UNIVERSITATEA TEHNICĂ "GHEORGHE ASACHI" DIN IAŞI
FACULTATEA DE INGINERIE ELECTRICĂ, ENERGETICĂ ŞI INFORMATICĂ APLICATĂ

DEPARTAMENTUL DE ENERGETICĂ

DOSAR DE CONCURS

Pentru acordarea gradației de merit

Prof. dr. ing. *Burlica Radu*

19.10.2026

UNIVERSITATEA TEHNICĂ
„GHEORGHE ASACHI" DIN IAȘI
REGISTRATURA GENERALĂ
-2-
Nr. 42763 / 19.10.2026

Anexa nr. 1

Domnule Decan,

Subsemnatul, Burlica Radu, cadru didactic al Universității Tehnice „Gheorghe Asachi" din Iași cu funcția actuală de profesor universitar, în cadrul Departamentului de Energetică, Facultatea de Inginerie Electrică, Energetică şi Informatică Aplicată, solicit, prin prezenta, înscrierea la concursul pentru acordarea gradației de merit pentru perioada 2026 - 2031, conform Procedurii privind acordarea gradaţiilor de merit pentru personalul didactic titular din cadrul Universităţii Tehnice „Georghe Asahi" din Iasi, PO.DID.11

Data,

19.10.2025

Semnătura,

.....

Anexa nr. 2

RAPORT DE AUTOEVALUARE A ACTIVITĂŢII PENTRU ANII 2020 – 2024

Numele şi prenumele: **Burlica Radu**
Funcţia didactică: **Profesor universitar**
Facultatea/ Departamentul: **Facultatea de Inginerie Electrică, Energetică şi Informatică Aplicată / Departamentul de Energetică**

Activitatea întreprinsă în perioada de referință, 2021-2025 a condus la îndeplinirea standardelor minimale pentru fiecare dintre cele 5 criterii evaluate conform Procedurii de evaluare a cadrelor didactice de către structurile de management TUIASI.POB.12.

Criteriul 1. Activitatea didactică

Activitatea didactică s-a concentrat în special pe elaborarea de materiale didactice dedicate atât studenților înmatriculați la studii de licență, cât și celor înmatriculați la studii de master. Am elaborat/contribuit la elaborarea de seturi de prezentări în format Power Point, suporturi de curs şi îndrumare de laborator în format electronic cât şi publicate în editură: Dragoș Astanei, Radu Burlică, „Tehnici de comutație – note de curs", Editura PIM, ISBN: 978-606-13-7147-1, 230 pag, Iași, 2022, Dragoș Astanei, Radu Burlică, „Tehnici de comutație – aplicații", Editura PIM, ISBN: 978-606-13-7148-8, 146 pag, Iași, 2022.

În perioada de referință am contribuit la dezvoltarea bazei materiale prin realizarea unui număr de 21 de lucrări noi de laborator cu stand experimental. De asemenea, am contribuit la achiziția de noi echipamente sau tehnică de calcul prin intermediul proiectelor pe care le-am coordonat în calitate de director de proiect / responsabil de temă, în valoare de peste 165.000 lei.

Punctajele anuale obținute pentru perioada 2021-2025 la *Criteriul 1 – Activitatea didactică*, conform fișelor de autoevaluare anuale, sunt prezentate în tabelul de mai jos:

Criteriu / an	2021	2022	2023	2024	2025	Total	Punctaj mediu
C1	568.3	580	1051	886.68	444.5	**3530.48**	**706**

Criteriul 2. Activitatea de cercetare științifică

Activitatea de cercetare s-a materializat prin publicarea în calitate de autor/co-autor de cărți de specialitate şi de articole în cadrul unor reviste științifice de tip peer-review cât şi în volumele de lucrări ale conferinţelor BDI. Astfel, în perioada de referință, 2021-2025, au fost raportate 2 cărţi de specialitate (dintre care una în editură internațională), 15 articole publicate în jurnale cu factor de impact (dintre care 12 indexate Q1 şi Q2), 1 articol în revistă BDI și 19 articole publicate în volumele conferinţelor indexate BDI.

Am obţinut două brevete de invenţie, naţionale.

O pondere importantă în punctajul obținut la *Criteriul 2 - Activitatea de cercetare științifică* îl reprezintă citările lucrărilor publicate, în fișa de autoevaluare fiind raportate 1200 de citări, dintre care 856 fiind WOS.

Punctajele anuale obținute pentru perioada 2021-2025 la *Criteriul 2 – Activitatea de cercetare științifică*, conform fișelor de autoevaluare anuale, sunt prezentate în tabelul de mai jos:

Criteriu / an	2021	2022	2023	2024	2025	Total	Punctaj mediu
C2	4471	2924.87	2854	3038.8	3522	**16810.67**	**3362**

Criteriul 3. Recunoașterea națională și internațională

Punctajul obținut pentru *Criteriul 3 – Recunoașterea națională și internațională* se datorează în principal activităților desfășurate în calitate de membru al unor societăți științifice, membru în comisii de îndrumare de doctorat și pentru susținerea publică a unor teze de doctorat, membru în comisii de concurs pentru posturi didactice universitare, activitatea de evaluare a unor proiecte, activitatea de recenzare a unor lucrări științifice în principal la nivelul unor reviste internaționale cu factor de impact sau pentru conferințe internaționale, precum și în calitate de membru al comitetului de organizare a unor evenimente științifice internaționale.

O contribuție importantă la punctajul obținut o reprezintă premiile obținute în perioada de referință: Premiul TUIASI de excelență în cercetarea științifică în anul 2023 - Premiul pentru cele mai bune performante în inovare și transfer tehnologic, Premiul TUIASI de excelență în cercetarea științifică în anul 2023 - Premiul pentru grupul care a contribuit la atragerea celor mai multe fonduri publice pentru cercetarea științifică – 6 articole premiate în competițiile UEFISCDI.

De asemenea, am realizat 4 stagii (două stagii de 2 săptămâni şi unul de 1 lună) în calitate de Profesor invitat pentru prelegeri la Universitatea din Orleans, Orleans, Franţa şi un stagiu Erasmus de 7 zile.

Punctajele anuale obținute pentru perioada 2021-2025 la *Criteriul 3 – Recunoașterea națională și internațională*, conform fișelor de autoevaluare anuale, sunt prezentate în tabelul de mai jos:

Criteriu / an	2021	2022	2023	2024	2025	Total	Punctaj mediu
C3	371	448	434	297	327	**1877**	**375**

Criteriul 4. Activitatea cu studenții

Punctajul pentru această activitate s-a datorat în principal activității întreprinse în calitate de îndrumător al lucrărilor de licență și/sau disertație pentru studenți înmatriculați la nivel de licență și/sau master, îndrumător de an pentru câte o grupă de studenți la licență anual, îndrumarea studenților în vederea participării la cercurile studențești, și pentru activitatea de prezentare a ofertei educaționale a universității în licee.

