loss Minimization and Cluster Identification in Power System Network, Proceedings of 8-th IEEE International Power Engineering and Optimization Conference, PEOCO 2014, Langkawi, Malaysia, 24-25 March 2014, pp. 568-572 (**conferință IEEE Xplore**)
2. Jumaat S.A., Musirin, I., Othman M.M., Mokhlis H., Rahmat N.A., Developed Cluster of SVC Installation in Power System Network via Hybrid Meta-Heuristic Method, Proceedings of IEEE Jordan Conference on Applied Electrical Engineering and Computing Technologies, AEECT 2013, pp. 1-6, (**conferință IEEE Xplore**)

28. Lucrarea citata [2]

Aparaschivei E.D., Ivanov O., Gavrilas M., Load flow estimaton in electrical systems using artificial neural networks, Proceedings of the 2012 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, 25-27 Oct. 2012, pp. 276 – 279, ISBN: 978-1-4673-1171-7

Lucrarea care citeaza

1. Boopathi, C.S., Venkadesan, A., Dash, S.S., Comparison of various learning algorithms for artificial neural network based on-line load flow analysis, International Review on Modelling and Simulations, Volume 7, Issue 2, 2014, Pages 323-330 (**revistă SCOPUS**)
2. Zarkovic M., Sosic D., ANN for solving the harmonic load flow in electric power systems with DG, Proc. of Mediterranean Conference on Power Generation, Transmission, Distribution and Energy Conversion (MedPower 2016), Belgrade Serbia, 6-9 Nov. 2016, pp. 1-4, DOI: 10.1049/cp.2016.0990 (**conferință IEEE Xplore**)

29. Lucrarea citata [1]

Ivanov O., Gavrilaș M., Vicol B., New models for power systems state estimation, UPB Scientific Bulletin, Series C: Electrical Engineering, Volume 74, Issue 1, 2012, Pages 181-188, ISSN: 2286-3540.

Lucrarea care citeaza

1. Presada, V.I., Cristea, C.V., Eremia, M., Toma, L., State estimation in power systems with FACTS devices and PMU measurements, Proceedings of the 49th International Universities Power Engineering Conference, UPEC 2014; Cluj-Napoca; Romania; 2 - 5 September 2014, Article number 6934712 (**conferință SCOPUS**)

30. Lucrarea citata [1]

Stativa A., Gavrilas M., Stahie V., Optimal Tuning and Placement of Power System Stabilizer using Particle Swarm Optimization Algorithm, Proceedings of the 2012 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, 25-27 Oct. 2012, pp. 242-247, ISBN: 978-1-4673-1171-7.

Lucrarea care citeaza

1. Sosa Ríos M.R., González-Fernández R.A., Coordinated tuning of power system controllers using metaheuristic techniques, Proc. of 2014 Power Systems Computation Conference, Wroclaw, Poland, 18-22 Aug. 2014, pp. 1-8, DOI: 10.1109/PSCC.2014.7038318 (**conferință IEEE Xplore**).

31. Lucrarea citata [1]

Stativa A., Gavrilas M., Ivanov O., Optimal Power System Stabilizer Design Using Multiple Wide-Area Input Signals, Proceedings of the 14th International Conference on Environment and Electrical Engineering (EEEIC) Location: Krakow, Poland, May 10-12, 2014, pp. 34-39.

Lucrarea care citeaza

1. Tashchilin V., Chusovitin P., Shabalin G., Pazderin A., Gerasimov K., Measurements-based approach for PSS retuning, Proc. of 2015 IEEE 15th International Conference on Environment and Electrical Engineering (EEEIC), Rome, Italy, 10-13 June 2015, DOI: 10.1109/EEEIC.2015.7165348 (**conferință IEEE Xplore**).

32. Lucrarea citata [2]

Ivanov O., Gavrilas M., State estimation for power systems with multilayer perceptron neural networks, Proc. of 11th Symposium on Neural Network Applications in Electrical Engineering, NEUREL 2012, Belgrade, Serbia, 20-22 Sep., 2012, pp. 243-246.

Lucrarea care citeaza

1. Fainti R., Alamaniotis M., Tsoukalas L.H., Distribution congestion prediction using artificial neural networks for big data, Proc. of Mediterranean Conference on Power Generation, Transmission, Distribution and Energy Conversion (MedPower 2016), Belgrade, Serbia, 6-9 Nov. 2016, pp. 1 - 7, DOI: 10.1049/cp.2016.1108 (**conferință IEEE Xplore**).
2. Fainti, Rafik; Alamaniotis, Miltiadis; Tsoukalas, Lefteri H. - Backpropagation Neural Network for Interval Prediction of Three-Phase Ampacity Level in Power Systems, International Journal of Monitoring and Surveillance Technologies Research (IJMSTR), Volume 4, Issue 3, 2016, p. 1-20 (**revistă ACM DL**)

33. Lucrarea citata [2]

Ivanov O., Gavrilas M., Neagu B., Intelligent Monitoring and Control in Transmission and Distribution Networks, Proc. of International Conference on Optimization of Electrical and Electronic Equipment (OPTIM 2014), Brasov, Romania, May 22-24, 2014, pp. 185-191.

Lucrarea care citeaza

1. Fainti, Rafik; Alamaniotis, Miltiadis; Tsoukalas, Lefteri H. - Backpropagation Neural Network for Interval Prediction of Three-Phase Ampacity Level in Power Systems, International Journal of Monitoring and Surveillance Technologies Research (IJMSTR), Volume 4, Issue 3, 2016, p. 1-20 (**revistă ACM DL**).
2. Fainti R., Alamaniotis M., Tsoukalas L.H., Distribution congestion prediction using artificial neural networks for big data, Proc. of Mediterranean Conference on Power Generation, Transmission, Distribution and Energy Conversion (MedPower 2016), Belgrade, Serbia, 6-9 Nov. 2016, pp. 1 - 7, DOI: 10.1049/cp.2016.1108 (**conferință IEEE Xplore**).

34. Lucrarea citata [1]

Toma R., Gavrilas M., The Impact on Voltage Stability of the Integration of Renewable Energy Sources into the Electricity Grids, Proc. of 8th International Conference and Exposition on Electrical And Power Engineering (EPE), Iasi, ROMANIA, Oct. 16-18, 2014, pp. 1051-1054.

Lucrarea care citeaza

1. Zhang X, Wang B, Wang K, Zhang L. Probability assessment for power system voltage stability margin with renewable energy source using slice sampling. Int Trans Electr Energ Syst. 2017;e2366. https://doi.org/10.1002/etep.2366 (**revistă Wiley Online Library**)

35. Lucrarea citata [1]

Kriukov Al., Vicol B., Gavrilas M., Applying a micro-market inside an electric vehicles parking facility, Proc. of 49th International Universities Power Engineering Conference (UPEC 2014), Cluj-Napoca, Romania, 2-5 Sept. 2014, pp. 1-6

Lucrarea care citeaza

1. Pol Olivella-Rosell et al., Day-ahead micro-market design for distributed energy resources, 2016 IEEE International Energy Conference (ENERGYCON), 4-8 April 2016, Leuven, Belgium, DOI: 10.1109/ENERGYCON.2016.7513961 (**conferință IEEE Xplore**)

36. Lucrarea citata [1]

Cartina G., Georgescu G., Gavrilas M., Bonciu Cl., Neural Networks and Expert Systems in Power Systems, "Gh. Asachi" Publishing House, Iasi, Romania, 1994.

Lucrarea care citeaza

1. Cartina G., Bonciu C., Musat M., Zisman Z., Losses minimization in power systems using artificial neural networks, Proc. of 9th Mediterranean Electrotechnical Conference, 1998. MELECON 98, Vol. 2, pp. 1103 – 1106, DOI: 10.1109/MELCON.1998.699403 (**conferință IEEE Xplore**)

37. Lucrarea citata [1]

Cartina G., Bonciu Cl.,Georgescu G., Gavrilas M., Optimization Algorithms for Artificial Neural Networks, Proc. of 5th Symposium on Automatic Control and Computer Science, Iasi, Romania, Vol. 1, October 1995, pp. 194-199.

Lucrarea care citeaza

1. Cartina G., Bonciu C., Musat M., Zisman Z., Losses minimization in power systems using artificial neural networks, Proc. of 9th Mediterranean Electrotechnical Conference, 1998. MELECON 98, Vol. 2, pp. 1103 – 1106, DOI: 10.1109/MELCON.1998.699403 (**conferință IEEE Xplore**)

38. Lucrarea citata [1]

Cartina G., Georgescu G., Gavrilas M., Bonciu C., Alexandrescu V., Neural Solution to the Voltage Violations Problem in on-line Contingency Analysis, ELECTRIMACS 1996, St. Nazaire, Vol. 2, pp.465-468.

Lucrarea care citeaza

1. Cartina G., Bonciu C., Musat M., Zisman Z., Losses minimization in power systems using artificial neural networks, Proc. of 9th Mediterranean Electrotechnical Conference, 1998. MELECON 98, Vol. 2, pp. 1103 – 1106, DOI: 10.1109/MELCON.1998.699403 (**conferință IEEE Xplore**)

39. Lucrarea citata [1]

Cartina G., Gavrilas M., Georgescu G., Bonciu Cl., Bociu C., Approximation / Correction of Voltage Overstepping with Artificial Neural Networks, International Symposium on Signals, Circuits and Systems, SCS 1997, Iasi, Romania, Vol. 2, pp.535-538.

Lucrarea care citeaza

1. Cartina G., Bonciu C., Musat M., Zisman Z., Losses minimization in power systems using artificial neural networks, Proc. of 9th Mediterranean Electrotechnical Conference, 1998. MELECON 98, Vol. 2, pp. 1103 – 1106, DOI: 10.1109/MELCON.1998.699403 (**conferință IEEE Xplore**)

40. Lucrarea citata [2]

Vicol Bogdan, Gavrilas Mihai, Ivanov Ovidiu, Neagu Bogdan, Grigoras Gheorghe - Synchrophasor measurement method for overhead line parameters estimation in MV distribution networks, Proc. of 2014 16th International Conference on Harmonics and Quality of Power (ICHQP), 2014, pp. 862-865, Bucharest, Romania, 25-28 May 2014, DOI: 10.1109/ICHQP.2014.6842833 (IEEExplore), Accession Number: WOS:000343776100177, ISBN:978-1-4673-6487-4, ISSN: 2164-0610 (ISI Thomson Reuters)

Lucrarea care citeaza

1. Zvada, P.; Zelenskii, E.; Kononov, Y. - The experimental studies to improve the measurements synchronization accuracy in the 10 kV feeder at zero crossing by calculated compensation of phase shift of voltage, 21st IMEKO TC-4 International Symposium on Understanding the World through Electrical and Electronic Measurement, and 19th International Workshop on ADC Modelling and Testing; Budapest; Hungary; 7-9 September 2016, 2016, p. 284-287 (**conferință Scopus**)
2. Zelenskii, E. G.; Kononov, Yu. G., Levchenko, I. I. - Identification of the parameters of distribution networks by synchronized current and voltage measurements, Russian Electrical Engineering, July 2016, Volume 87, Issue 7, pp 363–368, DOI: 10.3103/S1068371216070129 (**revistă Springer**)

41. Lucrarea citata [1]

Coroama Iulia, Gavrilas Mihai, Ivanov Ovidiu, A Genetic Algorithm Approach to Voltage-VAR Control in Systems with Distributed Generation, Proceedings of thr The 11th WSEAS International Conference on Mathematical

Methods And Computational Techniques In Electrical Engineering (MMACTEE '10), Timisoara, Romania, October 21-23 2010, pp.104-109, 6 pg., 2010, Code 85094, ISBN: 978-960474238-7 (Scopus)

Lucrarea care citeaza

1. Zajkowski, Konrad; Scaticailov, Serghei, Determination of the Environmental Impact of Reactive Power Compensation in the Power Grid, Revista de Tehnologii Neconventionale; Sibiu 20.2 (Jun 2016) p. 54-61 (**revistă ProQuest**)

42. Lucrarea citata [1]

Ivanov Ovidiu, Gavrilas Mihai, Improved WLS Estimation in Large Systems Using Genetic Algorithms, Proceedings of the 2009 The International Conference Interdisciplinarity in Engineering INTER-ENG, Tg. Mures, Romania, 2009, pp. 82-87.

Lucrarea care citeaza

1. Tungadio D.H., Jordaan J.A., Siti M.W., Power system state estimation solution using modified models of PSO algorithm: Comparative study, Measurement, Volume 92, October 2016, Pages 508–523, doi.org/10.1016/j.measurement.2016.06.052 (**revistă Elsevier**)

43. Lucrarea citata [1]

Grigoras Gh., Gavrilas M., Phase swapping of lateral branches from low-voltage distribution networks for load balancing, 2016 International Conference and Exposition on Electrical and Power Engineering (EPE 2016), Iasi, Romania, 20-22 Oct. 2016, pp. 715 - 718, DOI: 10.1109/ICEPE.2016.7781432.

Lucrarea care citeaza

1. Gheorghe Grigoras ; Bogdan-Constantin Neagu ; Florina Scarlatache, Smart metering based approach for phase balancing in low voltage distribution systems, 2017 10th International Symposium on Advanced Topics in Electrical Engineering (ATEE), 23-25 March 2017, Bucharest, Romania, DOI: 10.1109/ATEE.2017.7905027 (**conferință IEEE Xplore**)

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C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS.

1. **Ciprian Nemeş**, Metode și tehnici de evaluare a fiabilității - aplicații în energetică, Editura PIM Iaşi, ISBN 978-606-13-5347-7, 156 pg., 2019.
2. **Ciprian Nemeş**, Florin Munteanu, Adecvabilitatea sistemelor de producere a energiei electrice, Editura Politehnium Iaşi, ISBN 978-973-621-480-6, 208 pg., 2018.
3. **Ciprian Nemeş**, Florin Munteanu, Monica Atudori, Staţii electrice - îndrumar de proiectare, Editura Politehnium Iaşi, ISBN: 978-973-621-419-6, 230 pg., 2013.
4. **Ciprian Nemeş**, Florin Munteanu, Producerea şi distribuţia energiei electrice. Partea I – Producerea energiei electrice, Editura Politehnium Iaşi, ISBN: 978-973-621-318-2, 225 pg., 2011.
5. Florin Munteanu, **Ciprian Nemeş**, Fenomenul de scurtcircuit ... de la terorie la practică, Editura Politehnium Iaşi, ISBN: 978-973-621-302-1, 284 pg., 2010.
6. **Ciprian Nemeş**, Florin Munteanu, Dumitru Ivas, Tehnici moderne de analiză a disponibilităţii elementelor şi sistemelor, Editura Politehnium Iaşi, ISBN: 978-973-621- 240-6, 264 pg., 2008.

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

1. Florin Munteanu, Maricel Adam, Dumitru Ivas, **Ciprian Nemeş**, Aparate şi comutări inteligente în sistemele electroenergetice, Casa de editură Venus Iaşi, ISBN 973-756-025-6, 317pg, 2006.
2. Florin Munteanu, Dumitru Ivas, **Ciprian Nemeş**, Centrale electrice - partea electrică - vol I. Analiza fenomenului de scurtcircuit, Editura Setis Iaşi, ISBN 973-86764-6-0, 341 pg., 2005.
3. **Ciprian Nemeş**, Dumitru Ivas, Florin Munteanu, cap. Metode de determinare a fiabilităţii având la bază raportul solicitare–rezistenţă, cap. Calculul probabilităţii de defect în cazul solicitărilor multiple dependente, Capitole în volumul Sisteme expert de asigurare a calităţii totale in industria de materiale şi echipamente electrotehnice, Seria QUALINDSER, ISBN 973-8292-29-8, pp. 50-59, pp. 59-69, 20 pg., 2002.
4. Dumitru Ivas, Florin Munteanu, Mugurel Rotariu, Eugeniu Voinea, **Ciprian Nemeş**, Ingineria fiabilităţii sistemelor complexe, Editura Perfect Bucureşti, ISBN 973-85069-3-X, 320 pg., 2001.

5. Florin Munteanu, Dumitru Ivas, **Ciprian Nemeş**, Proiectarea si analiza asistată de calculator a instalaţiilor de alimentare cu energie electrică. Seria Energie – Mediu, Editura AGIR Bucureşti, ISBN 973-8130-44-1, 140 pg., 2001.
6. Florin Munteanu, Dumitru Ivas, **Ciprian Nemeş**, Ingineria disponibilităţii subsistemelor de distribuţie a energiei electrice, Editura Spectrum Iaşi, ISBN 973-98335-3-5, 254 pg., 1999.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

- F.Baiceanu, O.Ivanov, R. Beniuga, C. Neagu, **C. Nemes**, A Continuous Multistage Load Shedding Algorithm for Industrial Processes Based on Metaheuristic Optimization. *Mathematics* 2023, *11*, 2684. **Impact Factor:** 2.3 (**2023**), https://doi.org/10.3390/math11122684, WOS:001017561300001
- Baiceanu Florin Constantin, Munteanu Florin, Nemes Ciprian-Mircea, Transient Residual Voltage Influence on the Dynamic Load Transfer, Bulletin of the Polytechnic Institute of Iași. Electrical Engineering, Power Engineering, Electronics, vol. 67, issue 4, **2022**, Secţia ELECTROTEHNICĂ. ENERGETICĂ. ELECTRONICĂ, pp. 57-71, DOI: https://doi.org/10.2478/bipie-2021-0022, https://sciendo.com/article/10.2478/bipie-2021-0022
- Tiganasu Cosmin, Cercel George, **Nemes Ciprian**, An overview of the home energy management system, Buletinul Institutului Politehnic din Iaşi Publicat de Universitatea Tehnică „Gheorghe Asachi" din Iaşi, vol. 67 (71), no 2, **2021** Secţia ELECTROTEHNICĂ. ENERGETICĂ. ELECTRONICĂ, pp.9-18, DOI:10.2478/bipie-2021-0007, https://sciendo.com/issue/BIPIE/67/2
- George Cercel, Cosmin Tigănaşu, **Ciprian Nemeş**, Photovoltaic Systems Maximum Power Point Tracking Algorithms, Buletinul Institutului Politehnic din Iaşi Publicat de Universitatea Tehnică „Gheorghe Asachi" din Iaşi, vol. 67 (71), no 2, **2021** Secţia ELECTROTEHNICĂ. ENERGETICĂ. ELECTRONICĂ, pp.19-29, DOI:10.2478/bipie-2021- 0007, https://sciendo.com/issue/BIPIE/67/2
- F. Munteanu, F.Baiceanu, **C. Nemes**, Switch-off transients affecting the dynamic load transfer, University Politehnica of Bucharest Scientific Bulletin Series C-Electrical Engineering and Computer Science, vol. 82, iss. 1, **2020**, pp. 289-300, WOS:000518413400022
- 7 Alexandra Ciobanu, Florin Munteanu, **Ciprian Nemeş**, Adochiţei M., *Dynamic Bayesian network for weather forecast and evaluation of renewable resources availability*, Journal of Sustainable Energy, vol. 9, no. 2, ISSN 2067-5534, pp.58-63, June **2018**.
- **Ciprian Nemeş**, Florin Munteanu F., Astanei D., *Analysis of grid-connected photovoltaic system integration on low-voltage distribution network*. 22th Conference of Energy Engineering, CIE 2016, 02-04 June 2016, Oradea. Published in Journal of Sustainable Energy ISSN 2067-5534, vol. 7, no. 1, pp.9-14, March **2016**.
- Alexandra Ciobanu, Florin Munteanu, **Ciprian Nemeş**, Dragoş Astanei, *Availability Evaluation of Nodal Architectures using Bayesian Networks*, Buletinul Institutului Politehnic din Iaşi Bulletin of the Polytechnic Institute of Iaşi, ISSN 1223-8139, Vol. 62 (66), no. 3 **2016**, pp 31-40.
- Sorina Costinas, **Ciprian Nemes**, Current maintenance using geographical information system, part of the global smart-grid technology solution, Buletinul Institutului Politehnic din Iaşi, Tomul LX (LXIV), Fasc.1, pp. 103-110, **2014**.
- **Ciprian Nemeş,** *A clear sky irradiation assessment using the European Solar Radiation Atlas model and Shuttle Radar Topography Mission database: A case study for Romanian territory*,

J.Renewable Sustainable Energy, vol. 5, is. 4, no. 041807, Impact Factor 2013: 1.51, 12 pg., **2013**. DOI: 10.1063/1.4813001, WOS:000323945600008

- **Ciprian Nemeş**, Marcel Istrate, *A Clear Sky Irradiation Assessment Using The Esra Model And SRTM Database*, Environmental Engineering And Management Journal , vol. 12, iss. 6, ISSN: 1582- 9596, Impact Factor: 1.258, pp.: 1271-1279, **2013**, WOS:000325632500021
- **Ciprian Nemeş**, Marcel Istrate, *Statistical Analysis of Wind Turbine's Output Power*, Electronics and Electrical Engineering Journal, no. 4 (120) 2012, print ISSN: 1392-1215, online ISSN: 2029-5731, Impact Factor 2012: 0.411, pp. 31-34, 4 pg., **2012**. DOI: 10.5755/j01.eee.120.4.1447, WOS:000303226800006
- **Ciprian Nemeş**, Florin Munteanu, *Operational parameters evaluation for optimal wind energy systems development*, Published in U.P.B. Sci. Bulletin, Series C, vol. 74, iss. 1, ISSN 1454-234x, pp. 223-230, 8 pg., 2012.
- Florin Munteanu, **Ciprian Nemeş**, *Belief networks utilization for nodal power quality and availability assessment*, Published in U.P.B. Sci. Bulletin, Series C, vol. 74, iss. 1, ISSN 1454-234x, pp. 215- 222, 8 pg., 2012.
- Giuseppe Marco Tina, Gilles Notton, **Ciprian Nemeş**, *Time frame measurements impact on probabilistic behaviour of photovoltaic systems,* Paper published in Bulletin AGIR - B+ , XVII, nr. 2, April-June 2012, ISSN-L 1224-7928, ISSN-online 2247-3548. pp. 1-9, 9 pg., 2012.
- **Ciprian Nemeş,** Florin Munteanu, *The Wind Energy System Performance Overview: Capacity Factor vs. Technical Efficiency,* International Journal of Mathematical Models and Methods in Applied Sciences, North Atlantic University Union, iss. 1, vol. 5, ISSN: 1998-0140, pp. 159-166, 8 pg., 2011.
- **Ciprian Nemeş,** *A comparative analysis of wind speed distribution evaluation*. Bulletin of the Polytechnic Institute of Iaşi, tom LVII (LXI), fasc.2, ISSN 1223-8139, pp. 145-151, 7 pg., 2011.
- **Ciprian Nemeş**, Marcel Istrate, *Overview of Optimal Wind Turbine Selecting*, Proceedings of the 4th International Conference on Modern Power Systems – MPS 2011 Cluj-Napoca, Published in Acta Electrotehnica, vol. 52, no. 5, ISSN 1841-3323, pp.323-326, 4 pg., 2011.
- **Ciprian Nemes,** Nicu Costandache, Florin Munteanu, *Probabilistic approach of generation system considering the power station reliability,* Proceedings of the 4th International Conference on Modern Power Systems – MPS **2011** Cluj-Napoca, Published in Acta Electrotehnica, vol 52, no. 5, ISSN 1841-3323, 2011, pp. 327-330, 4 pg., 2011.
- **Ciprian Nemeş,** Florin Munteanu, *Potential Solar Irradiance Assessment based on a Digital Elevation Model*, Advances in Electrical and Computer Engineering, vol. 11, no. 4, ISSN: 1582-7445, e-ISSN: 1844-7600, Impact Factor 2011: 0.555, pp. 89-92, 4 pg., **2011**. DOI: 10.4316/AECE.2011.04014, WOS:000297764500014
- **Ciprian Nemeş,** Florin Munteanu. *A Probabilistic Model for Power Generation Adequacy Evaluation.* Revue Roumaine des Sciences Techniques - Rev. Roum. Sci. Techn.– Électrotechn. et Énerg., 56, 1/2011, Bucharest, ISSN: 0035-4066, Impact Factor 2011: 0.136, pp. 36–46, 11 pg., **2011**, WOS:000289219900004
- **Ciprian Nemeş,** Florin Munteanu, *Development of Reliability Model for Wind Farm Power Generation*, Advances in Electrical and Computer Engineering, vol. 10, no. 2, ISSN 1582-7445, e- ISSN 1844-7600, Impact Factor 2010: 0.688, pp. 24-29, 6 pg., **2010**. DOI: 10.4316/AECE.2010.02004, WOS:000280312600004

- Florin Munteanu, **Ciprian Nemeş**, *Fast Method for accutare faul type detection in high voltage networks*. Bulletin of the Polytechnic Institute of Iaşi, tom LVI(LX), fasc.2, ISSN 1223-8139, pp. 89- 96, 8 pg., 2010.
- **Ciprian Nemeş,** Florin Munteanu, Mbuyamba Tshibanda, *Reliability evaluations of Power Systems including Wind Power Generation*. Bulletin of the Polytechnic Institute of Iaşi, tom LVI(LX), fasc.2, ISSN 1223-8139, pp. 97-106, 10 pg., 2010.

- Florin Munteanu, **Ciprian Nemeş,** *Real efficiency of intelligent switching of high voltage circuitbreakers*, Published in U.P.B. Sci. Bulletin, Series C, vol. 72. iss.1, ISSN1454-234x, pp. 173-182, 10 pg., 2010.
- **Ciprian Nemeş,** Florin Munteanu, *Probabilistic method for circuit breaker maintenance planning,* Revista Electrotehnica, Electronica, Automatica, no. 4, vol. 58, ISSN 1582-5175, pp. 69-73, 2010.
- **Ciprian Nemeş**, Florin Munteanu, *A Wind Power Generation Model for Reliability Evaluation*, Revista Electrotehnica, Electronica, Automatica, no. 1, vol. 58, ISSN 1582-5175, pp. 31-36, 2010.
- Irina Ciornei, **Ciprian Nemeş**, Elias Kyriakides, *The future hybrid renewable power system and its generation dispatch*, Revista Energetica, no. 6, vol. 58, iunie 2010, ISSN 1453-2360, pp. 262-268, 6 pg., 2010.
- Florin Munteanu, **Ciprian Nemeş**, *Reliability optimization of the power system nodes considering the switching components*, Published in Annals of the University of Craiova, Electrical and Engineering Series, no. 34, ISSN:1842-4805, pp. 196-199, 4 pg., 2010.
- Florin Munteanu, **Ciprian Nemeş,** *The high voltage circuit-breaker of intelligent switching. A theoretical background*. Revista Electrotehnica, Electronica, Automatica, no.1, vol 57, ISSN 1582- 5175, pp. 26-30, 5 pg., 2009.
- **Ciprian Nemeş,** *A probabilistic model for circuit breaker adequability,* Bulletin of the Polytechnic Institute of Iaşi, tom LV (LIX), fasc.1, ISSN 1223-8139, pp. 109-116, 8 pg., 2009.
- **Ciprian Nemeş**, Florin Munteanu, *Probabilistic approach of the generated power of a wind turbine*. Bulletin of the Polytechnic Institute of Iaşi, tom LV (LIX), fasc. 3, ISSN 1223-8139, pp. 123-130. 8 pg., 2009.
- **Ciprian Nemeş**, Florin Munteanu, *Optimization of the circuit breaker maintenance using the distribution of the disconnecting number*, Published in Annals of the University of Craiova, Electrical and Engineering Series, no. 32, ISSN 1842-4805, pp. 146-149, 4 pg., 2008.
- Florin Munteanu, **Ciprian Nemeş**, *Methods for maintenance optimization of power system components,* Published in Annals of the University of Craiova, Electrical and Engineering Series, no. 32, ISSN 1842-4805, pp. 142-146, 4 pg., 2008.
- Florin Munteanu, **Ciprian Nemeş,** *Human reliability influence on systems maintenance,* Published in Bulletin of the Polytechnic Institute of Iaşi, tom LIV (LVIIII), fasc. 3, pp. 455-460, 6 pg., 2008.
- **Ciprian Nemeş,** *The strength variables of the elements subjected to the fluctuating stress,* Bulletin of the Polytechnic Institute of Iaşi, tom LIV(LVIII), fasc. 1, pp. 79-83, 5 pg., 2008.
- **Ciprian Nemeş**, Florin Munteanu, *Equipment reliability analysis using the probabilistic design methodology*, Published in Bulletin of the Polytechnic Institute of Iaşi, tom LIV (LVIIII), fasc. 3, pp. 185-192, 8 pg., 2008.
- Florin Munteanu, **Ciprian Nemeş**, Dumitru Ivas, *Comutarea inteligenta – o nouă tehnologie în electroenergetică*, Rev. Energetica no.8, vol. 56, august 2008, ISSN 1453-2360, pp. 310-315, 6 pg., 2008.
- Florin Munteanu, **Ciprian Nemeş**, *Theoretical background of intelligent switching of the high voltage circuit-breakers*, Volum SNET, 5-7 iunie 2008. Univ. Politehnica din Bucuresti, ISBN 978-606-521- 045-5, pp. 359-364, 6 pg., 2008.

- *Dumitru Ivas, Florin Munteanu, Ciprian Nemeş, Methods for power system security management, Published in Bulletin of the Polytechnic Institute of Iaşi, tom L(LIV), fasc. 5A, ISSN-1223-8139, pp. 380 - 385, 6 pg. 2004.*

- *Ciprian Nemeş, Dumitru Ivas, Florin Munteanu, The life time distribution calculation based on wearing process, Published in Bulletin of the Polytechnic Institute of Iaşi, tom L(LIV), fasc. 5A, ISSN- 1223-8139 pp. 411-416, 6 pg., 2004.*
- *Ciprian Nemeş, Dumitru Ivas, Probabilistic approach for the short-circuit stress used in the reliability indicators, Bulletin of the Polytechnic Institute of Iaşi, tom L(LIV), fasc. 1-2 / 2004, pp. 129-137, 9 pg. 2004.*
- *Ciprian Nemeş, Dumitu Ivas, Florin Munteanu, Modelarea distribuţiilor solicitărilor termice şi electrodinamice la scurtcircuit în evaluarea fiabilităţii preliminate a echipamentelor din electroenergetică, Rev. Energetica, vol 52, nr. 6, iunie 2004, ISSN 1453-2360, pp 277-281, 5 pg., 2004.*
- *Dumitru Ivas, Florin Munteanu, Ciprian Nemeş, Modele de risc în managementul sistemului energetic, Rev. Energetica, vol. 51, nr. 11-12, noiembrie-decembrie 2003, ISSN 1453-2360, pp. 477- 482, 6 pg., 2003.*
- *Dumitru Ivas, Florin Munteanu, Ciprian Nemeş, Selectivitatea statistică, criteriu de optimizare a dezvoltării şi exploatării reţelelor de distribuţie a energiei electrice, Rev. Energetica, vol. 51, nr. 10, octombrie 2003, ISSN 1453-2360, pp. 433-436, 4 pg., 2003.*
- *Dumitru Ivas, Florin Munteanu, Ciprian Nemeş, Ionuţ Mălăescu, Systemicaly connections in theorethical and practical reliability, Bulletin of the Polytechnic Institute of Iaşi, tom XLVIII(LII), fasc. 5A, 2002, ISSN 0258-9109, pp. 137-142, 6 pg., 2002.8. Ciprian Nemeş, Dumitru Ivas, Models for estimations of strength distributions parameters using the stress-strength interference, Bulletin of the Polytechnic Institute of Iaşi, tom XLVIII(LII), fasc. 5A, 2002, ISSN 0258-9109, pg. 143-146, 4 pg., 2002.*
- *Dumitru Ivas, Muntenu, Ciprian Nemeş, Contribuţii la modelarea fiabilităţii sistemelor cu structură dinamică cu aplicaţii la schemele cu întrerupătoare, Rev. Energetica, anul 48, nr. 2, ISSN 1220- 5133, pp. 76-80, 5 pg., 2000.*
- *Dumitru Ivas, Mugurel Rotariu, Florin Munteanu, Ciprian Nemeş, A optimization criterions for the distribution networks selectivity, Bulletin of the Polytechnic Institute of Iaşi, tom XLV (IL), fasc. 5C, SSN 0258-9109, pp. 94-98, 5 pg., 1999.*
- *Dumitru Ivas, Florin Munteanu, Ciprian Nemeş, Mutaţii posibile în conceperea şi exploatarea reţelelor de distribuţie datorate noilor tehnici de conducere (NTC), Rev. Energetica nr. august 1999*
- *Dumitru Ivas, Florin Munteanu, Ciprian Nemeş, Indices to evaluate the network nodes structure,Revue Roumaine des Sciences Techniques, Serie Electrotechnique et Energetique, tome 45, octobre-decembre 2000, Academie Roumaine, pp 649-655, 7 pg., 2000*

G. Lucrări ştiinţifice publicate în reviste din străinătate.

1. Ciprian Nemeş, Florin Munteanu, Probabilistic approach for thermal and electrodynamics stresses distribution functions, Journal Elektrotechnika i elektronika E+E (Електротехника и електроника Sofia), no 11-12, 2008, ISSN 0861-4717, pp. 46-50, 5 pg., 2008.

H. Lucrări ştiinţifice publicate în volumele conferinţelor.

- Alexandru-Cosmin Ciocea, Florin Munteanu, Ciprian Nemeș, Experimental Investigation and Results on the Wear of Photovoltaic Panels, 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi), 17-19 October 2024, DOI: 10.1109/EPEi63510.2024.10758115

- Ilişescu, C. M. Nemes and F. C. Băiceanu, "Availability of Hydroelectric Generating Units based on the Maintenance Schedule," 2023 International Conference on Electromechanical and Energy Systems (SIELMEN), Craiova, Romania, 2023, pp. 1-7, doi: 10.1109/SIELMEN59038.2023.10290836.

- Ilisescu Ionut, Nemes Ciprian-Mircea, Adequacy evaluation of power generating systems taking into account the power reserves requirements, 2022 International Conference and Exposition on Electrical And Power Engineering (EPE), DOI: 10.1109/EPE56121.2022.9959840

- F. C. Baiceanu, C. F. Acsinte, O. Ivanov, C. M. Nemes, B. C. Neagu, A Load Shedding Approach for Islanded Operation in Industrial Electrical Systems, 2022 14th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), DOI: 10.1109/ECAI54874.2022.9847448

- C-F. Acsinte, C. -M. Nemes and F. C. Baiceanu, "Impact of Distributed Generation on the Performance of Electrical Networks," 2022 International Conference and Exposition on Electrical And Power Engineering (EPE), Iasi, Romania, 2022, pp. 601-604, doi: 10.1109/EPE56121.2022.9959757.

- F. C. Baiceanu, C. Nemes, F. Munteanu and C. F. Acsinte, "Controlled Switching Taking Into Account the Standard Deviation of Switching Time," 2022 International Conference and Exposition on Electrical And Power Engineering (EPE), Iasi, Romania, 2022, pp. 617-621, doi: 10.1109/EPE56121.2022.9959770.

- F. C. Baiceanu, C. F. Acsinte, O. Ivanov, C. M. Nemes, B. C. Neagu, A Load Shedding Approach for Islanded Operation in Industrial Electrical Systems, 2022 14th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), DOI: 10.1109/ECAI54874.2022.9847448

- M. Ghidu, C. Nemes, "Reliability Assessment of Auxiliary Power Supply Systems for a Nuclear Power Plant (NPP)," 2021 9th International Conference on Modern Power Systems (MPS), 2021, pp. 1-7, doi: 10.1109/MPS52805.2021.9492657.

- Cosmin-Florin Acsinte, Ciprian-Mircea Nemes, Florin Constantin Baiceanu, Impact of Distributed Generation on the Performance of Electrical Networks, 2022 International Conference and Exposition on Electrical And Power Engineering (EPE), DOI: 10.1109/EPE56121.2022.9959757

- Ilisescu Ionut, Nemes Ciprian-Mircea, Adequacy evaluation of power generating systems taking into account the power reserves requirements, 2022 International Conference and Exposition on Electrical And Power Engineering (EPE), DOI: 10.1109/EPE56121.2022.9959840

- Tiganasu Cosmin, Cercel George, Nemes Ciprian The influence of battery state of charge on self consumption indices, 2021 International Conference on Electromechanical and Energy Systems (SIELMEN), 6-8 Oct. 2021, Iasi, Romania, DOI: 10.1109/SIELMEN53755.2021.9600406, ISBN: 978-1-6654-0078-7

- Cercel George, Tiganasu Cosmin, Nemes Ciprian Power Quality Requirements for Grid-Connected Photovoltaic Systems, 2021 International Conference on Electromechanical and Energy Systems (SIELMEN), 6-8 Oct. 2021, Iasi, Romania, pp.019-024, DOI: 10.1109/SIELMEN53755.2021.9600364, ISBN: 978-1-6654-0078-7

- M Ghidu, C Scinteie, C Nemes, Effect of wear process on the security of Nuclear Power Plants, 2021 International Conference on Electromechanical and Energy Systems (SIELMEN), 6-8 Oct. 2021, Iasi, Romania, pp. 169-174, DOI: 10.1109/SIELMEN53755.2021.9600406, ISBN: 978-1-6654-0078-7

- Florin Baiceanu, Florin Munteanu, Ciprian Neme, Transient Power Quality Mitigation by Synchronized Capacitor Banks Switching, 2020 International Conference and Exposition on Electrical And Power Engineering (EPE), 22-23 Oct. 2020, Iasi, Romania. DOI: 10.1109/EPE50722.2020.9305559

- Alexandru Ciocea, Florin Munteanu, Ciprian Nemes, Methods and Techniques for Photovoltaic Solar Power Plant Monitoring and Wearing State Evaluation, 2020 International Conference and Exposition on Electrical And Power Engineering (EPE), 22-23 Oct. 2020, Iasi, Romania. DOI: 10.1109/EPE50722.2020.9305559

- Cercel George, Tiganasu Cosmin, Nemes Ciprian, Photovoltaic panels analysis based on Simulink tools, 2020 International Conference and Exposition on Electrical And Power Engineering (EPE), 22-23 Oct. 2020, Iasi, Romania. DOI: 10.1109/EPE50722.2020.9305559

- Tiganasu Cosmin, Cercel George, Nemes Ciprian, Self-Consumption Indices Evaluation for a Residential Load Profile, 2020 International Conference and Exposition on Electrical And Power Engineering (EPE), 22-23 Oct. 2020, Iasi, Romania. DOI: 10.1109/EPE50722.2020.9305559

- F. C. Baiceanu, F. Munteanu, C. Nemes, “Influence of Multi-Pulse Rectifier on Power Quality in an Industrial Environment”- *8th International Conference on Modern Power Systems (MPS), 21-23* May 2019, Cluj-Napoca, Romania. **DOI:** 10.1109/MPS.2019.8759775

- C. Mihalcea, F. Munteanu, C.Nemes, F. Baiceanu “ Lifetime Availability Analysis of High Voltage Circuit Breakers for Maintenance Optimization” *8th International Conference on Modern Power Systems (MPS), 21-23* May 2019, Cluj-Napoca, Romania. **DOI:** 10.1109/MPS.2019.8759677

- Nemes C., Baiceanu F., Tiganasu C “Assessment of Photovoltaic Modules’ Parameters Using the On-Site Measurements”- *8th International Conference on Modern Power Systems (MPS), 21-23* May 2019, Cluj-Napoca, Romania. **DOI:** 10.1109/MPS.2019.8759777 , ISBN: 978-1-7281-0750-9.

- Cosmin Tiganasu, Ciprian Nemes , Florin Munteanu , Daniel Muneanu, Cezar Scinteie *The load management concept applied on the residential sector* , 12th International Conference on Electromechanical and Energy Systems (SIELMEN 2019), October 9-11, 2019, Chişinău, Republic of Moldova, **DOI:** 10.1109/SIELMEN.2019.8905817, ISBN: 978-1-7281-4011-7.

- Ciprian Nemes, Mihaela Adochitei, Florin Munteanu, Alexandra Ciobanu, Octav Neagu, Self-consumption enhancement on a low-voltage grid-connected photovoltaic system, 5th IEEE International Energy Conference ENERGYCON 2018, 3-7 Jun 2018, Cyprus DOI: 10.1109/ENERGYCON.2018.8398839, WOS:000465417100106

- Ciprian M. Nemeş ; Cezar G. Scînteie ; Romeo Ciobanu, Enhancement of Annual Energy Production Based on Optimal Adjustment of PV Panels Orientation, 5th IEEE International Energy Conference ENERGYCON 2018, 3-7 Jun 2018, Cyprus DOI: 10.1109/ENERGYCON.2018.8398835, WOS:000465417100102
- Ciprian Nemes; Romeo Ciobanu; Calin Rugina; Probabilistic Analysis of Sky Clearness Index for Solar Energy Systems Planning, 2018 Smart City Symposium Prague (SCSP), 24-25 May 2018, Prague, Czech Republic, DOI:10.1109/SCSP.2018.8402677, WOS:000443451800032
- Alexandru Ciocea, Florin Munteanu, Ciprian Nemes, *Method to Assess the Degradation Risk of Photovoltaic Systems*, 10th International Conference and Exposition on Electrical Power Engineering, 18-19 October 2018, Iasi, Romania. pp. 0159 – 0164, **DOI:** 10.1109/ICEPE.2018.8559803 , WOS:00045875220003
- Florin Munteanu, Alexandra Ciobanu, Ciprian Nemes, *A Bayesian Approach of the Availability Complementarity of Renewable Resources*, 10th International Conference and Exposition on Electrical Power Engineering, 18-19 October 2018, Iasi, Romania, pp. 0731 – 0736, **DOI:** 10.1109/ICEPE.2018.8559738 , WOS:000458752200143
- Ciprian Nemes, Florin Munteanu, An IoT Load Management System for Residential Photovoltaic Prosumers, 10th International Conference and Exposition on Electrical Power Engineering, 18-19 October 2018, Iasi, Romania, pp. 0037 – 0041, **DOI:** 10.1109/ICEPE.2018.8559854 , WOS:000458752200007
- Ciprian Nemes, Florin Munteanu, Dragos Astanei, Mihaela Larion, Mihaela Adochitei, Voltage dips analysis for grid connections of dispatchable photovoltaic systems, 2017 International Conference on Optimization of Electrical and Electronic Equipment (OPTIM) & 2017 Intl Aegean Conference on Electrical Machines and Power Electronics (ACEMP), 25-27 May 2017 , Brasov, Romania, pp. 783-788, DOI: 10.1109/OPTIM.2017.7975064 , WOS:000426909600120
- A.Ciobanu; F. Munteanu; C. Nemes; D. Astanei, Data - driven Bayesian networks for reliability of supply from renewable sources, 2017 International Conference on Optimization of Electrical and Electronic Equipment (OPTIM) & 2017 Intl Aegean Conference on Electrical Machines and Power Electronics (ACEMP), 25-27 May 2017, Brasov, Romania, pp. 84-89, DOI: 10.1109/OPTIM.2017.7974952, WOS:000426909600012
- Ciprian Nemes; Florin Munteanu; Dragos Astanei; Alexandra Ciobanu; Mihaela Adochitei; Mihaela Larion, A correlation between photovoltaic system production and local solar resources, 14th International Conference on Engineering of Modern Electric Systems (EMES 2017), 1-2 June 2017, Oradea, Romania, pp. 47-50, DOI: 10.1109/EMES.2017.7980378 WOS:000427085200011
- D. Astanei; F. Munteanu; C. Nemes; A. Ciobanu; M. Ionescu; M. Adochitei, Light flicker detection using high-speed imaging, 7th International Conference on Modern Power Systems (MPS), 6-9 June 2017, Cluj-Napoca, Romania DOI:10.1109/MPS.2017.7974448 , WOS:000428462600076
- Alexandra Ciobanu, F.Munteanu, C. Nemes, D.Astanei, Availability Model of Wind and Solution to Immunize the Generators Against Short Time Perturbations , International Symposium on Fundamentals of Electrical Engineering, University Politehnica of Bucharest, Romania, June 30 - July 2, 2016, DOI: 10.1109/ISFEE.2016.7803166, WOS:000392434400018
- F. Munteanu; Alexandra Ciobanu; C. Nemes, From technical design structures to Bayesian networks in power engineering, 2016 International Conference on Applied and Theoretical

Electricity (ICATE), 6-8 Oct. 2016, Craiova, Romania, pp: 1 – 6, DOI: 10.1109/ICATE.2016.7754625 , WOS:000390767500025

- A. Ciobanu; F. Munteanu; C. Nemes, Bayesian networks utilization for reliability evaluation of power systems, 2016 International Conference and Exposition on Electrical and Power Engineering (EPE), 20-22 Oct. 2016, Page(s):837 – 841, DOI: 10.1109/ICEPE.2016.7781454 , WOS:000390706300164

- D. Astanei ; C. Nemes ; F. Munteanu ; A. Ciobanu, Annual energy production estimation based on wind speed distribution, 2016 International Conference and Exposition on Electrical and Power Engineering (EPE), 20-22 Oct. 2016, Page(s): 862 – 867, DOI: 10.1109/ICEPE.2016.7781454 , WOS:000390706300169

- Ciprian Nemes; Florin Munteanu; Mugurel Rotariu; Dragos Astanei, Availability assessment for grid-connected photovoltaic systems with energy storage, 2016 International Conference and Exposition on Electrical and Power Engineering (EPE), 20-22 Oct. 2016, Page(s): 908 – 911, DOI: 10.1109/ICEPE.2016.7781454 , WOS:000390706300177

- Astanei Dragos, Munteanu Florin, Nemeș Ciprian, Pellerin Stephane, Hnatiuc Bogdan, Electrical diagnostic of high voltage discharges produced by a new spark-plug, 13th International Conference on Engineering of Modern Electric Systems (EMES), 11-12 June 2015, Oradea, Romania, pp. 1-4, DOI:10.1109/EMES.2015.7158388, WOS:000363815100001

- Ciprian Nemeş, Florin Munteanu, Dragoș Astanei, Annual energy harvest of LACARP photovoltaic system, 6th International Conference on Modern Power Systems MPS2015, 18-21 May 2015, Cluj-Napoca, Romania, Published in Acta Electrotehnica, vol. 2015, nr. 3, pp. 213-219, 2015

- Munteanu Florin, Nemes Ciprian, Astanei Dragos, Ciobanu Alexandra, „DATA MINING FOR WIND AVAILABILITY MODELING", proceedings of 7th International Conference on ENERGY and ENVIRONMENT (CIEM), octombrie 2015, Iaşi, România.