Punctajele anuale obținute pentru perioada 2021-2025 la *Criteriul 4 – Activitatea cu studenții*, conform fișelor de autoevaluare anuale, sunt prezentate în tabelul de mai jos:

Criteriu / an	2021	2022	2023	2024	2025	Total	Punctaj mediu
C4	23.5	13.5	20	114	129	**300**	**60**

Criteriul 5. Activitatea în comunitatea academică

Punctajul obținut în cadrul acestui criteriu se datorează participării la mese rotunde/dezbateri organizate la nivelul facultății/ universității și/sau la nivelul unor universități partenere din străinătate dar și activității în comisii la nivel de departament/facultate/universitate: director centru de cercetare ENERG, membru in comisia de admitere doctorat, membru în comisiile pentru examenele de finalizare a studiilor universitare de master și licență.

Punctajele anuale obținute pentru perioada 2021-2025 la *Criteriul 5 – Activitatea în comunitatea academică*, conform fișelor de autoevaluare anuale, sunt prezentate în tabelul de mai jos:

Criteriu / an	2021	2022	2023	2024	2025	Total	Punctaj mediu
C5	18	18	18	18	25	**97**	**19.4**

Punctajele totale anuale obținute prin sumarea punctajelor aferente fiecărui criteriu evaluat sunt prezentate în tabelul următor:

Criteriu / an	2020	2021	2022	2023	2024	Total	Punctaj mediu
TOTAL C1-C5	5451.8	3984.37	4377	4354.48	4447.5	**22615**	**4523**

De asemenea, la evaluarea de către Directorul de Departament, am obținut anual câte 50 de puncte.

Semnătura

Data: 19.10.2026



Numele şi prenumele: **Burlica Radu**
Funcţia didactică: **Profesor universitar**
Facultatea/ Departamentul: **Facultatea de Inginerie Electrică, Energetică şi Informatică Aplicată / Departamentul de Energetică**

GRILA DE EVALUARE

Criteriu / An	**2021**	**2022**	**2023**	**2024**	**2025**	**Sumă criteriu**
C1. Activitatea didactică	568.3	580	1051	886.68	444.5	**3530.48**
C2. Activitatea de cercetare științifică	4471	2924.87	2854	3038.8	3522	**16810.67**
C3. Recunoașterea națională și internațională	371	448	434	297	327	**1877**
C4. Activitatea cu studenții	23.5	13.5	20	114	129	**300**
C5. Activitatea în comunitatea academică	18	18	18	18	25	**97**
Total	5451.8	3984.37	4377	4354.48	4447.5	**22615.15**
PUNCTAJ FINAL (media aritmetică a punctajelor din fişele de autoevaluare depuse în ultimii 5 ani)	**4523**					

Semnătura

Data: 19.10.2026



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DEPARTAMENTUL DE ENERGETICĂ

FIŞA DE VERIFICARE

a îndeplinirii standardelor minimale naționale pentru postul de profesor universitar

Burlica Radu, Data nașterii: **14.09.1965,** Funcția ocupată: **Profesor universitar**

Tabel 1: Condiții minimale / punctaje obținute (în conformitate cu Domeniul CNATDCU Inginerie Electrică, Monitorul oficial al Romaniei Nr. 121 bis/11.II.2025)

Nr. crt.	Domeniul de activitate	Condiții conferențiar	**Punctaj obținut**
1	Activitatea didactică/profesională (A1)	Minimum 100	195.2
2	Activitatea de cercetare (A2)	Minimum 300	697
3	Recunoașterea impactului activității (A3)	Minimum 150	1116
TOTAL		**Minimum 550**	**2008.2**

Data: 19.10.2026

Semnătura
Burlica Radu



Tabelul 2. Tabel cu structura activității candidatului

Nr. crt.	Domeniul activităților	Tipul activităților	Categorii și restricții	Subcategorii	Indicatori (kpi)	Realizări	Punctaj
0	**1**	**2**	**3**	**4**	**5**	**6**	**7**
1	Activitatea didactică și profesională (A1)	1.1 Cărți și capitole în cărți de specialitate	1.1.1 Cărți cu ISBN/ capitole ca autor: profesor minim 4	1.1.1.1 internaționale	nr. pagini/ (2*nr. autori)	1	
				1.1.1.2 naționale	nr. pagini/ (5*nr autori)	7	122.5
			1.1.2 Cărți/ capitole de cărți ca editor/coordonator	1.1.2.1 internaționale	nr. pagini/ (3*nr. autori)		-
				1.1.2.2 naționale	nr. pagini/ (7*nr. autori)		-
		1.2 Suport didactic	1.2.1 Suport de curs inclusiv electronic: prof minimum 2		nr. pagini/ (10*nr. autori)	5	55.4
			1.2.2 Îndrumare de laborator/ aplicații: prof minimum 2		nr. pagini/ (20*nr. autori)	2	17.3
		1.3 Coordonare de programe de studii, organizare și coordonare programe de formare continuă și proiecte educaționale	Punctaj unic pentru fiecare activitate				
TOTAL Puncte Activitatea didactică/profesională (A1)					**195.2**		
2	Activitatea de cercetare (A2)	2.1 Articole în extenso în reviste cotate WOS Thomson-Reuters(1), în volume proceedings indexate WOS Thomson-Reuters și brevete indexate WOS Derwent	Minim 10 articole, din care minimum din care minimum 4 în reviste prim autor 5 art in reviste cu suma mai mare ca 3		(25 + 20 * factor impact (2)) / nr. de autori	48 din care 10 ca prim autor	459,34
		2.2 Articole în reviste și volumele unor manifestări științifice indexate în alte baze de date internaționale (BDI (3))	Minim 20 articole		20/nr. de autori	32	123
		2.3 Brevete de invenție indexate în alte baze de date		2.3.1 internaționale	25/nr. de autori	2	25
				2.3.2 naționale	15/nr. de autori	3	10
		2.4 Granturi/proiecte câștigate prin competiție națională/internațională (4)	2.4.1 Director/responsabil proiect - Minimum 2 pentru conferențiar	2.4.1.1 internaționale	20*ani de desfășurare	1	40
				2.4.1.2 naționale	10*ani de desfășurare	4	40

TOTAL PUNCTE Activitatea de cercetare (A2)					**697**		
A3	Recunoașterea impactului activității (A3)	3.1 Citări în reviste WOS și volumele conferințelor WOS [5] Citări în reviste și volumele conferințelor BDI [5]	3.1.2 WOS (minim 75 citări)		2/citare	558	1116
Total puncte Recunoașterea impactului activității (A3)					**1116**		
Total puncte					**2008.3**		

1. ACTIVITATE DIDACTICA SI PROFESIONALA (A1)

1.1. Cărți și capitole în cărți de specialitate (cu ISBN)

Nr. crt.	Subcategorii (National / International)	Rezultate (punctaje)	Cărți de specialitate/Capitole de cărți (titlul, autorii, nr. pagini, Editura, ISBN)	Nr pagini
0	1	2	3	4
1	Național	32,5	Radu Burlică, Dragoș Astanei, *Plasma non-termică: Fundamente, Aplicații, Analiză*, Editura PIM, Iași, 2020, ISBN 978-606-13-5944-8	325
2		*8*	**R. Burlică,** E. Hnatiuc, B. Hnatiuc, "Aparate Electrice de Comutaţie Acţionate cu Electromagneţi", Editura Venus, Iași, 2004, ISBN: 973-7960-30-0	120
3		*41*	**R. Burlica, "**Descarcari electrice de tip plasma rece. Aplicatii pentru mediu", Ed. PIM **,** 2015, , ISBN: 978-606-13-2409-5	204
4		*1*	"European Research in Cold Plasma Applications", ed. CAOM, 2007, ISBN: 978-973-0-04933-6	10
5		*43*	**R. Burlică**, "Tehnici de comutaţie", Editura PIM, 2014, ISBN: 978-606-13-2019-6	215
6		*18*	Iuliana Delicia Dirlau, Radu Burlica, " Aplicatii ale plasmei non-termica in agricultura" /186p	
7		*16*	D. Cretu, R. Burlica D. Astanei, Studiul Apei Activate cu plasma asupra materialului biologic,2025, ISBN978-973-621-562-9	240
	TOTAL	**118.5**		

1.2. Suport didactic

Nr. crt.	Subcategorii	Rezultate (punctaje)	Cărți și capitole în cărți de specialitate	Nr pagini
0	1	2	3	4
1	Suport de curs	11,5	Dragoș Astanei, Radu Burlică, *Tehnici de comutație – note de curs*, Editura PIM, Iași, 2022, ISBN: 978-606-13-7147-1	230
	Suport de curs	12.4	E Hnatiuc, R. Burlica B. Hnatiuc, *Bazele Teoretice ale Functionasrii Aparatelor electrice*, ISBN 973-7960-52-1	260
2	Îndrumar de laborator	7.3	Dragoș Astanei, Radu Burlică, *Tehnici de comutație – aplicații*, Editura PIM, Iași, 2022, ISBN: 978-606-13-7148-8	146
3	Îndrumar de laborator	10	R. Burlica*, Electroecologie* – indrumar 2015, 100p	100

4	Suport de curs	10.5	Radu Burlică, Dragoș Astanei, „Calculul numeric al aparatelor electrice –curs”, online - https://edu.tuiasi.ro/pluginfile.php/213794/mod_resource/content/1/CNAE%20curs%202025.pdf, 218 pag, 2025 –.	218
5	Suport de curs	6	Radu Burlică, **Dragoş Astanei**, Set prezentări în format PPT pentru disciplina *Electroecologie* – *https://edu.tuiasi.ro/course/view.php?id=3407*	250
6	Suport de curs	15	E. Hnatiuc, R Burlica, Aparate E;ectrice – curs-https://www.studocu.com/ro/document/universitatea-tehnica-gheorghe-asachi-din-iasi/aparate-electrice/ae-clasificari/2663767?sid=0588ecc8-af31-41ed-90bd-d1978b70578e1792141488	300
	TOTAL	**72.7**		

2.1. Articole publicate in extenso in reviste și în volume proceedings indexate WOS Thomson-Reuters

Nr. crt.	**Rezultate (punctaje)**	**Titlul lucrării, autorii, revista, pag (de la – pana la), vol….,**	**FI (2023)**
0	1	2	3
1.	17	Constantin Razvan Beniuga, Bogdan Andrei Pingescu, Oana Cristina Beniuga, Alin Dragomir, Dragos-George Astanei and Radu Burlica, “Photovoltaic Panel System with Optical Dispersion of Solar Light for Greenhouse Agricultural Applications”, AgriEngineering 2025, 7, 125. https://**doi.org/10.3390/agriengineering7040125**	3
2.	10,12	E.G. Acar, D. Doganoz, D. Cavdar, F. Karbancioglu-Guler, R. Burlica, D. Astanei, M.A. Olariu, G. Gunes, *Efficacy of Atmospheric Non-thermal Plasma Corona Discharge Under Dry and Wet Conditions on Decontamination of Food Packaging Film Surfaces*, Packaging Technology and Science, Vol. 37, issue 12, pp. 1121-1130, 2024, WOS:001297514900001	2,8
3.	17	M.A. Olariu, R. Herrero, D.G. Astanei, L. Jofre, J. Morentin, T.A. Filip, R. Burlică, *Improving Printability of Polytetrafluoroethylene (PTFE) with the Help of Plasma Pre-Treatment*, Polymers, Vol. 15, issue 16, Art. number 3348, 2023, WOS:001056759800001	4,7
4.	11.38	S. Pădureanu, R. Burlică, V. Stoleru, O. Beniugă, D. Dirlău, D.E. Creţu, D. Astanei, A. Patraş, *Non-Thermal Plasma-Activated Water: A Cytogenotoxic Potential on Triticum aestivum*, Agronomy, Vol. 13, issue 2, Art. number 459, 2023, WOS:000938080900001	3,3
5.	5,89	A. Mandici, C. Roşu, R. Burlica, D.E. Creţu, D. Astanei, O. Beniugă, D.C. Topa, T.G. Aostăcioaiei, A. Miron, *Effects of non-thermal plasma activated water and low temperature on wheat sprouts: a focus on photosynthetic pigments, protein and phenolic contents, antioxidant activity, antioxidant and prooxidant enzymes activity*, Farmacia, Vol. 70, issue 6, pp. 1072 – 1080, 2022, WOS:000969664100010	1,4
6.	8,7	A. Mandici, D.E. Creţu, R. Burlică, D. Astanei, O. Beniugă, C. Roşu, D.C. Topa, T.G. Aostăcioaiei, A.C. Aprotosoaie, A. Miron, *Preliminary Study on the Impact of Non-Thermal Plasma Activated Water on the Quality of Triticum aestivum L. cv. Glosa Sprouts*, Horticulturae, Vol. 8, issue 12, Art. number 1158, 2022, DOI: https://doi.org/10.3390/horticulturae8121158	3,1
7.	18,75	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, 2022, WOS: 000872282100001.	2,5
8.	12,55	I. Stoica, R.M. Albu, C. Hulubei, D. Astanei, R. Burlica, G.A.M. Mersal, T.A.S. Elnasr, A.I. Barzic, A.Y. Elnaggar, *A New Texturing Approach of a Polyimide Shielding Cover for Enhanced Light Propagation in Photovoltaic Devices*, Nanomaterials, vol. 12, issue 18, Art. number 3249, 2022, WOS: 000857761200001	4,4
9.	14,5	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, WOS:000771429600001.	3,1