- **Ciprian Nemeș,** Romeo Ciobanu, Calin Rugina, *Probabilistic Analysis of Sky Clearness Index for Solar Energy Systems Planning*, 2018 Smart City Symposium Prague (SCSP), 24-25 May **2018**, Prague, Czech Republic, DOI:10.1109/SCSP.2018.8402677, WOS:000443451800032
-
- Dragos Astanei, Florin Munteanu, **Ciprian Nemeş**, A. Ciobanu; M. Ionescu; M. Adochitei, *Light flicker detection using high-speed imaging*, 7th International Conference on Modern Power Systems (MPS), 6-9 June **2017**, Cluj-Napoca, Romania, DOI:10.1109/MPS.2017.7974448 , WOS:000428462600076
-
- **Ciprian Nemeș**; Florin Munteanu; Dragos Astanei; Alexandra Ciobanu; Mihaela Adochitei; Mihaela Larion, *A correlation between photovoltaic system production and local solar resources*, 14th International Conference on Engineering of Modern Electric Systems (EMES 2017), 1-2 June **2017**, Oradea, Romania, pp. 47-50, DOI: 10.1109/EMES.2017.7980378, WOS:000427085200011
-
- AlexandraCiobanu, Florin Munteanu, **Ciprian Nemeş**, Dragos Astanei, *Data - driven Bayesian networks for reliability of supply from renewable sources*, 2017 International Conference on Optimization of Electrical and Electronic Equipment (OPTIM) & 2017 Intl Aegean Conference on Electrical Machines and Power Electronics (ACEMP), 25-27 May **2017**, Brasov, Romania, pp. 84-89, DOI: 10.1109/OPTIM.2017.7974952, WOS:000426909600012

- **Ciprian Nemeș,** Florin Munteanu, Dragos Astanei, Mihaela Larion, Mihaela Adochitei, *Voltage dips analysis for grid connections of dispatchable photovoltaic systems*, 2017 International Conference on Optimization of Electrical and Electronic Equipment (OPTIM) & 2017 Intl Aegean Conference on Electrical Machines and Power Electronics (ACEMP), 25-27 May **2017** , Brasov, Romania, pp. 783- 788, DOI: 10.1109/OPTIM.2017.7975064 , WOS:000426909600120

- Alexandra Ciobanu, F.Munteanu, C. Nemes, D.Astanei, *Availability Model of Wind and Solution to Immunize the Generators Against Short Time Perturbations* , International Symposium on Fundamentals of Electrical Engineering, University Politehnica of Bucharest, Romania, June 30 – July 2, **2016**, DOI: 10.1109/ISFEE.2016.7803166, WOS:000392434400018

- Florin Munteanu, Alexandra Ciobanu, **Ciprian Nemeş**, *From technical design structures to Bayesian networks in power engineering*, 2016 International Conference on Applied and Theoretical Electricity (ICATE), 6-8 Oct. **2016**, Craiova, Romania, pp: 1 – 6, DOI: 10.1109/ICATE.2016.7754625 , WOS:000390767500025

- Alexandra Ciobanu, Florin Munteanu, **Ciprian Nemeş**, *Bayesian networks utilization for reliability evaluation of power systems*, 2016 International Conference and Exposition on Electrical and Power Engineering (EPE), 20-22 Oct. **2016**, Page(s):837 – 841, DOI: 10.1109/ICEPE.2016.7781454 , WOS:000390706300164

- Dragos Astanei, **Ciprian Nemeş** Florin Munteanu, Alexandra. Ciobanu, *Annual energy production estimation based on wind speed distribution*, 2016 International Conference and Exposition on Electrical and Power Engineering (EPE), 20-22 Oct. **2016**, Page(s): 862 – 867, DOI: 10.1109/ICEPE.2016.7781454 , WOS:000390706300169

- **Ciprian Nemeș,** Florin Munteanu, Mugurel Rotariu, Dragos Astanei, *Availability assessment for grid-connected photovoltaic systems with energy storage*, 2016 International Conference and Exposition on Electrical and Power Engineering (EPE), 20-22 Oct. **2016**, Page(s): 908 – 911, DOI: 10.1109/ICEPE.2016.7781454 , WOS:000390706300177
- **Ciprian Nemeș**, Sorina Costinas, *Yield and availability analysis of grid-connected photovoltaic systems – a case study for Iasi region, Romania*, 2015 Intl Aegean Conference on Electrical Machines & Power Electronics (ACEMP), 2015 Intl Conference on Optimization of Electrical & Electronic Equipment (OPTIM) & 2015 Intl Symposium on Advanced Electromechanical Motion Systems (Electromotion), 2-4 September **2015**, Side – Turkey, pp. 135-140, DOI: 10.1109/OPTIM.2015.7426955, WOS:000382957000026

- Astanei Dragos, Munteanu Florin, **Nemeș Ciprian**, Pellerin Stephane, Hnatiuc Bogdan, *Electrical diagnostic of high voltage discharges produced by a new spark-plug*, 13th International Conference on Engineering of Modern Electric Systems (EMES), 11-12 June **2015**, Oradea, Romania, pp. 1-4, DOI:10.1109/EMES.2015.7158388, WOS:000363815100001

- Sorina Costinas, **Ciprian Nemeș**, Ion Tristiu, Gabriela Nicoleta Sava*, Quality Cost of Power Supply and Pay-Back Capital of This*, 14th International Conference on Optimization of Electrical and Electronic Equipment (OPTIM 2014), May 22-24, **2014**, Brasov, Romania, pp. 124 – 129, DOI: 10.1109/OPTIM.2014.6850969, WOS:000343551300019

- Florin Munteanu, **Ciprian Nemeș,** *Availability Evaluation of Wind as a Repairable System*, 14th International Conference on Optimization of Electrical and Electronic Equipment (OPTIM

2014), May 22-24, **2014**, Brasov, Romania, ISSN: 978-1-4799-5183-3, pp. 756-761, WOS:000343551300111

- Florin Munteanu, **Ciprian Nemeş**, D. Astanei, *Power Quality Indices Proposal for Networks Operating in Sinusoidal and Unbalanced Conditions*, 2014 International Symposium on Fundamentals of Electrical Engineering (ISFEE), University Politehnica of Bucharest, Romania, November 28-29, **2014**, pp. 1 – 6, DOI: 10.1109/ISFEE.2014.7050553, WOS:000380570500021

- Florin Munteanu, **Ciprian Nemeş**, Monica Atudori, Loredana Galca, *Reliability model to estimate power quality and reliability of supply*, 12th International Conference on Environment and Electrical Engineering, Wroclaw, Poland, 5– 8 May **2013**, pp. 94-99, DOI:10.1109/EEEIC.2013.6549597, WOS:000395539900017

- **Ciprian Nemeş**, Munteanu, F., *A parametrical analysis of wind turbine energy performance*, 2013 Integration of Stochastic Energy in Power Systems (ISEPS), University Politehnica of Bucharest, Romania, November 07, **2013**, pp. 8 –13, DOI: 10.1109/ISEPS.2013.6707944, WOS:000349473300002

- Florin Munteanu, **Ciprian Nemeş**, Mariana Munteanu, *New Trends on Power Quality – Light Sensitivity Relationship and its Influence on Human Health*, 2012 International Conference and Exposition on Electrical and Power Engineering, October 25-27, **2012**, Iasi, Romania (EPE 2012), pp. 928-933, 6 pg., DOI:10.1109/ICEPE.2012.6463813, WOS:000324685300170

- **Ciprian Nemeş**, Florin Munteanu, *An Analysis of a Photovoltaic Panel Model Comparison Between Measurements and Analytical Models*, 2012 International Conference and Exposition on Electrical and Power Engineering, October 25-27, **2012**, Iasi, Romania (EPE 2012), pp. 939-944, DOI:10.1109/ICEPE.2012.6463811, WOS:000324685300172

- Giuseppe Marco Tina, Carmelo Brunetto, **Ciprian Nemeş**, *Adequacy Indices to Evaluate the Impact of Photovoltaic Generation on Balancing and Reserve Ancillary Service Markets,* 2012 International Conference and Exposition on Electrical and Power Engineering, October 25-27, **2012**, Iasi, Romania(EPE 2012), pp. 945-950, DOI:10.1109/ICEPE.2012.6463810 , WOS:000324685300173

- Florin Munteanu; **Ciprian Nemeș**; *The Maintenance Strategies Influence on the Reliability of Power Plant Generating Units*, 13th International Conference on Optimization of Electrical and Electronic Equipment (OPTIM 2012), 24- 26 May **2012**, Brasov, Romania, pp. 103-108, DOI:10.1109/OPTIM.2012.6231761, WOS:000398866700015

- **Ciprian Nemeş**, Florin Munteanu, *Reliability Consideration on Wind Farms Energy Production*, 13th International Conference on Optimization of Electrical and Electronic Equipment (OPTIM 2012), 24- 26 May **2012**, Brasov, Romania, pp. 183-187, DOI: 10.1109/OPTIM.2012.6231759, WOS:000398866700027

- **Ciprian Nemeş**; Costandache, N.; Munteanu, F., *Probabilistic Approach for Circuit-Breaker Availability,* 19th Symposium on Physics of Switching Arc Location: Brno, Czech Republic September 05-09, **2011**, pp. 287-290, WOS:000393239500058

- **Ciprian Nemeş**, Florin Munteanu, *Optimal Selection* of Wind Turbine for a Specific Area, 12th International Conference on Optimization of Electrical and Electronic Equipment, May 20-22,

2010, Brasov, Romania, (OPTIM 2010), pp. 1224-1229, OI:10.1109/OPTIM.2010.5510577, WOS:000291967300183

- Munteanu Florin, **Nemes Ciprian**, Astanei Dragos, Ciobanu Alexandra, *Data mining for wind availability modeling*, proceedings of 7th International Conference on Energy and Environment (CIEM 2015), octombrie **2015**, Iaşi, România.

- **Ciprian Nemes,** Marcel Istrate, *Probabilistic assessment of annual energy production from wind farms*, Proceedings of 35th International Conference on Fundamentals of Electrotechnics and Circuit Theory (35th IC-SPETO), Gliwice-Ustron, Poland, 23-26 may 2012, ISBN 978-83-85940-34-0, pp. 71- 72, 2 pg., 2012.

- **Ciprian Nemeş**, Mbuyamba Tshibanda, *Stochastic Analysis for Wind Speed Forecasting*, The International Conference INnovation and Collaboration in Engineering Research (INCER), 2–4 July 2012, Bucharest, Romania, CD format, 5 pg., 2012.

- Florin Munteanu, **Ciprian Nemeş,** *Statistical inference for Energy Consumption and Productivity Indices Evaluation in a Steelmaking Plant*, Proceedings of the 8th edition of International Conference on Industrial Power Engineering, CIEI 2011 Bacău, Romania, ISSN - 2069-9905, paper presented in Plenary Session, 2011.

- **Ciprian Nemeş,** Marcel Istrate, *Effects of wind profile in the wind energy systems performance*, International Workshop on Deregulated Electricity Market Issues in South-Eastern Europe, Bled, Slovenia. 20-21 September, ISBN 978-961-243-183-9, paper 95, 6 pg., 2011.

- Florin Munteanu, **Ciprian Nemes**, *Wide Area Power Quality Monitoring,* Proceedings on the 6th International Conference on Electrical & Power Engineering. EPE 2010, October 28-30, Iasi, Romania, ISBN 978-606-13-007-8, pp. 241-244, 4 pg., 2010.

- Florin Munteanu, **Ciprian Nemeş**, *New Method For Steady State Security Assessment of Power Networks*, Proceedings on the 6th International Conference on Electrical & Power Engineering. EPE 2010, October 28-30, Iaşi, Romania, ISBN 978-606-13-0077-82010, pp 245-248, 4 pg., 2010

- **Ciprian Nemeş,** Florin Munteanu, *Wind generation forecasting using time series techniques*, Proceedings of the 7th National Conference on Industrial Energetics with International Participation, CNEI 2009 Bacău, 5-7 November, ISBN 978-606-527-050-3, pp. 493-499, 2009.

- **Ciprian Nemeş,** Florin Munteanu, *A reliability-based equivalence between conventional power and wind power generation*, 7th International Conference of Electromechanical and Power Systems, SIELMEN 2009, Iaşi, Romania, vol I, ISBN 978-606-520-618-2, ISBN_vol I 978-606-520-617-5., pp. 375-379, 5 pg., 2009.

- Mbuyamba Tshibanda, **Ciprian Nemeş**, Prof Jan-Harm C Pretorius, *Negative Effects of Energy- Saving, Non-Linear Loads on LV Systems: Causes and Recommendations,* 4th International Conference on Energy and Environment CIEM'09 12-14 November 2009, Conference CD ISSN 2067-0893, Bucharest, paper 3, sect. 9, 2009.

- Catalin Pancu, **Ciprian Nemeş**, Adrian Baraboi, Maricel Adam, *The using of artificial intelligence in the reliability indices optimisation of electrical equipment,* The National

Conference of Industrial Energetics CNEI 2007 Bacau, University of Bacău, Engineering Faculty, 1-3 November 2007, Ed. Alma Mater, ISSN 1224-7480, pp. 179-184, 6 pg., 2008.

- **Ciprian Nemeş**, Florin Munteanu, Dumitru Ivas, *Evaluation of the electric power equipment reliability*, 2008 International World Energy System Conference. Technical University ”Gh. Asachi” Iaşi, Romania June 30-July 2, 2008, ISSN 1198-0729, Format CD, paper B021-II1 Session, 2008.
- **Ciprian Nemeş**, Florin Munteanu, Irina Ciornei, *Optimal relationship between operation and maintenance intervals*, 2008 International World Energy System Conference, Technical University ”Gh. Asachi” Iaşi, Romania June 30-July 2, 2008, ISSN 1198-0729, Format CD, paper B022-II1 Session, 2008.
- Florin Munteanu, **Ciprian Nemeş**, Monica Rotariu, *Intelligent controlled switching influence on power quality*, 2008 International World Energy System Conference, Technical University ”Gh. Asachi” Iaşi, Romania June 30-July 2, 2008, ISSN 1198-0729, Format CD, Plen Session, 2008.
- Florin Munteanu, **Ciprian Nemeş**, Dumitru Ivas, *The IEEE RTS utilization in Romania for reliability analysis of power systems: opportunity and difficulties*, 2008 International World Energy System Conference*,* Technical University ”Gh. Asachi” Iaşi, Romania June 30-July 2, 2008, ISSN 1198-0729, Format CD, paper B037-II1 Session, 2008.
- Dumitru Ivas, **Ciprian Nemeş**, Florin Munteanu, Constantin Darzan, *The models for security and risk indices evaluation in the electric power systems develops*, 2008 International World Energy System Conference, Technical University ”Gh. Asachi” Iaşi, Romania June 30-July 2, 2008, ISSN 1198-0729, Format CD, paper B035-II1 Session, 2008.
- Dumitru Ivas, **Ciprian Nemeş**, Florin Munteanu, Constantin Darzan, *The Models of Reliability Evaluation for Systems with Dependent Elements and Variable Structure*, 2008 International World Energy System Conference, Technical University ”Gh. Asachi” Iaşi, Romania, June 30-July 2, 2008, ISSN 1198-0729, Format CD, paper B036-II1 Session, 2008.
- 4**Ciprian Nemeş**, Florin Munteanu *Probabilistic approach for thermal and electrodynamics stresses distribution functions,* Twelfth International Conference on Electrical Machines, Drive s and Power Systems ELMA2008, Technical University of Sofia Bulgaria, ISSN 1313-4965, pp. 164-168, 5 pg., 2008.
- Irina Ciornei, **Ciprian Nemeş**, *The future hybrid renewable power system and its generation dispatch,* 2008 International World Energy System Conference, Technical University ”Gh. Asachi” Iaşi, Romania June 30-July 2, 2008, ISSN 1198-0729, Format CD, paper A41-III Session, 2008.
- **Ciprian Nemeş**, C-tin Darzan, Florin Munteanu, Elena Istrate, Dumitru Ivas, *The influence of controlled switching on the circuit breaker reliability,* Conferinta Nationala si Expozitia Energetica CNEE 2007 Sinaia, 7-9 Noiembrie 2007, Editura SIER Bucuresti, ISSN: 1843-6005, pp. 699-702, 4 pg., 2007.
- Florin Munteanu, Dumitru Ivas, **Ciprian Nemeş**, C-tin Darzan Elena Istrate, Bogdan Luminariu, *Intelligent apparatus and switching in power systems – principles and practical solutions*. Conferinta Nationala si Expozitia Energetica CNEE 2007 Sinaia, 7-9 Noiembrie 2007, Editura SIER Bucuresti, ISSN: 1843-6005, pp. 1015-1019, 5 pg. 2007.
- **Ciprian Nemeş**, Cătălin Pancu, *The reliability prediction using simulations and neuronal networks*, International Symposium on Electrical Engineering and Energy Converters, ELS 2007 Suceava, 27- 28 September 2007, ISBN: 978-973-666-259-1, pp. 196-199, 4 pg., 2007.
- Dumitru Ivas, Florin Munteanu, **Ciprian Nemeş,** *Interferentele eficientei energetice optime,* Simpozionul International de Eficienta Energetica, ed. a V-a SIEE2006, Cluj-Napoca, 03-05 octombrie 2006, ISBN 973-686-928-8, 978-973-686-928-0, pp. 45-50, 6 pg., 2006.
- Dumitru Ivas, Florin Munteanu, **Ciprian Nemeş**, *The models of risk in the developing and working of the electrical power system,* 4-th International Conference on Electrical and Power Engineering EPE 2006, Iaşi, Romania, October 12-14, 2006, Published in Bulletin of the Polytechnic Institute of Iaşi, tomul LII (LVI), fasc. 5C, pp. 1139-1144, 6 pg., 2006.

- **Ciprian Nemeş**, Florin Munteanu, Dumitu Ivas, *Probabilistic approach of controlled switching,* 4-th International Conference on Electrical and Power Engineering EPE 2006, Iaşi, Romania, October 12- 14, 2006, Published in Bulletin of the Polytechnic Institute of Iaşi, tomul LII (LVI), fasc. 5C, pp. 1151- 1154, 4 pg., 2006.
- Dumitru Ivas, Florin Munteanu, **Ciprian Nemeş,** *The impact of the new based-on-intelligentequipment management methods on the structure of the distribution power networks nodes,* Second Regional Conference and Exhibition on Electricity Distribution, organized by CIRED Committee of the states of Serbia and Montenegro, 17-20 October 2006, Zlatibor, Serbia, CD format, paper: 054-2006, Book of abstracts: ISBN 86-83171-13-2, pp. 7, 2006.
- **Ciprian Nemeş**, Dumitu Ivas, Florin Munteanu, *Probabilistic approach for thermal and electrodynamic stresses distribution functions,* Second Regional Conference and Exhibition on Electricity Distribution, organized by CIRED Committee of the states of Serbia and Montenegro, 17-20 October 2006, Zlatibor, Serbia, CD format, paper: 160-2006, Book of abstracts: ISBN 86-83171-13-2, pp. 11, 2006.
- Florin Munteanu, Dumitru Ivas, **Ciprian Nemeş**, *From controlled switching to intelligent switching,* Second Regional Conference and Exhibition on Electricity Distribution, organized by CIRED Committee of the states of Serbia and Montenegro, 17-20 October 2006, Zlatibor, Serbia, CD format, paper: 185-2006, Book of abstracts: ISBN 86-83171-13-2, pp.47, 2006
- **Ciprian Nemeş**, Dumitru Ivas, *Aspecte privind influenţa sistemului electroenergetic asupra fiabilităţii întreruptoarelor*, Al XIX-lea Simpozion Naţional "Siguranţă în Funcţionare a Sistemului Energetic" Sinaia, 28 - 30 septembrie 2005, ISBN 973-87456-0-8, pp. 165-169, 5 pg., 2005.
- Dumitru Ivas, Florin Munteanu, **Ciprian Nemeş**, *Asupra fiabilităţii sistemelor multivalente, de producţie şi deservire,* Al XIX-lea Simpozion Naţional "Siguranţă în Funcţionare a Sistemului Energetic" Sinaia, 28 - 30 septembrie 2005, ISBN 973-87456-0-8, pp. 191-195, 5 pg., 2005.
- Dumitru Ivas, Florin Munteanu, **Ciprian Nemeş**, Lucian Baron, *Limits of independent elements assumption in reliability system analysis and exceeding possibility,* 5th International Conference on Electromechanical and Power Systems, October 6-8, 2005, Chisinau, vol I, ISBN:973-716-208-0, pp. 395-398, 4 pg., 2005.
- **Ciprian Nemeş**, Dumitru Ivas, *Model for estimation of the strength distributions using the stressstrength interference*, 5th International Conference on Electromechanical and Power Systems, October 6-8, 2005, Chisinau, vol I, ISBN:973-716-208-0, pp. 173-174, 2 pg., 2005.
- **Ciprian Nemeş,** Dumitru Ivas, Florin Munteanu, *A method to establish the mean of number of operations for the IO 110 kV circuit breaker,* The International Conference on Energy and Environment, Bucharest 20 - 22 October 2005, Section 2 Reliability, Risk, Maintenance, pp. 2.47- 2.51, 5 pg., 2005
- Dumitru Ivas, Florin Munteanu, **Ciprian Nemeş**, *The models of risk in the management of the electric power system,* The International Conference on Energy and Environment, Bucharest 20 - 22 October 2005, Section 2 Reliability, Risk, Maintenance, pp 2.52- 2.59, 8 pg, 2005.
- **Ciprian Nemeş**, Dumitru Ivas, *The statistic character of the short-circuit currents stresses*. Ediţia a V-a Conferinţa Naţională de Energetică Industrială cu participare internaţională CNEI 2005, Bacău 10–12 Noiembrie 2005, ISSN 1224-7480, pg 109-133, 5 pg., 2005.
- Dumitru Ivas, Florin Munteanu, **Ciprian Nemeş**, *Systemically connections in theoretical and practical reliability,* Ediţia a V-a Conferinţa Naţională de Energetică Industrială cu participare internaţională CNEI 2005, Bacău 10–12 Noiembrie 2005, ISSN 1224-7480, pp. 184-188, pg. 5 pg. 2005.
- Dumitru Ivas, Florin Munteanu, **Ciprian Nemeş**, *The dynamic relations inside the state vector components - a criterion for technical systems reliability and risk evaluation,* The International World Energy System Conference WESC 2004, Oradea, ISSN 1198-0729, pg. 12-15, 4 pg., 2004.
- Dumitru Ivas, Florin Munteanu, Ciprian Nemeş, *New criterions for optimal development and exploitation network the statistical selectivity and relative sensitivity*, Regional Conference

and Exhibition on electricity distribution, Conference organized by CIRED Herceg Novi, Montenegro, 5-8 October 2004, pp. 76-82, 7 pp, 2004.

- Dumitru Ivas, Florin Munteanu, **Ciprian Nemeş**, *The models of risk in the management of the electrical power system,* WEC Regional Energy Forum – FOREN 2004, 13-17 June 2004, Neptun Olimp - Romania (format electronic - CD), paper no: S2_20, 8 pg., 2004.
- Dumitru Ivas, Florin Munteanu, Ciprian Nemeş, Gheorghe Chiriac, *Binomul scop-mijloc instrument de evaluare şi planificare a eficienţei energetice,* Simpozionul Internaţional de Eficienţă Energetică, ed. a IV-a, 18-20 octombrie 2004, Cluj-Napoca, pp. 103-108, 6 pg., 2004.
- Dumitru Ivas, Florin Munteanu, **Ciprian Nemeş**, *Une Generalisation de la notion de fiabilite pour les systemes multivalentes, de production et d'offre,* 4th international Conference on Electromechanical and Power Systems SIELMEN 2003, Chişinău 26-27 September 2003, vol. II, .ISBN 9975-9704-9-4, pp. 51-54, 4 pg., 2003.
- Ciprian Nemeş, Dumitru Ivas, *Modelarea solicitării la scurtcircuit a echipamentelor din staţiile electrice în calculul indicatorilor de fiabilitatea a acestora,* Al XVIII-lea Simpozion Naţional "Siguranţa în funcţionare a sistemului energetic" SIG 2003, 24-26 septembrie 2003 Oradea, Secţia1 Siguranţa în funcţionare a instalaţiilor de transport a energiei electrice, lucrarea 1.33, 6 pg., 2003.
- *Ciprian Nemeş, Dumitru Ivas, Florin Munteanu,* Modelarea fiabilităţii contactelor întreruptoarelor electrice bazată pe fizica electroeroziunii, *Conferinţa Internaţională Energie - Mediu CIEM 2003, 22-25 octombrie 2003, Bucureşti, vol.I. Sesiunea Fiabilitate, Risc, Mentenanţă, Ed. Academiei Române, ISBN 973-27-1032-2, pp. 2.16–2.20, 5 pg. 2003.*
- *Dumitru Ivas, Florin Munteanu, **Ciprian Nemeş**, Ioan Mălăescu,* Asupra modelării fiabilităţii sistemelor cu elemente dependente*, Conferinţa Internaţională Energie - Mediu CIEM 2003, 22-25 octombrie 2003, Bucureşti, vol.I. Sesiunea Fiabilitate, Risc, Mentenanţă, Ed. Academiei Române, ISBN 973-27-1032-2, pp. 2.21 - 2.27, 7 pg., 2003*
- **Ciprian Nemeş**, Dumitru Ivas, *Asupra metodelor de calcul al fiabilităţii echipamentelor electrice, folosind modelele solicitate-rezistenţă-timp*, Simpozionului Naţional de Reţele Electrice SNRE 2002, Oradea, lucrare I.5, 6 pg., 2002.
- Dumitru Ivas, Florin Munteanu, Ciprian Nemeş, Riscul producătorilor în relaţiile dintre parteneri pe piaţa de energie, Conferinţa Naţională a Energiei, FOREN 2002, June 09-13, 2002, Neptun Olimp - Romania (format electronic - CD), 2002.
- Dumitru Ivas, Florin Munteanu, Ciprian Nemeş, Managementul riscului între relaţiile dintre partenerii de pe piaţa de energie, Simpozionul Naţional Siguranţă în Funcţionare a Sistemului Energetic, Ediţia a XVII-a, vol 1, Deva 26-28 sept. 2001, pp. 12-18, 7 pg., 2001.
- Ciprian Nemeş, Dumitru Ivas, Florin Munteanu, B. Bagen, Modelarea intensităţii de defectare în perioada de rodaj a elementelor, Simpozionul Naţional Siguranţă în Funcţionare a Sistemului Energetic, Ediţia a XVII-a, vol 1, Deva 26-28 sept. 2001, pp. 56-62, 7 pg., 2001.
- Ciprian Nemeş, Dumitru Ivas, Florin Munteanu, Estimarea defecţiunilor folosind modelul static solicitare – rezistenţă, A treia Conferinţă Internaţională de Sisteme Electromecanice şi Energetice, SIELMEN 2001, Chişinău, 4-6 octombrie 2001, vol II, Secţiunea Fiabilitate şi Diagnoză, ISBN 9975 – 9638 – 7 – 0, pp. 149-152, 4. pg., 2001.
- Dumitru Ivas, Florin Munteanu, Ciprian Nemeş, Privire critică asupra metodelor de influenţare a fiabilităţii, A treia Conferinţă Internaţională de Sisteme Electromecanice şi Energetice, SIELMEN 2001, Chişinău, 4-6 octombrie 2001, vol II, Secţiunea Fiabilitate şi Diagnoză, ISBN 9975 – 9638 – 7 – 0, pp. 161-164, 4. pg., 2001.
- Dumitru Ivas, Florin Munteanu, Ciprian Nemeş, Nicolae Brumă, Coculeana Popa, Trecerea la noile tehnologii de dezvoltare şi exploatare a reţelelor electrice, evoluţia sau revoluţie?, Simpozionul Naţional de Reţele Electrice, ediţia a X-a, vol. I, SNRE 25-26 mai 2000, Iaşi, pp. 39-45, 7 pg., 2000.
- Florin Munteanu, Dumitru Ivas, Ciprian Nemeş, Nicolae Brumă, Coculeana Popa, Tehnici de ameliorare a calităţii serviciului de alimentare cu energie electrică, Simpozionul Naţional de Reţele Electrice, ediţia a X-a, vol. I, SNRE 25-26 mai 2000, Iaşi, pp. 254-263, 7 pg., 2000.

- Dumitru Ivas, Florin Munteanu, Ciprian Nemeş, Privire critică asupra modelelor şi metodelor de calcul a fiabilităţii sistemelor, limitele acestora in domeniul energetic necesitaţi şi perspective, Al XVI-lea Simpozion Naţional “Siguranţa în Funcţionare a Sistemului Energetic” Bacău, 22-23 Septembrie 1999, pp. 5-14, 10 pg., 1999.
- Florin Munteanu, Dumitru Ivas, Ciprian Nemeş, Tudor Mocanu, Calitate şi fiabilitate in condiţiile reglementarii pieţei de energie, Al XVI-lea Simpozion Naţional “Siguranţa în Funcţionare a Sistemului Energetic” Bacău, 22-23 Septembrie 1999, pp. 57-65, 9 pg., 1999.
- Dumitru Ivas, Florin Munteanu, Ciprian Nemeş, Criterii sistemice de eficienţă energetică, Simpozionul Internaţional de Eficienţă Energetică, Cluj-Napoca, 12-14 Octombrie, 1999.
- Dumitru Ivas, Florin Munteanu, Ciprian Nemeş, Energia electrică, Marfă sau serviciu? Criterii sistemice de apreciere a calităţii energiei electrice, Al III-lea Simpozion “Calitatea Energiei Electrice”, Targovişte, 8-9 decembrie 1999, pp. 100-104, 5 pg., 1999.
- Dumitru Ivas, Florin Munteanu, Ciprian Nemeş, Indices to Evaluate the Network Nodes Structure, Proceedings of the Third International Power System Conference, november 18-20,1999, Timişoara, România, published in Bulletin of Politehnica University, vol. III, tom 44(58), fasc. 2, ISSN 1224-6034. pp. 80-84, 5 pg., 1999.
- Florin Munteanu, Dumitru Ivas, Ciprian Nemeş, Tudor Mocanu, A combined criterion for electricity distribution networks restructuring, Proceedings of the Third International Power System Conference, november 18-20,1999, Timişoara, România, published in Bulletin of Politehnica University, vol. III, tom 44(58), fasc. 2, ISSN 1224-6034. pp. 85-90, 6 pg., 1999.

J. Invenţii.

1. 1. Ciprian Nemes, Florin Munteanu.“Metodă pentru managementul receptoarelor consumatorilor rezidențiali alimentați din surse fotovoltaice proprii” Cerere brevet nr. A00161/08.03.2018__

K. Contracte de cercetare.

Granturi de cercetare-dezvoltare câştigate prin competiţie naţională

1. Sistem de majorare a indicatorilor de autoconsum din surse fotovotaice, folosind conversia si stocarea sub forma de energie termica, Proiect tip PN-III-P3-3.1-PM-ROCN-2018-0093 / 02.07.2018-31.12.2018. Valoare 49.500 ron. Director proiect: CiprianNemeş

2. Sistem inteligent pentru managementul sarcinii consumatorilor rezidentiali alimentati din surse fotovoltaice, Proiect tip PN-III-P2-2.1-CI-2017-0823 nr. 145 CI / 10.10.2017-11.04.2018. Valoare 44990 ron. Director proiect: Ciprian Nemeş

3. Utilizarea modelelor analitice si a tehnicilor de inteligenta artificiala in optimizarea indicatorilor de fiabilitate a echipamentelor electroenergetice, prin monitorizarea solicitărilor. CNCSIC-AT/2007-2008, Cod CNCSIS – 29, Contract nr. : 33 GR /23.05.2007, 77 GR /11.06.2008.Valoare: 17000/2007; 18000/2008, Director proiect: Ciprian Nemeş

4. Zone urbane bioclimatice inteligente cu emisii reduse de carbon ca insule inovatoare energetic într-un oraș durabil, Proiect international - ERA NET Cofund-83/2016-2017 (SMART URBAN ISLE). Membru: Ciprian Nemeş

5. Construire platformă de cercetare pentru integrarea resurselor regenerabile in instalatii autonome-COPRESA, Proiect finanţat prin programul operaţional sectorial creşterea competitivităţii economice, axa prioritară 2 – Competitivitate prin CDI, operatiunea 2.3.2: Dezvoltarea infrastructurii de C-D a întreprinderilor, cu crearea de noi locuri de munca pentru C-D.

Proiect nr. 608/10.12.2013 coordonat de S.C. DAS S.R.L. Iaşi. Valoarea totală de 6.126.355,31 RON, din care asistenţa financiară nerambursabilă este de 2.443.129 RON. Membru UTI: Ciprian Nemeş

6. Cercetări privind integrarea surselor regenerabile de energie: studii în direcţia dezvoltării serviciului de alimentare cu energie electrică. Domeniul de cercetare: Mediu dezvoltare durabilă, Proiect: Performanţă prin postdoctorat pentru integrarea in aria europeană de cercetare, PERFORM-ERA, ID – 57649, 2010 - 2013, POSDRU/89/1.5/S/57649 Proiect finanţat prin Programul Operaţional Sectorial pentru Dezvoltarea Resurselor Umane 2007 – 2013. Buget total proiect: 20.813.320 RON, din care finanţare nerambursabilă 20.016.735 RON. Proiect coordonat de Prorectoratul Ştiinţific al Universtităţii Tehnice "Gheorghe Asachi" din Iaşi. Membru / cercetător postdoc: Ciprian Nemeş

7. Aparate si comutari inteligente in sistemele electroenergetice, Proiect CEEX – MENER nr. 607/2005-2007, Valoare: 48936.21/2005; 168000/2006; 50000/2007, Membru: Ciprian Nemeş

8. Dezvoltarea parteneriatelor C/D in vederea promovării unor proiecte europene în domeniul sistemelor distribuite de monitorizare a mediului, CEEX Modul 3, contract 201/2006, 2006 – 2008, Membru: Ciprian Nemeş.

Contracte încheiate cu institute de cercetare, companii, regii, societăţi comerciale

1. Cercetari privind dezvoltarea uniu sistem pentru monitorizarea si optimizarea indicatorilor de autoconsum din surse distribuite Contract nr. 16052P\07.09.2017 - 15.10.2018, Beneficiar: SC DAS SRL Iasi. Valoare: 45000 RON + TVA, Responsabil temã: Ciprian Nemes.

2. Cercetari experimentale privind calitatea energiei electrice si solutii de ameliorare in cadrul Arcelor Mittal Galati. Contract nr. 141P\26.01.2017, Beneficiar: SC Arcelor Mittal Galati. Valoare: 33750 RON + TVA, Membru: Ciprian Nemes

3. Masuratori privind calitatea energiei electrice si solutii de ameliorare in cadrul Arcelor Mittal Galati. Contract nr. 2016P\15.12.2015 - 19.09.2016 , Beneficiar: SC Arcelor Mittal Galati. Valoare: 30000 RON + TVA. Membru: Ciprian Nemes

4. Estimarea productiei de energie electrica si dimensionarea parcului fotovoltaic de 132,6 kWp – Letcani, Contract nr. 3872P / 04.03.2013, Beneficiar: SC Consult Finance SRL Iasi. Valoare: 3500+ TVA= 4340 RON, Responsabil temã: Ciprian Nemes.

5. Cercetări experimentale privind proiectarea, functionarea si exploatarea panourilor fotovoltaice si optimizarea sistemelor inteligente de orientare biaxialã. Contract nr. 2274P / 17.12.2012 - 15.06.2014, Beneficiar: SC DAS SRL Iasi. Valoare: 20.000 euro+TVA. Membru: Ciprian Nemes

6. Evaluarea prin calcul a câmpurilor electrice şi magnetice de 50Hz în zona traversărilor variantei de ocolire a mun. Iaşi, de către LEA 220 kV Gutinaş-Munteni-FAI, Contract nr. 2874P / 31.08.2011, Beneficiar: SC Electromontaj SA, Sucursala Iaşi. Valoare: 2000 RON. Responsabil temă: Ciprian Nemeş

7. Substaţiile de tracţiune la Regionala CFR Iaşi şi siguranţa circulaţiei pe căile ferate, Contract nr. 7680P/2007 Beneficiar: E-on Energie Iasi. Valoare: 12.500+TVA=14.875RON, Membru: Ciprian Nemes

8. Studiul şi determinarea prin calcul a tensiunilor induse în LEA 220-400 kV din gestiunea ST. Bacău, în condiţii speciale de paralelism, în vederea respectării valorilor limită admise, Contract nr. 3274P/17.10.2005, Beneficiar: C.N. Transelectrica S.A. Sucursala de Transport Bacău. Valoare 99000+TVA=11781 RON, Membru: Ciprian Nemeş

9. Măsurarea tensiunii de atingere şi de pas la staţia 110/20/6 kV Comăneşti, Contract nr. 321P/13.02.2004, Beneficiar: S.C. ELCO SA Botosani, Valoare 2000+TVA=2.380 RON, Responsabil temă: Ciprian Nemeş

10. Instrumente matematice de modelare a comportării construcţiilor hidrotehnice bazate pe metoda seriilor de timp, Contract nr. 1910P/23.09.2004, Beneficiar: Universitatea Tehnicã Cluj Napoca, Valoare 15.000+TVA=17.850 RON, Responsabil temă: Ciprian Nemeş

11. Modelarea fiabilităţii sistemelor cu structură dinamică aplicată sistemelor de transport al energiei electrice, Contract nr. 1579P/24.07.2004, Beneficiar: C.N. Transelectrica S.A. Sucursala de Transport Bacău, Valoare 6.500+TVA=7.735 RON, Responsabil temă: Ciprian Nemeş
12. Verificarea SUUCE pentru optimizarea exploatării şi dezvoltării instalaţiilor la SH Rm. Vâlcea, Contract nr. 894P/2001-2002 Beneficiar: SH Râmnicu Vâlcea. Valoare 9.146+TVA=10.884 RON, Membru: Ciprian Nemeş

13. Criterii, metode şi instrumente de decizie în dezvoltarea şi exploatarea reţelelor de transport în condiţiile create de reforma sectorului energetic, Contract nr. 1135P/2001, Beneficiar: C.N. Transelectrica S.A. Sucursala de Transport Bacău. Valoare 4.000+TVA=4.760 RON, Membru: Ciprian Nemeş

14. Optimizarea structurii reţelelor de MT ale SDEE Bacău pe baza analizei combinate CPT-fiabilitate, Contract nr. 1262/1999 Beneficiar: CONEL Bacău. Valoare 2.500 RON, Membru: Ciprian Nemeş

15. Principii tehnice şi economice moderne în exploatarea sistemelor de alimentare cu energie electrică, Contract nr. 1263/1999 Beneficiar: CONEL Bacău. Valoare 2.500 RON, Membru: Ciprian Nemeş

16. Evaluarea instrumentelor necesare pentru licitarea energiei electrice pe intervale, Contract nr. 412P/1999, Beneficiar: CONEL Bacău. Valoare 4.500 RON, Membru:Ciprian Nemeş

17. Analiza pierderilor este energie electrică în reţeaua de distribuţie a SDEE Târgovişte, Contract nr. 16709/1998, Beneficiar: SC Electrica SA. Valoare 6.000 RON, Membru: Ciprian Nemeş

7. Dezvoltarea parteneriatelor C/D in vederea promovării unor proiecte

L. Premii, distincţii.

M. Alte realizări semnificative.

Data,
20.04.2025

Nume, semnătura
prof.univ.dr.ing. Ciprian Mircea Nemeș

Lista de lucrări în domeniul de studii universitare de masterat Inginerie Energetică

Numele şi prenumele: Gheorghe Grigoraș

N. Teza de doctorat.

„Tehnici noi de supraveghere si conducere a sistemelor electroenergetice", 2005, Domeniul „Inginerie Energetică", Universitatea Tehnică „Gheorghe Asachi" din Iași, conducător doctorat: prof. dr. ing. Cârțină Gheorghe

O. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

1. **Gheorghe Grigoraş**, Bogdan Neagu, Florina Scarlatache, Data Mining-Based Approaches in the Power Quality Analysis, Capitolul 5 in cartea Smart Grids 3.0, Editori: Bhargav Appasani si Nicu Bizon, Springer International Publishing, Switzerland, 2023,ISBN: ISBN-13: 9783031385056
2. Bogdan Neagu, **Gheorghe Grigoraş**, Florina Scarlatache, Engineering Applications of Crowdsourcing Concept in Active Distribution Grids, Capitolul 3 in cartea Smart Grids 3.0, Editori: Bhargav Appasani si Nicu Bizon, Springer International Publishing, Switzerland, 2023,ISBN: ISBN-13: 9783031385056
3. **Gheorghe Grigoras**, Bogdan-Constantin Neagu Livia Noroc, Ecaterina Chelaru, New Smart Devices-Based Strategies for Optimal Planning and Operation of Active Electric Distribution Networks, Capitolul 10 in cartea Power System Strength Evaluation methods, best practice, case studies, and applications, Edtori: Hassan Haes Alhelou, Nasser Hosseinzadeh, Behrooz Bahrani, The Institution of Engineering and Technology (IET), UK, 2023, ISBN-13: 978-1-83953-807-0
4. Bogdan Neagu, Mihai Gavrilas, Ovidiu Ivanov, **Gheorghe Grigoraş**, The Crowdsourcing Concept-Based Data Mining Approach Applied in Prosumer Microgrids, Capitol in cartea The Future of Data Mining, Editor: Cem Ufuk Baytar, Nova Science Publishers, USA, 2022, 77–94 ISBN: 979-8-88697-315-0
5. **Gheorghe Grigoraş**, Bogdan Neagu, Regression Analysis-Based Load Modelling for Electric Distribution Networks, Capitol in cartea Numerical Methods for Energy Applications, Editori: Naser Mahdavi Tabatabaei, Nicu Bizon, Springer International Publishing, Switzerland, 2021,ISBN: 978-3-030-62190-2
6. Bogdan Neagu, **Gheorghe Grigoraş**, Decision-Making Strategies with Clustering Based Unsupervised Learning for Smart Grids Planning, Capitol in cartea An Introduction to Approaches and Modern Applications with Ensemble Learning, Editor: Yi-Tung Chan, Nova Science Publishers, USA, 2020, ISBN: 978-1-53618-680-2
7. Scarlatache Florina, **Gheorghe Grigoras**, Using Unsupervised Learning Techniques in Optimal Power System Operation, Capitolul 3 in cartea Advances in Engineering Research, Editor Victoria M. Petrova, Nova Science Publishers, USA, 2020, pp. 117 – 156, ISBN: 978-1-53618-508-9
8. **Gheorghe Grigoraş**, Ovidiu Ivanov, Bogdan Neagu, Pragma Kar, Smart Metering Based Strategies for Improving Energy Efficiency in Microgrid, Capitol in cartea Microgrid Architectures, Control and Protection Methods, Editori: Naser Mahdavi Tabatabaei, Ersan Kabalci, Nicu Bizon, Springer International Publishing, Switzerland, pp. 463 – 490, 2020,ISBN: 978-3-030-23722-6.
9. **Gheorghe Grigoraş**, Bogdan Neagu, Ovidiu Ivanov, Mihai Gavrilas, Florina Scarlatache, Smart Meter Data-based Strategies in the Optimal Operation of Electric Distribution Systems, Lambert Academic Publishing, Riga, Lituania, 264 pg. (110 pg. Grigoraș), 2019, 978-620-0-50306-0

10. Bogdan Neagu, **Gheorghe Grigoraş**, Ovidiu Ivanov, The Optimal Operation of Active Distribution Networks based on Smart Metering, Capitol in cartea Advanced Communication and Control Methods for Future Smartgrid, Editor: Taha Selim Ustun, IntechOpen, Londra, UK, 2019, ISBN: 978-1-78984-105-3
11. **Gheorghe Grigoraş**, Impact of smart meter implementation on saving electricity in distribution networks in Romania, Capitol in cartea Application of Smart Grid Technologies. Case Studies in Saving Electricity in Different Parts of the World, Editori: Lisa Ann Lamont Ali Sayigh, Elsevier, Academic Press, Londra, UK, pp. 313 – 346, 2018, ISBN: ISBN 978-0-12-803128-5.
12. **Gheorghe Grigoraş**, Electrical Energy Consumption Forecasting to Improve Energy Efficiency of Water Distribution Systems, Capitol in cartea Energy Harvesting and Energy Efficiency. Technology, Methods, and Applications, Editori: Nicu Bizon, Naser Mahdavi Tabatabaei, Frede Blaabjerg, Erol Kurt, Springer International Publishing, Switzerland, pp. 599 – 628, 2017, ISBN: 978-3-319-49874-4.
13. Florina Scarlatache, **Gheorghe Grigoraş**, Impact of the Distributed Generation on Optimal Operation and Planning of the Electrical Networks, capitol in cartea Distributed Generation. Systems, Performance and Emerging Technologies, Editor Tao, Lin, Nova Science Publishers, USA, pp. 127 – 160, 2017, ISBN: 978 -1 – 53611-074-6.
14. Bogdan-Constantin Neagu, **Gheorghe Grigoraş**, The Assessment of Power Quality in Electric Distribution Systems from Romania, capitol in cartea Advances in Energy Research, Editor Morena J. Acosta, Nova Science Publishers, USA, pp. 157 – 211, 55 pg., 2017, ISBN: 978-1-53612-699-0.
15. **Gheorghe Grigoraş**, Florina Scarlatache, Bogdan-Constantin Neagu, Clustering in Power Systems. Applications, Lambert Academic Publishing, Germania, 264 pg. (210 pg. Grigoraş), 2016, ISBN: 978-3-330-01545-6.
16. **Gheorghe Grigoraş**, Gheorghe Cartina, Elena-Crenguta Bobric, Trends and Directions for Energy Saving in Electric Networks – capitol in cartea Management of Technological Innovation in Developing and Developed Countries, Editor : HongYI Sun, Editura Intech, Croatia, pp. 3 – 27, 2012, ISBN : 978-953-51-0365-3
17. **Gheorghe Grigoraş**, Gheorghe Cartina, The impact of the Fuzzy Modeling in Electric Distribution Systems. Applications, Lambert Academic Publishing, Germania, 168 pg., 2011, ISBN: 978-3-8473-2793-6.