10.	8,78	M. Wartel, F. Faubert, I.D. Dirlau, S. Rudz, N. Pellerin, D. Astanei, R. Burlica, B. Hnatiuc, S. Pellerin, *Analysis of plasma activated water by gliding arc at atmospheric pressure: Effect of the chemical composition of water on the activation*, Journal of Applied Physics, vol. 129, issue 23, Art. number 233301, 2021, WOS:000661619600014.	2,7
11.	5,38	R. Burlică, D. Astanei, D.E. Cretu, D. Dirlau, O. Beniuga, 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, 2021, WOS:000637746900009	0,9
12.	10,1	V. Stoleru, R. Burlică, G. Mihalache, D. Dirlau, S. Padurean, G.C. Teliban, D. Astanei, A. Cojocaru, O. Beniuga, A. Patras, *Plant growth promotion effect of plasma activated water on Lactuca sativa L. cultivated in two different volumes of substrate*, Scientific Reports (Nature), vol. 10, issue 1, Art. number 20920, 2020, WOS:000608975400032	3,8
13.	14,33	R. Burlică, I.D. Dirlau, D. Astanei, *Non-thermal plasma mini-reactors for water treatment*, Environmental Engineering and Management Journal, vol. 18, nr. 8, pp. 1799-1807 2019, WOS:000482576500020	0,9
14.	24,56	V. Popescu, D. Astanei, R. Burlica, A. Popescu, C. Munteanu, F. Ciolacu, M. Ursache, L. Ciobanu, A. Cocean, *Sustainable and cleaner microwave-assisted dyeing process for obtaining eco-friendly and fluorescent acrylic knitted fabrics*, Journal of Cleaner Production, vol. 232, pp. 451-461, 2019, WOS:000477784000042	9,8
15.	7,17	M. Ursache, B. Hnatiuc, E. Hnatiuc, D. Astanei, J.-L. Brisset, R. Burlica, *Direct and delayed degradation of azorubin (E122) by gliding arc discharges*, Environmental Engineering and Management Journal, vol. 14, issue 11, pp. 2737 – 2746, 2015, WOS:000369099900026	0,9
16.	10,2	B. Hnatiuc, D. Astanei, S. Pellerin, N. Cerqueira, M. Hnatiuc, *Diagnostic of plasma produced by a spark plug at athmospheric pressure: reduced electric field and rotational – vibrational temperatures*, Contributions to Plasma Physics Journal, vol. 3, issue 8, pp. 712 – 723, 2014, WOS:000341707500003.	1,3
17.	9,8	B. Hnatiuc, S. Pellerin, E. Hnatiuc, R. Burlica, N. Cerqueira, D. Astanei, *Spectroscopic diagnostic of transient plasma produced by a spark plug*, Romanian Journal of Physics, vol. 56 S, pp. 109 – 113, 2011, WOS:000295495500017.	1,2
18.	4,17	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, WOS:000941563300062	0
19.	3,57	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	0
20.	4,17	D. Astanei, R. Burlică, D. Creţu, ID Dirau, G. Urmă, B. Hnatiuc, *Capacitive Power Supply for Double Spark Plug Ignition System*, proceedings of 2019 International Conference on Electromechanical and Energy Systems (SIELMEN 2019), art. number 264, Oct 9 – 11, 2019, Craiova, Romania, WOS:000630287500035	0
21.	6,25	O. Beniugă, I.D. Dirlău, D. Astanei, R. Burlică, *Electromagnetic field radiation generated by pulsed non-thermal plasma discharge*, proceedings of 8th International Conference on Modern Power Systems (MPS 2019), pp. 1 – 4, 21-23 mai, 2019, Cluj-Napoca, Romania, WOS:000612401900065	0
22.	5	D. Creţu, R. Burlică, D. Astanei, I.D. Dirlău, O. Beniugă, *Energy Efficiency Evaluation of HV Power Supplies for Non-Thermal Plasma Generation*, proceedings of 8th International Conference on Modern Power Systems (MPS 2019), pp. 1 – 4, 21-23 mai, 2019, Cluj-Napoca, Romania, WOS:000612401900058	0
23.	6,25	D. Astanei, R. Burlică, ID Dirau, M. Andrușcă, *Ayrton Relation Applied for Medium Voltage AC Electrical Discharges*, proceedings of 2018 International Conference and Expozition on Electrical and Power Engineering (EPE 2018), pp. 583 – 588, Oct 18 – 19, 2018, Iași, Romania, WOS:000458752200113	0

24.	6,25	R. Burlică, D. Astanei, A. Dragomir, M. Adam, *Overvoltage Differential Protection of Low Voltage Circuits*, proceedings of 2018 International Conference and Expozition on Electrical and Power Engineering (EPE 2018), pp. 599 – 602, Oct 18 – 19, 2018, Iaşi, Romania, WOS:000458752200116	0
25.	5	D. Astanei, ID Dirau, O. Beniugă, R. Burlică, C. Gouillou, , *Evaluation of Reactive Species Produced in Water by GlidArc Plasma*, proceedings of 2018 International Conference and Expozition on Electrical and Power Engineering (EPE 2018), pp. 603 – 608, Oct 18 – 19, 2018, Iaşi, Romania, WOS:000458752200117	0
26.	6,25	ID Dirau, O. Beniugă, R. Burlică, D. Astanei, *Influence of Surface Gliding Discharges on Organic Pollutants from Aqueous Solutions*, proceedings of 2018 International Conference and Expozition on Electrical and Power Engineering (EPE 2018), pp. 897 – 900, Oct 18 – 19, 2018, Iaşi, Romania, WOS:000458752200175	0
27.	2,77	V. Stoleru, C. Stratulat, G. Teliban, S. Pădureanu, A. Patraş, R. Burlică, ID. Dirlau, D. Astanei, O. Beniugă, *Morphological, Physiological and Productive Indicators of Lettuce under Non-thermal Plasma*, proceedings of 2018 International Conference and Expozition on Electrical and Power Engineering (EPE 2018), pp. 937 – 942, Oct 18 – 19, 2018, Iaşi, Romania, WOS:000458752200183	0
28.	3,57	S. Pădureanu, V. Stoleru, A. Patraş, R. Burlică, ID. Dirlau, D. Astanei, O. Beniugă, *Effect of Non-Thermal Activated Water on Lactuca Sativa L. Germination Dynamic*, proceedings of 2018 International Conference and Expozition on Electrical and Power Engineering (EPE 2018), pp. 889 – 892, Oct 18 – 19, 2018, Iaşi, Romania, WOS: 000458752200173	0
29.	8,33	I.D. Dirlau, R. Burlica, D. Astanei, *The effect of gas and solution flow rate on nitrates and H 2 O 2 generation in NTP discharges*, proceedings of 2016 International Conference and Expozition on Electrical and Power Engineering (EPE 2016), pp. 462 – 465, Oct 20 – 22, 2016, Iaşi, Romania, WOS:000390706300093	0
30.	6,25	R. Burlica, D. Astanei, M. Andrusca, E. Hnatiuc, *The dynamic behavior of electromagnetic plunger drivers for electrical apparatusses with contacts*, proceedings of 2016 International Conference and Expozition on Electrical and Power Engineering (EPE 2016), pp. 139 – 142, Oct 20 – 22, 2016, Iaşi, Romania, WOS:000390706300030	0
31.	8,33	R. Burlică, E. Hnatiuc, D. Astanei, *Fault current protection control by di/dt*, proceedings of 8th IEEE International Conference and Expozition on Electrical and Power Engineering, EPE 2014, pp. 264-267, October 16-18, Iaşi Romania, WOS:000353565300042	0
32.	6,25	M. Adochiţei, C. Harabagiu, D. Astanei, R. Burlică, *A new solar energy converting system with vertical photovoltaic panels*, proceedings of 8th IEEE International Conference and Expozition on Electrical and Power Engineering, EPE 2014, pp. 1129-1131, October 16-18, Iaşi Romania, WOS:000353565300205	0
33.	4,17	D. Astanei, M. Ursache, I. Stoica, E. Hnatiuc, R. Munteanu, R. Burlica, *Zirconium and Titanium Surface Treatment Using Non-Thermal Plasma for Dentistry Applications*, proceedings of 14th IEEE Conference on Optimization of Electrical and Electronic Equipment - OPTIM 2014, pp. 1024-1029, May 22-24, Braşov, Romania, WOS:000343551300150	0
34.	8,33	F. Munteanu, C. Nemes, D. Astanei, *Power quality indices proposal for networks operating in sinusoidal and unbalanced conditions*, proceedings of 2014 International Symposium on Fundamentals of Electrical Engineering (ISFEE 2014), pp. 1 – 6, November 28 – 29, 2014, Bucharest, Romania, DOI: 10.1109/ISFEE.2014.7050553, WOS:000380570500021	0
35.	5	M. Ursache, E. Hnatiuc, R. Burlica, D. Astanei, B. Hnatiuc, *The influence of the dispersion flux on the connection transient regime for DC electromagnets*, proceedings of 7th IEEE International Conference and Exposition on Electrical and Power Engineering, EPE – 2012, pp. 172-177, October 25-27, Iaşi, Romania, WOS:000324685300036	0
36.	25.6	Effects of the Voltage and Current Waveforms and Discharge Power on Hydrogen Peroxide Formation in Water-Spray Gliding Arc Reactors By: Burlica, Radu; Finney, Wright C.; Locke, Bruce R. IEEE Transactions on Industry Applications Volume: 49 Issue: 3 Pages: 1098- 2013 (Q2) DOI10.1109/TIA.2013.2253080	2.6
37.	28.3	Optical Diagnostics of Electrical Discharge Water-Spray Reactors for Chemical Synthesis, Burlica, Radu; Shih, Kai-Yuan; Bruce Locke IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS Volume: 49 Issue: 1 Pages: 305-310 Published: JAN-FEB 2013 (Q2) DOI10.1109/TIA.2012.2228833	3