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS.

1. Florina Scarlatache, **Gheorghe Grigoras**, Metode numerice în inginerie. Volumul I, Editura PIM, Iasi, 280 pg., 2022, ISBN: 978-606-13-7122-8.
2. Florina Scarlatache, **Gheorghe Grigoraş**, Conducerea și supravegherea sistemelor electroenergetice. Simulatoare software și fizice, Editura PIM, Iași 2021, 150 pag. ISBN: 978-606-13-6614-9
3. **Gheorghe Grigoraş**, Conducerea sistemelor electroenergetice folosind tehnici de Inteligență Artificială, Editura PIM, Iasi, 210 pag., 2019, ISBN: 978-606-13-7121-1.
4. **Gheorghe Grigoraş**, Optimizări în sistemele energetice. Aplicații practice, Editura PIM, Iași 2017, 106 pg. ISBN :978-606-13-4053-8
5. **Gheorghe Grigoraş**, Scarlatache Florina, Metode numerice. Aplicații practice, Editura PIM, Iași, 176 pg., 2014, ISBN: 978-606-13-2143-8.
6. **Gheorghe Grigoraş**, Metode numerice. Aplicatii in Matlab. Vol. II, Editura PIM, Iasi, 124 pg., 2012, ISBN: 978-606-13-0770-8.
7. **Gheorghe Grigoraş**, Metode numerice. Aplicatii in Matlab, Vol. I, Editura PIM, 230 pg., 2010, ISBN: 978-606-13-0177-5.

8. **Gheorghe Grigoraş**, Gheorghe Cartina, Elena Crenguta Bobric, Sisteme de supraveghere, conducere şi achiziţii de date, Editura SETIS, Iasi, 220 pg., 2009, ISBN:978-606-92041-3-9.
9. Mihai Gavrilas, Gheorghe Cartina, Virgil Alexandrescu, Ovidiu Ivanov, **Gheorghe Grigoraş**, Modelarea sarcinilor din retelele electrice. Vol. I, Editura PIM, Iasi, 2007, 124 pagini, ISBN: 978-973-716-433-4.
10. Mihai Gavrilas, Gheorghe Cartina, Virgil Alexandrescu, Ovidiu Ivanov, **Gheorghe Grigoraş** Modelarea sarcinilor din retelele electrice. Vol. II, Editura Cermi, Iasi, 116 pg., 2007, ISBN 978-973-667-315-3.
11. Elena Crenguta Bobric, **Gheorghe Cartina**, Gheorghe Grigoraş, Tehnici de optimizare în energetică, Editura Didactică şi pedagogică, Bucuresti, 158 pg., 2008, ISBN 978-973-30-2425-5.
12. Mircea Eremia, Gheorghe Cârțină, Dragoș Petricică, Ion Bulac, Constantin Bulac, Ion Triştiu, **Gheorghe Grigoraș**, Tehnici de inteligenţă artificială în conducerea sistemelor electroenergetice, Editura AGIR, Bucureşti, 356 pg. 2006, ISBN: 973-160-106-X.
13. Gheorghe Cartina, **Gheorghe Grigoraș**, Tehici de Inteligență Artificială în Electroenergetică, Editura SETIS, Iaşi, 212 pg., 2004, ISBN: 973-86764-4-4.
14. Gheorghe Cârţină G., Yong-Hua Song, **Gheorghe Grigoraş**, Optimal Operation and Planning of Power Systems, Casa de Editură VENUS, Iaşi, 156 pg., 2003, ISBN: 973-7960-09-2.
15. Gheorghe Cârțină, Gheorghe Grigoraş, Elena Crenguta Bobric, Tehici de clustering în modelarea fuzzy. Aplicaţii în energetică, Casa de Editură VENUS, Iaşi, 230 pg. 2005, ISBN: 973-7960-86-6
16. Gheorghe Cârţină, **Gheorghe Grigoraş**, Tehnici moderne de optimizare. Aplicaţii în energetică, Casa de Editură Venus, Iaşi, 210 pg., 2002, ISBN: 973-8174-80-5.
17. Gheorghe Cartina, **Gheorghe Grigoraș**, Inteligența Artificială. Optimizări în energetică, Casa de Editură VENUS, Iaşi, 200 pg., 2001, ISBN: 973-8174-22-8.

D. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

D1. Lucrări ştiinţifice publicate în reviste cotate ISI

1. **Grigoras Gheorghe**, Bogdan Livadariu, Bogdan-Constantin Neagu, Data Clustering-Driven Fuzzy Inference System-Based Optimal Power Flow Analysis in Electric Networks Integrating Wind Energy, Processes 13, no. 3, 676, 2025, WOS:001452140000001 (Q2)
2. Dandea Vasilica, Stefania Galbau, Mihai-Alexandru Baciu, **Gheorghe Grigoras**, Three-Layer Framework Integrating Optimal Placement of Supervisory, Control, and Acquisition System Measurements with Clustering-Based Electric Substations Selection for State Estimation of Medium-Voltage Distribution Networks, Applied Sciences, 15, no. 4, 1942, 2025, WOS:001429918800001 (Q1)
3. **Grigoras Gheorghe**, Gârbea Răzvan, Neagu Bogdan Constantin, Toward Smart SCADA Systems in the Hydropower Plants through Integrating Data Mining-Based Knowledge Discovery Modules. Applied Sciences. 2024; 14(18):8228. WOS:001323830500001 (Q1)
4. Ovidiu Ivanov, Mihai-Andrei Luca, Bogdan-Constantin Neagu, **Gheorghe Grigoras**, Mihai Gavrilas. Flexible Energy Storage for Sustainable Load Leveling in Low-Voltage Electricity Distribution Grids with Prosumers, Sustainability, Vol. 16, Nr. 10, 3905. WOS:001231408300001
5. Vasilica Dandea, **Gheorghe Grigoras**, Expert System Integrating Rule-Based Reasoning to Voltage Control in Photovoltaic-Systems-Rich Low Voltage Electric Distribution Networks: A Review and Results of a Case Study. Applied Sciences. 2023; 13(10):615, https://doi.org/10.3390/app13106158 (Q2) Accession Number: WOS:000995609600001
6. **Gheorghe Grigoraș**, Maria Simona Raboaca, Catalin Dumitrescu, Daniela Lucia Manea, Traian Candin Mihaltan, Violeta-Carolina Niculescu, and Bogdan Constantin Neagu. Contributions to

Power Grid System Analysis Based on Clustering Techniques, Sensors, vol. 23, nr. 4: 1895. 2023, WOS:000942301200001 Q2)

7. **Gheorghe Grigoraș**, Bogdan-Constantin Neagu, Ovidiu Ivanov, Bogdan Livadariu, Florina Scarlatache, A New SQP Methodology for Coordinated Transformer Tap Control Optimization in Electric Networks Integrating Wind Farms, Applied Sciences, vol. 12, nr. 3, 1129, 2022, Accession NumberWOS:000754870900001 (Q2)
8. Mudita Sandesara, Umesh Bodkhe, Sudeep Tanwar, Mohammad Alshehri, Ravi Sharma, Bogda-Constantin Neagu, **Gheorghe Grigoras**, Simona Raboaca, Design and Experience of Mobile Applications: A Pilot Survey. Mathematics. 2022; 10(14):2380. https://doi.org/10.3390/math10142380 (Q1)
9. Harsh Mankodiya, Priyal Palkhiwala, Rajesh Gupta, Nilesh Kumar Jadav, Sudeep Tanwar, Bogdan-Constantin Neagu, **Gheorghe Grigoras**, Fayez Alqahtani, Ahmed M. Shehata, A Real-Time Crowdsensing Framework for Potential Covid Carrier Detection using Wearable Sensors, Mathematics. 2022, (Q1)
10. **Gheorghe Grigoraș**, Livia Noroc, Ecaterina Chelaru, Florina Scarlatache, Bogdan-Constantin Neagu, Ovidiu Ivanov, Mihai Gavrilaș, Coordinated Control of Single-Phase End-Users for Phase Load Balancing in Active Electric Distribution Networks, Mathematics, vol. 9, nr. 21, 2662, 2021, Accession Number: WOS:000719474900001 (Q1)
11. **Gherghe Grigoraș**, Bogdan Neagu, Florina Scarlatache, Livia Noroc, Ecaterina Chelaru, Bi-Level Phase Load Balancing Methodology with Clustering-Based Consumers' Selection Criterion for Switching Device Placement in Low Voltage Distribution Networks, Mathematics, vol. 9, nr. 5, 542, 2021, Accession Number: WOS:000628360100001 (Q1)
12. Alexandru Kriukov, Mihai Gavrilaș, Ovidiu Ivanov, **Gherghe Grigoraș**, Bogdan Neagu, Florina Scarlatache, Novel Decentralized Voltage-Centered EV Charging Control Algorithm Using DSRC System in Low Voltage Distribution Networks, IEEE Access, vol. 9, pp. 164779 - 164800, Accession Number: WOS:000734431000001 (Q2)
13. Ovidiu Ivanov, Bogdan Neagu, Mihai Gavrilas, **Gheorghe Grigoraș**, A Phase Generation Shifting Algorithm for Prosumer Surplus Management in Microgrids using Inverter Automated Control, Electronics, vol. 10, nr. 22, 2740, 2021, Accession Number: WOS:000727513800001 (Q2)
14. Avishek Banerjee, Samiran Chattopadhyay, Mihai Gavrilas, **Gheorghe Grigoraș**, Optimization and Estimation of Reliability Indices and Cost of Power Distribution System of an Urban Area by a Noble Fuzzy-Hybrid Algorithm, Applied Soft Computing, vol. 102, Aprilie, 107078, 2021 Accession Number: WOS:000632598600011 (Q1)
15. Ovidiu Ivanov, Bogdan-Constantin Neagu, **Gheorghe Grigoraș**, Florina Scarlatache, Mihai Gavrilas, A Metaheuristic Algorithm for Flexible Energy Storage Management in Residential Electricity Distribution Grids, Mathematics, vol. 9, nr. 19, 2375, 2021, Accession NumberWOS:000746426300001 (Q1)
16. Florina Scarlatache, **Gheorghe Grigoraș**, Vlad-Andrei Scarlatache, Bogdan-Constantin Neagu, Ovidiu Ivanov, A Hybrid Methodology Based on Smart Management Energy Consumption in Irrigation Systems, Electronics, vol. 10, nr. 22, 2864, 2021, Accession NumberWOS:000727225500001 (Q3)
17. Alin Dragomir, Maricel Adam, Mihai Andrusca, **Gheorghe Grigoraș**, Marian Dragomir, Seeram Ramakrishna, Simulation and Monitoring of Electrical Contacts Thermal Stresses in Railway Electric Traction, Mathematics, vol. 9, nr. 24, 3191, 2021, Accession NumberWOS:000741491500001 (Q1)
18. **Gheorghe Grigoraș**, Bogdan Neagu, An Advanced Decision Support Platform in Energy Management to Increase Energy Efficiency for Small and Medium Enterprises, Applied Sciences, vol. 10, 3505, 2020, Accession Number: WOS:000541440000166 (Q2)

19. **Gheorghe Grigoraș**, Bogdan Neagu, Mihai Gavrilas, Ion Triștiu, Constantin Bulac, Optimal Phase Load Balancing in Low Voltage Distribution Networks using a Smart Meter Data-based Algorithm, Mathematics, vol. 8, 549, 2020, Accession Number: WOS:000531824100089 (Q1)
20. Bogdan Neagu, Ovidiu Ivanov, **Gheorghe Grigoraș**, Mihai Gavrilas; Marcel Istrate, New Market Model with Social and Commercial Tiers for Improved Prosumer Trading in Microgrids, Sustainability, vol. 12, 7265, 2020, WOS:000584284700001. (Q2)
21. Bogdan Neagu, Ovidiu Ivanov, **Gheorghe Grigoraș**, Mihai Gavrilas, A New Vision on the Prosumers Energy Surplus Trading Considering Smart Peer-to-Peer Contracts, Mathematics, 2020, 8, 235. Accession Number: WOS:000519234000090 (Q1)
22. Ovidiu Ivanov, Samiran Chattopadhyay, Soumya Banerjee, Bogdan Neagu, **Gheorghe Grigoraș**, Mihai Gavrilas, A Novel Algorithm with Multiple Consumer Demand Response Priorities in Residential Unbalanced LV Electricity Distribution Networks, Mathematics, 2020, 8, 1220. Accession Number: WOS:000567310900001 (Q1)
23. **Gheorghe Grigoraș**, Bogdan Neagu, Smart Meter Data-Based Three-Stage Algorithm to Calculate Power and Energy Losses in Low Voltage Distribution Networks. Energies 2019, 12, 3008, Accession Number: WOS:000482174800167 (Q3)
24. Ovidiu Ivanov, Bogdan Neagu, **Gheorghe Grigoraș**, Mihai Gavrilas, Optimal Capacitor Bank Allocation in Electricity Distribution Networks Using Metaheuristic Algorithms, Energies 2019, 12, 4239, Accession Number: WOS:000504898500017 (Q3)
25. Avishek Banerjee, Samiran Chattopadhyay, **Gheorghe Grigoraș**, Mihai Gavrilaș, Minimization of reliability indices and cost of power distribution systems in urban areas using an efficient hybrid meta-heuristic algorithm, Soft Computing, vol. 23, nr. 4, pp. 1257 – 1281, 2019, DOI 10.1007/s00500-017-2846-6, ISSN: 1432-7643, WOS:000457882400013. (Q2)
26. V. Postolaty, V. Berzan, E. Bykova,V. Bosneaga., V. Suslov, I. Ermurachi, **Gheorghe Grigoras**, M. Gavrilas, M. Istrate, Estimation of Power Exchange through 110 kV OverheadPower Lines at the Interface of the Romanian and Moldovan Power Systems, PROBLEMELE ENERGETICII REGIONALE, vol 2 (37), pp. 46 – 61, 2018, Accession Number: WOS:000441795300006
27. **Gheorghe Grigoraș**, Florina Scarlatache, An assessment of the renewable energy potential using a clustering based data mining method. Case study in Romania, Energy, Volume 81, pp. 416–429, 2015, ISSN: 0360-5442, WOS:000351248200041 (Q1)
28. **Gheorghe Grigoraș**, Elena-Crenguța Bobric, Clustering Based Approach for Customers' Classification from Electrical Distribution Systems, U.P.B. Sci. Bulletin, Series C, Vol. 77, Nr. 2, pp. 219-226, 2015, ISSN : 2286-3540, WOS:000421799900018
29. **Gheorghe Grigoraș**, Cecilia Barbulescu, Human errors monitoring in electrical transmission networks based on a partitioning algorithm, International Journal of Electrical Power and Energy Systems, vol. 49, pp. 128–136, 2013, ISSN: 0142-0615, WOS:000317546900015 (Q1)
30. **Gheorghe Grigoraș**, Gheorghe Cârțină, The fuzzy correlation approach in operation of electrical distribution systems, The International Journal for Computation and Mathematics in Electrical and Electronic Engineering, Vol. 32, Nr. 3, pp. 1044-1066, 2013, ISSN: 0332-1649, WOS:000317546900015 (Q3)
31. Florina Rotaru, Gianfranco Chicco, **Gheorghe Grigoraș**, Gheorghe Cârțină, Two-stage distributed generation optimal sizing with clustering-based node selection, International Journal of Electrical Power & Energy Systems, Vol. 40, Nr. 1, pp. 120–129, 2012, ISSN: 0142-0615, WOS:000304637300013 (Q1)
32. **Gheorghe Grigoraș**, Gheorghe Cârţină, Elena Crenguța Bobric, Strategies for Power/Energy Saving in Distribution Networks, Advances in Electrical and Computer Engineering, Vol. 10, Nr. 2, pp. 63 - 66, 2010, ISSN: 1582 – 7445, WOS:000280312600010 (Q3)
33. Marcel Istrate, **Gheorghe Grigoraș**, Energy Consumption Estimation in Water Distribution Systems using Fuzzy Techniques, Environmental Engineering and Management Journal, Vol. 9, Nr. 2, pp. 249 – 256, 2010, ISSN: 1582 – 9596, WOS:000276559000010 (Q3)

34. Elena Crenguța Bobric, Gheorghe Cârţină, **Gheorghe Grigoraş**, Clustering Techniques in Load Profile Analyze for Distribution Stations, Journal of Advances in Electrical and Computer Engineering, Nr.1, pp. 63 – 66, 2009, ISSN: 1582 – 7445, WOS:000264815300011 (Q3)
35. Elena Crenguța Bobric, Gheorghe Cârţină, **Gheorghe Grigoraş**, Fuzzy Techniques used for Energy Losses Determination in Medium and Low Voltage Networks, Journal of Electronics and Electrical Engineering, Nr. 2, pp. 95 – 98, 2009, ISSN: 1392 – 1215 - Accession Number: WOS:000263760900021

D2. Lucrări ştiinţifice publicate în reviste indexate în baze de date internaționale

1. Mihai Gavrilaș, **Gheorghe Grigoraș**, Mihaela Cazacu, Ovidiu Carp, Ioan Andrei, Reducing Active Energy Losses in Low Voltage Distribution Grids, Journal of Sustainable Energy Vol. 8, No. 3, pp. 113 – 120, 2017, ISSN 2067-5534 (EBSCO, Index Copernicus) - cod CNCSIS : 817.
2. Bogdan-Constantin Neagu, **Gheorghe Grigoraș**, The Assessment of Power Quality in Electric Distribution Systems from Romania, Advances in Energy Research, vol. 28, pp. 157 – 211, 2017, ISBN: 978-1-53612-699-0 (Scopus).
3. **Gheorghe Grigoraș**, Assessment of Electrical Load in Water Distribution Systems Using Representative Load Profiles-Based Method, Advances in Electrical Engineering, vol. 2014, Article ID 865621, 10 pages, 2014. doi:10.1155/2014/865621, ISSN: 2356-6655, ISSN: 2314-7636 (Online) (http://www.hindawi.com/journals/aee/2014/865621/), (DOAJ)
4. **Gheorghe Grigoraș**, Virgil Alexandrescu, Gheorghe Cârțină, Florina Scarlatache, Estimation of Power/Energy Losses in Electric Distribution Systems based on an Efficient Method, TELKOMNIKA Indonesian Journal of Electrical Engineering, vol. 11, No. 9, pp. 4854-4860, 2013, ISSN: 2302-4046, e-ISSN: 2087-278X (SCOPUS)
5. **Gheorghe Grigoraș**, Gheorghe Cârțină, Impact of the fuzzy modeling in operation of electric distribution systems, WSEAS Transactions on Circuits and Systems, vol. 11, no. 4, pp. 105 – 114, 2012, E-ISSN: 2224-266X (SCOPUS)
6. **Gheorghe Grigoraș**, Cecilia Bărbulescu, Gheorghe Cârțină, Daniela Comănescu, Human Errors Monitoring in Electrical Transmission Networks, Journal of Energy and Power Engineering, vol. 6, no. 3, pp. 425 – 428, 2012, ISSN: 1934-8975 (CSA)
7. **Gheorghe Grigoraș**, Gheorghe Cârțină, Impact of the Fuzzy Typical Load Profiles in Distribution Network Control, Journal of Electrical and Control Engineering, vol. 2, no. 1, pp. 8 – 14, 2012, ISSN : 2223-2036 (DOAJ)
8. **Gheorghe Grigoraș**, Gheorghe Cârțină, Improved Fuzzy Load Models by Clustering Techniques in Distribution Network Control, International Journal on Electrical Engineering and Informatics, Vol. 3, no. 2, pp. 207 – 216, 2011, ISSN 2085-6830, (SCOPUS)
9. **Gheorghe Grigoraș**, Daniela Comanescu, Gheorghe Cârțină, Cecilia Barbulescu, Optimal Operation of a Hydro Cascade using Typical Loading Profiles, International Journal of Academic Research, vol. 3, no. 2, pp. 58 – 63, 2011, ISSN: 2075-4124, (IndexCopernicus)
10. **Gheorghe Grigoraș**, Istrate Marcel, An Efficient Clustering Method in Evaluation of the Electric Energy Consumption from Water Hydrophore Stations, International Review on Modelling and Simulations, Vol. 4, no. 2, 2011, pp. 813–818, ISSN: 1974-9821 (SCOPUS)
11. **Gheorghe Grigoraș**, Gheorghe Cârțină, Marcel Istrate, Florina Rotaru, The Efficiency of the Clustering Techniques in the Energy Losses Evaluation from Distribution Networks, International Journal of Mathematical Models and Methods in Applied Sciences, vol. 5, no. 1, pp. 133 – 140, 2011, ISSN: 1998-0140 (SCOPUS)
12. **Gheorghe Grigoraș**, Gheorghe Cârțină, Strategies Regarding Operating Voltage Levels in Distribution Networks, Journal of Energy and Power Engineering, vol. 4, No.6, pp. 60 – 63, 2010, ISSN: 1934-8975 (CSA).

13. Gheorghe Cârţină, **Gheorghe Grigoraş**, Elena-Crenguța Bobric, Opportunities to conserve energy right from distribution installations, Buletinul U.P.B, Series C, Vol. 72, No. 1, pp. 81 – 90, 2010, ISSN (print): 2286-3540 (SCOPUS).
14. Gheorghe Cârţină, Gheorghe Grigoraş, Optimal Reconfiguration of Distribution Networks in Uncertainty Conditions, Buletinul Stiintific al UPB, Seria: Inginerie Electrica, nr. 4, pp. 247 – 254, 2007, ISSN (print): 2286-3540 (SCOPUS)
15. **Gheorghe Grigoraş**, Gheorghe Cârţină, Virgil Alexandrescu, Geographic Information System (GIS) – An Integrated Technology for Distribution Systems, Buletinul Stiintific al UPB, Seria: Inginerie Electrica, nr. 4, pp. 255 – 262, 2007, ISSN (print): 2286-3540 (SCOPUS).

E. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

1. Livia Noroc, **Gheorghe Grigoraş**, A Clustering-Based Methodology for Phase Load Balancing in Low Voltage Distribution Networks, Buletinul Institutului Politehnic din Iasi, Secţia: Electrotehnică, Energetică, Electronică, Volumul 66 (70), Nr. 3, pp. 25-44, 220, ISSN 1223-8139 (Index Copernicus, getCITED, Ulrich's), cod CNCSIS: 87.
2. Ecaterina Chelaru, **Gheorghe Grigoraş**, An Improved Strategy Based on a Multi-Criteria Analyse to Replace Transformers in Electric Distribution Networks, Buletinul Institutului Politehnic din Iasi, Secţia: Electrotehnică, Energetică, Electronică, Volumul 66 (70), Nr. 3, pp. 45-62, 220, ISSN 1223-8139 (Index Copernicus, getCITED, Ulrich's), cod CNCSIS: 87.
3. Neagu B., Ivanov O., **Grigoraș G.**, Gavrilaș M., Short-term Load Forecast Approach Based on Artificial Neural Networks, Buletinul Institutului Politehnic din Iasi, Secția: Electrotehnica, Energetica, Electronica, Volumul 65 (69), Fasc. 2, pp. 9-22, 2019, ISSN 1223-8139 (Index Copernicus, getCITED, Ulrich's), cod CNCSIS: 87.
4. Gavrilaș M., **Grigoraș G.,** Cazacu M., Carp C.O., Andrei I., Reducing active energy losses in low voltage distribution grids, Journal of Sustainable Energy, Vol.. 8, No. 3, 2017, pag. 113 – 120, ISSN 2067-5534 (cod CNCSIS 817).
5. **Grigoraș G.**, Gavrilaș M., Scarlatache Fl., Cazacu M., Cosarca M., Assessing energy losses in unbalanced low voltage electric distribution networks, Energetica, Vol. 64, Nr. 2, 2016, pag. 53 – 59, ISSN: 1453-2360 (cod CNCSIS 512)
6. **Grigoraș G.**, Gavrilaș M., Buliga S., Strugaru C., Solutions regarding the efficient use of transformers in electric distribution networks, Energetica, Vol. 63, Nr. 4, 2015, pag. 145 – 149, ISSN: 1453-2360 (cod CNCSIS 512).
7. Gavrilaș M., **Grigoraș G.**, Buliga S., Strugaru C., Influence of renewable sources integration on technical energy losses in high voltage distribution networks, Energetica, Vol. 63, Nr. 4, 2015, pag. 139 – 144, ISSN: 1453-2360 (cod CNCSIS 512).
8. Neagu B.C., **Grigoraș G.**, Scarlatache Fl., Load management in distribution systems with smart metering, Energetica, Vol. 63, Nr. 4, 2015, pag. 150 – 156, ISSN: 1453-2360 (cod CNCSIS 512).
9. **Grigoraș G.**, Neagu B.C., Market clearing price forecasting in deregulated electricity markets using a fuzzy approach, Acta Electrotehnica, Vol. 56, Nr. 3, 2015, pag. 113-116, ISSN : 1841-3323, (cod CNCSIS 576).
10. Neagu B.C., **Grigoraș G.,** Data mining tools in electricity distribution systems, Acta Electrotehnica, Vol. 56, Nr. 3, 2015, pag. 209-212, ISSN : 1841-3323, (cod CNCSIS 576).
11. Scarlatache Fl., **Grigoraş G.,** Neagu B.C., The impact of distributed generation on the voltage control in electrical distribution networks, Energetica, Vol. 62, nr. 3, 2014, pag. 105 – 110, ISSN: 1453-2360 (cod CNCSIS 512).
12. **Grigoraș G.**, Gavrilaș M., maximum load estimation of consumers in low voltage networks using a clustering techniques based method, Energetica, Vol. 62, Nr. 3, 2014, pag. 90 – 94, ISSN: 1453-2360 (cod CNCSIS 512).

13. Scarlatache Fl., **Grigoraş G**., A wind energy profiling method based on unsupervised learning techniques, Buletinul Institutului Politehnic din Iasi, Secţia: Electrotehnică, Energetică, Electronică, Tomul LX (LXIV), Fasc. 2, 2014, pag. 9-17, ISSN 1223-8139 (cod CNCSIS 87).
14. **Grigoraș G.,** Scarlatache Fl., Bărbulescu C., Optimal power flow analysis using the correlation method for estimation of nodal loads, Acta Electrotehnica, Vol. 54, No. 5, 2013, pag. 208 – 2012, ISSN : 1841-3323 (cod CNCSIS 576).
15. **Grigoraș G.,** Scarlatache Fl., Bărbulescu C., Analysis of incidents caused by human factor in transmission power grids, Acta Electrotehnica, Vol. 54, No. 5, 2013, pag. 204 – 2007, ISSN : 1841-3323, (cod CNCSIS 576).
16. **Grigoraş G.,** Scarlatache Fl., Clustering to peak load estimation in transformer substations from electric distribution systems, Buletinul Institutului Politehnic din Iasi, Secţia: Electrotehnică, Energetică, Electronică, Tomul LIX (LXIII), Fasc. 3, 2013, ISSN 1223-8139 (cod CNCSIS 87).
17. **Grigoraș G**., Scarlatache Fl., Estimation of power/energy losses in electric networks using Artificial Intelligence techniques, Energetica, Vol. 61, Nr. 5, 2013, pag. 189 – 193, ISSN: 1453-2360 (cod CNCSIS 512).
18. Scarlatache Fl., **Grigoraş G**., An approach regarding the placement of distributed generation sources in electric distribution systems using Hurwitz criterion, Buletinul Institului Politehnic din Iasi, Seria Electrotehnica, Energetica, Tomul LVIII(LXII), No. 4, 2012, pag. 109 - 117, ISSN: 1223-8139 (cod CNCSIS 87).
19. Scarlatache Fl., **Grigoraș G.,** Cârțină G., Using of clustering techniques for placement of distributed generation sources in electrical distribution systems, Buletinul AGIR, No. 3, 2012, pag. 1 - 6, ISSN: 2247-3548, (cod CNCSIS 415).
20. Scarlatache Fl., **Grigoraș G**., Cârțină G., An algorithm based on the clustering techniques for the optimal placement of the distributed generation sources in distribution systems, Buletinul Institului Politehnic din Iasi, Seria Electrotehncica, Energetica, Tomul LVIII(LXII), No. 1, 2012, pag. 115 – 124, ISSN 1223-8139, (cod CNCSIS 87).
21. Alexandrescu V., Cârțină G., **Grigoraș G**., On distribution network operation analysis, Buletinul Institului Politehnic din Iasi, Seria Electrotehnica, Energetica, Tomul LVIII(LXII), No. 1, 2012, pag. 105 – 114, ISSN : 1223-8139, (cod CNCSIS 87).
22. **Grigoraș G**., Comanescu D., Cârțină G., Solutions regarding to reducing of electrical consumptions in hydropower plants, Buletinul Institului Politehnic din Iasi, Seria Electrotehncica, Energetica, Tomul LVI(LX), No. 1, 2011, pag. 133 – 140, ISSN: 1223-8139, (cod CNCSIS 87).
23. **Grigoraș G.,** Barbulescu C., Cârțină G., Comanescu D., A comparative study regarding efficiency of the hierarchical clustering techniques in typical load profiles determination, Acta Electrotehnica, Vol. 52, Nr. 5, 2011, pag. 184 – 188, ISSN 2344–5637 (cod CNCSIS 576).
24. Bărbulescu C., Grigoraș G., Cârțină G., Rotaru Fl., Study based on clustering techniques regarding accidental events from the south-east of the transport system from Romania, Acta Electrotehnica, Vol. 52, Nr. 5, 2011, pag. 46 – 49, ISSN 2344–5637, (cod CNCSIS 576).
25. **Grigoraș G**., Comanescu D., Rotaru Fl., Cârțină G., Using of a hybrid method in the loading profiles determination of a hydropower cascade, Buletinul Institului Politehnic din Iasi, Seria Electrotehncica, Energetica, Tomul LVII(LXI), Nr. 2, 2011, pag. 117 – 128, ISSN 1223-8139, (cod CNCSIS 87).
26. **Grigoraş G**., Bărbulescu C., Cârţină G., Rotaru Fl., Accidental incidents duration analysis in power transmission grids, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Electronică Tomul LVI (LX), Fasc. 2, 2010, pag. 107 – 115, ISSN 1223-8139, (cod CNCSIS 87).
27. Cârţină G., **Grigoraş G.,** Bobric E.C., Opportunities to conserve energy right from distribution installations, Buletinul U.P.B, Series C, Vol. 72, No. 1, 2010, pag. 81 – 90, ISSN (print): 2286-3540, (cod CNCSIS 101).

28. **Grigoraş G**., Cârţină G., Energy losses evaluation using a method based on clustering and fuzzy techniques, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Electronică, Tomul LVI (LX), Fasc. 3, 2010, pag. 95 – 100, ISSN 1223-8139, (cod CNCSIS 87).
29. **Grigoraş G**., Bobric E.C., Cârţină G., Rotaru Fl., Strategies for minimization of power losses in electric distribution networks, Energetica, Nr. 7, 2010, pag. 314 - 318, ISSN: 1453-2360, (cod CNCSIS 512).
30. Alexandrescu V., Cârţină G., **Grigoraş G**., On power flow problem of distribution networks under condition of lack of information, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Electronică, Tomul LVI (LX), Fasc. 2, 2010, pag. 77 – 87, ISSN 1223-8139, (cod CNCSIS 87).
31. **Grigoraş G.,** Bărbulescu C., Cârţină G., Incident duration analysis in power transmission grids by clustering techniques, Energetica, Nr. 10, 2010, pag. 474 – 478, ISSN: 1453-2360, (cod CNCSIS 512).
32. **Grigoraş G**., Cârţină G., Alexandrescu V., An improved method for power losses determination in rural distribution networks, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Tomul LIV (LVIII), Fasc. 3, 2008, pag. 23 – 30, ISSN 1223-8139, (cod CNCSIS 87).
33. **Grigoraş G**., Cârţină G., Bobric E.C., Possibilities for energy saving in electric distribution networks, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Tomul LIV (LVIII), Fasc. 3, pag. 211 – 220, 2008, pag. 211 – 220, ISSN 1223-8139, (cod CNCSIS 87).
34. **Grigoraş G**., Cârţină G., Energy saving by efficient transformers in distribution networks, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Tomul LIV (LVIII), Fasc. 2, , 2008, pag. 83 – 88, ISSN 1223-8139, (cod CNCSIS 87).
35. Cârţină G., **Grigoraş G**., Optimal reconfiguration of distribution networks in uncertainty conditions, Buletinul Stiintific al UPB, Seria: Inginerie Electrica, nr. 4, 2007, pag. 247 – 254, ISSN (print): 2286-3540, (cod CNCSIS 101).
36. **Grigoraş G**., Cârţină G., Alexandrescu V., Geographic Information System (GIS) – An Integrated technology for distribution systems, Buletinul Stiintific al UPB, Seria: Inginerie Electrica, nr. 4, 2007, pag. 255 – 262, ISSN (print): 2286-3540, (cod CNCSIS 101).
37. Mihaescu A., Cârţină G., **Grigoraş G**., Next generation networks in communications trends, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Tomul LIV (LVIII), Fascicula 3-4, 2007, pag. 111-120, ISSN 1223-8139, (cod CNCSIS 87).
38. Alexandrescu V., Cârţină G., **Grigoraş G**., Nouvelle Méthodologie d'Application des Modèles Statique de la Charge Asynchrone á l'étude de la Stabilité de Tension des Réseaux électriques, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Tomul LIII (LVII), Fasc. 1 - 2, 2007, pag. 127 – 132, ISSN 1223-8139, (cod CNCSIS 87).
39. Alexandrescu V., Cârţină G., **Grigoraş G.,** Integrated software application for the management of databases containing static and dynamic models of the aggregated loads from distribution network and their use in static and dynamic networks, Analele Universităţii din Craiova, Seria: Inginerie Electrica, Vol. II, 2007, pag. 323 – 326, ISSN: 1842-4805, (cod CNCSIS 174).
40. Cârţină G., **Grigoraş G**., Bobric E.C., Power system analysis using Matlab toolboxes, Analele Universitatii din Craiova, Seria: Inginerie Electrica, Vol. II, 2007, pag. 305 – 308, ISSN :1842-4805, (cod CNCSIS 174).
41. Cârţină G., **Grigoraş G**., Lupaşcu C., Modeling of the customers' consumption categories in electric distribution systems, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Fasc. 5C, 2006, pag. 1175 – 1180, ISSN : 1223-8139, (cod CNCSIS 87).
42. **Grigoraş G**., Cârţină G., Alexandrescu V., Lupaşcu C., Fuzzy load models and GIS documents in distribution networks analysis, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Fasc. 5C, 2006, pag. 1199 – 1204, ISSN : 1223-8139, (cod CNCSIS 87).
43. Lupaşcu C., Cârţină G., **Grigoraş G.,** Optimal reconfiguration of the distribution networks using clustering techniques and fuzzy load models, Buletinul Institutului Politehnic Iaşi, Seria:

Electrotehnică, Energetică, Fasc. 5C, , 2006, pag. 1205 – 1210, ISSN : 1223-8139, (cod CNCSIS 87).

44. Alexandrescu V., Cârţină G., **Grigoraş G**., Static load models of the induction motors, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Fasc. 5C, pp. 1579 – 1583, 2006, ISSN : 1223-8139, (cod CNCSIS 87).
45. Gavrilaş M., Cârţină G., **Grigoraş G**., Ivanov O., Lupaşcu C., Integrated model for electric load profiling, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Fasc. 5C, 2006, pag. 1193 – 1198, ISSN: 1223-8139, (cod CNCSIS 87).
46. **Grigoraş G**., Cârţină G., Using of fuzzy typical load profiles in missing data treatment, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Tomul LII (LVI), Fasc. 3-4, 2006, pag. 139 – 145, ISSN : 1223-8139, (cod CNCSIS 87).
47. Alexandrescu V., Cârţină G., **Grigoraş G**., Nouvelle méthode pour déterminer les modeles statiques de la charge asynchrone agrégé, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Electronică, Tomul LII (LVI), Fasc. 3-4, 2006, pag. 119 – 128,ISSN : 1223-8139, (cod CNCSIS 87).
48. Alexandrescu V., Cârţină G., **Grigoraş G**., Analiza nodală Dimo în pregătirea viitorilor ingineri electroenergeticieni, Energetica, Nr. 9, 2005, pag. 354 – 358, ISSN: 1453-2360, (cod CNCSIS 512).
49. **Grigoraş G**., Cârţină G., Improvement of the loads estimation with the clustering techniques, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Electronică, Tomul LI (LV), Fasc. 1 - 2, 2005, pag. 131 – 136, ISSN: 1223-8139, (cod CNCSIS 87).
50. Cârţină G., **Grigoraş G.,** Determinarea benzilor optimale de reglare a tensiunii în reţelele electrice, Energetica, Vol. 52, Nr. 11, 2004, pp. 487 -491, ISSN: 1453-2360, (cod CNCSIS 512).
51. **Grigoraş G.,** Cârţină G., Alexandrescu V., Pay as Bid approach in energy market, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Electronică, Tomul LI (LV), Fasc. 3 - 4, 2005, pag. 125 – 130, ISSN : 1223-8139, (cod CNCSIS 87).
52. **Grigoraş G**., Cârţină G., Alexandrescu V., Using fuzzy logic in distribution network power loss estimation, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Electronică, Tomul L(LIV), Fasc. 5A, 2004, pag.157 – 162, ISSN : 1223-8139 (cod CNCSIS 87).
53. **Grigoraş G**., Cârţină G., Using of the clustering techniques in load profiles determination, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Electronică, Tomul L(LIV), Fasc. 3 - 4, 2004, pag. 121 -127, ISSN: 1223-8139, (cod CNCSIS 87).
54. **Grigoraş G**., Cârţină G., Load uncertainties introduction in power flow analysis, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Electronică, Tomul XLIX (LIII), Fasc. 1-2, 2003, pag. 121 – 126, ISSN: 1223-8139, (cod CNCSIS 87).
55. Cârţină G., **Grigoraş G**., Bidding strategies in deregulated markets, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Electronică, Tomul XLIX(LIII), Fasc. 3/4, 2003, pag. 133 – 141, ISSN 1223-8139, (cod CNCSIS 87).
56. Cârţină G., Alexandrescu V., **Grigoraş G**., Utilizarea tehnicilor GIS (Geographic Information Systems) în planificarea reţelelor electrice, Energetica, Vol, 51, Nr. 8, 2003, pag. 346-349, ISSN: 1453-2360, (cod CNCSIS 512).
57. Alexandrescu V., Cârţină G., **Grigoraş G**., On the local voltage stability static analysis, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Electronică, Tomul XLIX(LIII), Fasc. 3/4, 2003, pp. 127-131, ISSN: 1223-8139, (cod CNCSIS 87).
58. **Grigoraş G**., Cârţină G., Moshe M., Using of the increasing factors method in distribution networks planning, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Electronică, Tomul XLVIII LII), Fasc. 3-4, 2002, pag. 173 – 179, ISSN 1223-8139, (cod CNCSIS 87).

59. Alexandrescu V., Grigoraș G., Alocarea costurilor serviciului de transport de energie pe noduri de rețea, ținând seama de circulația puterilor reactive, Energetica, Vol. 50, Nr. 10, 2002, pag. 438-446, ISSN: 1453-2360, (cod CNCSIS 512).
60. Cârţină G., **Grigoraş G**., Moshe M., Using of the power correlation in distribution networks planning, Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Electronică, Tomul XLVIII(LII), Fasc. 1-2, 2002, pag. 149-157, ISSN: 1223-8139, (cod CNCSIS 87).
61. Cârţină G., Alexandrescu V., **Grigoraş G**., Application of the powers correlation in fuzzy modeling, Bul. Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Fascicula 5A, 2002, pag. 297 – 302, ISSN 1223-8139, (cod CNCSIS 87).
62. Grigoraş G., Cârţină G., Electric network planning aspects with special regard to reliability, Bul. Buletinul Institutului Politehnic Iaşi, Seria: Electrotehnică, Energetică, Electronică, Tomul XLVII(LI), Fasc. 3-4, , 2001, pag. 127-134, ISSN: 1223-8139, (cod CNCSIS 87).

F. Lucrări ştiinţifice publicate în volumele conferinţelor.

F1. Conferințe indexate WoS

1. Stefania Galbau, **Gheorghe Grigoras**, Bogdan Constantin Neagu, Florina Scarlatache, Dorin Lucache and Vlad Hustiuc, Characterization of the Power Quality in the Electric Distribution Networks Using Data Mining with K-Means Clustering, 10th International Conference on Systems and Control (ICSC), Marseille, France, 2022, pp. 131-136, WOS:000927654200023
2. Razan Garbea, Florina Scarlatache, **Gheorghe Grigoras**, Bogdan Constantin Neagu, Extracting the Operating Characteristics of Hydropower Plants Using a Clustering-based Efficient Methodology, 9th International Conference on Modern Power Systems (MPS2021), Cluj-Napoca, Romania, 16-17 Iunie, 2021, WOS:000941563300045
3. Constantin Zetu, Bogdan Constantin Neagu, **Gheorghe Grigoras**, Florina Scarlatache, The Risk Analisys for the Coexistence of Overhead Lines and Urban Green Areas, 9th International Conference on Modern Power Systems (MPS2021), Cluj-Napoca, Romania, 16-17 Iunie, 2021, WOS:000941563300035
4. Vasilica Dandea, **Gheorghe Grigoraș**, Bogdan-Constantin Neagu, Florina Scarlatache, K-means Clustering-based Data Mining Methodology to Discover the Prosumers' Energy Features, 12th International Symposium on Advanced Topics in Electrical Engineering (ATEE2021), 25-27 Martie, 2021, Bucuresti, Romania, WOS: 000676164800102
5. Ecaterina Chelaru, Livia Noroc, **Gheorghe Grigoras**, Bogdan-Constantin Neagu, Energy Losses Estimation in the Electric Distribution Networks Using Clustering-Based Selection of the Representative Feeders, International Conference Interdisciplinarity in Engineering (INTER-ENG 2021), Targu Mures, Romania, 7 - 8 October 2021. WOS:000773080200047
6. Bogdan-Constantin Neagu, Mihai Gavrilas, **Gheorghe Grigoras**, Ovidiu Ivanov, Load Modeling Approaches in Smart Grids: An Overview, International Conference Interdisciplinarity in Engineering (INTER-ENG 2021), Targu Mures, Romania, 7 - 8 October 2021. WOS:000773080200049
7. Ecaterina Chelaru, **Gheorghe Grigoras**, Decision Support System to Determine the Replacement Ranking of the Aged Transformers in Electric Distribution Networks, 12th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), 25-27 Iunie, Bucuresti, 2020, Accession Number: WOS:000627393500004
8. Livia Noroc, **Gheorghe Grigoras**, Performance Assessment of the Hierarchical Clustering Methods in Classification of Electric Distribution Networks Considering Unbalance Degree, 12th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), 25-27 Iunie, Bucuresti, 2020, Accession Number: WOS:000627393500098

9. Bogdan Constantin Neagu, **Gheorghe Grigoraș**, A data-mining-based methodology to identify the behavioural characteristics of prosumers within active distribution networks, International Symposium on Fundamentals of Electrical Engineering (ISFEE), 2020, Bucharest, Romania, November 5–7, Accession NumberWOS:000812321500035
10. Bogdan-Constantin Neagu, **Gheorghe Grigoras**, A Fair Load Sharing Approach Based on Microgrid Clusters and Transactive Energy Concept, 12th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), 25-27 Iunie, Bucuresti, 2020, Accession Number: WOS:000627393500104
11. **Gheorghe Grigoraş**, Ovidiu Ivanov, Bogdan Neagu, Pragma Kar, Smart Metering Based Strategies for Improving Energy Efficiency in Microgrid, Capitol in cartea Microgrid Architectures, Control and Protection Methods, Editori: Naser Mahdavi Tabatabaei, Ersan Kabalci, Nicu Bizon, Springer International Publishing, Switzerland, pp. 463 – 490, 2020, Accession Number: WOS:000672412900021
12. **Gheorghe Grigoras**, Bogdan Neagu, Ovidiu Ivanov, Aggregate Method based on Expert System for Electricity Consumption Forecasting of Small and Medium Enterprises, 2019 11th International Symposium on Advanced Topics in Electrical Engineering (ATEE), Bucureti, Romania, 23 – 28 Mai, 2019, Accession Number: WOS:000475904500123
13. Bogdan Neagu, **Gheorghe Grigoras**, Ovidiu Ivanov, The Influence of Harmonics on Additional Power Losses at Large Enterprises, 2019 11th International Symposium on Advanced Topics in Electrical Engineering (ATEE), Bucureti, Romania, 23 – 28 Mai, 2019, Accession Number: WOS:000475904500097
14. Ovidiu Ivanov, Bogdan Neagu, **Gheorghe Grigoraș**, Mihai Gavrilaș, Capacitor Banks Placement Optimization Improvement Using the Sperm Whale Algorithm, 11th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), 27-29 Iunie, 2019, WOS:000569985400130
15. Bogdan Neagu, **Gheorghe Grigoraș**, Uncertainty-Based Decision Making in the Planning of Electric Transmission Networks, 11th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), 27-29 Iunie, 2019, WOS:000569985400085
16. Bogdan Neagu, **Gheorghe Grigoraș**, Ovidiu Ivanov, An Efficient Peer-to-Peer Based Blokchain Approach for Prosumers Energy Trading in Microgrids, 8th International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 21-23 Mai, 2019, WOS:000612401900090
17. **Gheorghe Grigoraș**, Bogdan Neagu, Ovidiu Ivanov, An Efficient Approach for Flattening the Electricity Consumption Profile at Small and Medium Enterprises, 8th International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 21-23 Mai, 2019, WOS:000612401900021
18. Bogdan Neagu, **Gheorghe Grigoraș**, Decision-Making Approach for Choosing of Electricity Supplier to Improve the Energy Efficiency, 2019 International Conference on ENERGY and ENVIRONMENT (CIEM), Timisoara, Romania, 17-18 Octombrie, 2019, Accession Number: WOS:000630902700072
19. **Gheorghe Grigoraș**, Mihai Gavrilaș, Bogdan Neagu, Ovidiu Ivanov, Ion Triștiu, Constantin Bulac, An Efficient Method to Optimal Phase Load Balancing in Low Voltage Distribution Network, 2019 International Conference on ENERGY and ENVIRONMENT (CIEM), Timisoara, Romania, 17-18 Octombrie, 2019, Accession Number: WOS:000630902700068
20. Bogdan Neagu, Mihai Gavrilaș, **Gheorghe Grigoraș**, Ovidiu Ivanov, Voltage Control in Microgrids in the Presence of Small-Scale Renewable Energy Source, 2019 International Conference on Electromechanical and Energy Systems (SIELMEN), Chisinau, Republica Moldova, 9-11 Octombrie, 2019, Accession Number: WOS:000630287500022
21. Ovidiu Ivanov, Bogdan Neagu, Mihai Gavrilaș, **Gheorghe Grigoraș**, Calin-Viorel Sfintes, Phase Load Balancing in Low Voltage Distribution Networks Using Metaheuristic Algorithms,

International Conference on Electromechanical and Energy Systems (SIELMEN), Chisinau, Republica Moldova, 9-11 Octombrie, 2019, WOS:000630287500107

22. Bogdan Neagu, **Gheorghe Grigoraș**, Optimal Voltage Control in Power Distribution Networks Using an Adaptive On-Load Tap Changer Transformers Techniques, International Conference on Electromechanical and Energy Systems (SIELMEN), Chisinau, Republica Moldova, 9-11 Octombrie, 2019, Accession Number: WOS:000630287500111
23. **Gheorghe Grigoras**, Bogdan Neagu, Energy Consumption Forecasting to Small and Medium Enterprises Using a Hybrid Method, 2018 International Symposium on Fundamentals of Electrical Engineering (ISFEE), Bucureti, Romania, 1 – 3 Noiembrie, 2018, Accession Number: WOS:000480396400064
24. Ovidiu Ivanov, **Gheorghe Grigoras**, Bogdan Neagu, Smart Metering based Approaches to Solve the Load Phase Balancing Problem in Low Voltage Distribution Networks, 2018 International Symposium on Fundamentals of Electrical Engineering (ISFEE), Bucureti, Romania, 1 – 3 Noiembrie, 2018, Accession Number: WOS:000480396400007
25. Florina Scarlatache, **Gheorghe Grigoraş**, Bogdan-Constantin Neagu, Romeo Ciobanu, Aided decision making for hybrid energy systems planning in micro-grids, 2018 Smart City Symposium Prague (SCSP), Praga, Republica Cehă, 24 – 25 Mai, 2018. Accession Number: WOS:000443451800033
26. **Gheorghe Grigoraş**, Nicu Bizon, Florentina Enescu, Jose Manuel Lopez Guede, Guadalupe Flores Salado, Raymond Brennan, Connie O'Driscoll, Mergersa Dinka, Mohamed Gar Alalm, ICT based Smart Management Solution to Realize Water and Energy Savings through Energy Efficiency Measures in Water Distribution Systems, 10th Edition Electronics, Computers and Artificial Intelligence (ECAI 2018), 28 June -30 June, 2018, Iasi, Romania WOS:000467734100082
27. Bogdan Constantin Neagu, **Gheorghe Grigoras**, Florina Scarlatache, Influence of Outliers on Transformer Power Losses Estimation Using a Statistical Based Data Mining Approach, 10th Edition Electronics, Computers and Artificial Intelligence (ECAI 2018), 28 June -30 June, 2018, Iasi, Romania, Accession Number: WOS:000467734100072
28. **Gheorghe Grigoraş**, Bogdan-Constantin Neagu, Florina Scarlatache, Influence of Sampling Size in Profiling Process of Electricity Consumption at Small and Medium Enterprises, 10th International Conference and Exposition on Electrical and Power Engineering (EPE2018), Iasi, Romania, pp. 743 – 748, 2018, Accession Number: WOS:000458752200145
29. **Gheorghe Grigoraș**, Mihai Gavrilaș, An Improved Approach for Energy Losses Calculation in Low Voltage Distribution Networks based on the Smart Meter Data, 10th International Conference and Exposition on Electrical and Power Engineering (EPE2018), Iasi, Romania, pp. 749 – 754, 2018, Accession Number: WOS:000458752200146
30. **Gheorghe Grigoraș**, Florina Scarlatache, Bogdan-Constantin Neagu, Analysis of energy saving solutions based on replacement of distribution transformers, 2017 International Conference on Optimization of Electrical and Electronic Equipment (OPTIM) & 2017 Intl Aegean Conference on Electrical Machines and Power Electronics (ACEMP), Brasov, Romania, pp. 66 – 71, 2017 Accession Number: WOS:000426909600009
31. **Gheorghe Grigoraș**, Florina Scarlatache, Daniela Comanescu, Bogdan-Constantin Neagu, Expert system for optimal power allocation in hydropower dispatchable units, 2017 International Conference on Optimization of Electrical and Electronic Equipment (OPTIM) & 2017 Intl Aegean Conference on Electrical Machines and Power Electronics (ACEMP), Brasov, Romania, pp. 605 – 610, 2017 Accession Number: WOS:000426909600091
32. Bogdan-Constantin Neagu, **Gheorghe Grigoraș**, Florina Scarlatache, Effects of outliers on calculation of load profile factors, 2017 International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 6 – 9 Iunie, 2017 Accession Number: WOS:000428462600009

33. **Gheorghe Grigoraş**, Bogdan-Constantin Neagu, Florina Scarlatache, Cristina Schreiner, Romeo Ciobanu, Identification of pilot nodes for secondary voltage control using K-means clustering algorithm, 2017 IEEE 26th International Symposium on Industrial Electronics (ISIE), Edinburgh, UK, pp. 106 – 110, 2017 Accession Number: WOS:000426794000015
34. **Gheorghe Grigoraş**, Electrical Energy Consumption Forecasting to Improve Energy Efficiency of Water Distribution Systems, Capitol in cartea Energy Harvesting and Energy Efficiency. Technology, Methods, and Applications, Editori: Nicu Bizon, Naser Mahdavi Tabatabaei, Frede Blaabjerg, Erol Kurt, Colecția Lectures Notes in Energy, vol. 37, Springer International Publishing, Switzerland, pp. 599 – 628, 2017, ISBN: 978-3-319-49874-4. Accession Number: WOS:000412159000022
35. Bogdan-Constantin Neagu, **Gheorghe Grigoraş**, Florina Scarlatache, Cristina Schreiner, Romeo Ciobanu, Patterns discovery of load curves characteristics using clustering based data mining, 2017 11th IEEE International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG), Cadiz, Spain, pp. 83 – 87, 2017 WOS:000406491800013
36. Florina Scarlatache, **Gheorghe Grigoraş**, Bogdan-Constantin Neagu, Cristina Schreiner, Romeo Ciobanu, Influence of hybrid energy systems on micro-grids control, 2017 11th IEEE International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG), Cadiz, Spain, pp. 313 – 317, 2017 WOS:000406491800050
37. Bogdan-Constantin Neagu, **Gheorghe Grigoraş**, Florina Scarlatache, Outliers discovery from Smart Meters data using a statistical based data mining approach, 2017 10th International Symposium on Advanced Topics in Electrical Engineering (ATEE), București, Romania, pp. 555 -558, 2017, WOS:000403399400108
38. **Gheorghe Grigoraş**, Bogdan-Constantin Neagu, Florina Scarlatache, Smart metering based approach for phase balancing in low voltage distribution systems, 2017 10th International Symposium on Advanced Topics in Electrical Engineering (ATEE), București, Romania, pp. 551 -554, 2017, WOS:000403399400107
39. Avishek Banerje, Samiran Chattopadhyay, Anup Kumar Mukhopadhyay, **Gheorghe Grigoraș**, A fuzzy-ACO algorithm to enhance reliability optimization through energy harvesting in WSN, 2016 International Conference on Electrical, Electronics, and Optimization Techniques (ICEEOT), Chennai, India, pp. 584 – 589, 2016, WOS:000391380900108
40. Florina Scarlatache, **Gheorghe Grigoraș**, Bogdan-Constantin Neagu, Clustering Based Data Mining in Wind Power Production, ECAI 2017 - International Conference – 9th Edition Electronics, Computers and Artificial Intelligence, 29 June -01 July, 2017, Targoviste, Romania, Accession Number: WOS:000425865900119.
41. Bogdan-Constantin Neagu, **Gheorghe Grigoraș**, Florina Scarlatache, Power losses estimation in harmonic polluted LV distribution networks with a fuzzy approach, 2016 8th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Ploiesti, Romania, 2016, WOS:000402541200042
42. Florina Scarlatache, **Gheorghe Grigoraș**, Bogdan-Constantin Neagu, Decision making methodology based on fuzzy logic in optimal DG location, 2016 8th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Ploiesti, Romania, 2016, WOS:000402541200117
43. **Gheorghe Grigoraș**, Bogdan Constantin Neagu, Florina Scarlatache, Estimation of energy losses in distribution transformers using a fuzzy approach, 2016 International Symposium on Fundamentals of Electrical Engineering (ISFEE), București, Romania, 2016, WOS:000392434400035
44. Bogdan-Constantin Neagu, **Gheorghe Grigoraș**, Florina Scarlatache, The influence of harmonics on power losses in urban distribution networks, 016 International Symposium on Fundamentals of Electrical Engineering (ISFEE), București, Romania, 2016, WOS:000392434400036

45. **Gheorghe Grigoraș**, Mihai Gavrilaș, Phase swapping of lateral branches from low-voltage distribution networks for load balancing, 2016 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, pp. 715 – 718, 2016, WOS:000390706300142
46. Avishek Banerjee, Mihai Gavrilaș, **Gheorghe Grigoraș**, Samiran Chattopadhyay, A fuzzy hybrid approach for reliability optimization problem in power distribution systems, 2016 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, pp. 809 – 814, 2016, WOS:000390706300159
47. Florina Scarlatache, **Gheorghe Grigoraș**, A fuzzy approach in optimal DG planning, 2016 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, pp. 738 – 742, 2016, WOS:000390706300147
48. Avishek Banerjee, Mihai Gavrilaș, **Gheorghe Grigoraș**, Samiran Chattopadhyay, Decision making in assessment of RRAP of WSN using fuzzy-hybrid approach, 2015 IEEE International Conference on Advanced Networks and Telecommuncations Systems (ANTS), Kolkata, India, 2015, WOS:000375678600053
49. Bogdan-Constantin Neagu, **Gheorghe Grigoraș**, Assessment of slow voltage variations from the electric distribution systems with fuzzy techniques, 2015 7th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), București, Romania, pp. 61 – 66, 2015, WOS:000370971100118
50. Florina Scarlatache, **Gheorghe Grigoraș**, Placement of DG sources using a clustering based partitioning method in distribution systems, 2015 9th International Symposium on Advanced Topics in Electrical Engineering (ATEE), București, Romania, pp. 868 – 872, 2015, WOS:000368159800160
51. **Gheorghe Grigoraș**, Florina Scarlatache, Processing of smart meters data for peak load estimation of consumers, 2015 9th International Symposium on Advanced Topics in Electrical Engineering (ATEE), București, Romania, pp. 864 – 867, 2015, WOS:000368159800159
52. **Gheorghe Grigoraș**, Ovidiu Ivanov; Mihai Gavrilas, Customer classification and load profiling using data from Smart Meters, 12th Symposium on Neural Network Applications in Electrical Engineering (NEUREL), Belgrad, Serbia, pp. 73-78, 2014, WOS:000380554900017
53. Florina Scarlatache, Gheorghe Grigoraș, Influence of wind power plants on power systems operation, 2014 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, pp. 1010-1014, 2014, WOS:000353565300184
54. Gheorghe Grigoraș, Florina Scarlatache, Knowlegde extraction from Smart Meters for consumer classification, 2014 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, pp. 978-982, 2014, WOS:000353565300179
55. Gheorghe Grigoraş, **Florina Scarlatache**, Use of data from smart meters in optimal operation of distribution systems, 2014 International Conference on Optimization of Electrical and Electronic Equipment (OPTIM), Brasov, Romania, pp. 179 – 184, 2014, WOS:000343551300026
56. Florina Scarlatache, **Gheorghe Grigoraş**, Optimal coordination of wind and hydro power plants in power systems, 2014 International Conference on Optimization of Electrical and Electronic Equipment (OPTIM), Brasov, Romania, pp. 689 – 694, 2014, WOS:000343551300102
57. Alexandru Kriukov, **Gheorghe Grigoraș**, Mihai Gavrilaș, Florina Scarlatache, Bogdan-Constantin Neagu, An analyze of slow voltage variations from the electric distribution systems with a clustering based approach, 2014 16th International Conference on Harmonics and Quality of Power (ICHQP), București, Romania, pp. 689 – 693, 2014, WOS:000343776100142
58. Alexandru Kriukov, **Gheorghe Grigoraș**, Florina Scarlatache, Ovidiu Ivanov, Bogdan Vicol, Use of fuzzy techniques in reliability assessment of electric distribution systems, 2014 16th International Conference on Harmonics and Quality of Power (ICHQP), București, Romania, pp. 29 – 33, 2014, WOS:000343776100007

59. Bogdan Vicol, Mihai Gavrilaş, Ovidiu Ivanov, Bogdan-Constantin Neagu, **Gheorghe Grigoraş**, Synchrophasor measurement method for overhead line parameters estimation in MV distribution networks, 2014 16th International Conference on Harmonics and Quality of Power (ICHQP), București, Romania, pp. 862 – 865, 2014, WOS:000343776100177
60. **Gheorghe Grigoraş**, Marcel Istrate, Florina Scarlatache, Electrical energy consumption estimation in water distribution systems using a clustering based method, International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Pitești, Romania, pp. 1 -6, 2013, WOS:000343672500023
61. Florina Scarlatache, **Gheorghe Grigoraş**, The influence of the DG sources in the optimal operation of the electrical distribution systems, 2013 8th International Symposium on Advanced Topics in Electrical Engineering (ATEE), București, Romania, pp. 1 -4, 2013, WOS:000332928500175
62. **Gheorghe Grigoraş**, Florina Scarlatache, Energy losses estimation in electrical distribution networks with a decision trees-based algorithm, 2013 8th International Symposium on Advanced Topics in Electrical Engineering (ATEE), București, Romania, pp. 1 -4, 2013, WOS:000332928500176
63. Florina Scarlatache, **Gheorghe Grigoraş**, Gheorghe Cârţină, Gianfranco Chicco, A comparative study regarding the optimal placement of the DG sources, 2012 International Conference and Exposition on Electrical and Power Engineering, Iasi, Romania, pp. 231 – 236, 2012, WOS:000324685300046
64. **Gheorghe Grigoraș**, Virgil Alexandrescu, Gheorghe Cârțină, A calculation method of power and energy losses in distribution networks, 2012 International Conference and Exposition on Electrical and Power Engineering, Iasi, Romania, pp. 197 – 200, 2012, WOS:000324685300040
65. **Gheorghe Grigoraş**, Florina Scarlatache, Gheorghe Cârţină, Load estimation for distribution systems using clustering techniques, 2012 13th International Conference on Optimization of Electrical and Electronic Equipment (OPTIM), Brașov, Romania, pp. 301 – 306, 2012, WOS:000398866700045
66. Florina Scarlatache, **Gheorghe Grigoraş**, Gianfranco Chicco, Gheorghe Cârţină, Using k-means clustering method in determination of the optimal placement of distributed generation sources in electrical distribution systems, 2012 13th International Conference on Optimization of Electrical and Electronic Equipment (OPTIM), Brașov, Romania, pp. 953 – 958, 2012, WOS:000398866700143
67. Daniela Comanescu, **Gheorghe Grigoraș**, Gheorghe Cârțină, Florina Rotaru, Determination of typical load profiles in hydro-power plant by clustering techniques, 2010 12th International Conference on Optimization of Electrical and Electronic Equipment, Brașov, Romania, pp. 1294 – 1297, 2010, WOS:000291967300194
68. **Gheorghe Grigoraș**, Gheorghe Cârțină, Elena-Crenguta Bobric, Florina Rotaru, Evaluation of the performances of efficient transformers in distribution networks by fuzzy techniques, 2010 12th International Conference on Optimization of Electrical and Electronic Equipment, Brașov, Romania, pp. 1281 – 1284, 2010, WOS:000291967300192
69. **Gheorghe Grigoraș**, Gheorghe Cârțină, Elena Crenguța Bobric, An improved fuzzy method for energy losses evaluation in distribution networks, 15th IEEE Mediterranean Electrotechnical Conference (MELECON), Valletta, Malta, pp. 131 – 135, 2010, WOS:000286988200025
70. **Gheorghe Cârțină**, Gheorghe Grigoraș, Elena Crenguța Bobric, Daniela Comanescu, Improved fuzzy load models by clustering techniques in optimal planning of distribution networks, 2009 IEEE Bucharest PowerTech, București, Romania, pp. 1 – 6, 2009, WOS:000276834600280
71. **Gheorghe Cârțină**, Gheorghe Grigoraș, Elena Crenguța Bobric, Clustering techniques for energy losses evaluation in distribution networks, 2009 IEEE Bucharest PowerTech, București, Romania, pp. 1 – 5, 2009, WOS:000276834600281

72. **Gheorghe Grigoraş**, Gheorghe Cârțină, Elena Crenguța Bobric, Cecilia Barbulescu, Missing data treatment of the load profiles in distribution networks, 2009 IEEE Bucharest PowerTech, București, Romania, pp. 1 – 5, 2009, WOS:000276834600189
73. **Gheorghe Grigoraş**, Cârțină Gheorghe, Mihai Gavrilaș, Using of Clustering Techniques in Optimal Placement of Phasor Measurements Units, Conference: 9th WSEAS/IASME International Conference on Electric Power Systems, High Voltages, Electric Machines (POWER '09), Genoa, Italia, pp. 104-108, 2009, WOS:000276614400015
74. Gheorghe Cârțină, Virgil Alexandrescu, **Gheorghe Grigoraş**, Mariana Moshe, Peak load estimation in distribution networks by fuzzy regression approach, 2000 10th Mediterranean Electrotechnical Conference. Information Technology and Electrotechnology for the Mediterranean Countries (MeleCon 2000) vol. 3, pp. 907 – 910, 2000, WOS:000166106500221

F3. Conferințe indexate în baze de date internaționale

1. Ștefania Gălbău, **Gheorghe Grigoraş** and Bogdan Neagu, "Voltage Quality Pattern Recognition in Microgrids Using a Data-Driven Machine Learning-Based Methodology," 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi), Iasi, Romania, 2024, pp. 450-455, (IEEE Xplore)
2. Bogdan Livadariu, **Gheorghe Grigoraş**, Bogdan Neagu, Ovidiu Ivanov, Florina Scarlatache Mihai Gavrilas, "Optimal Power Flow with the Clustering-Improved Fuzzy Models for Uncertainty Sources of Wind Power and Nodal Loads," 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi), Iasi, Romania, 2024, pp. 484-489 (IEEE Xplore)
3. Florina Scarlatache, **Gheorghe Grigoraş**, Vlad Scarlatache, Bogdan Neagu and Mihai Baciu, "Using Hybrid PV-Hydrogen Storage Systems in Optimal Planning of Microgrids," 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi), Iasi, Romania, 2024, pp. 556-559 (IEEE Xplore)
4. Claudia Bondar, Bogdan Neagu, **Gheorghe Grigoras**, Attila Simo, "Optimal Recloser Placement in Distribution Networks to Improve Power Quality Indicators," 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi), Iasi, Romania, 2024, pp. 456-461 (IEEE Xplore)
5. Bogdan Neagu, Mihai Luca, Mihai Gavrilas, **Gheorghe Grigoras**, Ovidiu Ivanov, Florina Scarlatache, "Leveraging Energy Storage Systems and Virtual Power Lines to Minimize Curtailment in Future Distribution Grids," 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi), Iasi, Romania, 2024, pp. 495-500 (IEEE Xplore)
6. Răzvan Livadariu, **Gheorghe Grigoraş**, Florina Scarlatache, Bogdan Neagu, "Robust Methodology to Extract the Electricity Consumption Patterns of End-Users Using Data Mining Techniques," 2024 16th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Iasi, Romania, 2024, pp. 1-6, doi: 10.1109/ECAI61503.2024.10607397 (IEEE Xplore)
7. Cosmin Despa, Adi Gugiuman, Bogdan Neagu, **Gheorghe Grigoras**, Impact of Electrical Vehicle Charging on Developing Cities Power System in Near-Future Scenarios, The 18th International Conference Interdisciplinarity in Engineering. Inter-Eng 2024, Tg. Murs, Romania, (Springer)
8. Răzvan Livadariu, **Gheorghe Grigoras**, Bogdan Neagu, Internet of Things and Data Mining: A Comprehensive Analysis of Applications in Energy Consumption ManagementThe 18th International Conference Interdisciplinarity in Engineering. Inter-Eng 2024., Tg. Mures Romania (Springer)
9. Bogdan Livadariu, **Gheorghe Grigoras**, Bogdan-Constantin Neagu, Assessing the Trend of Power Quality Indicators in the Electric Distribution Networks Using a Regression Models-

Based Approach. Case Study in Romania, The 17th International Conference Interdisciplinarity in Engineering (INTER-ENG 2022), Tg. Mures, Romania, 6 -7 octombrie, 2023, DOI: 10.1007/978-3-031-54671-6_42 (Springer)

10. Bogdan Neagu, **Gheorghe Grigoras**, Mihai Gavrilas, Radu Porumb, Ion Tristiu, Technical Losses Estimation in Low Voltage Distribution Network Using Deterministic Methods, The 17th International Conference Interdisciplinarity in Engineering (INTER-ENG 2022), Tg. Mures, Romania, 6 -7 octombrie, 2023, DOI: 10.1007/978-3-031-54671-6_41 (Springer)
11. Bogdan Neagu, **Gheorghe Grigoras**; Florina Scarlatache; Stefania Galbau, An Efficient Distribution Transformer Fleet Modernization Strategy for a Rapid Transition toward the Active Electric Networks, 13th International Symposium on Advanced Topics in Electrical Engineering (ATEE), Bucharest, Romania, 23-25 March 2023, DOI: 10.1109/ATEE58038.2023.10108311 (IEEE Xplore)
12. Florina Scarlatache, **Gheorghe Grigoraş**, Vlad Scarlatache, Vasilica Dandea, "Digital Twin-based Decision-Making Methodology for the Optimal Operation of Microgrids," 2023 10th International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 2023, pp. 1-5, doi: 10.1109/MPS58874.2023.10187426. (IEEE Xplore)
13. Bogdan Livadariu, **Gheorghe Grigoras**, Florina Scarlatache, Bogdan Neagu, "Voltage Control in Electric Networks with Wind Farms Connected Using a Scenario-Based Optimization Framework," 2023 10th International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 2023, pp. 1-6, doi: 10.1109/MPS58874.2023.10187415. (IEEE Xplore)
14. **Gheorghe Grigoras**, Bogdan-Constantin Neagu, Vasilica Dandea, Two-Stage Framework for Steady-State Analysis of Low Voltage Electric Distribution Networks Integrating Photovoltaic Prosumers, 15 th INTERNATIONAL CONFERENCE on ELECTRONICS, COMPUTERS and ARTIFICIAL INTELLIGENCE (ECAI 2023), June 29– June 30, 2023, doi: 10.1109/ECAI58194.2023.10194116 (IEEE Xplore)
15. Bogdan Constantin Neagu, **Grigoras Gheorghe**, Razvan-Petru Livadariu, Additional Power Losses Estimation in Harmonic Polluted LV Distribution Grid using a Ward's Hierarchical Clustering Method, 15 th INTERNATIONAL CONFERENCE on ELECTRONICS, COMPUTERS and ARTIFICIAL INTELLIGENCE (ECAI 2023), June 29– June 30, 2023, doi: 10.1109/ECAI58194.2023.10193906 (IEEE Xplore)
16. **Gheorghe Grigoraş**, Stefania Gălbău, Bogdan Neagu, "Phase Load Balancing in Active Electric Distribution Networks Using the Phase Swapping Smart Devices on Lateral Branches," 2023 11th International Conference on ENERGY and ENVIRONMENT (CIEM), Bucharest, Romania, 2023, pp. 1-5, doi: 10.1109/CIEM58573.2023.10349358. (IEEE Xplore)
17. Ecaterina Chelaru, Vasilica Dandea, Livia Noroc, **Gheorghe Grigoras**, "Determining the Occupancy Patterns and Typical Power Demand Profiles of the Electric Vehicle Charging Stations Using a Flexible Clustering-based Data Mining Framework," 2023 International Conference on Electromechanical and Energy Systems (SIELMEN), Craiova, Romania, 2023, pp. 1-6, doi: 10.1109/SIELMEN59038.2023.10290841. (IEEE Xplore)
18. Ecaterina Chelaru, **Gheorghe Grigoras**, Livia Noroc, Bogdan-Constantin Neagu and Ovidiu Ivanov, An Efficient Integration Strategy of the Prosumers in the Active Electric Distribution Networks, 14th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Ploiesti, Romania, 30 iunie – 1 iulie 2022, pp. 1-6, doi: 10.1109/ECAI54874.2022.9847516 (IEEE Xplore)
19. Livia Noroc, **Gheorghe Grigoras**, Vasilica Dandea, Ecaterina Chelaru, Bogdan-Constantin Neagu, An Efficient Voltage Control Methodology in LV Networks Integrating PV Prosumers Using Distribution Transformers with OLTC, 2022 IEEE 20th International Power Electronics and Motion Control Conference, Brasov, Romania, 25-29 septembrie, 2022. (IEEE Xplore)
20. Ecaterina Chelaru, **Gheorghe Grigoras**, Livia Noroc, Stefania Galbau, Bogdan-Constantin, Neagu, Ovidiu Ivanov, Assessing The Modernization Process of A Transformer Fleet In The

Electric Distribution Networks. Case Study In Romania, The 16th International Conference Interdisciplinarity in Engineering (INTER-ENG 2022), Tg. Mures, Romania, 6 -7 octombrie, 2022. (Springer)

21. Constantin Zetu, Bogdan-Constantin Neagu, **Gheorghe Grigoras**, Ovidiu Ivanov, Mihai Gavrilas, Overhead Transmission Lines Capacity Management Based On Different Weather Conditions, The 16th International Conference Interdisciplinarity in Engineering(INTER-ENG 2022), Tg. Mures, Romania, 6 -7 octombrie, 2022. (Springer)
22. Livia Noroc, **Gheorghe Grigoras**, Chelaru, Ecaterina; Dandea, Vasilica; Neagu, Bogdan Constantin, Voltage Control Strategy Using the Rule-Based Reasoning in LV Distribution Networks with PV Penetration Integrating OLTC-Fitted Transformer, 2022 International Conference on Electrical and Power Engineering (EPE 2022), Iaşi, Romania, 20-22 octombrie 2022. (IEEE Xplore)
23. Razvan Garbea, **Gheorghe Grigoras**, Clustering-Using Data Mining-based Application to Identify the Hourly Loading Patterns of the Generation Units from the Hydropower Plants, 2022 International Conference on Electrical and Power Engineering (EPE 2022), Iaşi, Romania, 20-22 octombrie 2022. (IEEE Xplore)
24. Ovidiu Ivanov, Bogdan Neagu, Nicusor Toma, **Grigoras Gheorghe**; Paul Ghilan, Mihai Gavrilas,, Metaheuristic Approaches for Distributed Generation Placement Optimization in Electrical Grids - A comparison between PSO, Tiki-Taka and Archimedes Optimzation Algorithms, 2022 International Conference on Electrical and Power Engineering (EPE 2022), Iaşi, Romania, 20-22 octombrie 2022. (IEEE Xplore)
25. Bogdan Neagu, Mihai Gavrilas, Ovidiu Ivanov, **Gheorghe Grigoraş**, The Crowdsourcing Concept-Based Data Mining Approach Applied in Prosumer Microgrids, Capitol in cartea The Future of Data Mining, Editor: Cem Ufuk Baytar, Nova Science Publishers, USA, 2022, 77–94 (Scopus)
26. **Gheorghe Grigoras**, Vasilica Dandea, Bogdan-Constantin Neagu, Florina Scarlatache, Load Estimation with the Clustering-Based Selection of the Electric Distribution Substations Integrated in SCADA System, 10th International Conference on ENERGY and ENVIRONMENT (CIEM), 14 – 15 Octombrie, 2021, Bucuresti, Romania. DOI: 10.1109/CIEM52821.2021.9614718 (IEEE Xplore)
27. Constantin Zetu, Bogdan-Constantin Neagu, **Gheorghe Grigoras**, Florina Scarlatache, A New Approach for the Coexistence Study of Urban Buildings Near High Voltage Overhead Lines, 10th International Conference on ENERGY and ENVIRONMENT (CIEM), 14 – 15 Octombrie, 2021, Bucuresti, Romania. DOI: 10.1109/CIEM52821.2021.9614825 (IEEE Xplore)
28. Ecaterina Chelaru, **Gheorghe Grigoraș**, Livia Noroc, Bogdan-Constantin Neagu, and Florina Scarlatache, Influence of the Prosumers on the Replacement Strategies of the Aged Transformers from the Electric Distribution Networks, 13th Interantional Conference on Electromechanical and Energy Systems (SIELMEN), 7-8 Octombrie, 2021, Chisinau, Rep. Moldova. DOI: 10.1109/SIELMEN53755.2021.9600425 (IEEE Xplore)
29. Mihai-Andrei Luca, Bogdan-Constantin Neagu, Ovidiu Ivanov, Mihai Gavrilas, **Gheorghe Grigoras**, A Deeper Analysis about the Impact of Prosumers on Power Losses in Low Voltage Microgrids, 13th Interantional Conference on Electromechanical and Energy Systems (SIELMEN), 7 -8 Octombrie, 2021, Chisinau, Rep. Moldova. DOI: 10.1109/SIELMEN53755.2021.9600366 (IEEE Xplore)
30. Bogdan Constantin Neagu, Constantin Zetu, **Gheorghe Grigoras**, Ovidiu Ivanov, Theories about Mechanical Calculus in the Context of Coexistence between Overhead Power Lines and Buildings from Outskirts of Cities, 13th Interantional Conference on Electromechanical and Energy Systems (SIELMEN), 7-8 Octombrie, 2021, Chisinau, Rep. Moldova. DOI: 10.1109/SIELMEN53755.2021.9600329 (IEEE Xplore)

31. Mihai Sanduleac, Eremia Mircea, Lucian Toma, Catalin Damian, Mihai Gavrilas, **Gheorghe Grigoras**, Ion Stratan, Victor Gropa, Islanded Microgrids control by using Grid Former and Synthetic Slack Bus concept - A preliminary analysis, 13th Interantional Conference on Electromechanical and Energy Systems (SIELMEN), 7 -8 Octombrie, 2021, Chisinau, Rep. Moldova. DOI: 10.1109/SIELMEN53755.2021.9600347 (IEEE Xplore)
32. Vasilica Dandea, **Gheorghe Grigoras**, Bogdan-Constantin Neagu și Florina Scarlatache A Clustering-based Knowledge Extraction Methodology for Prosumers' Classification and Injected Power Profiles Grouping, 13th International Conference on Electronics, Computers and Artificial Intelligence, ECAI 2021, 1 – 3 Julie, 2021, Pitesti, Romania, DOI: 10.1109/ECAI52376.2021.9515042 (IEEE Xplore)
33. Razvan Garbea, Florina Scarlatache, **Gheorghe Grigoras**, Bogdan-Constantin Neagu , Integration of Data Mining Techniques in SCADA System for Optimal Operation of Hydropower Plants, 13th International Conference on Electronics, Computers and Artificial Intelligence, ECAI 2021, 1 – 3 Julie, 2021, Pitesti, Romania, DOI: 10.1109/ECAI52376.2021.9515045 (IEEE Xplore)
34. Livia Noroc, **Gheorghe Grigoras**, Clustering-based consumers' selection to optimal placement of the phase load balancing devices, 11th International Conference and Exposition on Electrical and Power Engineering (EPE2020), Iasi, Romania, 2020. DOI: 10.1109/EPE50722.2020.9305026 (IEEE Xplore)
35. Ecaterina Chelaru, **Gheorghe Grigoras**, Decision Making Strategies to Establish the Replacement Priority of Transformers from Electric Distribution Substations, 11th International Conference and Exposition on Electrical and Power Engineering (EPE2020), Iasi, Romania, 2020. DOI: 10.1109/EPE50722.2020.9305627 (IEEE Xplore)
36. Bogdan-Constantin Neagu, **Gheorghe Grigoraș**, An Efficient Metaheuristic Algorithm for Optimal Capacitor Allocation in Electric Distribution Networks, 2017 2nd International Conference on Software, Multimedia and Communication Engineering (SMCE 2017), Shanghai, China, pp. 327- 332, 2017 (EI Compendex)
37. Gheorghe Cârţină, **Gheorghe Grigoraș**, Determination of the Customers Consumption Categories using Clustering Techniques, 30th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO'07, Gliwice-Ustron, Polonia, pp. 231 – 232, 2007 (INSPEC).
38. **Gheorghe Grigoraş**, Gheorghe Cârţină, Virgil Alexandrescu, Analysis of the Electric Distribution Networks using Geographic Information System (GIS) Technology, 30th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO'07, Gliwice-Ustron, Polonia, pp. 111 – 112, 2007 (INSPEC).
39. Virgil Alexandrescu, Gheorghe Cârţină, **Gheorghe Grigoraş**, Software Application to Elaborate Static and Dynamic Load Models for Different Categories of Electric Consumers, 30th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO'07, 2007, Gliwice-Ustron, Polonia, pp. 225 – 226, 2007 (INSPEC).
40. Gheorghe Cârţină, **Gheorghe Grigoraș**, Elena-Crenguța Bobric, Using of the fuzzy logic for voltage control in distribution networks, 26th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO 2003, Gliwice-Niedzika, Poland, vol. 2, pp. 319 - 322, 2003, (INSPEC).
41. Gheorghe Cârţină, **Gheorghe Grigoraş**, Ovidiu Dumitrescu, Pavel Atanasoae, Optimal commitment of equipments in combined heat and power plants, 26th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO 2003, Gliwice-Niedzika, Poland, vol. 2, pp. 331 - 334, 2003, (INSPEC).
42. **Gheorghe Grigoraş**, Gheorghe Cârţină, Load flow analysis in distribution system using fuzzy powers correlation models, 26th International Conference on Fundamentals of Electrotechnics

and Circuit Theory, IC-SPETO 2003, Gliwice-Niedzika, Poland, vol. 2, pp. 323 - 326, 2003, (INSPEC).

43. Ovidiu Dumitrescu, Pavel Atanasoae, Gheorghe Cârţină, **Gheorghe Grigoraş**, The influence of equipments modernization on the consumption characteristics in power plants, 26th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO 2003, Gliwice-Niedzika, Poland, Vol. 2, pp. 327 - 330, 2003, (INSPEC).
44. Gheorghe Cârţină, **Gheorghe Grigoraş**, Fuzzy Modeling in Distribution Systems, 25th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO 2002, Gliwice-Ustron, Poland, vol. 2, pp. 249 - 252, 2002, (INSPEC).
45. **Gheorghe Grigoraş**, Gheorghe Cârţină, Time Influence in Reliability Factors Evaluation, 25th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO 2002, Gliwice-Ustron, Poland, vol. 2, pp. 353 - 356, 2002 (INSPEC).
46. Elena-Crenguța Bobric, Gheorghe Cârţină, **Gheorghe Grigoraș**, Fuzzy-Based Voltage/Reactive Power Control in Power Systems, 25th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO 2002, Gliwice-Ustron, Poland, vol.2, pp. 431 - 434, 2002 (INSPEC).

F3. Conferințe neidexate

1. Ștefania Loredana Gălbău, **Gheorghe Grigoraș**, Bogdan Neagu, Metodologie bazată pe algoritmi de invățare nesupravegheată pentru analiza calitatii tensiunii in rețelele electrice de distribuție, Simpozionul Național de Calitate a Energiei Electrice, Târgoviște, Romania, 10 – 12 decembrie, 2024.
2. Claudia Bondar, Bogdan Neagu, **Gheorghe Grigoraș**, Radu Porumb, Automatizarea retelelor electrice de distribuție pentru minimizarea întreruperilor neplanificate și creșterea calității energiei electrice, Simpozionul Național de Calitate a Energiei Electrice, Târgoviște, Romania, 10 – 12 decembrie, 2024.
3. Claudia Bondar, Bogdan Neagu, **Gheorghe Grigoraș**, Analiza implentării separatoarelor telecomandate asupra indicatorilor de performanță SAIDI și SAIFI, 10th edition of International Symposium “Brainstorming in Agora Students’ Scientific Circle“ BACStud 2024, Oradea, Romania.
4. Tofan Sebastian-Ionuț, **Gheorghe Grigoraș**, Bogdan Neagu, Estimarea producției de energie electrică a noilor prosumatori integrați în rețelele de joasa tensiune, 10th edition of International Symposium “Brainstorming in Agora Students’ Scientific Circle“ BACStud 2024, Oradea, Romania.
5. Asavei Nicolae, **Gheorghe Grigoraș**, Bogdan Neagu, Planificarea dezvoltării rețelelor electrice de distribuție de joasă tensiune în contextul tranziției de la conceptul “passive grids" către “active grids”, 10th edition of International Symposium “Brainstorming in Agora Students’ Scientific Circle“ BACStud 2024, Oradea, Romania.
6. Livadariu Răzvan, **Gheorghe Grigoraș**, Bogdan Neagu, Identifying Representative Milestones from State-of-The Art of Energy Management Solutions Based on IoT and Data Mining, 10th edition of International Symposium “Brainstorming in Agora Students’ Scientific Circle“ BACStud 2024, Oradea, Romania.
7. Maria Relea, Bogdan Neagu, **Gheorghe Grigoraș**, Metoda statistică bazată pe tehnicile de data mining pentru identificarea datelor aberante utilizate în stadiul de planificare al rețelelor de distribuție, 10th edition of International Symposium “Brainstorming in Agora Students’ Scientific Circle“ BACStud 2024, Oradea, Romania.
8. Todireanu Gheorghiță Andy, Bogdan Neagu, **Gheorghe Grigoraș**, Influența regimului deformat asupra pierderilor suplimentare de putere activă, 10th edition of Internacalctional Symposium “Brainstorming in Agora Students’ Scientific Circle“ BACStud 2024, Oradea, Romania.

9. Asavei Nicolae, Tofan Sebastian-Ionuț, **Gheorghe Grigoraș**, Bogdan Neagu, Estimation of Energy Production From Small-Scale Renewable Sources and Analysis of the Impact on Low-Voltage Distribution Networks, Simpozionul National INOV8ING, Tg. Mures, Romania, 15 decembrie, 2024.
10. Maria Relea, Gheorghiță-Andy Todireanu, Bogdan Neagu, **Gheorghe Grigoraș**, Consumption Management at the Residential Consumer Level Simpozionul National INOV8ING, Tg. Mures, Romania, 15 decembrie, 2024.
11. Asavei Nicolae, Dandea Vasilica, **Gheorghe Grigoraș**, Bogdan Neagu, Strategie de planificare a dezvoltării rețelelor electrice de distribuție în contextul integrării surselor locale de energie regenerabilă de mică putere, Simpozionul Științific Studențesc Internațional ELStudIS, Editia III-a, Iași Romania, 17 – 19 octombrie 2024.
12. Tofan Sebastian-Ionuț, Noroc Livia, **Gheorghe Grigoraș**, Bogdan Neagu, Analiză comparativă privind eficiența variantelor de montare a panourilor fotovoltaice la prosumatori din punct de vedere al producției de energie electrică, Simpozionul Științific Studențesc Internațional ELStudIS, Editia III-a, Iași Romania, 17 – 19 octombrie 2024.
13. Relea Maria, Claudia Bondar, Bogdan Neagu, **Gheorghe Grigoraș**, Identificarea datelor aberante provenite de la contoarele inteligente prinr-o metodă statistică bazată pe "Data Mining", Simpozionul Științific Studențesc Internațional ELStudIS, Editia III-a, Iași Romania, 17 – 19 octombrie 2024.
14. Gheorghiță-Andy Todireanu, Cosmin Despa, Bogdan Neagu, **Gheorghe Grigoraș**, Estimarea piederilor de putere în rețelele electrice de distrbuție de joasă tensiune poluate armonic Simpozionul Științific Studențesc Internațional ELStudIS, Editia III-a, Iași Romania, 17 – 19 octombrie 2024.
15. Nicolae Asavei, **Gheorghe Grigoras**, B.C. Neagu, Integrarea prosumatorilor în rețelele de distribuție de joasă tensiune. analiză și evaluarea impactului, 9th edition of International Symposium "Brainstorming in Agora Students' Scientific Circle" BACStud 2023, Oradea, Romania (5 puncte)
16. S. Munteanu, B.C. Neagu, **Gheorghe Grigoras**, Studiu de coexistență între liniile electrice aeriene și clădiri rezidențiale, 9th edition of International Symposium "Brainstorming in Agora Students' Scientific Circle" BACStud 2023, Oradea, Romania. (5 puncte)
17. Stefania Galbau, **Gheorghe Grigoras**, Voltage Quality Assessment in Microgrids Using Clusterig-Based Unsupervised Learning Techniques, 9th edition of International Symposium "Brainstorming in Agora Students' Scientific Circle" BACStud 2023, Oradea, Romania. (7,5 puncte)
18. Răzvan Livadariu, **Gheorghe Grigoras**, Methodology for identifying electricty consumption patterns of end users using data mining techniques, 9th edition of International Symposium "Brainstorming in Agora Students' Scientific Circle" BACStud 2023, Oradea, Romania. (7,5 puncte)
19. R. Livadariu, **Gheorghe Grigoras**, Data Mining in Advanced Metering Infrastructure to Identify the Consumption Patterns and Behaviors of the Residential End-Users, 6th International Conference of the Doctoral Scool, Iasi, Romania, 17 – 19 mai 2023. (7.5 puncte)
20. S. Galbau, **Gheorghe Grigoraș**, A clustering-based efficient framework for voltage quality pattern recognition in microgids, 6th International Conference of the Doctoral Scool, Iasi, Romania, 17-19 mai, 2023 (7,5 puncte)
21. Nicolae Asavei, **Gheorghe Grigoras**, Bogdan Neagu, Metodologie de estimare a impactului creșterii numărului de prosumatori în rețelele electrice de distribuție de joasă tensiune, Simpozionul National EMING, Resita, Romania, 18 – 20 mai, 2023. (5 puncte)
22. Mihail Cristea, Bogdan Neagu, **Gheorghe Grigoras**, Influența integrării sistemelor fotovoltaice asupra regimurilor de funcționare ale rețelelor electrice de distribuție de medie tensiune, Simpozionul National EMING, Resita, Romania, 18 – 20 mai, 2023. (5 puncte)

23. Nicolae Asavei, **Gheorghe Grigoras**, Bogdan Neagu, O analiză critică cu privire la impactul prosumatorilor asupra rețelelor de distribuție electrică de joasă tensiune bazată pe o platformă de simulare a regimurilor permanente de funcționare, Simpozionul National INOV8ING, Tg. Mures, Romania, 15 decembrie, 2023. (5 puncte)
24. Paul Ploscariu, Bogdan Neagu, **Gheorghe Grigoras**, O nouă abordare pentru studiile de coexistență între liniile electrice aeriene și clădiri rezidențiale, Simpozionul National INOV8ING, Tg. Mures, Romania, 15 decembrie, 2023. (5 puncte)
25. Revenco Teodora, B.C. Neagu, **Gheorghe Grigoras**, Analiza regimurilor de funcționare ale rețelelor electrice de distribuție de joasă tensiune în contextul integrării vehiculelor electrice, 8th edition of International Symposium "Brainstorming in Agora Students' Scientific Circle" BACStud 2022.
26. Vlad Hustiuc, **Gheorghe Grigoras**, B.C. Neagu, Extragerea informațiilor din măsurătorile de sarcină și tensiune folosind tehnici de clustering pentru evaluarea calității tensiunii în rețelele electrice de distribuție, 8th edition of International Symposium "Brainstorming in Agora Students' Scientific Circle" BACStud 2022.
27. Livadariu Bogdan-Pavel, **Gheorghe Grigoras**, B.C. Neagu, Aplicarea modelelor de regresie la studierea trendului indicatorilor de calitate a energiei electrice în rețelele de distribuție din România, 8th edition of International Symposium "Brainstorming in Agora Students' Scientific Circle" BACStud 2022.
28. Vasilica Dandea, **Gheorghe Grigoras**, Scenarios-Based Analysis to Evaluate Impact of Prosumers on the Operation of the Low Voltage Electric Distribution Networks, 5th International Conference of the Doctoral Scool, Iasi, Romania, 2022.
29. Razvan Gârbea, **Gheorghe Grigoraș**, Discovering the Patterns of Operating Regimes by K-Means Clustering-based Data Mining for Hydropower Plants, 5th International Conference of the Doctoral Scool, Iasi, Romania, 2022.
30. Bogdan Livadariu, **Gheorghe Grigoras**, An Optimization-Based Analysis to Evaluate the Impact of the Wind Farms on the Operation of the Electric Networks, 5th International Conference of the Doctoral Scool, Iasi, Romania, 2022.
31. Postolati V. M., Berzan V. P., Bykova E. V., Boșneaga V. A., Suslov V. M., **Gheorghe Grigoraș**, Mihai Gavrilaș, Marcel Istrate, Posibilitățile de utilizare a dispozitivelor de reglare a fazei pentru conectarea la operare paralelă a sistemelor electroenergetice din Moldova și România prin liniile de 110 kV, WEC Central & Eastern Europe Regional Energy Forum – FOREN 2018, Costinești, Romania, 2018.
32. **Gheorghe Grigoraș**, Cecilia Bărbulescu, Decision making under uncertainty in development planning of power grid, International Conference on Condition Monitoring, Diagnosis and Maintenance 2015, CMDM 2015 (3rd edition), București, Romania, 2015.
33. **Gheorghe Grigoraș**, Florina Scarlatache, Posibilități privind estimarea pierderilor de energie în rețelele electrice de distribuție folosind tehnici fuzzy, Simpozionul Național "Sisteme Inteligente în Electroenergetică" – SIE 2014, Galați, Romania, 2014.
34. Cecilia Bărbulescu, **Gheorghe Grigoraș**, Florina Scarlatache, Analysis of the Electricity Generation Potential by Renewable Source in Romanian Power System, WEC Central & Eastern Europe Regional Energy Forum – FOREN 2014, București, Romania, 2014.
35. **Gheorghe Grigoraș**, Cecilia Bărbulescu, Florina Scarlatache, A Data Mining Techniques Based Approach for Identify of Electricity Generation Potential by Renewable Sources in Romanian Power System, CIGRÉ Regional South-East European Conference RSEEC 2014 (2nd edition), Timisoara, Romania, 2014.
36. **Gheorghe Grigoraș**, Elena Crenguța Bobric, Clustering Based Approach for Customers' Classification from Electrical Distribution Systems, 6th International Conference on Energy and Environment, CIEM 2013, București, Romania, 2013.