38.	19	Hydrogen Generation by Pulsed Gliding Arc Discharge Plasma with Sprays of Alcohol Solutions By: Burlica, Radu; Shih, Kai-Yuan; Hnatiuc, Bogdan; et al. Industrial & Engineering Chemistry Research , Volume: 50 Issue: 15 Special Issue: SI Pages: 9466-9470 2011 (Q2) DOI10.1021/ie101920n	3.5
39.	8.6	Effect of electrical current on h-2/h2o2 generation in non-thermal plasma gliding arc reactors By: Burlica, Radu; Hnatiuc, Bogdan; Hnatiuc, Eugen; et al. ENVIRONMENTAL ENGINEERING AND MANAGEMENT JOURNAL Volume: 10 Issue: 4 Pages: 579-583 Published: APR 2011	0.9
40.	7.8	Spectroscopic diagnostic of transient plasma produced by a spark plug By: Hnatiuc, B.; Pellerin, S.; Hnatiuc, E.; et al. ROMANIAN JOURNAL OF PHYSICS Volume: 56 Supplement: S Pages: 109-113 Published: 2011	0.8
41.	19	Bacteria Inactivation Using Low Power Pulsed Gliding Arc Discharges with Water Spray By: Burlica, R.; Grim, R. G.; Shih, K. -Y.; et al. PLASMA PROCESSES AND POLYMERS Volume: 7 Issue: 8 Pages: 640-649 Published: AUG 23 2010 (Q2) DOI10.1002/ppap.200900183	3.5
42.	17	Effect of Pressure on Discharge Initiation and Chemical Reaction in a Liquid-Phase Electrical Discharge Reactor By: Shih, Kai-Yuan; Burlica, Radu; Finney, Wright C.; et al. IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS Volume: 45 Issue: 2 Pages: 630-637 Published: MAR-APR 2009 (Q2) DOI10.1109/TIA.2009.2013570	3
43.	42.5	Pulsed plasma gliding-arc discharges with water spray By: Burlica, Radu; Locke, Bruce R. IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS Volume: 44 Issue: 2 Pages: 482-489 Published: MAR-APR 2008 (Q2) DOI10.1109/TIA.2008.916603	3
44.	6	Destruction of alkaline cyanides by electric discharges By: Doubla, Avaly; Brisset, Jean-Louis; Moussa, David; et al. RESEARCH JOURNAL OF CHEMISTRY AND ENVIRONMENT Volume: 11 Issue: 1 Pages: 92-95 Published: MAR 2007	1./6
45.	4	Effect of Pressure on Chemical Reaction in a Liquid Phase Electrical Discharge Reactor By: Shih, Kai-Yuan; Burlica, Radu; Finney, Wright C.; et al. Conference: 42nd Annual Meeting of the IEEE-Industry-Applications-Society Location: New Orleans, LA Date: SEP 23-27, 2007 CONFERENCE RECORD OF THE 2007 IEEE INDUSTRY APPLICATIONS CONFERENCE FORTY-SECOND IAS ANNUAL MEETING, VOLS. 1-5 Book Series: IEEE INDUSTRY APPLICATIONS SOCIETY ANNUAL MEETING Pages: 1124-1128 Published: 2007	0
46.	25.6	Formation of reactive species in gliding arc discharges with liquid water By: Burlica, R; Kirkpatrick, MJ; Locke, BR JOURNAL OF ELECTROSTATICS Volume: 64 Issue: 1 Pages: 35-43 Published: JAN 2006 (Q3)	2.6
47.	19.5	Organic dye removal from aqueous solution by glidarc discharges By: Burlica, R; Kirkpatrick, MJ; Finney, WC; et al. Conference: Joint Meeting of the Electrostatics-Society-of-America/IEEE-Industry-Applications-Society-Electrostatic-Processes-Committee Location: Little Rock, AR Date: JUN 24-27, 2003 Sponsor(s): Electostatist Soc Amer; IEEE, Ind Applicat Soc Electrstat Processes Comm JOURNAL OF ELECTROSTATICS Volume: 62 Issue: 4 Pages: 309-321 Published: NOV 2004 (Q3)	2.6

48.	4	Non-destructive testing method for spark plug insulators By: Burlica, R; Chiruta, M; Duca, M Conference: 8th International Symposium on Non-Linear Electromagnetic Systems (ISEM Braunschweig) BRAUNSCHWEIG, GERMANY Date: MAY 12-14, 1997 Non-linear electromagnetic systems: advanced techniques and mathematical methods Book Series: STUDIES IN APPLIED ELECTROMAGNETICS AND MECHANICS Volume: 13 Pages: 197-200 Published: 1998	0
Total	**495**	**459,34 p**	

2.2. Articole in reviste si volumele unor manifestări ştiinţifice indexate în alte baze de date internaţionale (BDI)

Nr. crt.	Rezultate (punctaje)	Titlul lucrării, autorii, revista, pag (de la – pana la), vol….,
8. 1	3,33	B.A. Pingescu, V.D. Asmarandei, D.G. Astanei, O.C. Beniugă, C.R. Beniugă, R. Burlică, *High conductivity solution treatment by non-thermal plasma T-shaped mini electrochemical reactors*, Proc. of the 2024 IEEE International Conference and Exposition on Electrical and Power Engineering, pp. 616-619, 17-19 oct. 2024, Iasi, Romania, DOI: 10.1109/EPEi63510.2024.10758144
9. 2	3,33	B.A. Pingescu, D. Astanei, R. Burlică, V.D. Asmarandei, O.C. Beniugă, V. Gheorghe, *Capacitive Power Supplies for Non-Thermal Plasma Electrochemical Mini-Reactors*, Proc. of the 2024 IEEE International Conference and Exposition on Electrical and Power Engineering, pp. 632-635, 17-19 oct. 2024, Iasi, Romania, DOI: 10.1109/EPEi63510.2024.10758134
10. 4	5	O.C. Beniugă, C.R. Beniugă, D.G. Astanei, R. Burlică, *Thermostat Behavior Analysis in Smart Home Environment Using Petri Nets*, Proc. of the 2024 IEEE International Conference and Exposition on Electrical and Power Engineering, pp. 390-393, 17-19 oct. 2024, Iasi, Romania, DOI: 10.1109/EPEi63510.2024.10758167
11. 5	4	T.A. Filip, I. Turcan, C.C. Simota, D.G. Astanei, M.A. Olariu, *Fabrication and Preliminary Evaluation of Flexible Screen-Printed Resistive Voltage Divider*, Proc. of the 2023 International Conference on Engineering and Emerging Technologies (ICEET), 27-28 oct. 2023, Istanbul, Turkey, DOI: 10.1109/ICEET60227.2023.10526109
12. 6	4	C.C. Rusu, D. Astanei, R. Burlică, D.E. Creţu, O. Beniugă, *Rotary DBD Plasma Reactor for Inline Treatment of Polymeric Substrates*, Proc. of the 2023 10th International Conference on Modern Power Systems (MPS), 21-23 jun. 2023, Cluj-Napoca, Romania, DOI: 10.1109/MPS58874.2023.10187433
13. 7	4	C.C. Rusu, D.E. Creţu, R. Burlică, D. Astanei, O. Beniugă, *DBD system operating in ambient air for surface treatment of polyethylene terephthalate films*, Buletinul Institutului Politehnic din Iaşi, Secţia Electrotehnică, Energetică, Electronică, acceptat spre publicare noiembrie 2022.
14. 8	4	D.-E. Cretu, C.-C. Rusu, D. Astanei, R. Burlica, O. Beniuga, *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
15. 9	3,33	D.-E. Cretu, S. Pellerin, R. Burlica, M. Wartel, D. Astanei, F. Faubert, *Influence of Water Injection Technique in an Argon NTP System Used for PAW Generation*, Proc. of the 2022 International Conference and Exposition on Electrical and Power Engineering, 20-22 oct. 2022, Iasi, Romania, DOI: 10.1109/EPE56121.2022.9959849
16. 10	3,33	D.-E. Cretu, C.-C. Rusu, R. Burlica, O. Beniuga, D. Astanei, D. Tesoi, *DBD Non-Thermal Plasma Used on Surface Treatment of Polymeric Film for Food Packaging*, Proc. of the 2021 International Conference on Electromechanical and Energy Systems (SIELMEN), pp. 454-457, 6-8 oct. 2021, Iasi, Romania, DOI: 10.1109/SIELMEN53755.2021.9600314.
17. 11	6,67	I. C. Felea, E. Hnatiuc, D. Astanei, *Characterization of Cold Plasma Glidarc Reactors*, Proc. of the 2021 International Aegean

Nr. crt.	Rezultate (punctaje)	Titlul lucrării, autorii, revista, pag (de la – pana la), vol….,
		Conference on Electrical Machines and Power Electronics (ACEMP) & 2021 International Conference on Optimization of Electrical and Electronic Equipment (OPTIM), pp. 351-357, 2-3 sept. 2021, Braşov, Romania, DOI: 10.1109/OPTIM-ACEMP50812.2021.9590073
18. 12	3,33	D.-E. Cretu, R. Burlica, O. Beniuga, D. Astanei, C. Rusu, D. Tesoi, *Surface Treatment of Polyethylene Terephthalate Film Using a DBD Non-Thermal Plasma Reactor*, Proc. of the 2021 International Aegean Conference on Electrical Machines and Power Electronics (ACEMP) & 2021 International Conference on Optimization of Electrical and Electronic Equipment (OPTIM), pp. 364-367, 2-3 sept. 2021, Braşov, Romania, DOI: 10.1109/OPTIM-ACEMP50812.2021.9590058
19.	4	D.E. Crețu, D. Astanei, R. Burlică, O. Beniugă, D. Tești, *The Influence of NTP Reactor Geometry on H2O2 Generation in Water*, Proc. of the 2020 International Conference and Exposition on Electrical and Power Engineering, 22-23 oct. 2020, Iasi, Romania, DOI: 10.1109/EPE50722.2020.9305678
20.	3,33	D Tești, D-E Crețu, O Beniugă, R Burlică, D. Astanei, M Olariu, *DBD Plasma in Air Reactor for Polymeric Surfaces Treatment*, Proc. of the 2020 International Conference and Exposition on Electrical and Power Engineering, 22-23 oct. 2020, Iasi, Romania, DOI: 10.1109/EPE50722.2020.9305586
21.	4	M. Adam, M. Andrusca, A. Dragomir; D. Astanei; R. Burlica, *Technical Condition Monitoring of Impedance Bonds using Sensors and Dedicated Device*, Proc. of the 2018 International Conference and Exposition on Electrical and Power Engineering, 22-23 oct. 2020, Iasi, Romania, DOI: 10.1109/EPE50722.2020.9305673
22.	5	I.D. Dirlau, R. Burlica, D. Astanei, O. Beniuca, *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
23.	10	Gheorghe Veronica Carmen, Burlică Radu, Îmbunătățirea Performanței Transformatoarelor de Distribuție din Sistemul Energetic, Buletinul Institutului Politehnic din Iași, Publicat de Universitatea Tehnică „Gheorghe Asachi" din Iași, Vol.70(74), Nr. 1, 2024, doi:10.2478/bipie-2024-0002.
24.	10	Burlica, and B. Locke. The effect of confined plasma gliding arc discharges on organic compounds removal in aqueous solutions, Buletinul Institutului Politehnic Iasi Tomul LII (LVI), FASC. 5, 2006 ISSN1223-8139
25.	10	R. Burlica and E. Hnatiuc, Gyroscopic stabilization system for small and medium size vessels Buletinul Institutului Politehnic Iasi, Tomul LII (LVI), FASC. 5, 2006 ISSN1223-8139
26.	5	R. Burlica, M. Kirkpatrick, M. Finney and B. Locke, The Effects of Gas and Solution Flow Rate on Dye Removal in Glidarc Reactors, Buletinul Institutului Politehnic Iasi. Tomul L(LIV), Fasc. 5A, EPE 2004. ISSN1223-8139
27.	4	Hnatiuc B., Pellerin S., Rascanu V., Hnatiuc E., Burlica R. Analysis of the transition of a dielectric barrier discharge to a luminiscent discharge at atmospheric pressure, Buletinul Institutului Politehnic Iasi. Tomul L(LIV), Fasc. 5A, 2004. ISSN1223-8139
28.	2	Hnatiuc E., Brisset J. L., Hnatiuc B., Mousa D., Burlica R., Doubla A., Fanmoe J., Kamgang O., Tsagou E., About the performances of the electrochemical reactors with cold plasma, Buletinul Institutului Politehnic Iasi. Tomul L(LIV), Fasc. 5A, EPE 2004. ISSN1223-8139
29.	6.3	R. Burlica, E. Hnatiuc and B. Hnatiuc, Possibilities to anticipate the fault current in A.C. power electrical networks. Buletinul Institutului Politehnic Iasi, Tomul XLVIII,Fasc. 5A, 2002 ISSN 0258-9109