37. Florina Scarlatache, Cecilia Barbulescu, **Gheorghe Grigoraș**, Gheorghe Cârțină, Influence of Coordination between Distribution Generation Sources on Optimal Voltage Control, International Conference on Condition Monitoring, Diagnosis and Maintenance - CMDM 2013, București, Romania, 2013.
38. **Gheorghe Grigoraș**, Cecilia Bărbulescu, Florina Scarlatache, Clustering-based algorithm for optimal selection of pilot nodes in secondary voltage control, International Conference on Condition Monitoring, Diagnosis and Maintenance - CMDM 2013, București, Romania, 2013.
39. **Gheorghe Grigoraș**, Cecilia Bărbulescu, Gheorghe Cârţină, Florina Rotaru, Power Flow Analysis in Power Systems Using Fuzzy Correlation Models for the Nodal Loads, WEC Central & Eastern Europe Energy Forum- FOREN 2012 , Neptun, România, 2012.
40. Cecilia Bărbulescu, Gheorghe Grigoraș, Gheorghe Cârțină, An Approach based on Zoning of Electric Transmission System for Human Errors Monitoring, WEC Central & Eastern Europe Energy Forum – FOREN, Neptun, România, 2012.
41. Gheorghe Grigoraș, Cecilia Bărbulescu, Clustering-based algorithm in power system partitioning, CIGRÉ Regional South-East European Conference, RSEEC 2012, Sibiu, Romania, 2012.
42. Florina Scarlatache, Gheorghe Grigoraș, Gheorghe Cârțină, Algoritm de amplasare și dimensionare optimă a surselor de generare distribuită bazat pe tehnici de clustering, Simpozion Național "Sisteme inteligente în Electroenergetică" (SIE), Galati, Romania, 2012.
43. Daniela Comănescu, Gheorghe Grigoraș, Florina Scarlatache, Efficient Operation Of The Hydropower Cascade Under Active Networks, CIGRÉ Regional South-East European Conference, RSEEC 2012, Sibiu, Romania, 2012.
44. Gheorghe Grigoraș, Cecilia Barbulescu, Florina Rotaru, Gheorghe Cartina, Using of the Fuzzy Correlation in Load Estimation of Power Stations, 8th International Conference on Industrial Power Engineering, Bacău, Romania, pp. 31 – 35, 2011.
45. Florina Rotaru, Gheorghe Grigoraș, Daniela Comanescu, Gheorghe Cartina, Economic Efficiency of the Solutions for the Renewals/Reinforcements on Distribution Networks, 8th International Conference on Industrial Power Engineering, Bacău, Romania, pp. 103 – 108, 2011.
46. Gheorghe Grigoraș, Cecilia Bărbulescu, Gheorghe Cartina, Power flow analysis in electric networks under conditions of missing data, International Conference on Condition Monitoring, Diagnosis and Maintenance, București, Romania, September 19-23, 2011.
47. Daniela Comănescu, Gheorghe Grigoraș, Florina Rotaru, Creșterea aportului surselor de generare distribuită în SEN şi impactul asupra funcţionării centralelor hidroelectrice, Conferinţa Naţională şi Expoziţia de Energetică, Sinaia, 26-28 Octombrie, 2011.
48. Cecilia Bărbulescu, Gheorghe Grigoraș, Gheorghe Cârţină, Elena-Crenguţa Bobric, Analysis of Accidental Events in Power Transmission Grids by Clustering Techniques, WEC Central & Eastern Europe Energy Forum – FOREN, Neptun, România, 2010.
49. Daniela Comanescu, Constantin Sarsaniuc, Gheorghe Cârţină, Gheorghe Grigoraș, Soluţii de alegere a transformatoarelor. Modalităţi de Reducere a Consumurilor în centralele hidroelectrice, WEC Central & Eastern Europe Energy Forum – FOREN, Neptun, România, 2010.
50. Gheorghe Grigoraș, Gheorghe Cârţină, Elena- Crenguța Bobric, Optimal Placement of Phasor Measurements Units in Power Systems, Simpozionul International de Sisteme Inteligente in Electroenergetica, SIE'10, Galati, Romania, 2010.
51. Florina Rotaru, Gheorghe Grigoraș, Gheorghe Cârţină, Implementing a Development Strategy of Electric Distribution Networks, Simpozionul International de Sisteme Inteligente in Electroenergetica, SIE'10, Galati, Romania, 2010.
52. Cecilia Bărbulescu, Gheorghe Grigoraș, Gheorghe Cârţină, A New Approach Regarding to Analysis of Accidental Events in Electrical Transmission Systems, Simpozionul International de Sisteme Inteligente in Electroenergetica, SIE'10, Galati, Romania, 2010.

53. Gheorghe Grigoraş, Gheorghe Cârţină, Elena-Crenguța Bobric, Comparison of Methods for Filling Missing Data, Proc. of the 32th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO'09, Gliwice-Ustron, Polonia, 2009.
54. Gheorghe Cârţină, Gheorghe Grigoraş, Elena Crenguța Bobric, Smart Grid Challenges in Distribution Systems, Proc. of the 32th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO'09, Gliwice-Ustron, Polonia, 2009.
55. Costea, L.C., Gheorghe Cârţină, Gheorghe Grigoraş, Chosing of the Efficint Investment Solutions in Electrical Networks, Proc. of the 32th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO'09, Gliwice-Ustron, Polonia, 2009.
56. Gheorghe Grigoraş, Gheorghe Cârţină, Elena-Crenguța Bobric, Marginal Clearing Price Auction In Energy Markets, Conferința Internațională de Sisteme Electromecanice și Energetice (SIELMEN 2009), Chisinau, Republica Moldova, 2009.
57. Gheorghe Cârţină, Gheorghe Grigoraş, Energy losses evaluation using an improved fuzzy method, Conferința Internațională de Sisteme Electromecanice și Energetice (SIELMEN 2009), Chisinau, Republica Moldova, 2009.
58. Gheorghe Cârţină, Gheorghe Grigoraş, Bobric E.C., Challenges and Opportunities for Distribution Systems, International Conference on ENERGY and ENVIRONMENT (CIEM 2009), Bucuresti, Romania, 2009.
59. Gheorghe Grigoraş, Gheorghe Cârţină, Costea C., Dragoș Machidon, Strategies regarding operating voltage levels in distribution networks, International Conference on ENERGY and ENVIRONMENT (CIEM 2009), Bucuresti, Romania, 2009.
60. Daniela Comanescu, Gheorghe Cârţină, Gheorghe Grigoraş, Possibility for reducing intern consumption in hydro power plant, International Conference on ENERGY and ENVIRONMENT (CIEM 2009), Bucuresti, Romania, 2009.
61. Gheorghe Cârţină, Gheorghe Grigoraş, Elena-Crenguța Bobric, Power/Energy Saving Potential Evaluation in Distribution Networks by Fuzzy Techniques, International World Energy System Conference, WESC 2008, Iasi, Romania, 2008.
62. Gheorghe Cârţină, Gheorghe Grigoraş, Virgil Alexandrescu, The Clustering Techniques in the Determination of the Power Losses in Radial Networks, International World Energy System Conference, WESC 2008, Iasi, Romania, 2008.
63. Costea L.C., Gheorghe Cârţină, Gheorghe Grigoraş, Optimal Investments in Electric Networks Based on Economic Analysis, International World Energy System Conference, WESC 2008, Iasi, Romania, 2008.
64. Costea, L.C., Gheorghe Cârţină, Gheorghe Grigoraş, Optimal Decisions in the Replacement of Old Distribution Transformers by Efficient Transformers in Distribution Networks, International World Energy System Conference, WESC 2008, Iasi, Romania, 2008.
65. Virgil Alexandrescu, Gheorghe Cârţină, Gheorghe Grigoraş, Software Application to Create and Manage Static Load Models to Improve Electric Network Analysis, International World Energy System Conference, WESC 2008, Iasi, Romania, 2008.
66. Gheorghe Cârţină, Gheorghe Grigoraş., Strategies for Renewal of Electric Distribution Networks, Simpozionul International de Inteligenta Artificiala in Electroenergetica, SIAE'08, Galati, Romania, 2008.
67. Gheorghe Grigoraş, Gheorghe Cârţină, Elena-Crenguța Bobric, Solutions for missing Data Treatment in Electric Distribution Systems, Simpozionul International de Inteligenta Artificiala in Electroenergetica, SIAE'08, Galati, Romania, 2008.
68. Gheorghe Cârţină, Gheorghe Grigoraş, Optimal Reconfiguration of Distribution Networks in Uncertainty Conditions, International Conference on Energy – Environment, CIEM'07, Bucureşti, România, 2007.

69. Gheorghe Grigoraş, Gheorghe Cârţină, Virgil Alexandrescu, Geographic Information System (GIS) – An Integrated Technology for Distribution Systems, International Conference on Energy – Environment, CIEM'07, Bucureşti, România, 2007.
70. Gheorghe Cârţină, Gheorghe Grigoraş, Elena Crenguța Bobric, Power System Analysis using Matlab Toolboxes, Proc. of the 6th International Conference on Electromechanical and Power Systems, SIELMEN'07, Chişinău, Rep. Moldova, 2007.
71. Virgil Alexandrescu, Gheorghe Cârţină, Gheorghe Grigoraş, Integrated Software Application for the management of Databases Containing Static and Dynamic Models of the Aggregated Loads from Distribution Network and Their Use in Static and Dynamic Networks, International Conference on Electromechanical and Power Systems, SIELMEN'07, Chişinău, Rep. Moldova, 2007.
72. Gheorghe Cârţină, Gheorghe Grigoraş, Elena-Crenguța Bobric, Carmen Lupaşcu, Improving of Fuzzy Models by Clustering Techniques in Optimal Reconfiguration of the Distribution Networks, International World Energy System Conference, WESC 2006, Torino, Italia, 2006, CD –ROM, ISBN-10: 88-87380-51-1.
73. Gheorghe Grigoraş, Gheorghe Cârţină, Elena-Crenguța Bobric, Techniques for Treatment of the Missing Data in Load Profiles of the Electric Distribution Systems, International World Energy System Conference, WESC 2006, Torino, Italia, 2006, CD –ROM, ISBN-10: 88-87380-51-1.
74. Gheorghe Cârţină, Gheorghe Grigoraş, Elena-Crenguța Bobric, Carmen Lupaşcu, Improving Techniques for Electric Networks Control, 29th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO 2006, Gliwice-Niedzika, Polonia, vol. II, pp. 581 – 584, 2006.
75. Gheorghe Cârţină, Gheorghe Grigoraş, Carmen Lupaşcu, Using of the Clustering Techniques in GIS Documents Processing for Distribution Systems, WEC Regional Energy Forum – FOREN 2006, Neptun, Romania, 2006.
76. Gheorghe Cârţină, Gheorghe Grigoraş, Carmen Lupaşcu, Le Rôle du GIS Dans la Problèmatique de L'environnement, Colocviul Tehnic L'Amelioration Des Facteurs D'Environnement, Iași, Romania, pp. 17 – 22, 2006.
77. Gheorghe Cârţină, Gheorghe Grigoraş, Elena-Crenguța Bobric, Folosirea modelelor fuzzy a profilurilor de sarcină în supravegherea on-line a reglajului optimal tensiune-putere reactivă în reţelele electrice, Simpozionul Internaţional "Sisteme de Inteligenţă Artificială în Electroenergetică", SIAE06, Galaţi, Romania, pp. 36 – 43, 2006.
78. Gheorghe Cârţină, Yona Schweiter, Gheorghe Grigoraş, Tehnici de IA în conducerea optimală a centralelor electrice, Simpozionul Internaţional "Sisteme de Inteligenţă Artificială în Electroenergetică", SIAE06, Galaţi, Romania, pp. 31 – 35, 2006.
79. Gheorghe Grigoraş, Gheorghe Cârţină, Utilizarea tehnicilor fuzzy şi GIS în planificarea utilităţilor, Al III- lea Simpozion Internaţional "Sisteme de Inteligenţă Artificială în Electroenergetică", SIAE06, Galaţi, Romania, pp. 120 – 128, 2006.
80. Gheorghe Cârţină, Gheorghe Grigoraş, Elena-Crenguța Bobric, Improving Techniques of Fuzzy Models in Power Systems, 5th International Conference on Electromechanical and Power Systems, SIELMEN'05, Chişinău, Rep. Moldova, vol. 1, pp. 460 – 463, 2005.
81. Gheorghe Cârţină, Gheorghe Grigoraș, Virgil Alexandrescu, Pilot Pattern Choosing by Clustering and Fuzzy Techniques, Proc. of the International Conference Energy – Environment, CIEM'05, Bucureşti, România, CD, 2005.
82. Gheorghe Cârţină, Gheorghe Grigoraș, Pay as Bid versus Marginal Clearing Pricing, Proc. of the International Conference Energy – Environment, CIEM'05, Bucureşti, România, CD, 2005.
83. Bobric Elena-Crenguța, Gheorghe Cârţină, Gheorghe Grigoraş, Determination of Energy Losses in Medium and Low Voltage Networks, 5th International Conference on Electromechanical and Power Systems, SIELMEN'05, Chişinău, Rep. Moldova, vol. 1, pp. 450 – 453, 2005.

84. Bobric Elena-Crenguța, Gheorghe Cârţină, Gheorghe Grigoraş, Consumption Modeling for Low Voltage Networks, 5th International Conference on Electromechanical and Power Systems, SIELMEN'05, Chişinău, Rep. Moldova, vol. 1, pp. 454 – 457, 2005.
85. Gheorghe Grigoraş, Gheorghe Cârţină, Intervalele de încredere ale preţului marginal de închidere, International Conference Energy – Environment, CIEM'05, Bucureşti, România, CD, 2005.
86. Gheorghe Cârţină, Gheorghe Grigoraş, Power Flow Optimization using Powers Correlation Fuzzy Models, 27th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO 2004, Gliwice-Niedzika, Poland, vol. 2, pp. 273 - 276, 2004.
87. Gheorghe Cârţină, Gheorghe Grigoraş, Ovidiu Dumitrescu, Pavel Atanasoae, Energy Market Simulation with MatLab Programming, 27th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO 2004, Gliwice-Niedzika, Poland, vol. 1, pp. 187 – 190, 2004.
88. Gheorghe Cârţină, Gheorghe Grigoraş, Optimal Planning by Processing GIS Documents with MatLab, 27th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO 2004, Gliwice-Niedzika, Poland, vol. 1, pp. 183 - 186, 2004.
89. Ovidiu Dumitrescu, Pavel Atanasoae, Gheorghe Cârţină, Gheorghe Grigoraş, Eficiency and Reliability Improving of Combined Heat and Power Generation Units, 27th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO 2004, Gliwice-Niedzika, Poland, vol. 23, pp. 281 - 284, 2004.
90. Gheorghe Grigoraş, Gheorghe Cârţină, Alexandrescu V., Levels of Energy Losses in Distribution Networks, Proc. of the 27th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO 2004, Gliwice-Niedzika, Poland, vol. 2, pp. 277 - 280, 2004.
91. Gheorghe Cârţină, Virgil Alexandrescu, Gheorghe Grigoraş, Variables Correlations in Fuzzy Optimization Models, International World Energy System Conference, (WESC 2004) Oradea,
92. Gheorghe Grigoraş, Virgil Alexandrescu, Gheorghe Cârţină, Energy Losses Computation in Distribution Systems Using Fuzzy Techniques, International World Energy System Conference, (WESC 2004) Oradea, Romania, pp.302 – 305, 2004.
93. Gheorghe Cârţină, Virgil Alexandrescu, Gheorghe Grigoraş, Using of the GIS Techniques in Optimization of Local Distribution Systems, WEC Regional Energy Forum – FOREN 2004, Neptun, Romania, CD, 2004.
94. Gheorghe Cârţină, Virgil Alexandrescu, Gheorghe Grigoraş, Ioan Silvaş, Dumitru Federenciuc, Petru Burlacu, Tehnici IA în analiza contingenţelor în reţelele de 110 kV, Simpozionul Internaţional "Sisteme de Inteligenţă Artificială în Electroenergetică", SIAE04, Galaţi, Romania, pp. 56-60, 2004.
95. Gheorghe Cârţină, Virgil Alexandrescu, Gheorghe Grigoraş, Ioan Silvaş, Dumitru Federenciuc, Sorin Ivan, Tehnici fuzzy în modelarea consumului reţelelor de joasă tensiune, Simpozionul Internaţional "Sisteme de Inteligenţă Artificială în Electroenergetică", SIAE04, Galaţi, Romania, pp. 61-66, 2004.
96. Gheorghe Grigoraş, Virgil Alexandrescu, Gheorghe Cârţină, Folosirea tehnicilor fuzzy în estimarea pierderilor de energie în reţelele de distribuţie, , Simpozionul Internaţional "Sisteme de Inteligenţă Artificială în Electroenergetică", SIAE04, Galaţi, Romania, pp. 148-154, 2004.
97. Gheorghe Cârţină, Gheorghe Grigoraş, Determination of Load Profiles in Power System by Fuzzy Techniques, the 8th International Symposium on Automatic Control and Computer Science, SACCS 2004, Iaşi, Romania, CD, 2004.
98. Gheorghe Cârţină, Virgil Alexandrescu, Gheorghe Grigoraş, Software for competition in deregulated markets, International Conference Energy – Environment, CIEM'05, Bucureşti, România, vol. II, pp.5.49 – 5.54, 2003.

99. Gheorghe Cârţină, Virgil Alexandrescu, Gheorghe Grigoraş, Integrating and processing GIS documents with Matlab programming in networks planning, International Conference Energy – Environment, CIEM'05, Bucureşti, România,, vol. I, pp.1.34 – 1.40, 2003.
100. Gheorghe Cârţină, Gheorghe Grigoraş, Coculeana Popa, Nicolae Brumă, Evaluarea influenţei factorului timp asupra siguranţei în funcţionare a echipamentelor electrice folosind tehnicile fuzzy, Simpozionul National "Siguranţa în funcţionare a sistemului energetic", Oradea, Romania, pp. 204 – 208, 2003.
101. Cârţină Gheorghe, Grigoraş Gheorghe, Brumă Nicolae, Coculeana Popa, Folosirea tehnicilor fuzzy în cadrul modelelor de fiabilitate, Simpozionul National "Siguranţa în funcţionare a sistemului energetic", Simpozionul National "Siguranţa în funcţionare a sistemului energetic", Oradea, Romania, pp. 209 – 214, 2003.
102. Gheorghe Cârţină, Gheorghe Grigoraş, Reliability Indexes Evaluation in Uncertainty Conditions, the 2nd European Conference on Intelligent Systems & Technologies, ECIT'2002, Iasi, Romania, CD, 2002, ISBN: 973-8075-20-3.
103. Gheorghe Cârţină, Gheorghe Grigoraş, Unit Commitment Optimization by Interior-Point Method, the 2nd European Conference on Intelligent Systems & Technologies, ECIT'2002, Iasi, Romania, CD, 2002, ISBN: 973-8075-20-3.
104. Gheorghe Cârţină, Virgil Alexandrescu, Eugen Bîrlădeanu, Gheorghe Grigoraş, Mariana Moshe, Power Distribution System Reliability Planning Using Fuzzy Logic, 24th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO 2001, Gliwice-Ustron, Poland, vol. 2, pp. 353 - 356, 2001.
105. Virgil Alexandrescu, Gheorghe Cârţină, Eugen Bîrlădeanu, Gheorghe Grigoraş, On the Induction Motor Modeling in Static Analysis of the Electric Power Systems Voltage Stability, 24th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO 2001, Gliwice-Ustron, Poland, vol. 2, pp. 345 - 348, 2001, ISBN: 83-85940-23-5.
106. Eugen Bîrlădeanu, Gheorghe Cârţină, Virgil Alexandrescu, Gheorghe Grigoraş, About the Solutions for Operation Security Enhancement of The Power Systems Using the Fuzzy Description of Load, 24th International Conference on Fundamentals of Electrotechnics and Circuit Theory, IC-SPETO 2001, Gliwice-Ustron, Poland, vol.2, pp. 357 - 360, 2001, ISBN: 83-85940-23-5.
107. Gheorghe Cârţină, Gheorghe Grigoraş, Considerarea factorului timp în determinarea indicatorilor de fiabilitate, a-III-a Conf. Intern. de Sisteme Electromecanice şi Energetice (SIELMEN 2001), Chişinău, Rep. Moldova, vol.II, pp. 157 - 160, 2001, ISBN: 9975-9638-7-0 .
108. Gheorghe Cârţină, Gheorghe Grigoraş, Using Fuzzy Reliability Indices in Planning of the Distribution Networks, 7th Intern. Symposium on Automatic Control and Computer Science, SACCS 2001, Iaşi, Romania, CD, 2001.
109. Gheorghe Cârţină, Gheorghe Grigoraş, Estimation of Diversity Factors by Fuzzy Techniques, 7th Intern. Symposium on Automatic Control and Computer Science, SACCS 2001, Iaşi, Romania, CD, 2001.
110. Virgil Alexandrescu, Gheorghe Cârtină, Eugen Bîrladeanu, Claudia Bonciu, Gheorghe Grigoraş, A new view-point regarding the static caracteristics study of the induction motors, 23nd International Conference on Fundamentals of Electrotechnics and Circuit Theory, SPETO 2000, Gliwice-Ustron, Poland, pp. 325-328, 2000.
111. Gheorghe Cârtină, Virgil Alexandrescu, Gheorghe Grigoraş, Mariana Moshe, Peak load estimation in distribution networks, 23nd International Conference on Fundamentals of Electrotechnics and Circuit Theory, SPETO 2000, Gliwice-Ustron, Poland, pp. 423-426, 2000.
112. Virgil Alexandrescu, Eugen Bîrlădeanu, Gheorghe Cârţină, Claudia Bonciu, Gheorghe Grigoraş, Alocarea costurilor serviciului de transport de energie electrică pe noduri de reţea, Conferinţa Naţională de Energetică, CNE-M-2000, Chişinău, Rep. Moldova, vol.I, pp. 153-157, 2000, ISBN: 9975-63-024-3.

113. Eugen Bîrlădeanu, Gheorghe Cârţină, Virgil Alexandrescu, Claudia Bonciu, Gheorghe Grigoraş, Considerarea costurilor marginale în tariful de transport al energiei electrice, Conferinţa Naţională de Energetică, CNE-M-2000, Chişinău, Rep. Moldova, pp. 149-152, 2000, ISBN: 9975-63-024-3.
114. Claudia Bonciu, Gheorghe Cârtina, Virgil Alexandrescu, Gheorghe Grigoraș, Mihai Caba, Abordari multicriteriale in modernizarea liniilor de MT, Simpozionul National de Retele Electrice, 25, Iasi, Romania, vol.II, pp. 305-309, 2000.
115. Virgil Alexandrescu, Gheorghe Cârtină, Eugen Bîrladeanu, Cludia Bonciu, Gheorghe Grigoraș, Ioan Ciutea, Coculeana Popa, Tehnici fuzzy in analiza retelelor electrice de distributie de medie tensiune, Simpozion National de Retele Electrice, 25 – 26 Mai 2000, Iasi, Romania, Vol.II, pp.284-289.
116. Gheorghe Cârţină, Virgil Alexandrescu, Eugen Bîrlădeanu, Gheorghe Grigoraş, Mariana Moise, Optimizarea multicriterială a deciziilor privind lucrările de modernizare in energetică, Sesiunea jubiliara a Facultăţii de Energetică, UTB, vol.I, pp.25-30, 2000.

G. Cereri de brevet.

1. Grigoraș G., Ivanov O., Neagu B.C., Gavrilaș M., Scarlatache Fl., Platformă software de management și control integrat al consumurilor de energie electrică și gaze naturale în scopul creșterii eficienței energetice la întreprinderile mici și mijlocii, A/00922-13.11.2017 (cerere brevet).
2. Grigoraș G., Ivanov O., Neagu B.C., Scarlatache Fl., Gavrilaș M., Platforma software de asistare a deciziilor în proiectarea ecologică optimă a instalațiilor electrice cu producere si stocare locală a energiei în scopul creșterii eficienței energetice la toate categoriile de consumatori, A/00923-21.11.2018 (cerere brevet).

H. Contracte de cercetare/granturi.

1. Granturi interne – PUBLICAŢII, Universitatea Tehnică „Gheorghe Asachi”din Iaşi“, contract nr. GI /P19 /2021 (Director)
2. Platforma software de asistare a deciziilor în proiectarea ecologică optimă a instalațiilor electrice cu producere si stocare locală a energiei, în contextul creșterii eficienței energetice, Grant PN-III-P2-2.1-CI-2018-1128, Contract 192CI/25.07.2018, Beneficiar: UEFISCDI, Valoare: 50.000 lei, 2018, Grigoraș G. (director)
3. Platforma de management si control integrat al fluxurilor purtatorilor de energie in scopul cresterii eficientei energetice la IMM-uri, Grant PN-III-P2-2.1-CI-2017-0190, Contract 105CI/25.07.2017, Beneficiar: UEFISCDI, Valoare: 50.000 lei, 2017, Grigoraș G. (director)
4. Platformă software inovativa pentru managementul energetic al consumatorilor finali in vederea cresterii eficientei energetice și a reducerii emisiilor de carbon, Grant PN-III-P2-2.1-CI-2018-1017, Contract nr. 174CI din 04/07/2018, Beneficiar: UEFISCDI, Valoare: valoare 49990 lei, Grigoraș G. (membru)
5. Management inteligent a centralelor electrice virtuale cu ajutorul platformelor software bazate pe inteligenta artificiala, in contextul competitivitatii energetice Europene, Grant PN-III-P2-2.1-CI-2018-1011, Contract nr. 173CI din 02/07/2018, Valoare: 49750 lei, Grigoraș G. (membru)
6. Prognoza de consum propriu tehnologic pentru reteaua de energie electrica din zona de activitate a Delgaz Grid. S.A. pentru anul 2018., Contract nr. 3105P / 14.02.2018; beneficiar: Delgaz Grid. S.A ,Valoare:9981 euro, Grigoraș G. (membru)
7. Sistem integrat pentru optimizarea consumului de energie a grupurilor de pompare din cadrul sistemelor de irigații, Grant PN-III-P2-2.1-CI-2017-0169, Contract 17CI/25.07.2017, Valoare: 50.000 lei, 2017, Grigoraș G. (membru)

8. Instrument software pentru gestiunea tranzactiilor pe piata de energie electrica, Grant PN-III-P2-2.1-CI-2017-0328, Contract 45CI/25.07.2017, Valoare: 50.000 lei, 2017, Grigoraș G. (membru)
9. Prognoza de consum propriu tehnologic pentru reteaua de energie electrica din zona de activitate a Delgaz Grid. S.A. pentru anul 2018, beneficiar: Delgaz Grid. S.A ,Valoare: 44888 lei, Grigoraș G. (membru)
10. Prognoza de consum propriu tehnologic pentru reaua de energie electrica din zona de activitate a Delgaz Grid. S.A., Contract nr. 448P / 15.03.2017; beneficiar: Delgaz Grid. S.A ,Valoare: 44888 lei, Grigoraș G. (membru)
11. Elaborare studiu - Servicii de consultanță de specialitate în proiectul EON Moldova Distribuție de reducere a pierderilor tehnice în rețelele de distribuție a energiei electrice pentru perioada 2016; Contract nr. 684P / 21.04.2016; beneficiar: EON Distribuție Romania S.A., Valoare: 60000 lei, Grigoraș G. (membru)
12. Servicii de consultanță de specialitate în proiectul EON Moldova Distribuție de reducere a pierderilor tehnice în rețelele de distribuție, Contract nr. 1398P / 08.10.2014, beneficiar: E.ON Moldova Distribuţie S.A., Valoare: 194000 lei, Grigoraș G. (membru)
13. Studiu privind verificarea schemelor de protecţie împotriva loviturilor directe de trăsnet în cazul staţiei 220/110/20 kV Munteni. Analiză comparată a metodei normate şi a metodei electrogeometrice, Contract nr. 8795P/17.05.2013. Beneficiar: CN Transelectrica SA, Sucursala de Transport Bacău, Valoare: 70680 lei, Grigoraș G. (membru)
14. Dezvoltarea platformei de cercetare pentru energie eficientă și durabilă – ENERED, Grant 911/ SMIS-CSNR 13987, Contract de finanţare: 430/21.12.2012, 2012 – 2106, Valoare: 51031879 lei, Grigoraș G. (membru)
15. Studiu de determinare a consumului propriu tehnologic în rețelele de joasă tensiune aferente jud. Bacău, aparținând E.ON Moldova Distribuție S.A, Contract de cercetare nr. 3564P / 01.11.2011, 2011, beneficiar: E.ON Moldova Distribuţie S.A, Valoare: 50000 lei, Grigoraș G. (membru)
16. Sistem inteligent de predictie si control al congestiilor in retelele de transport si distributie la inalta tensiune, Grant PNCDI II – Parteneriate, contract nr. 22126 / 01.10.2008, 2008, beneficiar: CNCSIS,Valoare: 319859 lei, Grigoraș G. (membru)
17. Tehnici de Inteligență artificială și modele noi pentru dezvoltarea studiilor de sarcină în scopul utilizării eficiente a energiei electrice în condițiile impuse de funcționarea pieței de energie electrică, Grant CNCSIS tip A, cod 241, tema 13 / 2006, contract nr. 63GR/19.05.2006 si tema 26 / 2007, contract nr. GR80/23.05.2007, 2006, beneficiar: CNCSIS, Valoare: 90430 lei, Grigoraș G. (membru)
18. Amplasarea surselor de putere în reţelele de distribuţie de 110 kV şi MT ale S.C. E.ON Moldova Distribuţie S.A. după criteriul pierderilor minime de energie şi al apropierii surselor de consumator şi studio privind compensarea şi reglarea puterii reactive în scopul optimizării nivelului de tensiune în reţelele de 110 kV ale S.C. E.ON Moldova Distribuţie S.A, Contract de cerectare nr. 7405 P / 26.10.2007, 2007, beneficiar: E.ON Moldova Distribuţie S.A, Valoare: 145440 lei, Grigoraș G. (membru)
19. Utilizarea tehnicilor de inteligenţă artificială în scopul creşterii performanţelor reţelelor de transport ale energiei electrice, Contract de cerectare nr. 1578P/2003, 2003, beneficiar: Transelectrica SA –ST Bacău, Valoare: 5700 lei, Grigoraș G. (membru)
20. Produs soft pentru planificarea şi analiza reţelelor electrice de distribuţie. Contract de cerectare nr. 967P/2002, 2002, beneficiar: SC. FDFEE Electrica Moldova S.A. Sucursala Iaşi, Valoare: 5000 lei, Grigoraș G. (membru)
21. Model multiobiectiv de optimizare a planificarii retelelor electrice de distributie prin tehnici fuzzy, Contract de cerectare nr. 562P/2000, 2000, beneficiar: SC. FDFEE Electrica Moldova S.A. Sucursala Iaşi, Valoare: 5000 lei, Grigoraș G. (membru)

22. Alocarea costurilor serviciilor de transport pe noduri de retea tinind seama de cerintele si restrictiile specifice retelelor de transport din tara noastra, Contract de cercetare nr. 889P/2000, 2000, beneficiar: STD Bacau, Valoare: 4000 lei, Grigoraș G. (membru)
23. Analiza contingentelor din retelele 400/220/110 kV din zona STD Bacau in vederea optimizarii programului de retrageri din exploatare. Contract de cerectare nr. 890P/2000, 2000, beneficiar: STD Bacau, Valoare: 5000 lei, Grigoraș G. (membru)
24. Calcule utilizind tehnici fuzzy in reteaua de 110 kV a SDEE Galati; vizind simularea sarcinii; calculul regimurilor; optimizarea functionarii retelei. Contract de cerectare nr. 853P/2000, 2000, beneficiar: SDEE Galați, Valoare: 4000 lei, Grigoraș G. (membru)

I. Premii, distincţii.

1. Premiu CNCSIS prin Programul de finanţare > Planul Naţional PN II (2007 - 2013) > RESURSE UMANE > Premierea rezultatelor cercetării, in 2009 pentru lucrarea Clustering Techniques in Load Profile Analyze for Distribution Stations, publicată în jurnalul internaţional indexat ISI Journal of Advances in Electrical and Computer Engineering. http://www.cncsis.ro/articole/1941/Etapa-I_2009.html
2. Premiu CNCSIS prin Programul de finanţare > Planul Naţional PN II (2007 - 2013) > RESURSE UMANE > Premierea rezultatelor cercetării, in 2012 pentru lucrarea Two-stage distributed generation optimal sizing with clustering-based node selection, publicată în jurnalul internaţional indexat ISI International Journal of Electrical Power and Energy Systems.
3. Premiu CNCSIS prin Programul de finanţare > Planul Naţional PN II (2007 - 2013) > RESURSE UMANE > Premierea rezultatelor cercetării, in 2013 pentru lucrarea Human errors monitoring in electrical transmission networks based on a partitioning algorithm publicată în jurnalul internaţional indexat ISI International Journal of Electrical Power and Energy Systems.
4. Premiu CNCSIS prin Programul de finanţare > Planul Naţional PN II (2007 - 2013) > RESURSE UMANE > Premierea rezultatelor cercetării, in 2015 pentru lucrarea An assessment of the renewable energy potential using a clusteringbased data mining method. Case study in Romania publicată în jurnalul internaţional indexat ISI ENERGY,
5. Premiu UEFISCDI prin programul Planul National de Cercetare, Dezvoltare si Inovare pentru perioada 2015-2020, PNCDI III, Programul Dezvoltarea sistemului national de cercetare-dezvoltare, Subprogramul 1.1. – Resurse Umane, Premierea rezultatelor cercetarii – articole, in anul 2019 pentru lucrarea Minimization of reliability indices and cost of power distribution systems in urban areas using an efficient hybrid meta-heuristic algorithm, publicata in jurnalul SOFT COMPUTING,
6. Premiu UEFISCDI prin programul Planul National de Cercetare, Dezvoltare si Inovare pentru perioada 2015-2020, PNCDI III, Programul Dezvoltarea sistemului national de cercetare-dezvoltare, Subprogramul 1.1. – Resurse Umane, Premierea rezultatelor cercetarii – articole, in anul 2020 pentru lucrarea A Novel Algorithm with Multiple Consumer Demand Response Priorities in Residential Unbalanced LV Electricity Distribution Networks publicata in jurnalul MATHEMATICS
7. Premiu UEFISCDI prin programul Planul National de Cercetare, Dezvoltare si Inovare pentru perioada 2015-2020, PNCDI III, Programul Dezvoltarea sistemului national de cercetare-dezvoltare, Subprogramul 1.1. – Resurse Umane, Premierea rezultatelor cercetarii – articole, in anul 2020 pentru lucrarea An Advanced Decision Support Platform in Energy Management to Increase Energy Efficiency for Small and Medium Enterprisespublicata in jurnalul APPLIED SCIENCES
8. Premiu UEFISCDI prin programul Planul National de Cercetare, Dezvoltare si Inovare pentru perioada 2015-2020, PNCDI III, Programul Dezvoltarea sistemului national de cercetare-dezvoltare, Subprogramul 1.1. – Resurse Umane, Premierea rezultatelor cercetarii – articole, in

anul 2020 pentru lucrarea A New Vision on the Prosumers Energy Surplus Trading Considering Smart Peer-to-Peer Contracts publicata in jurnalul MATHEMATICS

9. Premiu UEFISCDI prin programul Planul National de Cercetare, Dezvoltare si Inovare pentru perioada 2015-2020, PNCDI III, Programul Dezvoltarea sistemului national de cercetare-dezvoltare, Subprogramul 1.1. – Resurse Umane, Premierea rezultatelor cercetarii – articole, in anul 2020 pentru lucrarea Optimal Phase Load Balancing in Low Voltage Distribution Networks Using a Smart Meter Data Based Algorithm, publicata in jurnalul MATHEMATICS
10. Premiu UEFISCDI prin programul Planul National de Cercetare, Dezvoltare si Inovare pentru perioada 2015-2020, PNCDI III, Programul Dezvoltarea sistemului national de cercetare-dezvoltare, Subprogramul 1.1. – Resurse Umane, Premierea rezultatelor cercetarii – articole, in anul 2021 pentru lucrarea New Market Model with Social and Commercial Tiers for Improved Prosumer Trading in Microgrids, publicata in jurnalul SUSTAINABILITY https://uefiscdi.gov.ro/resource-868117-precisi2021_lista-2_rezultate-eligibilitate-art-
11. Premiu UEFISCDI prin programul Planul National de Cercetare, Dezvoltare si Inovare pentru perioada 2015-2020, PNCDI III, Programul Dezvoltarea sistemului national de cercetare-dezvoltare, Subprogramul 1.1. – Resurse Umane, Premierea rezultatelor cercetarii – articole, in anul 2021 pentru lucrarea Optimization and estimation of reliability indices and cost of Power Distribution System of an urban area by a noble fuzzy hybrid algorithm, publicata in jurnalul APPLIED SOFT COMPUTING,
12. Premiu UEFISCDI prin programul Planul National de Cercetare, Dezvoltare si Inovare pentru perioada 2015-2020, PNCDI III, Programul Dezvoltarea sistemului national de cercetare-dezvoltare, Subprogramul 1.1. – Resurse Umane, Premierea rezultatelor cercetarii – articole, in anul 2021 pentru lucrarea Bi-Level Phase Load Balancing Methodology with Clustering-Based Consumers' Selection Criterion for Switching Device Placement in Low Voltage Distribution Networks, publicata in jurnalul MATHEMATICS
13. Premiul „TOP Reviewer 2019" decernat de Publons (Web of Science Group) pentru clasarea in top 1% mondial al numarului de recenzii facute in anul 2019 in domeniul „Cross-Field" https://publons.com/awards/peer-review/2019/by-field/
14. Premiu pentru cea mai buna lucrare a sectiunii „Advanced Modelling, Control, and Optimization Methods in Power Hybrid Systems", 12th International Conference on Electronics, Computers and Artificial Intelligence, ECAI 2020, June 25 – June 27, 2020, București, Romania: Livia Noroc și Gheorghe Grigoras, Performance Assessment of the Hierarchical Clustering Methods in Classification of Electric Distribution Networks Considering Unbalance Degree
15. Premiul revistei "Electronics" (indexată WoS) pentru lucrarea prezentată în cadrul Workshop-lui MPDI, 13th International Conference on Electronics, Computers and Artificial Intelligence, ECAI 2021, 1 – 3 Julie, 2021, Pitesti, Romania: Vasilica Dandea, Gheorghe Grigoras, Bogdan-Constantin Neagu și Florina Scarlatache A Clustering-based Knowledge Extraction Methodology for Prosumers' Classification and Injected Power Profiles Grouping.

Data,
07.04.205

Prof. dr. ing. Gheorghe Grigoras

Lista de lucrări în domeniul de studii universitare de masterat Inginerie Energetică

Numele și prenumele:
Costică NIȚUCĂ

A. Teza de doctorat.

1. *"Probleme de captare a curentului electric de la linia de contact pentru vehicule acţionate electric"*, anul susţinerii – 2003, Universitatea Tehnică "Gheorghe Asachi" din Iaşi, Domeniul – Inginerie electrică, conducător doctorat, prof. dr. ing. dr. H.C. Lorin Cantemir.

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate

1. T. Stanciu, **C. Niţucă**, *Didactics of technical subjects,* Editura Tehnica-Info, Chişinău, R. Moldova, 2006, ISBN 9978-9975-910-13-2. (Format B5, 312 pagini, 40 r/pg., în limba engleză, 1,2).

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS.

1. **C. Niţucă,** I. Nucă, A. T. Pleșca, G. Chiriac, V. Cazac, M. Burduniuc, *Improving the cross-border public transportation using electric buses supplied with renewable energy,* Editura Tritonic Books, București, 2022, ISBN 978-606-749-584-3. (Format A5, 220 pagini, 32r/pg., în limba engleză).
2. **C. Niţucă**, *Circuite integrate analogice. Note de curs,* Editura Tehnopress, Iaşi, 2019, ISBN 978-606-687-397-0. (Format B5, 144 pagini, 30r/pg.)
3. **C. Niţucă**, *Tehnica muncii intelectuale,* Editura Tehnopress, Iaşi, 2016, ISBN 978-606-687-292-8. (Format B5,190 pagini, 37r/pg.)
4. **C. Niţucă**, *Alimentarea şi captarea energiei electrice în tracţiunea feroviară,* Editura Performantica, Iaşi, 2009, ISBN 978-973-730-628-9. (Format B5, 260 pagini, 40r/pg.)
5. L. Cantemir, **C. Niţucă**, V. Dulgheru, Maria I. Carcea, Mariana N. Iftimie, *Iniţiere în creativitate tehnică, Vol. I,* Editura Tehnica Info, Chişinău, 2008, ISBN 978-9975-63-066-5. (Format B5, 278 pagini, 37r/pg.)
6. **C. Niţucă**, T. Stanciu, *Didactica disciplinelor tehnice,* Editura Performantica, Iaşi, 2006, ISBN (10): 973-730-311-3, ISBN (13): 978-973-730-311-0. (Format B5, 306 pagini, 40r/pg.)

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

1. C. Niţucă, Bazele creației tehnice. Indrumar, Editura Tehnopress, Iaşi, 2019, ISBN 978-606-687-398-7. Format B5, 146 pagini, 31r/pg)
2. Elena Tiron (coord), Educaţia centrată pe elev/student. Îndrumar, C. Niţucă (Coordonator capitol - formator: Specialitate şi didactica specialităţii centrată pe elev/student, pp. 47-117), Editura Performantica, Iaşi, 2012, ISBN 978-973-730-938-9. (Format B5, 70 pagini, 30r/pg.)
3. C. Niţucă, Maria I. Carcea, Caiet de practică pedagogică desfăşurată, Editura Performantica, Iaşi, 2006, ISBN 973-730-185-4. (Format A4, 104 pagini, 41r/pg.).

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

1. **C. Niţucă,** *Bazele creaţiei tehnice. Suport de curs*, Format electronic/prezentări .ppt – 179 slide-uri; http://www.euedia.tuiasi.ro/wp-content/uploads/Documente_PDF_Staff/Costica_Nituca/BCT_Curs_Nituca.pdf

2. **C. Niţucă,** *Circuite integrate analogice. Suport de curs*, Format electronic/prezentări .ppt– 124 slide-uri; http://www.euedia.tuiasi.ro/wp-content/uploads/Documente_PDF_Staff/Costica_Nituca/CIA_Curs_Nituca.pdf
3. **C. Niţucă,** *Etică şi integritate. Suport de curs*, Format electronic/prezentări .ppt, – 125 slide-uri; http://www.euedia.tuiasi.ro/wp-content/uploads/Documente_PDF_Staff/Costica_Nituca/EI_Curs_Nituca.pdf

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

1. Niţucă, C., Chiriac, G., Gabor, G., Nucă, I., Cazac, V., Burduniuc, M. (2021). Geometry design and analysis of an electric bus for the interior thermal modelling. Journal of Energy Technology, 14(2), 47-55, (Indexat ProQuest).
2. A. Pleşca, C. Niţucă, G. Chiriac, Z. Liu, Y. Geng, PSpice simulations for single-phase rectifiers for testing DC fuse, Journal Energy Technology, JET Vol. 12, Issue 2, 2019. (Indexat ProQuest).
3. C. Niţucă, G. Chiriac, Pantograph driven with a linear induction motor with adaptive fuzzy control, Journal Energy Technology-JET, Volume 12, 2019, pp. 41-54, Issue 1, April 2019. (Indexat ProQuest).
4. C. Niţucă, G. Chiriac, D. Cuciureanu, Guoqiang Zhang, Dong Han, A. Pleşca, Numerical Analysis of a Real Photovoltaic Module with Various Parameters, Modelling and Simulation in Engineering (HINDAWI), Article Number: 7329014, https://doi.org/10.1155/2018/7329014, Published: 2018. Accession Number: WOS: 000429430400001, Document Type: Article. (Indexat WOS, Scopus).
5. C. Niţucă, D. Cuciureanu, G. Chiriac, Switched Reluctance Generator for Low Speed Wind Turbines with Counter-Rotary Drive, Journal: Indian Journal of Science and Technology, Volume 9, Issue 40, 2016, Article number 86733, Source Type: Journal, ISSN: 09746846, DOI: 10.17485/ijst/2016/v9i40/86733, Document Type: Article, Published 2016. (Indexat Scopus).
6. D. Cuciureanu, C. Niţucă, G. Chiriac, Force Estimation of an Asymmetrical Pantograph for Different Damper Positions, Journal: Indian Journal of Science and Technology, Volume 9, Issue 40, 2016, Article number 88878, Source Type: Journal, ISSN: 09746846, DOI: 10.17485/ijst/2016/v9i40/88878, Document Type: Article, Published 2016. (Indexat Scopus).
7. G. Chiriac, D. Cuciureanu, C. Niţucă, Critical Speed Impact over the Pantograph-Catenary System's Behaviour, Journal: Indian Journal of Science and Technology, Volume 9, Issue 40, 2016, Article number 86736, Source Type: Journal, ISSN: 09746846, DOI: 10.17485/ijst/2016/v9i40/86736, Document Type: Article, Published 2016. (Indexat Scopus).
8. C. Niţucă, Thermal analisys for a double sided linear induction motor, European Scientific Journal, March 2013, Edition vol.9, No.9, ISSN: 1857 – 7881 (Print) e - ISSN 1857- 7431, pp. 38-50, Published 2013. Document Type: Article. (Indexat EBSCO, PROQUEST, Copernicus, Urlich's).
9. G. Chiriac, C. Nituca, A. Plesca, Possibilities to supply the railway electric vehicles through the electric arc, Buletinul Institutului Politehnic din Iaşi, Tomul LIX (LXIII), Fasc. 4, Secţia Electrothenică. Energetică. Electronică. 2013. (Index Copernicus, Ulrich's).

G. Lucrări ştiinţifice publicate în reviste din străinătate.

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

1.C. Niţucă, T. Stanciu, Issuses regarding the quality of pedagogical practical training of students in field of manufacturing engineering, Academic Journal of Manufacturing Engineering, Vol. 2, No. 4/2004, pp. 48-52, Editura Politehnica, Timişoara - 2004, ISSN 1583-7904.

I. Lucrări ştiinţifice publicate în volumele conferinţelor.

1. A. Dragomir, M. Adam, G. Chiriac, D. Murgoci, A. Vîlcu, C. Niţucă, Infrared Monitoring of Low Voltage Switch Separator Contact Resistance, 14th INTERNATIONAL CONFERENCE ON ELECTROMECHANICAL AND ENERGY SYSTEMS, 12 – 13 October 2023, Chișinău, R. Moldova, Indexat WOS
2. G. Chiriac, D.D. Lucache, C. Niţucă and G. Gabor, Aspects Regarding the Heating of Electric Buses, 2021 International Conference on Electromechanical and Energy Systems (SIELMEN), 2021, pp. 481-486, doi: 10.1109/SIELMEN53755.2021.9600435, (Indexat IEEE Xplore, Scopus).
3. I. Nuca, Cazac V. Burduniuc M., Niţucă C., Chiriac G., Gabor G., A Hybrid Charging System Design for Electric Vehicles with Autonomous Power Source, 2021 International Conference on Electromechanical and Energy Systems (SIELMEN), 2021, pp. 487-490, doi: 10.1109/SIELMEN53755.2021.9600328. (Indexat IEEE Xplore, Scopus).
4. G. Gabor, A.T. Plesca, F.A. Rusu, C. Niţucă, Analysis of sliding electromagnetic coupling parameters in a PLC automation system, International Conference on Electromechanical and Energy Systems (SIELMEN), Location: Craiova, Romania, Date of Conference: 9-11 Oct. 2019, DOI: 10.1109/SIELMEN.2019.8905912, Electronic ISBN: 978-1-7281-4011-7, USB ISBN: 978-1-7281-4010-0, Print on Demand (PoD) ISBN: 978-1-7281-4012-4, (Indexat IEEE Xplore, Scopus).
5. G. Chiriac, C. Niţucă, D. Sticea, Electric Locomotive Laboratory Test Bench for Research and Educational Purposes, 8th International Conference on Modern Power Systems (MPS), 21-23 may, 2019, paper 172, Cluj Napoca, Romania, 2019. Publisher: IEEE (Institute of Electrical and Electronics Engineers). (Indexat IEEE Xplore).
6. C. Niţucă, G. Chiriac, C. I. Gaţu, D. Cuciureanu, I. Murgescu, Laboratory Off-Grid Photovoltaic System with Two Axes Orientation, 10th International Conference and Exposition on Electrical and Power Engineering (EPE), 2018, Location: Iasi, ROMANIA, Date: OCT 18-19, 2018, Book Series: International Conference and Exposition on Electrical and Power Engineering, Pages: 846-849, Published: 2018. Accession Number: WOS: 000458752200165, Document Type: Proceedings Paper. (Indexat WOS, Scopus, IEEE Xplore).
7. C. Niţucă, G. Chiriac, C. I. Gaţu, D. Cuciureanu, I. Murgescu, Design and Experimental Studies on Laboratory Photovoltaic Concept for Mechatronics System of Solar Electric Application, 10th International Conference and Exposition on Electrical and Power Engineering (EPE), 2018, Location: Iasi, ROMANIA, Date: OCT 18-19, 2018, Book Series: International Conference and Exposition on Electrical and Power Engineering, Pages: 932-936, Published: 2018. Accession Number: WOS: 000458752200182, Document Type: Proceedings Paper. (Indexat WOS, Scopus, IEEE Xplore).
8. C. Pintilie, A. Plești, G. Gabor, C. Niţucă, M. Adam, A. Dragomir, Thermal Analysis of Tankless Heating System Using PLC, 10th International Conference and Exposition on Electrical and Power Engineering (EPE), 2018, Location: Iasi, ROMANIA, Date: OCT 18-19, 2018, Book Series: International Conference and

Exposition on Electrical and Power Engineering, Pages: 454-457, Published: 2018. Accession Number: WOS: 000458752200086, Document Type: Proceedings Paper. (Indexat WOS, Scopus, IEEE Xplore).

9. C. Dumitrescu, A. Plesca, M. Adam, C. Niţucă, A. Dragomir, Methods for Reducing Energy Consumption, Optimization in Operational Data Centers, 10th International Conference and Exposition on Electrical and Power Engineering (EPE), 2018, Location: Iasi, ROMANIA, Date: OCT 18-19, 2018, Book Series: International Conference and Exposition on Electrical and Power Engineering, Pages: 483-486, Published: 2018. Accession Number: WOS: 000458752200092, Document Type: Proceedings Paper. (Indexat WOS, Scopus, IEEE Xplore).
10. C. Dumitrescu, A. Plesca, Laura Dumitrescu, M. Adam, C. Niţucă, A. Dragomir, Assessment of Data Center Energy Efficiency. Methods and Metrics, 10th International Conference and Exposition on Electrical and Power Engineering (EPE), 2018, Location: Iasi, ROMANIA, Date: OCT 18-19, 2018, Book Series: International Conference and Exposition on Electrical and Power Engineering, Pages: 487-492, Published: 2018. Accession Number: WOS: 000458752200093, Document Type: Proceedings Paper. (Indexat WOS, Scopus, IEEE Xplore).
11. G. Gabor, C. Pintilie, C. Dumitrescu, C. Niţucă, A. T. Plesca, Application of Industrial PROFIBUS-DP Protocol, 10th International Conference and Exposition on Electrical and Power Engineering (EPE), 2018, Location: Iasi, ROMANIA, Date: OCT 18-19, 2018, Book Series: International Conference and Exposition on Electrical and Power Engineering, Pages: 614-617, Published: 2018. Accession Number: WOS: 000458752200119, Document Type: Proceedings Paper. (Indexat WOS, Scopus, IEEE Xplore).
12. Șt. Patrichi, C. Niţucă, G. Chiriac, A. Pleșca, Z. Liu, Y. Geng, Simulating Thermal Phenomena Occurring in Fast Electric Fuses Used for Power Electronic Protection, 10th International Conference and Exposition on Electrical and Power Engineering (EPE), 2018, Location: Iasi, ROMANIA, Date: OCT 18-19, 2018, Book Series: International Conference and Exposition on Electrical and Power Engineering, Pages: 910-915, Published: 2018. Accession Number: WOS: 000458752200178, Document Type: Proceedings Paper. (Indexat WOS, Scopus, IEEE Xplore).
13. Șt. Patrichi, A. Pleșca, C. Niţucă, G. Chiriac, J. Wang, X. Huang, Thermal Modeling and Simulations for Fast Electric Fuses, 10th International Conference and Exposition on Electrical and Power Engineering (EPE), 2018, Location: Iasi, ROMANIA, Date: OCT 18-19, 2018, Book Series: International Conference and Exposition on Electrical and Power Engineering, Pages: 920-923, Published: 2018. Accession Number: WOS: 000458752200180, Document Type: Proceedings Paper. (Indexat WOS, Scopus, IEEE Xplore).
14. M. Cardasim, C. Niţucă, A. Pleşca, G. Chiriac, C. Dumitrescu, Reliability Parameters Estimation for a Railway Catenary Power System, 10th International Conference and Exposition on Electrical and Power Engineering (EPE), Location: Iasi, ROMANIA, Date: OCT 18-19, 2018, Book Series: International Conference and Exposition on Electrical and Power Engineering, Pages: 1051-1056, Published: 2018. Accession Number: WOS: 000458752200206, Document Type: Proceedings Paper. (Indexat WOS, Scopus, IEEE Xplore).
15. T. Stanciu, C. Niţucă, G. Chiriac, A. Pleşca, Coherence and Continuity in the Continuing Education of Electrical and Energetic Field Teachers from The Pre-University Environment, 10th International Conference and Exposition on Electrical

and Power Engineering (EPE), 2018, Location: Iasi, ROMANIA, Date: OCT 18-19, 2018, Book Series: International Conference and Exposition on Electrical and Power Engineering, Pages: 1057-1062, Published: 2018. Accession Number: WOS: 000458752200207, Document Type: Proceedings Paper. (Indexat WOS, Scopus, IEEE Xplore).

16. G. Chiriac, C. Niţucă, D. Cuciureanu, I. Murgescu, Analysis of Hot-Spots Effects on the Performances of a Photovoltaic System Used in Romania, Conference: 2017 International Conference on Electromechanical and Power Systems (SIELMEN), Location: Iasi, ROMANIA, Date: OCT 11-13, 2017, Pages: 239-244, Published: 2017. Accession Number: WOS: 000426906000047, Document Type: Proceedings Paper. (Indexat WOS, Scopus, IEEE Xplore).
17. Aparaschivei, G. Chiriac, C. Niţucă, T. A. Plesca, Analysis of a Cable Lug Failure for a Recycle Compressor Trip, Conference: 2017 International Conference on Electromechanical and Power Systems (SIELMEN), Location: Iasi, ROMANIA, Date: OCT 11-13, 2017, Pages: 403-406, Published: 2017. Accession Number: WOS: 000426906000076, Document Type: Proceedings Paper. (Indexat WOS, Scopus, IEEE Xplore).
18. G. Chiriac, C. Niţucă, M. Cardasim, Failures Analysis in the 25 kV/50 Hz Railway Substations, Conference: 2017 International Conference on Electromechanical and Power Systems (SIELMEN), Location: Iasi, ROMANIA, Date: OCT 11-13, 2017. Pages: 407-410, Published: 2017. Accession Number: WOS:000426906000077, Document Type: Proceedings Paper. (Indexat WOS, Scopus, IEEE Xplore).
19. D. Cuciureanu, C. Niţucă, G. Chiriac, D. Sticea, Analysis of the Photovoltaic Panels Currently in Use in Different Locations, Conference: 2017, 9th International Conference and Exposition on Electrical and Power Engineering (EPE), Location: Iasi, ROMANIA, Date: OCT 20-22, 2016, Pages: 888-893, Published: 2016. Accession Number: WOS: 000390706300174, Document Type: Proceedings Paper. (Indexat WOS, Scopus, IEEE Xplore).
20. C. Niţucă, Magdalena Iorga, The Importance of Training Trainers Using Education Soft and Technologies, Conference: 16th International Conference on Modern Technologies, Quality and Innovation, Location: Sinaia, ROMANIA, Date: MAY 24-26, 2012, Book Series: International Conference ModTech Proceedings, Pages: 681-684, Published: 2012. Accession Number: WOS: 000392261800171, Document Type: Proceedings Paper. (Indexat WOS).
21. C. Niţucă, T. Stanciu, Core competencies in a changing educational environment essential in the act of teaching technical and technological subjects, Conference: 5th International Conference on Manufacturing Science and Education on Creative Thinking in Engineering and Academic Education, Location: Sibiu, ROMANIA, Date: JUN 02-05, 2011, VOL II, Book Series: Proceedings of the International Conference on Manufacturing Science and Education, Pages: 47-50, Published: 2011. Accession Number: WOS: 000393733900012, Document Type: Proceedings Paper. (Indexat WOS).
22. C. Niţucă, T. Stanciu, Study case for teaching in a e-learning open source environment, Conference: 5th International Conference on Manufacturing Science and Education on Creative Thinking in Engineering and Academic Education, Location: Sibiu, ROMANIA, Date: JUN 02-05, 2011, VOL II, Book Series: Proceedings of the International Conference on Manufacturing Science and Education, Pages:

101-104, Published: 2011. Accession Number: WOS: 000393733900025, Document Type: Proceedings Paper. (Indexat WOS).
23. L. Cantemir, C. Niţucă, G. Chiriac, A. Rachid, Unconventional Current Collecting of the Electric Energy from a Contact Line for the Electric Traction Vehicles, Conference: PACIFIC 2011 - International Conference on: Pantograph-Catenary Interaction Framework for Intelligent Control, Conference Proceedings, December 8th 2011, Amiens, France, pp. 48-53, Conference Paper, Published 2011, Code 92659. (Indexat Scopus).
24. V52 - L. Cantemir, C. Niţucă, Unde, când şi cum electricitatea a devenit electrotehnică, Revista Tehnocopia, 2015, nr. 1(12), Chişinău, R. Moldova, 2015, pp. 51-67.
25. V51 - C. Niţucă, A.T. Plesca, G. Chiriac, Unele momente din evolutia domeniului electrotehnica in procesul educational, Revista Tehnocopia, Nr.2(9), 2013, Chisinau, ISSN 1857-4904, pp. 55-62.
26. V50 - C. Niţucă, L. Cantemir, G. Chiriac, Aspects on the influence of the environment over the contact line, Railway Pro Science & Technology, Technical scientific colloquium, Railway infrastructure development policies, projects and technologies, 2012, February 22-23, Sibiu, pp. 23-26. ISSN 2284-7057.
27. V49 - G. Chiriac, L. Cantemir, C. Niţucă, I. Stoichescu, D. Demian, I. Gavrila, Some possibilities to reduce the electric energy consumption and the operating cost in the railway transportation, Railway infrastructure development for an efficient & green transport, Technical-scientific Colloquium for SISCE, I Edition, February 23 – 24, 2011, Poiana Braşov, Romania, pp. 30-35.
28. V48 - C. Niţucă, L. Cantemir, G. Chiriac, D. Demian, I. Gavrilă, I. Truica, Possibilities to reduce the electromagnetic pollution by eliminate the detachments of the pantograph from the contact line, Railway infrastructure development for an efficient & green transport, Technical-scientific Colloquium for SISCE, I Edition, February 23 – 24, 2011, Poiana Braşov, Romania, pp. 32-29.
29. V47 - L. Cantemir , C. Niţucă , G. Chiriac , A.P. Alexandrescu, D. Cuciureanu, Using the wind and river low energy with a new type of electric generator with unconventional drive method, European Exhibition of Creativity and Inovation - EURO INVENT 2010, Iaşi, pp. 189-196, ISBN 978-973-702-769-6.
30. V46 - L. Cantemir, Tamilia Elena Marin, C. Niţucă, A.P. Alexandrescu, Pledoarie pentru arheologia creativităţii tehnice, First European Exhibition of Creativity and Inovation - EURO INVENT 2009, Iaşi, pp. 159-166, ISBN 978-973-702-641-5.
31. V45 - C. Niţucă, Maria Ileana Carcea, I. G. Sandu, Proiectarea disciplinei Practica Pedagogică în cadrul programului de studii psihopedagogice - Modul I, Simpozionul Educaţia Azi, Anul I, Nr. 1, Bucureşti, 30 mai 2008, pp.478-486, ISSN 1844-8488.
32. V44 - I. Sandu, F. M. Fluturel, I. G. Sandu, C. Niţucă, A. V. Sandu, Aspecte etice privind valorizarea proprietăţii intelectuale, A XII-A Conferinţă Internaţională de Inventică „Cercetări şi Tehnologii Inovative Performante", INVENTICA 2008, 21-24 Mai, Iaşi, România, pp.453-463, ISBN 978-973-730-491-9.
33. V43 - L. Cantemir, D. Cuciureanu, C. Niţucă, Invenţia invenţiilor – de la buşteanul rostogolitor la roata cu spiţe, A XII-A Conferinţă Internaţională de Inventică „Cercetări şi Tehnologii Inovative Performante" INVENTICA 2008, 21-24 Mai, Iaşi, România, pp. 505-514, ISBN 978-973-730-491-9.

34. V42 - L. Cantemir, D. Cuciureanu, C. Niţucă, A.P. Alexandrescu, Alina Gheorghiu, Dilema invenţiei epocale a umanităţii. Ce a fost la început, osia fixă cu două roţi sau roata singulară?, Simpozionul Cucuteni 6000, Chişinău, Republica Moldova, 2008.
35. V41 - Maria Ileana Carcea, C. Niţucă, Trening of practical teaching capacites, 6the International Conference on Electromechanical and Power Systems, SIELMEN 2007, October 4-6, Chişinău, R. Moldova, pp. 265-268.
36. V40 - C. Niţucă, A. Rachid, L. Cantemir, G. Chiriac, Alina Gheorghiu, Constructive and Experimental Aspects Regarding the Electric Power Collecting for Very High Speed Traction, Analele Universităţii din Craiova, Seria Inginerie electrică, Anul 31, nr.31, 2007, Vol. II, 6the International Conference on Electromechanical and Power Systems, SIELMEN 2007, October 4-6, Cişinău, R. Moldova, pp. 290-293, ISSN 1842-4805.
37. V39 - L. Cantemir, C. Niţucă, Maria Carcea, V. Dulgheru, Metoda asocierii organice a structurilor elementare de sisteme funcţionale metoda logic determinată de creativitate tehnică şi înţelegere a procesului de creaţie intuitivă a unor invenţii deja elaborate, Lucrările Simpozionului Naţional ”Bazele Performanţei şi Inventicii” Institutul Naţional de Inventică, Academia de Ştiinţe Tehncie, Iaşi, 8-10 septembrie 2006, pp. 50-56, ISBN 973-730-244-3
38. V38 - T. Stanciu, C. Niţucă, The ranking of technical higher education institutions, premises for quality and succes, 5th International Conference on Electromechanical and Power Systems, SIELMEN 2005, 6-8 October, Chişinău, Republica Moldova, pp. 97-98, ISBN Vol I, 973-716-209-9.
39. V37 - Nicoleta M. Iftimie, Maria I. Carcea. C. Niţucă, Strategies for developing the study skills of enginnering students, 5th International Conference on Electromechanical and Power Systems, SIELMEN 2005, 6-8 October, Chişinău, Republica Moldova, pp. 107-110, ISBN Vol I, 973-716-209-9.
40. V36 - C. Niţucă, Maria I. Carcea, T. Stanciu, Basic criteria for evaluating teaching practice by mentors, 5th International Conference on Electromechanical and Power Systems, SIELMEN 2005, 6-8 October, Chişinău, R. Moldova, pp. 126-127, ISBN 973-716-209-9.
41. V35 - C. Niţucă, Maria I. Carcea, T. Stanciu, Issues in applying teching objectives during technical and technological lessons, 5th International Conference on Electromechanical and Power Systems, SIELMEN 2005, 6-8 October, Chişinău, Republica Moldova, pp. 128-131, ISBN 973-716-209-9.
42. V34 - C. Niţucă, L. Cantemir, G. Chiriac, Alina Gheorghiu, Aspects regarding the influence of precipitations settlement on the contact line, 5th International Conference on Electromechanical and Power Systems, SIELMEN 2005, 6-8 October, Chişinău, Republica Moldova, pp. 957-959, ISBN Vol II, 973-716-230-7.
43. V33 - C. Niţucă, T. Stanciu, Alina Gheorghiu, Issuses regarding the quality of pedagogical practical training of students for the electrical and mechanical profile, Academia Tehnică Militară, Al VIII_lea Simpozion Ştiinţific cu Participare Internaţională „Management şi Educaţie, Provocări ale Secolului XXI” 15-16 Octombrie 2004, Bucureşti, Secţiunea 2 – Discipline Umaniste, Comunicarea 12, ISBN 973-640-059-X.
44. V32 - T. Stanciu, C. Niţucă, C. Stanciu, Educational management and leadership in schools, Academia Tehnică Militară, Al VIII_lea Simpozion Ştiinţific cu Participare Internaţională „Management şi Educaţie, Provocări ale Secolului XXI” 15-16

Octombrie 2004, Bucureşti, Secţiunea 2 – Discipline Umaniste, Comunicarea 16, ISBN 973-640-059-X.
45. V31 - T. Stanciu, R. Budei, C. Niţucă, Technical Innovation and Innovative Education in Practice, Inventica 2004, pp.151-158.
46. V30 - G. Chiriac, L. Cantemir, M. Ghercă, C. Niţucă, Modeling the movement of a vehicle drived by d. c. series motors in viev energy consumption analysis. The 4th International Conference on Electromechanical and Power Systems, SIELMEN 2003, Vol III, Chişinău, 26-27 september 2003, pp. 35-38, ISBN 9975-9704-9-4.
47. V29 - G. Chiriac, L. Cantemir, C. Niţucă, Mouvement simulation and energy aspects for vehicle drived with d. c. series motors; The 4th International Conference on Electromechanical and Power Systems, SIELMEN 2003, Vol III, Chişinău, 26-27 september 2003, pp. 39-42, ISBN 9975-9704-9-4.
48. V28 - G. Chiriac, L. Cantemir, C. Niţucă, Energy consumption for the air drag for the uncover freight wagons; The 4th International Conference on Electromechanical and Power Systems, SIELMEN 2003, Vol III, Chişinău, 26-27 september 2003, pp. 43-46, ISBN 9975-9704-9-4.
49. V27 - C. Niţucă, L. Cantemir, Alina Gheorhgiu, G. Chiriac, Modeling and simulation of the interaction pantograph-catenary; The 4th International Conference on Electromechanical and Power Systems, SIELMEN 2003, Vol III, Chişinău, 26-27 september 2003, pp. 47-50, ISBN 9975-9704-9-4.
50. V26 - C. Niţucă, L. Cantemir, Alina Gheorhgiu, G. Chiriac, Simulation of the pantograph-catenary interaction; The 4th International Conference on Electromechanical and Power Systems, SIELMEN 2003, Vol III, Chişinău, 26-27 september 2003, pp. 51-54, ISBN 9975-9704-9-4.
51. V25 - C. Niţucă, L. Cantemir, Alina Gheorhgiu, G. Chiriac, Pantograph drived with a linear induction motor controlled with adaptive fuzzy control; The 4th International Conference on Electromechanical and Power Systems, SIELMEN 2003, Vol III, Chişinău, 26-27 sept. 2003, pp. 55-58, ISBN 9975-9704-9-4.
52. V24 - L. Cantemir, E. C. Teodoru, F. Bozianu, A. Aparaschivei, C. Niţucă, Posibilităţi de calcul a reactanţelor de magnetizare la motoarele asincrone cu dublu inductor şi întrefier plan, A Treia Conferinţă Intrenaţională de Sisteme Electromecanice şi Energetice, SIELMEN 2001, Chişinău, 4-6 octombrie, Volumul I, pp. 79-82, ISBN 9975-9638-6-2.
53. V23 - G. Chiriac, L. Cantemir, D. Ionescu, C. Niţucă, The modeling of the acceleration for a vehicle with d.c. series motors, Buletinul Institutului Politehnic Iaşi, Tom. XLVI, Fasc. 5, Electrotehnică, Energetică, Electronică, A X-a Conferinţă Naţională de Acţionări Electrice – CNAE 2000, Iaşi, 12-13 octombrie, 2000, pp. 230-235.
54. V22 - C. Niţucă, T. Stanciu, Aspects of efficient use of active learning methods in the training activity specific to technical and technological disciplines, Buletinul institutului Politehnic din Iaşi, Tomul LVII(LXI), Fasc.1-2, 2011, Secţia Socio-Umane, pp.61-67.
55. V21 - T. Stanciu, C. Niţucă, Research Methodology for Training Needs Analysis in Early Education in Romania, Second National Symposium Education-Profession Education-Creation in the Knowlendge Society, Publicat în Buletinul Institutului Politehnic din Iaşi, Tomul LV(LIX), Fasc. 3-4, Ştiinţe Socio-Umane, Iaşi, 6-7 novembrer, 2009, România, pp. 187-194, ISSN 1011-2855.
56. V20 - L. Cantemir, D. Cuciureanu, C. Niţucă, Technology of Technical Creativity, 12th International Conference, Tehnologii Moderne, Calitate, Restructurare, TMCR –

2008, 29-31 May, 2008, Publicat în Buletinul Institutului Politehnic Iaşi, Tomul LIV(LVIII), Fasc. 1, 2008, Secţia Construcţii de Maşini, pp. 517-526, ISSN 1011-2855.
57. V19 - C. Niţucă, Maria Ileana Carcea, G. I. Sandu, T. Stanciu, The Design Of A New Contents For Pedagogical Internship, Buletinul Institutului Politehnic Iaşi, Tomul LIV (LVIII), Fasc. 4, Ştiinţe Socio-Umane, 2008, pp. 77-82, ISSN 1224-5860.
58. V18 - C. Niţucă, T. Stanciu, G. I. Sandu, The Training Methodology in Vocational and Further Technical Education Through Technologies and Educational Softwares, Buletinul Institutului Politehnic Iaşi, Tomul LIV (LVIII), Fasc. 4, Ştiinţe Socio-Umane, 2008, pp. 83-88, ISSN 1224-5860.
59. V17 - L. Cantemir, A. Rachid, C. Niţucă, Etudde concernant sur le amplacement de ressort entre capteur et la manivelle, 4th International Conference on Electrical and Power Engineering – EPE 2006, Iaşi, România, 12-14 octombrie 2006, Buletinul Institutului Politehnic Iaşi, Tomul LII (LVI), Fasc. 5 A, pp. 531-536, ISSS 1223-8139.
60. V16 - C. Niţucă, L. Cantemir, Alina Gheorghiu, La possibilite de determiner le module d'elasticite equivalent de dilatation thermique equivalent pour la ligne de contact, 4th International Conference on Electrical and Power Engineering – EPE 2006, Iaşi, România, 12-14 octombrie 2006, Buletinul Institutului Politehnic Iaşi, Tomul LII (LVI), Fasc. 5 A pp. 563-566, ISSN 1223-8139.
61. V15 - C. Niţucă, Education par la créqtivité technique, First National Simpozion Education-Professionalization-Creation in the Knowledge Society – EPC 2006, Iaşi, România, 20-21 octombrie 2006, Buletinul Institutului Politehnic Iaşi, Tomul LII (LVI), Fasc. 5 Ştiinţe Socio-Umane, pp. 95-100, ISSN 1224-5860.
62. V14 - C. Niţucă, L. Cantemir, Alina Gheorghiu, Quelques aspects legislatifs concernant l'obtention du brevet d'invention, First National Simpozion Education-Professionalization-Creation in the Knowledge Society – EPC 2006, Iaşi, România, 20-21 octombrie 2006, Buletinul Institutului Politehnic Iaşi, Tomul LII (LVI), Fasc. 5 Ştiinţe Socio-Umane, pp.541-546, ISSN 1224-5860.
63. V13 - T. Stanciu, C. Niţucă, C. Stanciu, Issuses concerning the human resources and educational leadership in schools, Buletinul Institutului Politehnic Iaşi, Tomul L (LIV), Fasc. 5B, 2004, pp. 709-714, ISSN 1223-8139.
64. V59 - T. Stanciu, C. Niţucă, The staff supervision and evaluations policies in Romania and United States Universities, Buletinul Institutului Politehnic Iaşi, Tomul L (LIV), Fasc. 5B, 2004, pp. 715-720, ISSN 1223-8139.
65. V12 - G. Chiriac, L. Cantemir, C. Niţucă, Corection of the calculus for the total runing resistances of the trains, Buletinul Institutului Politehnic Iaşi, Tomul L (LIV), Fasc. 5C, 2004, pp. 1119-1124, ISSN 1223-8139.
66. V11 - C. Niţucă, L. Cantemir, G. Chiriac, Alina Gheorghiu, Aspects regarding the influence of the temperature range over the contact line, Buletinul Institutului Politehnic Iaşi, Tomul L (LIV), Fasc. 5C, 2004, pp. 1165-1170, ISSN 1223-8139.
67. V10 - Nicoleta-Mariana Iftimie, C. Niţucă, Aspects of formative education: developing instruments for inetllectual activity, Buletinul Institutului Politehnic Iaşi, Tomul L (LIV), Fasc. 5B, 2004, pp. 659-664, ISSN 1223-8139.
68. V9 - Mihaela Lupu, C. Niţucă, The implications of the e-laboratory the teacher training processes on the field of electro technical sciences, Buletinul Institutului Politehnic Iaşi, Tomul L (LIV), Fasc. 5B, 2004, pp. 689-694, ISSN 1223-8139.
69. V8 - C. Niţucă, Maria Ileana Carcea, T. Stanciu, Alina Gheorghiu, Working strategies regarding the practical training in pedagogy of students of technology, Buletinul

Institutului Politehnic Iaşi, Tomul L (LIV), Fasc. 5B, 2004, pp. 699-702, ISSN 1223-8139.

70. V7 - C. Niţucă, Maria Ileana Carcea, T. Stanciu, Alina Gheorghiu, Issues regarding the quality of pedagogical practical training of students for the electrical and mechanical profile, Buletinul Institutului Politehnic Iaşi, Tomul L (LIV), Fasc. 5B, 2004, pp. 703-708, ISSN 1223-8139.
71. V6 - L. Cantemir, E. Teodoru, F. Bozianu, A. Aparaschivei, C. Niţucă, On the three-phase double inductor plane air gap induction motor design and test, Buletinul Institutului Politehnic Iaşi, Tom XLVIII, Fasc. 5 C, pp. 131-136, 2002, ISSN 0258-9109.
72. V5 - A. Aparaschivei, L. Cantemir, G. Chiric, C. Niţucă, The dispersion reactances determination of the linear induction motors with ring windings, Buletinul Institutului Politehnic Iaşi, Tom XLVIII, Fasc. 5 C, pp. 137-142, 2002, ISSN 0258-9109.
73. V4 - C. Niţucă, L. Cantemir, G. Chiriac, A. Aparaschivei, Considerations regarding the influence of the inerţia of the pantograph head into the interaction pantograph-catenary, Buletinul Inst. Politehnic Iaşi, Tom XLVIII, Fasc. 5 C, pp. 287-292, 2002, ISSN 0258-9109.
74. V3 - C. Niţucă, L. Cantemir, G. Chiriac, G. Chiric, The modeling and simulation of the pantograph-catenary interaction, Buletinul Institutului Politehnic Iaşi, Tom XLVIII, Fasc. 5 C, pp. 293-298, 2002, ISBN 0258-9109.
75. V2 - G. Chiriac, L. Cantemir, C. Niţucă, Reducerea rezistenţei aerului pentru vagoane de marfă descoperite. Sisteme expert de asigurare a calităţii totale în industria de materiale şi echipamente electrotehnice, coord. A. Baraboi, Cristina Schreiner, R. Ciobanu, Vol I, Seria Qualindser, Editura “Gheorghe Asachi”, Iaşi, 2002, pp. 111-116, ISBN973-8292-29-8.
76. V1 - C. Niţucă, L. Cantemir, G. Chiriac, A. Aparaschivei, Unele aspecte privind viteza critică pentru sistemul de captare pantograf-catenară. Sisteme expert de asigurare a calităţii totale în industria de materiale şi echipamente electrotehnice, coord. A. Baraboi, Cristina Schreiner, R. Ciobanu, Vol I, Seria Qualindser, Editura “Gheorghe Asachi”, Iaşi, 2002, pp. 117-122, ISBN973-8292-29-8

J. Invenţii.

1. L. Cantemir, A. Rachid, C. Niţucă, I.C. Bărbânţă, G. Chiriac, A.P. Alexandrescu, Echipament de acţionare electromagnetică a unui culegător de curent de tip pantograf, Brevet de invenţie Nr. 128199, RO 128199 B1, Data depozit - 23.08.2011, Data eliberării - 28.02.2018.

K. Contracte de cercetare/granturi.

P1 - Improving the cross-border public transportation using electric buses supplied with renewable energy” – ELBUS, Code project 2SOFT/3.1/54, European Neighbourhood Instrument (ENI), Cross Border Cooperation (CBC) from Joint Operational Programme Romania – Republic of Moldova, Priority 3.1 – Development of cross border transport infrastructure and ICT infrastructure.
Volumul finanţării: 97,880.00 Euro. Director proiect, conf.dr.ing. C. Niţucă.
Perioada: 2020-2021.
Director proiect

P2 - The experimental study on overload current arc characteristics of DC electric fuse, DCFUSE, România - China, Contract PN-III-P3-3.1-PM-RO-CN-2018-25BM;. Volumul finanţării: 49.980,00 Lei. Director proiect, s.l.dr.ing. C. Niţucă
Perioada: 2018-2019.

Director proiect.
P3 - Modelling and simulation of the current limiting fuses, Capacities, Module III, Bilateral Research Project China - Romania, Contract no. 610/01.01.2013, Volumul finanţării: 45.500,00 Lei.Director de proiect, prof.dr.ing. T. A. Pleşca.
Perioada: 2013-2014.
Membru proiect.

Anexa A.3.3.c. Lista de lucrari, cadre didactice

Lista de lucrări în domeniul de studii universitare de masterat „Inginerie Energetică”

Numele şi prenumele: **Dragomir Alin**

P. Teza de doctorat.

1. „Contribuții privind managementul echipamentelor electrice. Monitorizarea solicitărilor termice”, 2017, Domeniul „Inginerie Electrică”, Universitatea Tehnică „Gheorghe Asachi” din Iași, conducător doctorat: prof. dr. ing. Adam Maricel.

Q. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

R. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).

1. *Asiminicesei O.M., Beniugă O.C., Dragomir A.,Comșa C.R., Haba C.G., Arădoaei S. T., Dosoftei C. C., Brînzilă M. C., Afaceri Digitale, Editura Performantica, ISBN: 978-606-685-932-5.*

S. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

T. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

U. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

1. Alexandra Bodoga, Andreea Nistorac, Alin Dragomir, Eugen Constantin Ailenei, Arina Seul, Mariana Diaconu, Catalin Dumitrel Balan, Maria Carmen Loghin, Ozone-Vacuum-Based Decontamination: Balancing Environ-2 mental Responsibility and Textile Waste, Journal Sustainability (ISSN 2071-1050), 17 November 2023.
2. A. Manushi Munshi, Manan Patel, Fayez Alqahtani, Amr Tolba, Rajesh Gupta, Nilesh Kumar Jadav, Sudeep Tanwar, Bogdan-Constantin Neagu and Alin Dragomir, Artificial Intelligence and Exploratory-Data-Analysis-Based Initial Public Offering Gain Prediction for Public Investors, Journal Sustainability (ISSN 2071-1050), 18 October 2022.
3. A. Dragomir, M. Andrusca, M. Adam, G. Grigoras, M. Dragomir, R. Seeram, Modeling, Simulation and Monitoring of Electrical Contacts Temperature in Railway Electric Traction, Journal Mathematics (ISSN 2227-7390), 10 December 2021.
4. G. Chiriac, D. D. Lucache, C. Nituca, A. Dragomir, R. Seeram, Electric Bus Indoor Heat Balance in Cold Weather, Journal Applied Sciences (ISSN 2076-3417), 10 December 2021.

5. M. Andrusca, M. Adam, A. Dragomir, E. C. Lunca, Innovative Integrated Solution for Monitoring and Protection of Power Supply System from Railway Infrastructure, Journal Sensors (ISSN 1424-8220), 25 November 2021.
6. Andrusca M., Adam M., Dragomir A., Lunca E., Seeram R., Postolache O., Condition Monitoring System and Faults Detection for Impedance Bonds from Railway Infrastructure, Journal Applied Sciences (ISSN 2076-3417; CODEN: ASPCC7), 4 September 2020.
7. Dragomir A., Adam M., Pancu C., Andruşcă M., Pantelimon R., Monitoring of long term thermal stresses of electrical equipment, Buletinul Ştiinţific, Seria C, Vol. 77, No. 2, 2015, pp. 245-253.

V. Lucrări ştiinţifice publicate în reviste din străinătate.

1. Dragomir A., Adam M., Andruşcă M., Munteanu A., Impact of Long-Term Thermal Stresses of Electrical Equipment on Climate Change, WSEAS Transactions on Environment and Development, volume 13, 2017, ISSN: 1790-5079.
2. Dragomir M., Dragomir A., Influence of The Line Parameters in Transmission Line Fault Location, World Academy of Science, Engineering and Technology-WASET, International Journal of Energy and Power Engineering Vol:11, No:5, 2017, pp 450-454, ISSN: 2326-9574.

W.Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

1. Adrian Vîlcu, Ionuț Nacu, Bogdan Vîrlan, Ionuț-Viorel Herghiligiu, Sandu Lupăcescu, Alin Dragomir, Incremental Innovation Methodology that Combines Computerized Modelling and Simulation with Value Analysis and Engineering Method, Bulletin of the Polytechnic Institute of Iași, Electrical Engineering, Power Engineering, Electronics Section, Vol.68, Iasi, ROMANIA, publicat Februarie 2024.
2. Alin Dragomir, Maricel Adam, Silviu-Marian Antohi, Adrian Vîlcu, Alexandra Bodoga, Considerations Regarding Electrical Equipment Monitoring Through Infrared Thermography, Bulletin of the Polytechnic Institute of Iași, Electrical Engineering, Power Engineering, Electronics Section, Vol.68, Iasi, ROMANIA, publicat Februarie 2024.
3. M. Atanasoaei, M. Adam, M. Andrusca, A. Dragomir, C.N. Deac, Aspects Regarding the Use of Electronic Power Devices in Power Grid, Bulletin of the Polytechnic Institute of Iași. Electrical Engineering, Power Engineering, Electronics Section, vol. 67, nr. 1, pag. 55-63, publicat Octombrie 2023.
4. Dragomir A., Adam M., Andruşcă M., Munteanu A., About thermal stresses monitoring and diagnosis of electrical equipment, Buletinul Institutului Politehnic din Iaşi, Volumul 62 (66), No. 1, Iaşi, România, 2016, ISSN: 1223-8139, CNCSIS: 87.
5. Dragomir A., Adam M., Andruşcă M., Munteanu A., Long term thermal stresses of a withdrawable electrical contact, Acta Electrotehnica, Cluj, România, 2015, ISSN: 1841-3323, CNCSIS: 576.

X. Lucrări ştiinţifice publicate în volumele conferinţelor.

1. Silviu Marian Antohi; Maricel Adam; Alin Dragomir; Dragos Mugoci; Alexandru Panțiru, Industrial Communication Networks Used within SAW Sensors Data

Transmission, 10th International Conference on Modern Power Systems – MPS 2023, Cluj, România 2023. (*IEEExplore*).

2. Alin Dragomir; Maricel Adam; Silviu Marian Antohi; Dragos Mugoci; Alexandru Panțiru, Temperature Monitoring of MV Switchgear Cabinet by Non-Intrusive Methods, 10th International Conference on Modern Power Systems – MPS 2023, Cluj, România 2023. (*IEEExplore*).
3. Alin Dragomir; Maricel Adam; Mihai Andrușcă, Centralized Monitoring and Diagnosing of the Return Circuit of Electric Railway Traction, XXVII International Conference"INVENTICA 2023. Science of creativity" June 22th, 2023, IASI, ROMANIA. (*IEEExplore*).
4. Alin Dragomir; Maricel Adam; Gabriel Chiriac; Dragoș Murgoci; Adrian Vîlcu; Costică Nițucă, Infrared Monitoring of Low Voltage Switch Separator Contact Resistance, 14th International Conference on Electromechanical and Power Systems – SIELMEN 2023, Chișinău, Rep. Moldova, 11-13 October 2023. (*IEEExplore*).
5. Antohi S.-M., Lucache D.-D., Adam M., Dragomir, A., Nadabaica S.-A., Bodoga A., Digital Settings of Low Voltage Circuit Breakers, ICATE 2024 - Proceedings of the 2024 International Conference on Applied and Theoretical Electricity, 2024, Craiova, Romania. (*IEEExplore*).
6. .Paduraru C.-B., Munteanu A., Adam, M., Dragomir A., Nadabaica S.-A., Chiriac G., Analysis of the permanent magnets influence on the operation of a BLDC motor, EPE 2024 - Proceedings of the 2024 13th International Conference and Exposition on Electrical and Power Engineering, 2024. (*IEEExplore*).
7. Anton A., Andrusca M., Adam, M., Dragomir. A, Micu M.-B., Antiohi S.-M., About Contact Resistance Monitoring and Vibration Analysis of a Power Circuit Breaker, EPE 2024 - Proceedings of the 2024 13th International Conference and Exposition on Electrical and Power Engineering, 2024. (*IEEExplore*).
8. Dragomir. A, Pingescu B.- A., Adam, M., Paizan D. , Astanei D.-G, Bodoga A., Digital Communication Capabilities of Low Voltage Circuit Breakers, EPE 2024 - Proceedings of the 2024 13th International Conference and Exposition on Electrical and Power Engineering, 2024. (*IEEExplore*).
9. Alin Dragomir; Maricel Adam; Silviu-Marian Antohi; Marian Atanasoaei; Alexandru Pantiru, Monitoring and Diagnosis of Electrical Equipment by Infrared Thermography, The 12th International Conference and Exposition on Electrical and Power Engineering- EPE 2022, Iaşi, România, 20-22 0ctombrie 2022 (*IEEExplore*).
10. Alexandru Pantiru; Marinela Barbuta; Maricel Adam; Alin Dragomir; Silviu-Marian Antohi, Foundation Structural Resistance Calculation of SF6 High-Voltage Circuit Breaker, The 12th International Conference and Exposition on Electrical and Power Engineering- EPE 2022, Iaşi, România, 20-22 0ctombrie 2022 (*IEEExplore*).
11. Marian Atănăsoaei; Maricel Adam; Mihai Andrusca; Alin Dragomir; Cosmin Nistor Deac, The Influence of TCSC Devices on Distance Protection Tripping Characteristic, The 12th International Conference and Exposition on Electrical and Power Engineering- EPE 2022, Iaşi, România, 20-22 0ctombrie 2022 (*IEEExplore*).
12. Silviu-Marian Antohi; Maricel Adam; Alin Dragomir; Marian Atanasoaei; Alexandru Pantiru, The Influence of Electrical Equipment Structural Elements on their Wireless Communications, The 12th International Conference and Exposition on

Electrical and Power Engineering- EPE 2022, Iaşi, România, 20-22 0ctombrie 2022 (*IEEExplore*).