Nr. crt.	Rezultate (punctaje)	Titlul lucrării, autorii, revista, pag (de la – pana la), vol….,
30.	6.3	Burlica R.,, Hnatiuc E., Hnatiuc B., The analytical evaluation of the disconnecting time for the D.C. electromagnetic commutation apparatuses with contacts, Buletinul Institutului Politehnic din Iaşi, Tomul XLVII(LI), Fascicula 1-2, Secţia a III-a, 2001, p. 175-180
31.	5	EFFECT OF NON-THERMAL PLASMA ON MOLECULAR SPECIES FORMED IN WATER BASED SOLUTION Authors: Iuliana Delicia Dirlau, Radu Burlica, Dragos Astanei, Oana Beniuga - Bulletin of the Polytechnic Institute of Iasi. Electrical Engineering, Power Engineering, Electronics Published by Technical University "Gheorghe Asachi" of Iaşi, Vol. 63 (67), No. 1,pp.9-20, 2017
32.	3.33	Ciprian-Cătălin Rusu, Daniel-Eusebiu Crețu, Radu Burlică, Dragoș Astanei and Oana Beniugă, "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, 2022– 3 p.
TOTAL	**123 p**	

2.3. Proprietate intelectuala, brevete de invenție

Nr crt	Subcategorii	Rezultate (punctaje)	Titlul proiectului
0	1	2	3
1	Internaţional	25	1. Gliding arc electrical discharge reactors with improved nozzle configuration Patent Number(s): US2009236215-A1; US8444924-B2, UNIV FLORIDA STATE RES FOUND SUA, Inventor(s): Burlica R, Locke B. 2. Pulsed gliding arc electrical discharge reactors Patent Number(s): US2007272543-A1 ; US7919053-B2, UNIV FLORIDA STATE RES SUA, Inventor(s): Burlica R, Locke B. –
2	Naţional	2,5	R. Burlică, D. Astanei, I.D. Dîrlău, O.C. Beniugă, M. Andruşcă, M. Adam *Minireactor electrochimic cu plasmă non-termică cu geometrie în formă de T, pentru producerea apei activate*, Brevet nr. RO134206B1 29.03.2024.
3	Naţional	3.75	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.
4	Naţional	3.75	**Cold plasma device with non-symetrical electrodes** Patent Number(s): RO128078-A2, OSIM RO In126ventor(s): Burlica R, Hnatiuc B, Hnatiuc E, Ursache M
5	Naţional	0	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 imprimarii circuitelor electronice flexibile*, Cerere de brevet nr. nr. A00117 / 11.03.2022.
TOTAL		**35**	

2.4. Granturi / proiecte câștigate prin competiție

Nr crt	Subcategorii	Rezultate (punctaje)	Titlul proiectului	Calitate (director / membru)
0	1	2	3	4
1	Internațional	2*10 = 20p	-Titlu: Bio-tratament aplicat pe ambele suprafețe ale foliei polimerice utilizată pentru împachetarea produselor alimentare utilizând plasma non-termică DBD-Corona - ERANET-MANUNET-III-PlasmaPack, nr. 214 / 2020, perioada 2020-2022 - Director proiect: Ș.l.dr.ing. Dragoș Astanei	Membru
2	Internațional	2,5*10 = 25p	-Titlu: Evaluarea apei activate produse de către diferite reactoare de plasmă non-termică - Proiect de tip PN-III-P3-3.1-PM-RO-FR, nr. 19BM / 2019, perioada 2019-2021 - Director proiect: Ș.l.dr.ing. Dragoș Astanei	membru
4	Internațional	4*1 =4p	-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) - Proiect PN-IV-P8-8.3-PM-RO-BE-2024-0011, perioada dec 2024 – dec 2025 - Director proiect: Ș.l. dr. ing. Constantin-Răzvan Beniugă	Membru
5	**Internațional**	**20*2 =40p**	**-Titlu: Reactor cu plasmă non-termică la presiune atmosferică pentru pre-tratamentul substraturilor polimerice utilizate în fabricarea circuitelor imprimate flexibile - Proiect ERANET-MANUNET-III-Treatoflex, nr. 146 / 2020, perioada 2020-2022**	**Director**
			Double-sided bio-treatment of polymeric foil for food packaging using coupled DBD-Corona non-thermal plasma Call name: P 3 - SP 3.2 - Proiecte ERA.NET ERANET-MANUNET-PlasmaPack 2020 - 2022	membru
6	**Național**	**2*2 = 4p**	**-Titlu: Model experimental pentru demonstrarea fezabilității creșterii potențialului terapeutic al germenilor de grâu prin tratarea acestora cu apa activată cu plasmă non-termică (PAW) - Proiect PN-III-P2-2.1-PED-2019-0556, nr. 361PED / 2020, perioada 2020-2022**	**director**
7	**Național**	**5*2 = 10p**	**-Titlu: Creșterea Producției Agricole în Sere Utilizând Irigarea cu Apă Activată cu Plasmă Rece - Proiect de tip PN III, P IV-PCE, nr. 15 / 12.07.2017, perioada 2017-2019**	**Director**
9	**National**	**5*2=10**	**The study of hydrogen production by cold plasma technologies Uefiscdi.ro PNII– IDEI 331 977/2009-2011**	**Director**
	National	**5*2**	**Grant de tip T, MCT, 6177 Gr/2000-2002**	**Director**
TOTAL		**164**		

3. RECUNOASTERE SI IMPACTUL ACTIVITATII (A3)

3.1. / 3.2. Citări în reviste și volumele conferințelor WOS și BDI

3. Citări în reviste cotate ISI sau indexate în baze de date internaţionale (BDI)

2.9.1. Lucrarea V. Stoleru, R. Burlică, G. Mihalache, D. Dirlau, S. Padurean, G.C. Teliban, D. Astanei, A. Cojocaru, O. Beniuga, A. Patras, „Plant growth promotion effect of plasma activated water on Lactuca sativa L. cultivated in two different volumes of substrate'', Scientific Reports (Nature), vol. 10, issue 1, Art. number 20920, 2020. Citări: 68 x Reviste ISI + 5 x Reviste BDI + 0 x Volume Conferinţe ISI + 0 x Volume Conferinţe BDI =