13. Alin Dragomir; Maricel Adam; Mihai Andrușcă; Silviu Marian Antohi; Cosmin Nistor Deac; Seeram Ramakrishna, Perspectives on Railway Electric Traction System Improvement Brought by Monitoring the Impedance Bonds, 13th International Conference on Electromechanical and Power Systems – SIELMEN 2021, Chișinău, Rep. Moldova, 06-08 October 2021 (*IEEExplore*).
14. Silviu Marian Antohi; Maricel Adam; Alin Dragomir; Mihai Andrusca; Marian Atanasoaei; Alexandru Miron; Anamaria Iamandi, About Communication Networks Used within Electrical Equipment, 13th International Conference on Electromechanical and Power Systems – SIELMEN 2021, Chișinău, Rep. Moldova, 06-08 October 2021 (*IEEExplore*).
15. Silviu Marian Antohi; Maricel Adam; Alin Dragomir; Mihai Andrusca; Marian Atanasoaei; Alexandru Miron; Anamaria Iamandi, Wireless Communication Networks within Electrical Equipment , 9th International Conference on Modern Power Systems – MPS 2021, Cluj, România 2021 (*IEEExplore*).
16. Dragomir A., M. Adam, M. Andrusca, M. Dragomir, Filip B., Iamandi A., Electrical Equipment Condition Monitoring by Vibration Diagnosis, 6th International Conference on Condition Monitoring, Diagnosis and Maintenance - CMDM 2021, 11-13 Octomber 2021, Bucharest, Romania (*IEEExplore*).
17. M. Atanasoaei, M. Adam, M. Andrusca, A. Dragomir, C.N. Deac, Aspects Regarding the Presence of TCSC Devices on the Transmission Lines, 9th International Conference on Modern Power Systems - MPS, 16-17 June 2021, Cluj, România (*IEEExplore*).
18. M. B. Micu, M. Adam, M. Andrusca, A. Dragomir, C.N. Deac, Aspects Regarding the Loads Patterns Determination from the Internal Sevices of the Power Substations, The 11th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 22-23 0ctombrie 2020 (*IEEExplore*).
19. A. Dragomir, M. Adam, M. Andrusca, M. Atanasoaei, O. Rusu, A. Miron, A. Iamandi, Aspects Regarding the Infrared Monitoring of Electrical Equipment Temperature, The 11th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 22-23 0ctombrie 2020 (*IEEExplore*).
20. E. Ojovanu, A. Dragomir, M. Adam, M. Andrusca, C.N. Deac, M. Cardasim, G. Mocanu, Mechanical Fault Detection by Vibration Monitoring of Electrical Equipment, The 11th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 22-23 0ctombrie 2020 (*IEEExplore*).
21. C.N. Deac, M. Adam, M. Andrusca, A. Dragomir, M. Micu, Supervision and Control System of an Electrical Equipment Testing Installation, The 11th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 22-23 0ctombrie 2020 (*IEEExplore*).
22. M. Atanasoaei, M. Adam, M. Andrusca, A. Dragomir, C.N. Deac, Effects of Solid State Current Limiter on the Power Grid, The 11th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 22-23 0ctombrie 2020 (*IEEExplore*).
23. M. Adam, M. Andrusca, A. Dragomir, D. Astanei, R. Burlica, Technical Condition Monitoring of Impedance Bonds using Sensors and Dedicated Device, The 11th International Conference and Exposition on Electrical and Power Engineering-EPE, Iaşi, România, 22-23 0ctombrie 2020 (*IEEExplore*).
24. Atănăsoaei M., Adam M., Andruşcă M., Dragomir A., Deac N. C., Aspects Regarding the Protection Relays from Power Substations, 12th International

Conference on Electromechanical and Power Systems - SIELMEN, Chișinău, Rep. Moldova, 2019 (*IEEExplore*).

25. Deac C.N., Adam M., Dragomir A., Micu M. B., Aspects Regarding the Alternating Current Monitoring In Electrical Equipment Testing Installations, 12th International Conference on Electromechanical and Power Systems - SIELMEN, Chișinău, Rep. Moldova, 2019 (*IEEExplore*).
26. Dragomir M., Iamandi A., Istrate M., Dragomir A., A Review of Phasor Estimation Algorithms for Power System Applications, 8th IEEE PES Innovative Smart Grid Technologies Europe - ISGT 2019 , 29th September- 2nd October, București, România 2019 (*IEEExplore*).
27. Dragomir A., Atănăsoaei M., Adam M., Andruşcă M., Deac N. C., Dragomir M., Infrared Procedure for Monitoring Long-term Thermal Stresses of Electrical Equipment, 54th International Universities Power Engineering Conferance, București, Septembrie 3-6, 2019 (*IEEExplore*)..
28. Dragomir M., Iamandi A., Rusu A. C., Atănăsoaei M., Dragomir A. , Adam M., Andruşcă M., Single-terminal Fault Location Algorithm for Electrical Lines, 54th International Universities Power Engineering Conferance, București, Septembrie 3-6, 2019 (*IEEExplore*).
29. Iamandi A., Iliescu S.S., Ionescu I., Dragomir M., Dragomir A., Reliability of protection schemes used for multi-terminal transmission lines, 8th International Conference on Modern Power Systems - MPS, Cluj, România 2019 (*IEEExplore*).
30. Dragomir M., Istrate M., Dragomir A., Filip B., Iamandi A., Machidon D., Estimation of Line Zero Sequence Impedance using Real Field Fault Data for Fault Location Application, 8th International Conference on Modern Power Systems - MPS, Cluj, România 2019 (*IEEExplore*).
31. Deac C.N., Adam M., Andruşcă M., Dragomir A., Aspects Regarding Contact Resistance Measurement, 8th International Conference on Modern Power Systems - MPS, Cluj, România 2019(*IEEExplore*).
32. Dragomir A. , Adam M., Andruşcă M., Deac C.N., Iamandi A.,Temperature logger for Electrical Equipment's Thermal Stress Monitoring, 8th International Conference on Modern Power Systems - MPS, Cluj, România 2019(*IEEExplore*).
33. Dragomir A. , Adam M., Andruşcă M., A Review about Wireless Monitoring of Electrical Equipment Temperature, 11th International Symposium on Advanced Topics in Electrical Engineering, București, Martie 28-30, 2019(*IEEExplore*).
34. Burlică R., Astanei D., Adam M., Dragomir A., Overvoltage Differential Protection of Low Voltage Circuits, The 10th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2018 (*IEEExplore*).
35. Andrușcă M., Adam M., Dragomir A., Astanei D., Andrușcă L., About Monitoring of Medium Voltage Circuit Breakers with SF6, The 10th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2018 (*IEEExplore*).
36. Munteanu A., Adam M., Andrușcă M., Dragomir A., Micu M. B., Aspects regarding the Monitoring of Electrical Equipment from Electric Traction, The 10th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2018(*IEEExplore*).
37. Munteanu A., Adam M., Andrușcă M., Dragomir A., Micu M. B., Cardașim M., A Possibility to Monitoring and Diagnosis of the Joint Coils from Railway Electric Traction, The 10th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2018(*IEEExplore*).

38. Deac C. N., Adam M., Pancu C., Andrușcă M., Dragomir A., Aspects Regarding the High-Current Testing of Current Paths, The 10th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2018 (*IEEExplore*).
39. Dumitrescu C., Plesca A. T., Dumitrescu L., Adam M., Nițucă C., Dragomir A., Assessment of Data Center Energy Efficiency. Methods and Metrics, The 10th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2018(*IEEExplore*).
40. Dumitrescu C., Plesca A. T., Adam M., Nițucă C., Dragomir A., Methods for Reducing Energy Consumption, Optimization in Operational Data Centers, The 10th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2018 (*IEEExplore*).
41. Pintilie C., Plesca A. T., Gabor G., Nițucă C., Adam M., Dragomir A., Thermal Analysis of Tankless Heating System Using PLC, The 10th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2018 (*IEEExplore*).
42. Adam M., Andruşcă M., Dragomir A., Burlică R., Short-circuit Thermal State of a Withdrawable Contact, The 10th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2018 (*IEEExplore*).
43. Dragomir M., Istrate M., Dragomir A., Review of Error Sources in One-End Data Impedance-Based Fault Location Algorithms, The 10th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2018 (*IEEExplore*).
44. Dragomir M., Filip B., Dragomir A., Improving the Fault Location for Transmission Grids using the Existing Measurements, The 10th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2018 (*IEEExplore*).
45. Micu M. B., Adam M., Andruşcă M., Dragomir A., Aspects Regarding Electrical Loads Pattern Recognition Using Artificial Neural Network, The 10th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2018 (*IEEExplore*).
46. Dragomir A., Adam M., Andruşcă M., Burlică R., Micu M. B., Patrichi S., Simulating Electrical Connections in Terms of Thermal Stresses, The 10th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2018 (*IEEExplore*).
47. Dragomir A., Adam M., Andruşcă M., Astanei D., Andrușcă L., Dumitrescu C., About Some Connection Modes of the Current Conducting Paths, The 10th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2018 (*IEEExplore*).
48. Miron A., Danubianu D., Dragomir A., Popa C., Pentiuc R., Using ANNs in Protection of Transmission Lines, the 14th Regional Energy Forum, Comitetul Român National al Consiliului Mondial de Energie, 10-14 Iunie, Costinești, Romania, 2018.
49. Dragomir M., Moraru Gh., Iamandi A., Miron A., Dragomir A., Review of Error Sources for Impedance-Based Fault Location Algorithms, 4th edition CIGRE Regional South-East European Conference - RSEEC 2018, 3-5 Octombrie, University "Politehnica" of Bucharest, Romania, 2018.
50. Munteanu A., Adam M., Andruşcă M., Dragomir A., Boghiu E., About monitoring of joint coils from electric traction railway, the 11th International Conference on

Electromechanical and Power Systems - SIELMEN, Chișinău, Rep. Moldova, pp. 86-89, 2017(*IEEExplore*).

51. Munteanu A., Adam M., Andruşcă M., Boghiu E., Dragomir A. , Thermal Stress Analysis of Current Path from Return Circuit of Electric Traction, 7th International Conference on Modern Power Systems - MPS, Cluj, România 2017 (*IEEExplore*).
52. Gheorghiţă M.C., Adam M., Andruşcă M., Munteanu A., Dragomir A., About Contact Resistance of the Electrical Equipment, 7th International Conference on Modern Power Systems - MPS, Cluj, România 2017 (*IEEExplore*).
53. Dragomir M., Dragomir A., Miron A., Wireless Devices for Electrical Equipment's Thermal Stress Monitoring, International Conference on Condition Monitoring, Diagnosis and Maintenance - CDMD, Bucureşti, România, pp. 391-396, 2017.
54. Dragomir A., Adam M., Andruşcă M., Munteanu A., Boghiu E., Considerations regarding infrared thermal stresses monitoring of electrical equipment, the 11th International Conference on Electromechanical and Power Systems - SIELMEN, Chișinău, Rep. Moldova, pp. 100-103, 2017(*IEEExplore*).
55. Dragomir A., Adam M., Andruşcă M., Munteanu A., Environmental Footprint created by Thermal Stresses Electrical Equipment, 7th International Conference on Modern Power Systems - MPS, Cluj, România 2017 (*IEEExplore*).
56. Boghiu E., Adam M., Andruşcă M., Dragomir A., Munteanu A., Aspects regarding controlled switching of the vacuum circuit breaker, the 11th International Conference on Electromechanical and Power Systems - SIELMEN, Chișinău, Rep. Moldova, pp. 82-85, 2017 (*IEEExplore*).
57. Boghiu E., Adam M., Andruşcă M., Dragomir A., Munteanu A., Influence of Operational Voltage on Switching Time of the Circuit Breakers, 7th International Conference on Modern Power Systems - MPS, Cluj, România 2017 (*IEEExplore*).
58. Munteanu A., Adam M., Andruşcă M., Dragomir A., Modeling and Simulation of a Supply System from Electric Traction , The 9th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2016 (*IEEExplore*).
59. Dragomir M., Miron A., Istrate M., Dragomir A., A Solution to Obtain Precise Fault Location Usinf a Two-End Data Algoritm , 9th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2016 (*IEEExplore*).
60. Dragomir A., Adam M., Andruşcă M., Munteanu A., Aspects Concerning the Influence of Environmental Factors in Infrared Monitoring of Electrical Equipment, The 9th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2016 (*IEEExplore*).
61. Andruşcă M., Adam M., Burlică R., Munteanu A., Dragomir A., Considerations Regarding the Influence of Contact Resistance on the Contacts of Low Voltage Electrical equipment, The 9th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2016 (*IEEExplore*).
62. Adam M., Andruşcă M., Munteanu A., Dragomir A., About the dynamic contact resistance of the circuit breakers, The 9th International Conference and Exposition on Electrical and Power Engineering- EPE, Iaşi, România, 2016 (*IEEExplore*).
63. Dragomir M., Dragomir A., Adam M., Miron A., Moraru G., Thermal Stress Monitoring Device for Electrical Equipment, International Conference on Condition Monitoring, Diagnosis and Maintenance - CDMD, Bucureşti, România, 2015.
64. Dragomir M., Miron A., Istrate M., Dragomir A., A Review of Impedance –Based Fault Approaches for Transmission Lines , 8th International Conference and

Exposition on Electrical and Power Engineering - EPE, Iași, România, 2014 (*IEEExplore*).

65. Dragomir A., Adam M., Andruşcă M., Pantelimon R., Thermal stress wireless monitoring devices for electrical equipment, The 8th International Conference and Exposition on Electrical and Power Engineering - EPE, Iaşi, România, 2014 (*IEEExplore*).
66. Andruşcă M., Adam M., Dragomir A., Roman C., Adruşcă L., Asset Management System – Software Application on Power Substation Level, 8th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2014 (*IEEExplore*).
67. Andruşcă M., Adam M., Baraboi A., Dragomir A., Munteanu A., Using fuzzy logic for diagnosis of technical condition of power circuit breakers, 8th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2014 (*IEEExplore*).
68. Cotruş A., Adam M., Pancu C., Pantelimon R., Dragomir A., Molodeschi M., Monitoring and command system for medium voltage circuit breakers with sulfur hexafluoride, 6th International Conference on Energy and Environment - CIEM, Editura POLITEHNICA press, Bucuresti, 2013.

Y. Invenţii.

Z. Contracte de cercetare/granturi.

1. Dezvoltarea instituțională a TUIASI prin creșterea performanței în cercetare, dezvoltare și inovare – COMPETE 2.0, Contract tip PNCDI III – PFE, nr. 27PFE/2021, 2021÷2023, funcția coordonator științific de proiect, echipa 7, Director proiect: prof.univ.dr.ing Maria Carmen Loghin.
2. Dezvoltarea Instituțională a TUIASI Prin Creșterea Vizibilității și a Performanței Cercetării TUIASI-COMPETE, Contract tip PNCDI III – PFE, nr. 9PFE/2018, 2018÷2020, funcția coordonator științific de proiect, echipa 2, Director proiect: prof.univ.dr.ing Maria Carmen Loghin.
3. Proiect mobilitati Romania-Franta PN III, PN-III-P3-3.1-PM-RO-FR, nr. 19BM / 2019, perioada 2019-2020 (international), Titlu: Evaluarea apei activate produse de către diferite reactoare de plasmă non-termică, funcția membru echipa implementare, Director proiect: S.l.dr.ing. Dragos-George Astanei.
4. Proiect ERANET-MANUNET-III-PlasmaPack nr. 214/2020, perioada 2020-2022 (international), Titlu: Bio-tratament aplicat pe ambele suprafete ale foliei polimerice utilizata pentru impachetarea produselor alimentare utilizand plasma non-termica DBD-Corona, funcția membru echipa implementare, Director proiect: S.l.dr.ing. Dragos-George Astanei.
5. Proiect PN-III-P2-2.1-PED-2019-0556 nr. 361PED /2020, perioada 2020 (national), Titlu: Model experimental pentru demonstrarea fezabilitatii cresterii potentialului terapeutic al germenilor de grau prin tratarea acestora cu apa activata cu plasma non-termica (PAW), funcția membru echipa implementare, Director proiect prof.univ.dr.ing Radu Burlică,
6. Proiect de tip ERANET-MANUNET-III-Treatoflex nr. 146/2020, perioada 2020-2022 (international), Titlu: Reactor cu plasma non-termica la presiune atmosferica pentru pre-tratamentul substraturilor polimerice utilizate in fabricarea circuitelor

imprimate flexibile, funcția membru echipa implementare, Director proiect: prof.univ.dr.ing Radu Burlică.

7. Granturi interne - IDEI DE PROIECT nr. GI_P7_IDEI_2021, Proiect pentru susţinerea capacităţii de participare cu propuneri de proiecte în cadrul Programului Cadru al Uniunii Europene pentru Cercetare şi Inovare 2021-2027 Orizont Europa, perioada 01.08.2021- 15.12.2021, Titlu: Sistem și metodă pentru producerea de energie electrică cu ajutorul micro-organismelor vii, funcția Director proiect: ș.l.dr.ing Alin Dragomir.
8. Granturi interne - IDEI DE PROIECT nr. GI_P8_IDEI_2021, Proiect pentru susţinerea capacităţii de participare cu propuneri de proiecte în cadrul Programului Cadru al Uniunii Europene pentru Cercetare şi Inovare 2021-2027 Orizont Europa, perioada 01.08.2021- 15.12.2021, Titlu: Sistem modular de stocare a energiei electrice pentru un vehicul electric cu posibilitatea inlocurii partiale a acumulatorului, funcția membru în echipa de proiect, Director proiect: ș.l.dr.ing Daniel Sticea.
9. Granturi interne - PUBLICATII nr. GI_P15_2021, Proiect pentru susţinerea capacităţii de participare cu propuneri de proiecte în cadrul Programului Cadru al Uniunii Europene pentru Cercetare şi Inovare 2021-2027 Orizont Europa, perioada 01.07.2021- 15.12.2021, Titlu: Sistem inteligent pentru monitorizarea și protecția instalațiilor de alimentare din tracțiunea electrică / Modelarea, simularea si monitorizarea solicitărilor termice ale elementelor sistemului de retur din tracțiunea electrică, membru în echipa de proiect, Director proiect: ș.l.dr.ing Mihai Andrușcă.

AA. Premii, distincţii.

BB. Alte realizări semnificative.

Data, 09.04.2025

Ș.l. dr. ing. Alin Dragomir

Anexa A.3.3.c. Lista de lucrari, cadre didactice

Lista de lucrări în domeniul de studii universitare de masterat

Managementul sistemelor de energie

Numele şi prenumele: Iuliana Vieru

A. Teza de doctorat.

• Contributii la optimizarea comportarii liniilor electrice aeriene la supratensiuni de trasnet, 2010

B. Lucrări ştiinţifice publicate în volumele conferinţelor.

• Iuliana Hriscu, Mircea Gusa and Marcel Istrate: „Analysis of Overhead Lines Behavior to Direct Lightning Strokes", WESC 2008

• Hriscu I, Gusa M and Istrate M: „Lightning stroke against overhead electric lines: a comparision between analytical and simulation methods of study" IS-SPETO 2009

• Iuliana Hriscu, Mircea Gusa and Marcel Istrate: „Some Aspects Concerning the ightning Behavior of Overhead Lines", CNEI 2009

• Iuliana Hriscu, Mircea Gusa and Marcel Istrate: „Some Aspects Concerning the Influences of Surge Arresters upon Lightning Behavior of Overhead Lines", WESC 2010

Data, Nume, semnătura

09.04.2025 dr. ing. Iuliana Vieru (Hriscu)

Anexa A.3.3.c. Lista de lucrari, cadre didactice

Lista de lucrări în domeniul de studii universitare de masterat Management Energie Mediu*

Numele şi prenumele: **Beniugă Oana Cristina**

A. Teza de doctorat.

1. „Studii teoretice şi experimentale privind procesarea numerică a imaginilor în metrologie" – Domeniul Inginerie Electrica, sustinuta public in data de 25.09.2009, in cadrul Universitatii Tehnice "Gheorghe Asachi" din Iaşi, Facultatea de Inginerie Electrică, Energetică şi Informatică Aplicată, conducător de doctorat prof. dr. ing. Mihai Crețu.

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

1. Donciu C., Costea O., Temneanu M., Damian R., Branzila M., New prototype architecture for automated irrigation based on power line communications, Grid Enabled Remote Instrumentation, Book Series: Signals and Communication Technology, Part V, chapter 33, pp. 499-509, 2009; ISSN:1860-4862, Publisher: Springer US, DOI: 10.1007/978-0-387-09663-6_33

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS.

1. Oana Cristina Beniugă, Protecția prin relee – note de curs, editura PIM, ISBN: 978-606-13-7838-8, 176 pag., 2023
2. Oana Cristina Beniugă, Florin Băiceanu - Protecția prin relee – îndrumar de laborator, editura PIM, ISBN: 978-606-13-7837-1, 180 pag., 2023
3. Oana-Maria Asiminicesei, Oana-Cristina Beniugă, Alin Dragomir, Ciprian-Romeo Comșa, Cristian-Gyözö Haba, Constantin-Cătălin Dosoftei, Sebastian-Teodor Arădoaei, Marius-Ciprian Brânzilă, AFACERI DIGITALE 3, seria: Antreprenoriat pentru ingineri și arhitecți, editura PERFORMANTICA, ISBN 978-606-685-932-5, 308 pag., 2022
4. Beniugă Oana Cristina, Automatizarea procesului de măsurare folosind procesarea numerică a imaginilor, editura PIM, format academic, ISBN 978-606-13-7985-9, 186 pag., 2023
5. Beniugă Oana, Emilian Furnică, Tehnologia fabricării aparatelor electrice - principii şi metode, editura PIM, format academic, ISBN 978-606-13-3827-6, 323 pag., 2017
6. Alexandru Sălceanu, Eduard Luncă, Oana Beniugă, Oana Neacşu, Silviu Ursache, Marius Păuleţ, Works and Walks in ESD, developed at the Faculty of Electrical Engineering, Electromagnetic Compatibility/Electromagnetic Field. Research and Development in Romania, Editura Agir, Bucureşti, format academic, Cap 3. EDUCATION, Seria: Electrotehnica – Electroenergetica, ISBN 978-973-720-521-6, 15 pag., 2014

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

1. Set prezentări în format PPT - Protecția prin relee - disponibil la https://edu.tuiasi.ro/course/view.php?id=2066
2. Set prezentări în format PPT - Automatizarea sistemelor electroenergetice disponibil la https://edu.tuiasi.ro/course/view.php?id=3932

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

1. O. C. Beniugă, C. R. Beniugă, D. G. Astanei and R. Burlică, Thermostat Behavior Analysis in Smart Home Environment Using Petri Nets, 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi), Iasi, Romania, 2024, pp. 390-393, doi: 10.1109/EPEi63510.2024.10758167
2. Using Petri Net Tool to Study the Dynamic Behaviour of Power Systems Protections, Oana Beniugă, Razvan Beniuga, Mihai Leca, Gabriel Constantin Sârbu, Proceedings of the 2018 International Conference and Expositions on Electrical and Power Engineering, pp. 416-419, IEEE Catalog Number: CFP1847S-USB ISBN: 978-1-5386-5061-5, WOS:000458752200079, 2018.
3. O. Beniugă, R. Beniugă, F. Băiceanu, House heating system thermal dynamics assessment using Petri Net approach, 2023 10th International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 2023, pp. 01-05, doi: 10.1109/MPS58874.2023.10187544
4. Beniugă, D. Machidon, P. S. Popa, O. Beniugă, F. Băiceanu and M. Istrate, Cost-effectiveness and sustainability analysis of a NZEB house, 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi), Iasi, Romania, 2024, pp. 187-192, doi: 10.1109/EPEi63510.2024.10758113
5. B. A. Pingescu, V. D. Asmarandei, D. G. Astanei, O. C. Beniugă, C. R. Beniugă and R. Burlică, High conductivity solution treatment by non-thermal plasma T-shaped mini electrochemical reactors, 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi), Iasi, Romania, 2024, pp. 616-619, doi: 10.1109/EPEi63510.2024.10758144
6. Bogdan, Pingescu, Astanei Dragos, Burlică Radu, Asmarandei Vasile Daniel, Beniugă Oana Cristina and Gheorghe Veronica. “Capacitive Power Supplies for Non-Thermal Plasma Electrochemical Mini-Reactors.” 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi) (2024): 632-635.
7. R. Burlica, D.E. Creţu, O. Beniugă, D. Astanei, Nonthermal Plasma Multi-Reactor Scale-Up Using Pulse Capacitive Power Supplies, Applied Sciences – Basel, vol. 12, issue 20, Art. number 10403, WOS: 000872282100001, 2022.
8. D. Astanei, R. Burlică, D.E. Creţu, M. Olariu, I. Stoica, O. Beniugă, Treatment of Polymeric Films Used for Printed Electronic Circuits Using Ambient Air DBD Non-Thermal Plasma, Materials, vol. 15, issue 5, art. number 1919, 2022.
9. R. Burlică, D. Astanei, D.E. Cretu, D. Dirlau, O. Beniugă, S. Padureanu, V. Stoleru, A. Patras, Non-thermal plasma T-shaped reactor for activated water production, Environmental Engineering and Management Journal, vol. 20, issue 3, pp. 397-404, WOS:000637746900009, 2021.
10. Alexandru Sălceanu, Oana Beniugă, Eduard Lunca - Advances in measurement and analysis of electrostatic discharge significance of human body capacitance, Environmental Engineering and Management Journal, Vol.12, No. 6, 1119-1124, ISSN: 1582-9596, WOS:000325632500002, 2013
11. Oana Beniugă, Oana Neacsu, Electrostatic discharge e-field spectrum analysis and graphical interpretation, BDI (B+) - BULETINUL INSTITUTULUI POLITEHNIC DIN IASI, TOME

LVII (LXI), FASC. 4, Electrotechnics, Energetics, Electronics, ISSN 1223-8139 - PP.139-146, 2011.
12. Rusu, Ciprian-Cătălin, Crețu, Daniel-Eusebiu, Burlică, Radu, Astanei, Dragoș, Beniugă, Oana. DBD System Operating in Ambient Air for Surface Treatment of Polyethylene Terephthalate Films, Bulletin of the Polytechnic Institute of Iași. Electrical Engineering, Power Engineering, Electronics Section, Volume 68 (2022) - Issue 1 (March 2022), 3922, pp.67-79, https://doi.org/10.2478/bipie-2022-0004, 2022
13. R9 I.D. Dirlau, R. Burlica, D. Astanei, O. Beniugă, Effect of non-thermal plasma on molecular species formed in water based solution, Buletinul Institutului Politehnic din Iaşi, Secţia Electrotehnică, Energetică, Electronică, vol. 63(67), nr. 1, pp. 9 – 20, 2017
14. Oana Neacşu, Oana Beniugă, Alexandru Sălceanu - Assessment on electric charges pollution in the residential area and laboratory environment, Environmental Engineering and Management Journal, , Vol. 11, No. 3, pp. 635-640, ISSN: 1582-9596, 2012.
15. Karol Kováč, Jozef Hallon, Oana Beniugă - Measurement of magnetic wave shape of indirect electrostatic discharge, Journal of ELECTRICAL ENGINEERING, VOL 63. NO 7s, pp.126-129, ISSN 1335-3632, 2012
16. O. Beniugă, R. Beniugă, F. Băiceanu, House heating system thermal dynamics assessment using Petri Net approach, 2023 10th International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 2023, pp. 01-05, doi: 10.1109/MPS58874.2023.10187544
17. R. Beniugă, O. Beniugă, D. Machidon, F. Băiceanu, M. Istrate, NZEB compliance principles in Romania for residential buildings, 2023 10th International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 2023, pp. 01-06, doi: 10.1109/MPS58874.2023.10187523.
18. D.E. Cretu, C.C. Rusu, D. Astanei, R. Burlica, O. Beniugă, Assessment of HV Power Supply Efficiency in Plasma Activated Water Production, Proc. of the 2022 International Conference and Exposition on Electrical and Power Engineering, 20-22 oct. 2022, Iasi, Romania, DOI: 10.1109/EPE56121.2022.9959831
19. D.E. Creţu, Ş. Ciauşu, R. Burlică, D. Astanei, O. Beniugă, D. Teşoi, Electromagnetic Field Radiation Generated by Dielectric Barrier Discharge, Proc. of the 2021 9th International Conference on Modern Power Systems (MPS), pp. 1-6, 16-17 iun. 2021, Cluj-Napoca, Romania, DOI: 10.1109/MPS52805.2021.9492635
20. Beniugă, O. Beniugă, F. Băiceanu, M. Istrate, The Influence of Feedwater Preheaters on the Power Plant Thermal Efficiency 2021 9th International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 2021, pp. 1-5, doi: 10.1109/MPS52805.2021.9492627
21. R. Beniugă, O. Beniugă, D. Machidon, M. Istrate, Wind Power in Romania Energy Mix Towards Sustainable Development, 2021 9th International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 2021, pp. 1-4, doi: 10.1109/MPS52805.2021.9492673.
22. F. C. Baiceanu, O. Beniugă, R. C. Beniuga, E. I. Diac, Quality Assessment of Power Transformers Differential Protection Behavior Using Harmonic Restraint Techniques, 2020 International Conference and Exposition on Electrical and Power Engineering (EPE), 2020, pp. 680-684, doi: 10.1109/EPE50722.2020.9305610.
23. F. C. Baiceanu, O. Beniugă, R. Beniugă, F. T. Munteanu, Transient of High Voltage Circuit Breakers Intelligent Switching during Grid Faults, 2021 9th International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 2021, pp. 1-4, doi: 10.1109/MPS52805.2021.9492555.
24. D. Astanei, D. Creţu, R. Burlică, ID Dirau, O. Beniugă, S. Pellerin, M. Wartel, Voltage Polarity Influence on NTP Energy Efficiency of Point-to-Point Reactor, Proceedings of 2019

International Conference on Electromechanical and Energy Systems (SIELMEN 2019), art. number 263, Oct 9 – 11, 2019, Craiova, Romania, WOS:000630287500116

25. Răzvan Beniugă, Marcel Istrate, Oana Beniugă, Dragoș Machidon, Educational Resource for Wind Turbine Behaviour Assessment, Proceedings of the 2018 International Conference and Expositions on Electrical and Power Engineering, pp.395-398 IEEE Catalog Number: CFP1847S-USB ISBN: 978-1-5386-5061-5
26. Gabriel Constantin Sârbu, Oana Beniugă, Evaluating measurement uncertainty of thermocouples calibration, Proceedings of the 2018 International Conference and Expositions on Electrical and Power Engineering, IEEE Catalog Number: CFP1847S-USB ISBN: 978-1-5386-5061-5
27. Răzvan Beniugă, Marcel Istrate, Oana Beniugă - Crowbar protection impact on wind farm behaviour during grid disturbance, Proceedings of the 7th International Conference on Modern Power Systems (MPS 2017), ISBN 978-1-5090-6565-3
28. Oana Beniugă, Razvan Beniuga, 3D Assessment of ESD field level for protection devices safety, Proceedings of the 10th International Symposium on Advanced Topics in Electrical Engineering March 23-25, 2017, ISBN: 978-1-5090-5160-1, pp. 354-357
29. Beniugă Oana, Beniugă Răzvan - Assessing operational planning performance among wind power system based on N-1 criterion (2017) 22nd IMEKO TC4 International Symposium and 20th International Workshop on ADC Modelling and Testing 2017, pp. 435-438
30. Oana Beniugă, Mihai Leca, Razvan Beniuga, Assessment of Influence of Grid Disturbances on Wind Turbine DFIG Converters, Proceedings of the 2016 International Conference and Exposition on Electrical and Power Engineering, ISBN: 978-1-5090-6128-0, pp. 693-696
31. Donciu C., O. Costea (Beniugă) Prototype architecture for automatic control of greenhouse crops irrigation, Acta Electrotehnica, nr. 2, pp.139 – 143, ISSN 1841-3323, Academia de Stiinţe Tehnice din România, Universitatea Tehnică din Cluj-Napoca, 2007
32. Temneanu C., C. Donciu, C. Cristian, O. Costea (Beniugă) Informatic System of Interactive Training for Virtual Laboratory Type Aplications (I). L5-Common Gate Interface (CGI) in Labview environment, Acta Electrotehnica nr. 2, pp.222– 227, ISSN 1841-3323, Academia de Stiinţe Tehnice din Romania, Universitatea Tehnica din Cluj-Napoca, 2008
33. O. Costea (Beniugă) Informatic System of Interactive Training for Virtual Laboratory Type Aplications (I). L1-The study of temperature transducers usimg FileldPoint Module, Acta Electrotehnica nr. 3, pp.213 – 217, ISSN 1841-3323, Academia de Stiinţe Tehnice din Romania, Universitatea Tehnica din Cluj-Napoca, 2007

G. Lucrări ştiinţifice publicate în reviste din străinătate.

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

I. Lucrări ştiinţifice publicate în volumele conferinţelor.

1. Oana Beniugă, Razvan Beniuga, Wind Farms' Grid Connection and Protection Requirements for Sustainable Development International Conference "Energy of Moldova – 2016. Regional aspects of development", 2016 - Chisinau, Republic of Moldova, ENERGY OF MOLDOVA-2016, pp.478 – 481, ISBN 978-9975-4123-5-3
2. Costea (Beniugă) O., Donciu C., Labview based analog and digital instrument's automated calibration, Management of Technological Changes, vol. 1, pp. 473-476, 2009;
3. Beniugă Oana, Neacşu Oana, Sălceanu Alexandru, Aproaches on Pollutant Fields Associated to Electrostatic Discharge over the Working and Electronic Environment – Modelling and Simulation, BDI - Buletinul Ştiinţific al Universităţii "Politehnica" din Timişoara Seria

Electronică şi Telecomunicaţii -Transactions on Electronics and Communications Tom 56(70), Fascicola 2, pp.3-6, ISSN 1583-3380, 2011

J. Invenţii.

1. R. Burlică, D. Astanei, I.D. Dirlău, O. Beniugă, M. Andruşcă, M. Adam, Minireactor electrochimic cu plasma non-termica cu geometri in forma de T pentru producerea apei activate, Brevet nr. 134206/29.03.2024, RO 134206 B1
2. Cerere de brevet – R. Burlică, D. Astanei, O. Beniugă, A. Dragomir, R.Beniuga, Sistem de panouri fotovoltaice cu dispersie optică a luminii solare pentru aplicații în agricultură, Cerere de brevet nr. nr. A00557/ 06.10.2023.
3. Cerere de brevet – R. Burlică, D. Astanei, O. Beniugă, D.E. Creţu, C.C. Rusu, Dispozitiv cu plasma non-termica DBD-Corona pentru tratamentul substraturilor polimerice destinate ambalarii produselor alimentare,Cerere de brevet nr. A00493/12.08.2022.
4. Cerere de brevet – R. Burlică, D. Astanei, O. Beniugă, M.A. Olariu, D.E. Creţu, Dispozitiv cu plasma non-termica DBD pentru tratamentul substraturilor polimerice destinate imprimării circuitelor electronice flexibile, Cerere de brevet nr. nr. A00117/11.03.2022.
5. Cerere de brevet – I.D. Dirlău, D. Astanei, O. Beniugă, R. Burlică, Minireactor conic cu plasmă non-termică pentru producerea apei activate, cu aplicaţii în agricultură, Cerere de brevet nr. A01081/11.12.2017, publicată în RO-BOPI RO133404A2 / 28.06.2019.

K. Contracte de cercetare.

1. Membru proiect PN-IV-P8-8.3-PM-RO-BE-2024-0011, Titlu - Evaluarea impactului utilizării tehnologiei cu plasmă non-termică asupra creșterii și dezvoltării plantelor în sere și în spații protejate (Assessment of the impact of using non-thermal plasma technology on plant growth and development in indoor farming), internațional România – Belgia finanțat prin UEFISCDI
2. Membru proiect Bio-tratament aplicat pe ambele suprafețe ale foliei polimerice utilizată pentru împachetarea produselor alimentare utilizând plasma non-termică DBD-Corona, Proiect tip ERANET-MANUNET-III-PlasmaPack, nr. 214/2020, perioada 2020-2022 (24 luni)
3. Membru proiect Reactor cu plasma non-termica la presiune atmosferica pentru pre-tratamentul substraturilor polimerice utilizate in fabricarea circuitelor imprimate flexibile, proiect tip ERANET-MANUNET-III-Treatoflex, nr. 146/2020, perioada 2020-2022 (24 luni)
4. Director proiect - grant intern TUIASI, Titlu: Organic pollutant reformation to green hydrogen using non-thermal plasma technologies REFORM2H2 Proiect finantat de Univ.Tehnica Gheorghe Asachi din Iasi, Grant intern nr. GI/P11_IDEI 2021, Durata de derulare: 01.08.2021 - 15.12.2021
5. Director de proiect s.l.dr.ing. Oana Cristina Beniugă (Costea): Studii teoretice şi experimentale privind utilizarea procesării numerice a imaginilor în metrologie, Proiect finanțat de CNCSIS – PN II Contract TD nr. 92/2008, 2008-2009
6. Membru proiect C8. Centrul pentru Educație digitală - Grant intern de tip top-down cu Tema: Operaționalizarea Centrului de Inovare Digitală al TUIASI în cadrul proiectului ”DigitAll@TUIASI - Transformare digitală pentru profesiile viitorului” Contract tip G.I., nr. GI-TD-DigitAll-1/2022
7. Membru proiect Evaluarea apei activate produse de către diferite reactoare de plasmă non-termică, proiect tip PN-III-P3-3.1-PM-RO-FR, nr. 19BM/2019, perioada 2019-2021 (30 luni)

8. Membru proiect Model experimental pentru demonstrarea fezabilitatii cresterii potentialului terapeutic al germenilor de grau prin tratarea acestora cu apa activata cu plasma non-termica (PAW), proiect tip PN-III-P2-2.1-PED-2019-0556, nr. 361PED/2020, perioada 2020-2022 (24 luni)
9. Membru proiect Creșterea Producției Agricole în Sere Utilizând Irigarea cu Apă Activată cu Plasmă Rece, proiect tip PN III, PCE, nr. 15/12.07.2017, perioada 2017-2019 (30 luni)
10. Membru proiect Dezvoltarea unui ansamblu de senzori de curent şi tensiune şi a unui releu de protecţie pentru monitorizarea parametrilor electrici pe liniile MT/JT Beneficiar: Elecro Alfa International Botosani, nr. contract: 26153/10.12.2020, perioada de implementare: 2021
11. Membru proiect Sistem video inteligent de comandă a semaforizării intersecţiilor destinat diminuării congestiilor rutiere şi reducerii poluării fizico-chimice şi fonice a mediului, proiect finantat de CNCSIS - PN2-Parteneriate, 71-100/2007, 2007-2010
12. Membru proiect Sistem video automatizat cu grad ridicat de interschimbabilitate pentru etalonare metrologică a echipamentelor de măsurare Proiect finantat de CNCSIS - PN2-Parteneriate, contract 72-173/2008, 2008-2011
13. Membru proiect Titlul proiectului: Instrumentație la distanță pentru noile griduri regionale dedicate, PN II CAPACITĂȚI, nr. 62 CB/2008
14. Membru proiect Dezvoltarea parteneriatelor C/D în vederea promovării unor proiecte europene în domeniul sistemelor distribuite de monitorizare a mediului Proiect finantat de CNCSIS - CEEX Modul 3, contract 201/2006, 2006 – 2008
15. Membru proiect Dezvoltarea parteneriatelor C/D în vederea promovării unor proiecte europene în domeniul video-inspecţiei inteligente a materialelor textile Proiect finantat de CNCSIS - CEEX – Modul 3, contract 194/ 2006, 2006-2008
16. Membru proiect Sistem informatic de instruire interactiva bazat pe algoritmi multitask de mare viteza dezvoltat pe platforma reconfigurabila online pentru aplicații de tip laborator virtual Proiect finantat de CNCSIS - CEEX – Modul 1 – Infosoc, contract 137/2006, 2006 – 2008
17. Proiect de mobilități de tip INTERNATIONAL RESEARCH Project (IRP) Titlul proiectului: PLASMEAU - Plasmas non-thermiques pour la dégradation des contaminants émergents dans l'eau", finanțat de CNRS Franța

Perioada de derulare a mobilităților: 2024-2028

L. Premii, distincţii.

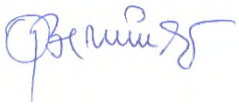
Premiile pentru excelență în cercetarea științifică acordate în 2023 de Universitatea Tehnică „Gheorghe Asachi” din Iași:

✓ Premiul pentru grupul care a contribuit la atragerea celor mai multe fonduri publice pentru cercetarea științifică - Grupul coordonat de Prof. univ. dr. ing. Radu Burlică, Facultatea de Inginerie Electrică, Energetică și Informatică Aplicată, Grup format din: Prof. univ. dr. ing. Radu Burlică, Conf. dr. ing. Dragoș Astanei, s.l.dr.ing. Oana Cristina Beniugă, Suma atrasă în universitate: 1.429.900 lei.

M. Alte realizări semnificative.

Data,
09.04.2025

Nume, semnătura
Beniugă Oana Cristina



* Conform H.G. 1175/ 2006

Lista de lucrări în domeniul de studii universitare de master „Inginerie Energetică”

Numele şi prenumele: **ANDRUŞCĂ Mihai**

A. Teza de doctorat.

2. „Contribuții privind managementul echipamentelor electrice din cadrul unei companii de electricitate”, 2013, Domeniul „Inginerie Electrică”, Universitatea Tehnică „Gheorghe Asachi” din Iași, conducător doctorat: prof. dr. ing. Adam M.

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).

1. Dragomir A., Adam M., **Andruşcă M.,** Centralized monitoring and diagnosing of the return circuit of electric railway traction, The XXVII International Conference "Inventica 2023. Science of creativity", Iasi, Romania, June 22nd 2023, pp. 144-154, Book Chapter, https://doi.org/10.2478/9788367405201-009, (ISBN: 978-83-67405-20-1), (indexed SCIENDO).
2. Pancu C., **Andruşcă M.,** Adam M., Echipamente cu logică programabilă, Editura PIM, Iasi, 170 pag., ISBN: 978-606-13-3721-72017.
3. **Andruşcă M.,** Adam M., Managementul echipamentelor electrice, Editura Politehnium, Iasi, 200 pag., ISBN: 978-973-621-464-6, 2017.
4. Adam M., Baraboi A., Pancu C., **Andruşcă M**., Echipamente electrice - vol.1 îndrumar de laborator, Editura Politehnium, Iasi, 200 pag., ISBN: 978-973-621-411-0, 2013.

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

1. Andrusca M., Adam M., Compatibilitate electromagnetica in energetica, 200 pag., http://www.energetica.tuiasi.ro/.
2. Adam M., Andrusca M., Echipamente Electrice I, 210 pag., http://www.energetica.tuiasi.ro/.
3. Andrusca M., Adam M., , Echipamente Electrice II, 170 pag., http://www.energetica.tuiasi.ro/.

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

8. **Andrusca M,** Adam M., Dragomir A., Lunca E, Innovative Integrated Solution for Monitoring and Protection of Power Supply System from Railway Infrastructuresm Sensors MDPI, 2021, FI-3.57, Q1.
9. Dragomir A., Adam M., **Andrusca M,** Grigoraș G., Dragomir M., Ramakrishna S., Modeling, Simulation and Monitoring of Electrical Contacts Temperature in Railway Electric Traction, Mathematics MDPI, 2021, FI-2.25, Q1.

10. **Andrusca M.,** Adam M., Dragomir A., Lunca E., Seeram R., Postolache O. Condition Monitoring System and Faults Detection for Impedance Bonds from Railway Infrastructure, Applied Sciences 10 (18), 6167, 2020, Revistă ISI Q2, FI 2,47.
11. Dragomir A., Adam M., Pancu C., **Andruşcă M.,** Pantelimon R., Monitoring of long term thermal stresses of electrical equipment, UPB Scientific Bulletin, Series C: Electrical Engineering, Volume 77, Issue 2, 2015, pag. 245-252.

G. Lucrări ştiinţifice publicate în reviste din străinătate.

1. Dragomir A., Adam M., Andruşcă M., Munteanu A., Impact of Long-Term Thermal Stresses of Electrical Equipment on Climate Change, WSEAS Transactions on Environment and Development, 2224-3496, Volume 13, 2017, Art. #3, pp. 19-26, ISSN / E-ISSN: 1790-5079 / 2224-3496.
2. Pleşca A, Irimia D.F, Rotariu M., Andruşcă M., About a Possibility to Fuse Monitoring and Testing, International Review on Modelling and Simulations (IREMOS), vol. 4, nr. 6, decembrie 2012, pp. 2770 – 2780, ISSN 1974-9821.