10 autori -34 +1.5=35.5 p

Citată în:

1) Katarína Kučerová, Mária Henselová, Ľudmila Slováková, Michaela Bačovčinová, Karol Hensel, „Effect of Plasma Activated Water, Hydrogen Peroxide, and Nitrates on Lettuce Growth and Its Physiological Parameters", Applied Sciences, Vol. 11, issue 5, art. no. 11051985, 2021 – Revista ISI– **5p;**

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Nonthermal Plasma Multi-Reactor Scale-Up Using Pulse Capacitive Power Supplies APPLIED SCIENCES-BASEL 14 ISI / 4 autori = 17.5 p

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Total punctaj Criteriu 3.2	**724**

	TOTAL 2* 558=1116 p	**533 WOS** **23 BDI**

Doctoranzi

1. **Dirlau Delicia (sustinut teza)**
2. **Cretu Daniel (sustinut teza)**
3. **Asmarandei Vasile Daniel**
4. **Pingescu Bogdan**
5. **Gheorghe Viorica**
6. **Covali Ionut**
7. **Galan Sebastian**
8. **Radu Alexandru**

Data:
19.10.2026

Semnătura
Burlica Radu



Numele şi prenumele: **Burlica Radu**
Funcţia didactică: **Profesor universitar**
Facultatea/ Departamentul: **Facultatea de Inginerie Electrică, Energetică şi Informatică Aplicată / Departamentul de Energetică**

FIŞA DE VERIFICARE
a îndeplinirii standardelor universităţii pentru postul de Profesor universitar
(concurs pentru acordarea gradaţiei de merit)

Tabelul 1. Standardul minimal al universităţii SMU.CONF.1 – Activitatea didactică

Standardul minimal al universităţii SMU.CONF.1 – Activitatea didactică	Indicatori de performanţă			Realizări (se trec cifrele de ordine ale realizărilor cuprinse în lista de lucrări, iar, după caz, celelalte realizări se nominalizează explicit)	Punctaj/ realizare	Număr impus de realizări	Număr de realizări ale candidatului	Număr puncte
Valoarea contribuţiilor la dezvoltarea activităţilor didactice / profesionale, prin cărţi/ capitole publicate în edituri recunoscute CNCS, sisteme de laborator funcţionale, metode de lucru avansate aplicate etc. - după caz, cu referire distinctă la realizările după acordarea ultimului titlu didactic/ grad profesional.	Ca	Carte/ curs/ manual publicată în străinătate			8	-		
		Capitol carte/ curs/ manual publicat în străinătate			6	-		
		Carte/ curs/ manual publicată în editură recunoscută CNCS (unic/ prim autor sau co-autor)		Ca1, Ca2	6	1	2	13,87
		Capitol curs/ manual publicat în editură recunoscută CNCS			3	-		
	I	Indrumar laborator/ proiect/ lucrări seminar/ culegere de probleme (publicat sau disponibil pe Web)		I1	4	1	1	2,92
	D	Sisteme de laborator funcţionale (numai pentru disciplinele prevăzute cu lucrări de laborator/ proiect/ lucrări)	Amenajare lucrare nouă de laborator cu instalaţie experimentală	D1, D2, D3, D4, D5, D6, D7, D8, D9	2	2	9	12
			Amenajare/ concepere lucrare nouă de laborator/ proiect/ simulare pe calculator/ studiu de caz		1.5			
	W	Utilizarea sistemelor de predare/ învăţare/	Suport de studiu/ autoinstruire pe Web pentru seminar, laborator, proiect (integral pentru o disciplină)		1	1		

		evaluare de tip e-learning/ on-line/ multimedia etc.	Suport de prezentare/ instruire text/ video/ audio/ ppt a disciplinei	W1, W2,W3	1		3	1,5
Total uncta SMU.CONF.1 (min. 16)								42,29

Detaliere punctaj în conformitate cu Anexa 3 la Procedura PO.DID.12

Indicatori		Punctaj
Ca	**Carte/ curs/ manual publicată în editură recunoscută CNCS (unic/ prim autor sau co-autor)**	
	Ca1 Dragoş Astanei, Radu Burlică, *Tehnici de comutație – note de curs*, Editura PIM, Iași, 2022, ISBN: 978-606-13-7147-1, 230 pag	**5,75**
	Ca2 Radu Burlică, **Dragoş Astanei,** *Plasma non-termică: Fundamente, Aplicații, Analiză*, Editura PIM, Iași, 2020, ISBN 978-606-13-5944-8, 325 pag	**8,12**
I	**Îndrumar/ culegere de probleme (publicat sau disponibil pe Web)**	
	I1 Dragoş Astanei, Radu Burlică, *Tehnici de comutaţie – aplicaţii*, Editura PIM, Iași, 2022, ISBN: 978-606-13-7148-8, 146 pag	**2,92**
D	**Sisteme de laborator funcţionale**	
	D1 Dragoş Astanei, R. Burlică, Studiul sistemelor de comandă şi protecţie ale motoarelor asincrone – instalaţie experimentală	**1**
	D2 Dragoş Astanei, R. Burlică, Studiul funcţionării contactorului cu vid – instalaţie experimentală	**1**
	D3 R. Burlică, Dragoş Astanei, Sisteme de protecţie la supratensiuni – instalaţie experimentală	**1**
	D4 Dragoş Astanei, R. Burlică, Analiza funcţionării releelor de comandă şi control – instalaţie experimentală	**1**
	D5 Dragoş Astanei, R. Burlică, Studiul releelor de curent – instalaţie experimentală	**1**
	D6 Burlică Radu, Dragoş Astanei, Pornirea stea-triunghi a motoarelor ansincrone – instalaţie experimentală	**1**
	D7 Burlica radu, Limitatoare de curent cu rezonanta, – instalaţie experimentală	**2**
	D8 Burlica Radu, Camere de stingere cu suflaj magnetic a arcului electric de curent continuu – instalaţie experimentală	**2**
	D9 Burlica radu, Protectia la aparitia arcului electric serie in circuitele de alimentare cu energie electrica	**2**
W	**Utilizarea sistemelor de predare/ învăţare/ evaluare de tip e-learning/ on-line/ multimedia etc.**	
	W1 Radu Burlică, **Dragoş Astanei**, Set prezentări în format PPT pentru disciplina *Electroecologie* – *https://edu.tuiasi.ro/course/view.php?id=3407*	**0.5**
	W2 Radu Burlică, Dragoș Astanei, „Calculul numeric al aparatelor electrice –curs”, online - https://edu.tuiasi.ro/pluginfile.php/213794/mod_resource/content/1/CNAE%20curs%202025.pdf, 218 pag, 2025	**0.5**
	W3 E. Hnatiuc, R Burlica, Aparate Electrice – curs-https://www.studocu.com/ro/document/universitatea-tehnica-gheorghe-asachi-din-iasi/aparate-electrice/ae-clasificari/2663767?sid=0588ecc8-af31-41ed-90bd-d1978b70578e1792141488	**0.5**
TOTAL		**30,29**

Data: 19.10.2026 **Candidat Burlica Radu**