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

6. M. Atanasoaei, M. Adam, **M. Andrusca,** A. Dragomir, C.N. Deac, Aspects Regarding the Use of Electronic Power Devices in Power Grid, Bulletin of the Polytechnic Institute of Iași. Electrical Engineering, Power Engineering, Electronics Section, vol. 67, nr. 1, pag. 55-63, 2021, (cod CNCSIS 87).
7. Micu M.B., Adam M., **Andruşcă M.,** Nonintrusive Electrical Loads Pattern Determination, Bulletin of the Polytechnic Institute of Iași. Electrical Engineering, Power Engineering, Electronics Section, vol. 67, nr. 1, pag. 65-74, 2021, (cod CNCSIS 87).
8. Dragomir A., Adam M., **Andruşcă M.,** Munteanu A., Thermal stress wireless monitoring devices for electrical equipment, Buletinul Inst. Polit. Iasi, vol. 62 (66), nr.1, 2016, secția Electrotehnica, Energetica, Electronica, pp.19-27, (cod CNCSIS 87).
9. Dragomir A., Adam M., **Andruşcă M.,** Munteanu A., Long term thermal stresses of a withdrawble electrical contact, Acta Electrotehnica, nr.3, 2015, pp. 83-87, (cod CNCSIS 576).
10. Munteanu A., Adam M., **Andruşcă M.,** Cotruş A., Aspects about Supply Systems in Railway Electric Traction, Acta Electrotehnica, nr.3, 2015, pp. 183-187, (cod CNCSIS 576).
11. **Andruşcă M.,** Adam M., R. Pantelimon, Baraboi A, Pancu C., Hardware-software Application for Monitoring and Diagnosis of Circuit Breakers, Acta Electrotehnica, Cluj, 2013, pp. 243-251, (cod CNCSIS 576).
12. Pantelimon R., Adam M., **Andruşcă M.,** Pancu C., Comparative Study between Perturb and Observe and Open Circuit Voltage Algorithms used for Maximum Power Point Tracking, Acta Electrotehnica, Cluj, 2013, pp. 251-257, (cod CNCSIS 576).
13. Irimia D.F, **Andruşcă M.,** Case study: a comparative analysis of the electric field near low frequency electric lines, Buletinul AGIR, nr. 2, 2012, pp. 781-787, (cod CNCSIS 415).

14. Adam M., **Andruşcă M.,** Baraboi A., Irimia D., Technical condition and the importance of electrical equipment from a transformer electric substation on their maintenance order, Buletinul AGIR, nr. 2, 2012, pp. 503-511, (cod CNCSIS 415).
15. **Andruşcă M.,** Adam M., Irimia D., Baraboi A., Electrical equipment maintenance, component of the asset management, Buletinul AGIR, nr. 2, 2012, pp. 513-520 (cod CNCSIS 415).
16. **Andruşcă M.,** Adam M., Baraboi A., Irimia F. D., Aspects regarding the asset management of the electrical equipment into a power station, Buletinul AGIR, nr. 4, 2011, pp. 165-170, (cod CNCSIS 415).
17. Adam M., Baraboi A., Pancu, C., **Andruşcă,** System for monitoring and diagnostics of the electrical equipment, Acta Electrotehnica, vol. 52, nr. 5, 2011, pp. 1-7, (cod CNCSIS 576).
18. **Andruşcă M.,** Monitorizarea şi diagnosticarea caracteristicelor cinematice ale întrerupătoarelor de înaltă tensiune, pp. 11-21, Editura Politehnium, Tendinţe şi cerinţe de interdisciplinaritate în cercetare. Prezentarea rezultatelor obţinute de doctoranzi ISBN 978-973-621-408-0, 2013.
19. **Andruşcă M.,** Adam M., Baraboi A., Irimia D., Pancu C., Pleşca T., Considerations regarding the asset management into electricity company, Change Management in a Dynamic Environment, pp. 396-405, Editura Niculescu, ISBN 978-973-748-658-5, 2011.

I. Lucrări ştiinţifice publicate în volumele conferinţelor.

69. M.B. Micu, M. Adam, **M. Andrusca ,** A. Anton, Bodolică M.C., Non-intrusive Monitoring of Consumers of the Power Station Internal Services, 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi), pp. 518-522, Iasi, Romania, 2024, (IEEExplore).
70. C Mihnea, **M Andruşcă,** M Adam, C Ciornohac, BN Ghiujan, A Anton, Monitoring of Medium Voltage Circuit Breakers using a Programmable Logic Controller, 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi), pp. 406-410, Iasi, Romania, 2024, (IEEExplore).
71. MC Bodolică, **M Andrușcă,** M Adam, A Anton, MB Micu, Aspects about Loads Monitoring and Static Switching for Unbalanced Low-Voltage Distribution Networks, pp. 435-439, Iasi, Romania, 2024, (IEEExplore).
72. Toma B.E., **M Andrușcă,** M Adam, C Mihnea, A Anton, D Daniel, Intelligent System of Management, Command, and Control of Electricity Generated by Renewable Sources, pp. 411-414, Iasi, Romania, 2024, (IEEExplore).
73. A Anton, **M Andruşcă,** M Adam, MB Micu, A Dragomir, SM Antohi, About Contact Resistance Monitoring and Vibration Analysis of a Power Circuit Breaker, pp. 430-434, Iasi, Romania, 2024, (IEEExplore).
74. E Lunca, S Vornicu, I Pavel, **M Andrusca,** Measurement and Numerical Simulation of the Low-Frequency Electric Field Generated by an Overhead Power Line, pp. 719-122, Iasi, Romania, 2022, (IEEExplore).
75. M Atănăsoaei, M Adam, **M Andrusca,** A Dragomir, CN Deac, The Influence of TCSC Devices on Distance Protection Tripping Characteristic, pp. 135-140, 2022 International Conference and Exposition on Electrical And Power Engineering (EPE), Iasi, Romania, 2022, (IEEExplore).
76. A. Dragomir, M. Adam, **M. Andrusca,** M. Atanasoaei, S.M. Antohi, C.N. Deac, Ramakrishna, Perspectives on Railway Electric Traction System Improvement

Brought by Monitoring the Impedance Bonds, 2021 International Conference on Electromechanical and Energy Systems (SIELMEN), Chisinau, Moldova, 2021.

77. S.M. Antohi, M. Adam, A. Dragomir, **M. Andrusca,** M. Atanasoaei, A. Miron, A. Iamandi, About Communication Networks Used within Electrical Equipment, 2021 International Conference on Electromechanical and Energy Systems (SIELMEN), Chisnau, Moldova, 2021.
78. S.M. Antohi, M. Adam, A. Dragomir, **M. Andrusca,** M. Atanasoaei, A. Miron, A. Iamandi, Wireless Communication Networks within Electrical Equipment, 2021 9th International Conference on Modern Power Systems (MPS), Cluj, Romania, 2021, (IEEExplore).
79. M. Atanasoaei, M. Adam, **M. Andrusca,** A. Dragomir, C.N. Deac, Aspects Regarding the Presence of TCSC Devices on the Transmission Lines, 2021 9th International Conference on Modern Power Systems (MPS), Cluj, Romania, 2021, (IEEExplore).
80. M. B. Micu, M. Adam, **M. Andrusca,** A. Dragomir, C.N. Deac, Aspects Regarding the Loads Patterns Determination from the Internal Sevices of the Power Substations, 11th International Conference and Exposition on Electrical and Power Engineering (EPE2020), 22-23 Octombrie, Iasi, Romania, 2020 (conferinta indexata WoS).
81. A. Dragomir, M. Adam, **M. Andrusca,** M. Atanasoaei, O. Rusu, A. Miron, A. Iamandi, Aspects Regarding the Infrared Monitoring of Electrical Equipment Temperature, 11th International Conference and Exposition on Electrical and Power Engineering (EPE2020), 22-23 Octombrie, Iasi, Romania, 2020 (conferinta indexata WoS).
82. E. Ojovanu, A. Dragomir, M. Adam, **M. Andrusca,** C.N. Deac, M. Cardasim, G. Mocanu, Mechanical Fault Detection by Vibration Monitoring of Electrical Equipment, 11th International Conference and Exposition on Electrical and Power Engineering (EPE2020), 22-23 Octombrie, Iasi, Romania, 2020 (conferinta indexata WoS).
83. C.N. Deac, M. Adam, **M. Andrusca,** A. Dragomir, M. Micu, Supervision and Control System of an Electrical Equipment Testing Installation, 11th International Conference and Exposition on Electrical and Power Engineering (EPE2020), 22-23 Octombrie, Iasi, Romania, 2020 (conferinta indexata WoS).
84. M. Atanasoaei, M. Adam, **M. Andrusca,** A. Dragomir, C.N. Deac, Effects of Solid State Current Limiter on the Power Grid, 11th International Conference and Exposition on Electrical and Power Engineering (EPE2020), 22-23 Octombrie, Iasi, Romania, 2020 (conferinta indexata WoS).
85. M. Adam, **M. Andrusca,** A. Dragomir, D. Astanei, R. Burlica, Technical Condition Monitoring of Impedance Bonds using Sensors and Dedicated Device, 11th International Conference and Exposition on Electrical and Power Engineering (EPE2020), 22-23 Octombrie, Iasi, Romania, 2020 (conferinta indexata WoS).
86. G. Mocanu, G. Gabor, A.T. Plesca, M. Adam, **M. Andrusca,** Temperature Monitoring of the Heating Resistors of the Railway Switches from Romanian Railway System, 11th International Conference and Exposition on Electrical and Power Engineering (EPE2020), 22-23 Octombrie, Iasi, Romania, 2020 (conferinta indexata WoS).
87. Micu M. B., Adam M., **Andrusca M.,** Deac C. N., Possibilities of Monitoring, Commands and Control of the Circuit Breakers, 12th International Conference on Electromechanical and Power Systems - SIELMEN, Chișinău, Rep. Moldova, 2019 (**IEEExplore**).

88. Deac C.N., Adam M., **Andruşcă M.,** Dragomir A., Aspects Regarding Contact Resistance Measurement, 8th International Conference on Modern Power Systems - MPS, Cluj, România 2019 (**IEEExplore**).
89. Dragomir A. , Adam M., **Andruşcă M.,** Deac C.N., Iamandi A.,Temperature logger for Electrical Equipment's Thermal Stress Monitoring, 8th International Conference on Modern Power Systems - MPS, Cluj, România 2019 (**IEEExplore**).
90. Dragomir A., Atănăsoaei M., Adam M**., Andruşcă M.,** Deac N. C., Infrared Procedure for Monitoring Long-term Thermal Stresses of Electrical Equipment, 54th International Universities Power Engineering Conferance, București, Septembrie 3-6, 2019 (**IEEExplore**).
91. Dragomir M., Iamandi A., Rusu A. C., Atănăsoaei M., Dragomir A. , Adam M., **Andruşcă M.,** Single-terminal Fault Location Algorithm for Electrical Lines, 54th International Universities Power Engineering Conferance, București, Septembrie 3-6, 2019 (**IEEExplore**).
92. Dragomir A. , Adam M., **Andruşcă M.,** A Review about Wireless Monitoring of Electrical Equipment Temperature, 11th International Symposium on Advanced Topics in Electrical Engineering, București, Martie 28-30, 2019. (**WoS Proceedings**).
93. Atănăsoaei M., Adam M., **Andruşcă M.,** Dragomir A., Deac N. C., Aspects Regarding the Protection Relays from Power Substations, 12th International Conference on Electromechanical and Power Systems - SIELMEN, Chișinău, Rep. Moldova, 2019 (**IEEExplore**).
94. Dragomir A., Adam M., **Andruşcă M.,** Dragomir M., Filip B., Iamandi A., Environmental factors that affects the infrared thermal stress monitoring of electrical equipment, 5th International Conference on Condition Monitoring, Diagnosis and Maintenance - CMDM 2019, September 9th -11th 2019, Bucharest, Romania.
95. **Andruşcă M.,** Adam M., Dragomir A., Astanei D., Andrusca L., About Monitoring of Medium Voltage Circuit Breakers with SF6, 10th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2018, pp. 551-559 (**WoS Proceedings**).
96. Adam M., **Andruşcă M.,** Dragomir A., Burlica R., Short-circuit Thermal State of a Withdrawable Contact, 10th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2018, pp. 963-967 (**WoS Proceedings**).
97. Dragomir A., Adam M., **Andruşcă M.,** Astanei D., Andrusca L., Dumitrescu C., About Some Connection Modes of the Current Conducting Paths, 10th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2018, pp. 357-361 (**WoS Proceedings**).
98. Dragomir A., Adam M., **Andruşcă M.,** Burlica R., Micu M.B., Patrichi S., Simulating Electrical Connections in Terms of Thermal Stresses, 10th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2018, pp. 361-367 (**WoS Proceedings**).
99. Astanei D., Burlica R., Dirlau I.D., **Andruşcă M.,** Ayrton Relation Applied for Medium Voltage AC Electrical Discharges, 10th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2018, pp. 583-589 (**WoS Proceedings**).
100. Munteanu A., Adam M., **Andruşcă M.,** Dragomir A., Micu M.B., Cardasim M., A Possibility to Monitoring and Diagnosis of the Joint Coils from Railway Electric

Traction, 10th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2018, pp. 538-542 (**WoS Proceedings**).

101. Munteanu A., Adam M., **Andruşcă M.,** Dragomir A., Micu M.B., Aspects regarding the Monitoring of Electrical Equipment from Electric Traction, 10th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2018, pp. 547-551 (**WoS Proceedings**).
102. Micu M.B., Adam M., **Andruşcă M.,** Dragomir A., Aspects Regarding Electrical Loads Pattern Recognition Using Artificial Neural Network, 10th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2018, pp. 325-329 (**WoS Proceedings**).
103. Deac C. N., Adam M., Pancu C., **Andruşcă M.,** Dragomir A., Aspects Regarding the High-Current Testing of Current Paths, 10th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2018, pp. 508-512 (**WoS Proceedings**).
104. Dragomir A., Adam M., **Andruşcă M.,** Munteanu A., Boghiu E., Considerations Regarding Infrared Thermal Stresses Monitoring of Electrical Equipment, 11th International Conference on Electromechanical and Power Systems, Chisinau, Moldova, 2017, pp.100-103 (**WoS Proceedings**).
105. Munteanu A., Adam M., **Andruşcă M.,** Dragomir A., Boghiu E., About Monitoring of Joint Coils from Electric Traction Railway, 11th International Conference on Electromechanical and Power Systems, Chisinau, Moldova, 2017, pp. 86-89 (**WoS Proceedings**).
106. Boghiu E., Adam M., **Andruşcă M.,** Dragomir A., Munteanu A Aspects Regarding Controlled Switching of the Vacuum Circuit Breaker, 11th International Conference on Electromechanical and Power Systems, Chisinau, Moldova, 2017, pp. 82-85 (**WoS Proceedings**).
107. Dragomir A., Adam M., **Andruşcă M.,** Munteanu A., Environmental Footprint created by Thermal Stresses Electrical Equipment, 7th International Conference on Modern Power Systems - MPS, Cluj, România 2017 (**WoS Proceedings**).
108. Munteanu A., Adam M., **Andruşcă M.,** Boghiu E., Dragomir A. , Thermal Stress Analysis of Current Path from Return Circuit of Electric Traction, 7th International Conference on Modern Power Systems - MPS, Cluj, România 2017 (**WoS Proceedings**).
109. Boghiu E., Adam M., **Andruşcă M.,** Dragomir A., Munteanu A., Influence of Operational Voltage on Switching Time of the Circuit Breakers, 7th International Conference on Modern Power Systems - MPS, Cluj, România 2017 (**WoS Proceedings**).
110. Gheorghiţă M.C., Adam M., **Andruşcă M.,** Munteanu A., Dragomir A., About Contact Resistance of the Electrical Equipment, 7th International Conference on Modern Power Systems - MPS, Cluj, România, 2017 (**WoS Proceedings**).
111. **Andruşcă M.,** Adam M., Burlica R., Dragomir A., Munteanu A., Considerations regarding the Influence of Contact Resistance on the Contacts of Low Voltage Electrical Equipment Proceedings, 9th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2016, pp. 123-128 (**WoS Proceedings**).
112. Adam M., **Andruşcă M.,** Dragomir A., Munteanu A., About the Dynamic Contact Resistance of the Circuit Breakers, 9th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2016, pp. 129-132 (**WoS Proceedings**).

113. Boghiu E., Adam M., **Andruşcă M.,** Micu M., Aspects Regarding the Controlled Switching of the Shunt Reactors, 9th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2016, pp. 119-122 (**WoS Proceedings**).
114. Micu M., Adam M., **Andruşcă M.,** Boghiu E., Aspects Regarding the Nonintrusive Load Monitoring and Electrical Equipment Diagnosis from Power Substations, 9th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2016, 115-118 (**WoS Proceedings**).
115. Munteanu A., Adam M., **Andruşcă M.,** Dragomir A., Modeling and Simulation of a Supply System from Electric Traction, 9th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2016, pp. 111-114 (**WoS Proceedings**).
116. Dragomir A., Adam M., **Andruşcă M.,** Munteanu A. Aspects Concerning the Influence of Environmental Factors in Infrared Monitoring of Electrical Equipment, 9th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2016, pp. 133-138 (**WoS Proceedings**).
117. Burlica R., Astanei D., **Andruşcă M.,** Hnatiuc E. The Dynamic Behavior of Electromagnetic Plunger Drivers For Electrical Apparatusses with Contacts, 9th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2016, pp. 139-142 (**WoS Proceedings**).
118. **Andruşcă M.,** Adam M., Baraboi A., Pantelimon R., Dragomir A., Using Fuzzy Logic for Diagnosis of Technical Condition of Power Circuit Breakers, Proceedings 8th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2014, pp. 268-273 (**WoS Proceedings**).
119. **Andruşcă M.,** Adam M., Molodeschi M., Roman C., Andruşcă L., Asset Management System - Software Application on Power Substation Level, Proceedings 8th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2014, pp. 274-279 (**WoS Proceedings**).
120. Dragomir A., Adam M., **Andruşcă M.,** Molodeschi M., About Thermal Stresses Monitoring and Diagnosis of Electrical Equipment, Proceedings 8th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2014, pp. 289-294 (**WoS Proceedings**).
121. Cotruş A., Adam M., **Andruşcă M.,** Pantelimon R., Power Flow Control Equipment, Proceedings 8th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2014, pp. 284-288 (**WoS Proceedings**).
122. **Andruşcă M.**, Adam M., R. Pantelimon, Baraboi A., About diagnosis of circuit breakers from electricity company, 8th International Symposium on Advanced Topics In Electrical Engineering-ATEE Bucureşti, România, 2013, (**WoS Proceedings**).
123. Pantelimon R., Adam M., **Andruşcă M.,** Pancu C., Aspects regarding solar battery charge controllers, 8th International Symposium on Advanced Topics In Electrical Engineering - ATEE, Bucureşti, România, 2013 (**WoS Proceedings**).
124. **Andruşcă M.,** Adam M., Irimia D., Baraboi A., Aspects about the monitoring and diagnosis of high voltage circuit breakers, Proceedings 7th International Conference and Exposition on Electrical and Power Engineering - EPE, Octombrie, Iași, România, 2012, pp. 154 – 158 (**WoS Proceedings**).
125. **Andruşcă M.,** Adam M., Irimia D., Baraboi A., Embedded system and software application for monitoring and diagnosis of high voltage circuit breakers, Proceedings 7th International Conference and Exposition on Electrical and Power

Engineering -EPE, Octombrie, Iași, România, 2012, pp. 159 – 166 (**WoS Proceedings**).

126. Irimia D., Baraboi A., Adam M., **Andruşcă M.,** Modeling, EMTP simulation and analyse of the electrical equipment from renewable energy system, Proceedings 7th International Conference and Exposition on Electrical and Power Engineering-EPE,Octombrie, Iași, România, 2012, pp. 143 – 147 (**WoS Proceedings**).
127. Irimia D., Baraboi A., Adam M., **Andruşcă M.,** Monitoring and diagnosis of the inverter from a renewable energy system, Proceedings 7th International Conference and Exposition on Electrical and Power Engineering-EPE, Octombrie, Iași, România, 2012, pp. 167 – 171 (**WoS Proceedings**).
128. Benchea M., Drilea D., **Andruşcă M.,** Puiu G., Software application for offline monitoring and diagnostic of electrical equipment, Proceedings 7th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2012, pp. 178-181, (**WoS Proceedings**).
129. Postolache O., Luncă E., Bicleanu P., **Andrușcă M.,** Girão P., Unobtrustive Cardio-Respiratory Monitoring Based on Microwave Doppler Radar, Proceedings 7th International Conference and Exposition on Electrical and Power Engineering - EPE, Iași, România, 2012, pp. 597-600, (**WoS Proceedings**).
130. **Andruşcă M.,** Adam M., Irimia D., Baraboi A., Prioritization of maintenance activities from an electricity company, 13th International Conference on Optimization of Electrical and Electronic Equipment (OPTIM 2012), Braşov, România, 2012, pp.1259-1265 **(IEEE Xplore).**
131. **Andruşcă M.,** Adam M., Baraboi A., Irimia D., Pancu C., Pleşca T., Considerations regarding the asset management into electricity company, The 5th International Conference of Management and Industrial Engineering ICMIE 2011, 20-21 Octombrie Bucureşti, România, 2011, pp. 396-405 (**WoS Proceedings**).
132. Irimia F. D., Baraboi A., **Andruşcă M.,** Adam M., About some quality aspects regarding the renewable energy installations voltage, 11th International Conference on Electrical Power Quality and Utilisation – EPQU, 17-19 Octombrie 2011, Lisabona, Portugalia, pp. 1-6 (**IEEExplore**).
133. **Andruşcă M.,** Adam M., R. Pantelimon, Baraboi A, Pancu C., LabVIEW Software Aplication for Monitoring and Diagnosis of Circuit Breakers, Proceedings of 5th International Conference on Modern Power Systems – MPS, Cluj-Napoca, România, 2013, pp. a34-a40.
134. Pantelimon R., Adam M., **Andruşcă M.,** Pancu C., Comparative Study of Maximum Power Point Tracking Algorithms used in Solar Battery Charge Controllers, Proceedings of 5th International Conference on Modern Power Systems – MPS, Cluj-Napoca, România, 2013, pp. a40-a43.

J. Invenţii.

1. Adam M., Munteanu A., Pancu C.M., **Andrușcă M.,** Metodă şi aparat pentru monitorizarea și diagnosticarea bobinelor de joantă, **Brevet de invenție** nr. RO132165 (B1), 2023-03-30.
2. Burlica R., Astanei D., Dirlau D., Beniuga O., **Andrusca M.,** Adam M., MInireactor electrochimic cu plasma non-termica cu geometrie in forma de T pentru producerea apei activate, **Brevet de invenție** nr. RO134206 (B1), 2024-03-29.
3. Dragomir A., Adam M., **Andrușcă M.,** Metodă si aplicatie software pentru monitorizarea și diagnosticarea cetralizată a circuitului de retur al tracțiunii electrice feroviare, Cerere brevet de invenție nr. 135541 A2, 2022.

4. Adam M., Munteanu A., Pancu C.M., **Andrușcă M.,** Metodă și sistem pentru localizarea sectorului cu defect în instalațiile de alimentare din tracțiunea electrică, Cerere brevet de invenție nr. a 00936, 2017.

K. Contracte de cercetare/granturi.

1. Director Proiect contract tip cercetare cu agent economic, SC ELEMATIS TECH. SRL, nr. 5078/14.02.2025, cu titlul Cercetări privind noi soluții moderne pentru proiectarea, realizarea și testarea tablourilor electrice de joasă tensiune, 2025-2026.
2. Coordonator GT in cadrul proiectului cu titlul Primul Student Electro din familie, Contract de finanțare: Nr. G2025-4065/21.01.2025, cod SMIS+- 326666, 2025-2027, Director proiect Conf. dr. ing. Dragos Astanei.
3. Membru in echipa de proiect international “Energy generation from Non-Powered Dams - ENERGYDAM”, 2021/332809, EEA and Norway grants, 2021 – ian. 2024, Director proiect Prof. dr. ing. Marcel Istrate.
4. Director Proiect “Grant Intern nr. GI/ P15 /2021 Publicatii”, Univ. Tehnica Gh. Asachi din Iasi, 2021.
5. Membru in echipa de proiect “Grant Intern nr. GI/ P7 /2021 Idei”, Univ. Tehnica Gh. Asachi din Iasi, 2021, Director proiect șef lucr. dr. ing. Alin Dragomir.
6. Membru in echipa de proiect “Model experimental pentru demonstrarea fezabilitatii cresterii potentialului terapeutic al germenilor de grau prin tratarea acestora cu apa activata cu plasma non-termica (PAW) – PhytoPAW”; PN-III-P2-2.1-PED-2019-0556; Contract UEFISCDI nr. 361PED / 2020; Perioadă de implementare: 01.11.2020 – 31.10.2022, Director proiect Prof. dr. ing. Radu Burlica.
7. Membru in echipa de proiect “Bio-tratament aplicat pe ambele suprafete ale foliei polimerice utilizata pentru impachetarea produselor alimentare utilizand plasma non-termica DBD-Corona - PlasmaPack”; tipul PN III-ERANET-MANUNET-III; Contract UEFISCDI nr. 214/2020; 23.11.2020-23.11.2022, Director proiect Sef lucr. dr. ing. Dragos Astanei.
8. Membru in echipa de proiect “Reactor cu plasma non-termica la presiune atmosferică pentru pre-tratamentul substraturilor polimerice utilizate în fabricarea circuitelor imprimate flexibile - Treatoflex”, tipul PN III-ERANET-MANUNET-III, Contract UEFISCDI nr. 146/ 2020; 23.03.2020-23.03.2022, Director proiect Prof. dr. ing. Radu Burlica.
9. Membru in echipa de proiect “Creșterea Producției Agricole în Sere Utilizând Irigarea cu Apă Activată cu Plasmă Rece”, Proiect tip PNIII – PCE (Proiect cercetare exploratorie) nr. 15 / 12.07.2017, 2017-2019, Director proiect Prof. dr. ing. Radu Burlica.
10. Membru in echipa de proiect “Evaluarea apei activate produse de către diferite reactoare de plasmă non-termică”, tip PN-III-P3-3.1-PM-RO-FR-2019-0213, Director proiect Sef lucr. dr. ing. Dragos Astanei.
11. Asistent manager in cadrul proiectului Şcoala de vară „Student ELECTRO la TUIASI”, Acord de grant nr. 120/SGU/PV/II din data de 07.05.2019. (2019-2022), Director proiect Prof. dr. ing. Maricel Adam.
12. Expert pe termen lung în cadrul proiectului „Dezvoltarea culturii antreprenoriale a studenților de la inginerie și arhitectură prin crearea unei rețele de centre de pregătire în antreprenoriat – AntreprenorIng”, POCU/379/6/21/123975, 2019-2022, Director proiect Prof. dr. ing. Neculai Eugen Seghedin.

13. Expert pe termen scurt în cadrul proiectului POCU/626/6/13/130661 ”Stagii de PRACTICă performante pentru studenţii Universităţii Tehnice Gheorghe Asachi Iaşi – PRACTIC”, 2020-2022, Director proiect Prof. dr. ing. Neculai Eugen Seghedin.
14. Expert învățământ superior în cadrul proiectului CNFIS-FDI, nr. 0006/2018 ”Acces direct prin Internationalizare Digitala – DIGITALin TUIASI”, 2018, Director proiect Prof. dr. ing. Irina Lungu.

L. Premii, distincţii.

1. Premierea rezultatelor cercetării UEFISDI-2023, PN-IV-P2-2.3- PRECISI-2023- 73617, **Andrusca M,** Adam M., Dragomir A., Lunca E, Innovative Integrated Solution for Monitoring and Protection of Power Supply System from Railway Infrastructuresm Sensors MDPI, 2021, FI-3.57, Q1, SENSORS Article.
2. Premierea rezultatelor cercetării UEFISDI-2023, PN-IV-P2-2.3- PRECISI-2023- 70575, Dragomir A., Adam M., **Andrusca M,** Grigoraș G., Dragomir M., Ramakrishna S., Modeling, Simulation and Monitoring of Electrical Contacts Temperature in Railway Electric Traction, Mathematics MDPI, 2021, FI-2.25, Q1, Mathematics Article.
3. Premiu UEFISCDI prin programul Planul National de Cercetare, Dezvoltare si Inovare pentru perioada 2015-2020, PNCDI III, Programul Dezvoltarea sistemului national de cercetare-dezvoltare, Subprogramul 1.1. – Resurse Umane, Premierea rezultatelor cercetarii – articole, in anul 2020 pentru lucrarea Condition Monitoring System and Faults Detection for Impedance Bonds from Railway Infrastructure, **Andrusca M,** Adam M., Dragomir A., Lunca E, Postolache O., Ramakrishna S., publicata in jurnalul Applied Sciences 10 (18), 6167, 2020.

M. Alte realizări semnificative.

Data,
Șef. lucr. dr. ing. Mihai Andrușcă
07.04.2025

Anexa A.3.3.c. Lista de lucrari, cadre didactice

Lista de lucrări în domeniul de studii universitare de masterat Management Energie Mediu

Numele şi prenumele: **Ș.l.dr.ing. Beniugă Răzvan**

A. Teza de doctorat

1. „*Cercetări privind integrarea surselor eoliene în sistemul energetic național*”, 2013, Domeniul „Inginerie Energetică”, Universitatea Tehnică „Gheorghe Asachi” din Iași, conducător doctorat: prof. dr. ing. Istrate Marcel

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate

Nu e cazul

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS

1. Răzvan Beniugă, Marcel Istrate, „*Provocări privind integrarea centralelor eoliene în sistemul energetic*”, Editura Politehnium, Iași 2023, ISBN 978-973-621-520-9
2. Răzvan Beniugă, „*Producerea energiei electrice și termice – Îndrumar de laborator*”, Editura PIM, Iași 2023, ISBN 978-606-13-8016-9
3. Răzvan Beniugă, „*Clădiri eficiente energetic. Soluții și strategii pentru îndeplinirea standardului NZEB*”, Editura PIM 2025, ISBN 978-606-13-8955-1

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local

Nu e cazul

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web

1. Istrate Marcel, Beniugă Răzvan, Sustainable Energy – Part B – Clean Coal Technology– suport curs publicat pe web în limba engleză,

http://iota.ee.tuiasi.ro/~tti/materiale/sustainable/Sustainable%20Energy-Part%20B.pdf

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale

1. O. Beniugă, O. Neacsu, A. Salceanu, R. Beniugă, Evaluating the immunity of electronic devices under the action of electrostatic discharge in near field environment, Proceedings of International Conference on Innovative Technologies 2011, pg.54-57, ISBN 987-80-904502-6-4
2. Oana Beniugă, Răzvan Beniugă, Paul Bicleanu, Ana Nicuta, Silviu Ursache - Wind Turbine Crowbar Reliability Related on Electric Charge Accumulation/Discharge, Proceedings of the 2012 International Conference and Exposition on Electrical and Power Engineering, ISBN: 978-1-4673-1171-7, pp.900-903

3. Răzvan Beniugă, Marcel Istrate – Voltage Recovery of DFIG Wind Turbines after a grid fault, Proceedings of the 2012 International Conference and Exposition on Electrical and Power Engineering, ISBN: 978-1-4673-1171-7, pp.904-908
4. Răzvan Beniugă, Specific requirements for grid connetion of wind farms in context of sustainable development, 16th International Student Conference on Electrical Engineering, ISBN 978-80-01-05043-9, Praga, 2012, Republica Ceha, pp.1-5
5. I. V. Banu, R. Beniugă, M. Istrate, Comparative analysis of the perturb-and-observe and incremental conductance MPPT methods, 2013 8TH INTERNATIONAL SYMPOSIUM ON ADVANCED TOPICS IN ELECTRICAL ENGINEERING (ATEE), Bucharest, 2013, pp. 1-4
6. Oana Beniugă, Mihai Leca, Razvan Beniuga, Assessment of Influence of Grid Disturbances on Wind Turbine DFIG Converters, Proceedings of the 2016 International Conference and Exposition on Electrical and Power Engineering, ISBN: 978-1-5090-6128-0, pp. 693 – 696
7. Răzvan Beniugă, Marcel Istrate, Oana Beniugă - Crowbar protection impact on wind farm behaviour during grid disturbance, Proceedings of the 7th International Conference on Modern Power Systems (MPS 2017), ISBN 978-1-5090-6565-3 – IEEExplore
8. Beniugă, O., Beniugă, R. - Assessing operational planning performance among wind power system based on N-1 criterion (2017) 22nd IMEKO TC4 International Symposium and 20th International Workshop on ADC Modelling and Testing 2017: Supporting World Development Through Electrical and Electronic Measurements, 2017-September, pp. 435-438 – SCOPUS
9. Oana Beniugă, Răzvan Beniugă, 3D Assessment of ESD field level for protection devices safety, Proceedings of the THE 10th INTERNATIONAL SYMPOSIUM ON ADVANCED TOPICS IN ELECTRICAL ENGINEERING March 23-25, 2017, ISBN: 978-1-5090-5160-1, pp. 354-357
10. Răzvan Beniugă, Marcel Istrate, Oana Beniugă, Dragoș Machidon – Educational Resource for Wind Turbine Behaviour Assessment, 2018 International Conference and Exposition on Electrical and Power Engineering (EPE), Octombrie 2018, Iași, România, pp 395-398, IEEExplore
11. Oana Beniuga, Răzvan Beniugă, Mihai Leca, Gabriel Constantin Sârbu - Using Petri Net Tool to Study the Dynamic Behaviour of Power Systems Protections, 2018 International Conference and Exposition on Electrical and Power Engineering (EPE), Octombrie 2018, Iași, România, pp 416-420, IEEExplore
12. Roxana Oprea, Marcel Istrate, Dragos Machidon, Răzvan Beniugă - Experimental Evaluation of the Optimum Tilt Angle for Fixed Photovoltaic Modules, 2018 International Conference and Exposition on Electrical and Power Engineering (EPE), Octombrie 2018, Iași, România, pp 594-598, IEEExplore
13. Răzvan Beniugă, Marcel Istrate, Oana Beniugă - Wind farms behaviour at power grid voltage dips, 2019 8th International Conference on Modern Power Systems (MPS), Cluj-Napoca, România, 21-23 Mai, 978-1-7281-0750-9/19, IEEExplore
14. Roxana Oprea, Marcel Istrate, Dragos Machidon, Razvan Beniuga, Determination of Optimum Tilt Angle for Fixed Photovoltaic Modules in Iasi, Romania, 2019 8th International Conference on Modern Power Systems (MPS), Cluj-Napoca, România, 21-23 Mai, 978-1-7281-0750-9/19, IEEExplore
15. Răzvan Beniugă, Oana Beniugă, Dragoș Machidon, Assessment of DFIG wind turbine overvoltage protection system for grid stability, 2019 8th International Conference on

Modern Power Systems (MPS), Cluj-Napoca, România, 21-23 Mai, 978-1-7281-0750-9/19, IEEExplore
16. F.C. Baiceanu, O. Beniuga, R.C. Beniuga, EI Diac, Quality Assessment of Power Transformers Differential Protection Behavior Using Harmonic Restraint Techniques, 2020 International Conference and Exposition on Electrical And Power Engineering (EPE), pp. 680-684, IEEExplore
17. Dragos Machidon, Roxana Oprea, Marcel Istrate, Razvan Beniuga, Energy Output Increase by Using a Periodic Orientation System for Fixed Photovoltaic Panels, 2020 International Conference and Exposition on Electrical And Power Engineering (EPE), pp. 388-391, IEEExplore
18. R. Beniugă, O. Beniugă, F. Băiceanu and M. Istrate, The Influence of Feedwater Preheaters on the Power Plant Thermal Efficiency, 2021 9th International Conference on Modern Power Systems (MPS), 2021, pp. 1-5, doi: 10.1109/MPS52805.2021.9492627
19. R. Beniugă, O. Beniugă, D. Machidon and M. Istrate, Wind Power in Romania Energy Mix Towards Sustainable Development, 2021 9th International Conference on Modern Power Systems (MPS), 2021, pp. 1-4, doi: 10.1109/MPS52805.2021.9492673.
20. D. Machidon, M. Istrate, R. Oprea and R. Beniuga, Performance analysis of double-axis orientating Low Concentration Photovoltaic Systems, 2021 9th International Conference on Modern Power Systems (MPS), 2021, pp. 1-5, doi: 10.1109/MPS52805.2021.9492623.
21. F. C. Baiceanu, O. Beniugă, R. Beniugă and F. T. Munteanu, Transient of High Voltage Circuit Breakers Intelligent Switching during Grid Faults, 2021 9th International Conference on Modern Power Systems (MPS), 2021, pp. 1-4, doi: 10.1109/MPS52805.2021.9492555.
22. Florin Constantin Baiceanu; Ovidiu Ivanov; Razvan-Constantin Beniuga; Bogdan Constantin Neagu; Ciprian-Mircea Nemes, A Continuous Multistage Load Shedding Algorithm for Industrial Processes Based on Metaheuristic Optimization, Mathematics, Journal article, 2023, DOI: 10.3390/math11122684, Part of ISSN: 2227-7390
23. Dragos Machidon; Marcel Istrate; Razvan Beniuga, An Application of LIDAR Technology for Wind Speed Measurement, 10th International Conference on Modern Power Systems (MPS) 2023, Conference paper, DOI: 10.1109/mps58874.2023.10187425
24. Oana Beniugă; Răzvan Beniugă; Florin Băiceanu, House heating system thermal dynamics assessment using Petri Net approach, 2023 10th International Conference on Modern Power Systems (MPS) 2023, Conference paper, DOI: 10.1109/mps58874.2023.10187544
25. Răzvan Beniugă; Oana Beniugă; Dragoş Machidon; Florin Băiceanu; Marcel Istrate, NZEB compliance principles in Romania for residential buildings, 2023 10th International Conference on Modern Power Systems (MPS) 2023, DOI: 10.1109/mps58874.2023.10187523
26. B. -A. Pingescu, V. D. Asmarandei, D. G. Astanei, O. C. Beniugă, C. R. Beniugă and R. Burlică, "High conductivity solution treatment by non-thermal plasma T-shaped mini electrochemical reactors", 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi), Iasi, Romania, 2024, pp. 616-619, doi: 10.1109/EPEi63510.2024.10758144
27. D. Machidon, M. Istrate and R. Beniuga, "Wind Speed Estimation based on Power Law Extrapolation Technique", 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi), Iasi, Romania, 2024, pp. 227-231, doi: 10.1109/EPEi63510.2024.10758142

28. P. -S. Popa, R. Beniugă and M. Istrate, "Comparing the concept of Nearly Zero-Energy Buildings between EU countries in terms of required renewable energy share", 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi), Iasi, Romania, 2024, pp. 164-169, doi: 10.1109/EPEi63510.2024.10758182
29. O. C. Beniugă, C. R. Beniugă, D. G. Astanei and R. Burlică, "Thermostat Behavior Analysis in Smart Home Environment Using Petri Nets", 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi), Iasi, Romania, 2024, pp. 390-393, doi: 10.1109/EPEi63510.2024.10758167
30. R. Beniugă, D. Machidon, P. -S. Popa, O. Beniugă, F. Băiceanu and M. Istrate, "Cost-effectiveness and sustainability analysis of a NZEB house", 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi), Iasi, Romania, 2024, pp. 187-192, doi: 10.1109/EPEi63510.2024.10758113
31. Machidon, D., Istrate, M., & Beniuga, R. (2025), "Wind Shear Coefficient Estimation Based on LIDAR Measurements to Improve Power Law Extrapolation Performance", Remote Sensing Journal MDPI, 17(1), 23. https://doi.org/10.3390/rs17010023

G. Lucrări ştiinţifice publicate în reviste din străinătate

1. Cintula, Boris - Viglaš, Dominik - Beniuga, Constantin-Razvan: Power System Security Operation in Applying The N-1 Criterion, in: ELITECH´12 [elektronický zdroj] : 14th Conference of Doctoral Students. Bratislava, Slovak Republic, 22 May 2012. - Bratislava : Nakladateľstvo STU, 2012. - ISBN 978-80-227-3705-0. - CD-ROM, [6] s
2. Viglaš, Dominik - Cintula, Boris - Beniuga, Constantin-Razvan: Development of Support of Renewable Energy Sources in Slovak Republic. In: ELITECH´12 [elektronický zdroj] : 14th Conference of Doctoral Students. Bratislava, Slovak Republic, 22 May 2012. - Bratislava : Nakladateľstvo STU, 2012. - ISBN 978-80-227-3705-0. - CD-ROM, [4] s
3. Iuliana-Delicia DÎRLAU, Oana BENIUGĂ, Radu BURLICĂ, Răzvan BENIUGĂ, Organic pollutants removal from aqueous solutions by surface gliding discharges, 4th Central and Eastern European Conference on Thermal Analysis and Calorimetry (CEEC-TAC4), 28 - 31 August 2017, Chisinau – Republica Moldova, ISBN 978-3-940237-47-7

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS

1. Iftime Cornel Marian, Guşă Mircea Dan, Beniugă Constantin Răzvan - Reactive power compensation for grid-connected wind farms that use induction generators and pitch control systems, Acta Electrotehnica, Volumul 52, Numărul 5, 2011
2. Constantin-Razvan BENIUGA, Marcel ISTRATE, DFIG Wind Turbine dynamic under the stress of power system faults, Buletinul AGIR nr. 3/2012 iunie- august , ISSN-L 1224-7928, pp.429 – 434
3. Marian Dragomir, Marcel Istrate, Razvan Beniuga, Dragos Machidon, Assessment of two-end data fault location algorithms for transmission grids, Buletinul AGIR nr. 3/2012 iunie- august , ISSN-L 1224-7928, pp.435-438
4. Alexandru Miron, Marian Dragomir, Razvan Beniuga, Crenguta E. Bobric, Cezar Popa, The use of wap applications to prevent large blackouts in the north-east romanian power grid, Buletinul AGIR nr. 3/2012 iunie- august , ISSN-L 1224-7928, pp.497-502
5. Beniugă Răzvan, Banu Ioan Viorel, Istrate Marcel, Behavior of Doubly-Fed Induction Generator Wind Turbines with crowbar System during Grid Faults, 5th International

Conference On Modern Power System, MPS 2013, 28-31 Mai, Cluj-Napoca, România, Acta Electrotehnica, ISSN 1841-3323, Volume 54, Number 5, 2013, pp.59-63

6. Dragomir Marian, Machidon Dragos, Beniugă Răzvan, One-end Data Fault Location Algorithm for Transmission Grids, 5th International Conference On Modern Power System, MPS 2013, 28-31 Mai, Cluj-Napoca, România, Acta Electrotehnica, ISSN 1841-3323, Volume 54, Number 5, 2013, pp.175-178

7. Banu Ioan Viorel, Beniugă Răzvan, Istrate Marcel, Study on Temperature for Modeling of Photovoltaic Solar Array using Experimental Test Data, 5th International Conference On Modern Power System, MPS 2013, 28-31 Mai, Cluj-Napoca, România, Acta Electrotehnica, ISSN 1841-3323, Volume 54, Number 5, 2013, pp.51-54

8. Oana Beniugă, Karol Kovac, Răzvan Beniugă, Electromagnetic compatibility problems involved by ESD Magnetic Field Radiation, 5th International Conference On Modern Power System, MPS 2013, 28-31 Mai, Cluj-Napoca, România, Acta Electrotehnica, ISSN 1841-3323, Volume 54, Number 5, 2013, pp.55-58

9. Răzvan Beniugă, Oana Beniugă - Grid fault outcome on assessing DFIG wind turbine voltage recovery output, BULETINUL INSTITUTULUI POLITEHNIC DIN IASI,Vol. 62 (66) FASC. 4, 2016, Electrotechnics, Energetics, Electronics, ISSN 1223-8139, pp.79-84 (cod CNCSIS 87)

10. Răzvan Beniugă, Studiul comportamentului unei turbine eoliene echipata cu generator de tip DFIG dupa producerea unui defect in retea, Workshop Tendinte si cerinte de interdisciplinaritate in cercetare, Iasi, Romania, 25 ian 2013, ISBN 978-973-621-408-0, pp.21-30

I. Lucrări ştiinţifice publicate în volumele conferinţelor

1. Oana Beniuga, Razvan Beniuga, Wind Farms' Grid Connection And Protection Requirements For Sustainable Development, Proceedings of INTERNATIONAL CONFERENCE "ENERGY OF MOLDOVA – 2016. REGIONAL ASPECTS OF DEVELOPMENT" 29 September – 01 October, 2016 - Chisinau, Republic of Moldova, ISBN 978-9975-4123-5-3 pg. 478 – 481

J. Invenţii

Nu e cazul

K. Contracte de cercetare

1. Director proiect UEFISCDI, PN-IV-P8-8.3-PM-RO-BE-2024-0011, Titlu - Evaluarea impactului utilizării tehnologiei cu plasmă non-termică asupra creșterii și dezvoltării plantelor în sere și în spații protejate (Assessment of the impact of using non-thermal plasma technology on plant growth and development in indoor farming)

2. Membru în echipa de cercetare a proiectului finantat de Univ.Tehnica Gheorghe Asachi din Iasi, Grant intern nr. GI/P11_IDEI 2021, Titlu: Organic pollutant reformation to green hydrogen using non-thermal plasma technologies REFORM2H2

3. Membru în echipa de cercetare a proiectului cu tema Cercetări privind determinarea profilului de viteze ale vântului din diferite amplasamente din țară, Contract consultanță științifică nr. 2592 / 26.01.2022 din partea Univ. Tehnice Gheorghe Asachi din Iași, pentru beneficiar SC WPD România SRL

4. Membru în echipa de cercetare a proiectului Cercetări privind evaluarea potențialului eolian în diferite amplasamente din țară, Contract consultanță științifică nr.

2443P/27.01.2023 din partea Univ. Tehnice Gheorghe Asachi din Iași, beneficiar: SC WPD România SRL

5. Membru în echipa de cercetare a proiectului Studiu asupra evaluării potențialului eolian la diferite înălțimi, Contract consultanță științifică nr. 2824/26.01.2024 din partea Univ. Tehnice Gheorghe Asachi din Iași, Beneficiar – SC. WPD România SRL

L. Premii, distincţii.

M. Alte realizări semnificative.

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09.04.2024

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