

**Fișa de îndeplinire a standardelor minime necesare și obligatorii pentru conferirea titlurilor didactice
din învățământul superior și a gradelor profesionale de cercetare-dezvoltare – Domeniul Fizică
în conformitate cu Ordinul de ministru 6129 din 2016
Anexa 3 – Comisia de Fizică**

Conf. Univ. Dr. Fiz. Ing. CAZACU Marius Mihai

	PUNCTAJ REALIZAT	Conditii minime	Criterii îndeplinite
Activitati	Cazacu Marius Mihai	Conform cu CNATCU, Ordin 6129/2016 (pentru abilitare, CSI, prof. univ.)	
A	2.91	2	DA
I	4.32	4	DA
P	11.75	4	DA
C	48.42	40	DA
H	12.00	10	DA
TOTAL T	15.77	12	DA

A1 - Activitatea didactica si profesionala

Nr. crt.	Tipul activitatilor	Activitate autor			Punctaj
1	Cărți în edituri internaționale recunoscute Web of Science în calitate de autor	A1=4/n.ef.	Nr. autori	Nr. autori efectivi (n.ef.)	0.00
		N/A		0.00	0.00
2	Capitole de cărți în edituri internaționale recunoscute Web of Science în calitate de autor/Review-uri în reviste cotate ISI	A2=1/n.ef.	Nr. autori	Nr. autori efectivi (n.ef.)	0.55
		1. Coman, T. B., Cazacu, M. M. , Apreotesei, G., Prelipceanu, M., & Radinschi, I. (2021). <i>In-person versus virtual activities: Assessing the usefulness and impact of simulated experiments, a case study</i> . Biomedical Engineering Tools for Management for Patients with COVID-19, 73–86, Capitolul 4, https://doi.org/10.1016/B978-0-12-824473-9.00004-5	5	5.00	0.20
		2. Buzea, C. G., Eva, L., Prelipceanu, M., Cazacu, M. M. , Garofalide, S., & Agop, M. (2021). <i>Coronavirus disease COVID-19 tracking the global outbreak. SEIR compartmental model applied to SARS-CoV-2 epidemic in Romania</i> . Biomedical Engineering Tools for Management for Patients with COVID-19, 87–102, Capitolul 5, https://doi.org/10.1016/B978-0-12-824473-9.00002-1	6	5.50	0.18
		3. Mireștean, C. C., Agop, M., Buzea, C. G., Cazacu, M. M. , Prelipceanu, M., Iancu, R. I., & Iancu, D. T. (2021). <i>Radiotherapy challenges in COVID era</i> . Biomedical Engineering Tools for Management for Patients with COVID-19, 41–72, Capitolul 3, https://doi.org/10.1016/B978-0-12-824473-9.00009-4	7	6.00	0.17

3	Cărți în edituri internaționale recunoscute Web of Science în calitate de editor	p=0,5/n.ef.	Nr. autori	Nr. autori efectivi (n.ef.)	0.00
		N/A		0.00	0.00
4	Cărți, manuale, îndrumare de laborator în edituri naționale sau alte edituri internaționale ca autor, note interne, prezentări susținute pentru aprobarea analizelor de date în cadrul colaborărilor mari	p=0,5/n.ef.	Nr. autori	Nr. autori efectivi (n.ef.)	0.38
		4. Irina Radinschi, Marius Mihai Cazacu - Physics 1 Quizzes - Performantica, Iasi, 2023, ISBN: 9786303280615	2	2.00	0.25
		5. M. Voiculescu, S. Condurache-Bota, L. Sfică, M.M. Cazacu , (2020), Teste și întrebări de fizica atmosferei, meteorologie și climatologie, Editura: Ars Longa, ISBN 978-973-148-354-9	4	4.00	0.13
5	Capitole de cărți în edituri naționale sau alte edituri internaționale ca autor	p=0,2/n.ef.	Nr. autori	Nr. autori efectivi (n.ef.)	0.63
		6. Capitol din “Îndrumar de lucrări practice pentru disciplina Fizică”, Ed. Performantica, 2023, ISBN: 978-630-328-060-8: M. M. Cazacu , Studiul proprietăților elastice. Studiul oscilațiilor.	1	1.00	0.20
		7. Capitol din “Îndrumar de lucrări practice pentru disciplina Fizică”, Ed. Performantica, 2023, ISBN: 978-630-328-060-8: M. M. Cazacu , I. Radinschi, Oscilații amortizate. Oscilații forțate. Pendulul lui Pohl.	2	2.00	0.10
		8. Capitol din “Îndrumar de lucrări practice pentru disciplina Fizică”, Ed. Performantica, 2023, ISBN: 978-630-328-060-8: M. M. Cazacu , I. Radinschi, Studiul fenomenelor specifice undelor electromagnetice. Microundele.	2	2.00	0.10
		9. Capitol din “Îndrumar de lucrări practice pentru disciplina Fizică”, Ed. Performantica, 2023, ISBN: 978-630-328-060-8: M. M. Cazacu , Experimentul Franck și Hertz. Determinarea primului potențial de excitare la atomii de neon.	2	2.00	0.10
		10. A. Ionce, I.S. Stratulat, A. Timofte, M.M. Cazacu , Analiza unui areal natural de balneoclimatoterapie: Cacica, Județul Suceava, Capitol din Partea III-a al cărții: Balneoclimatologia în România și Republica Moldova, coordonator I.S. Stratulat, Editura Academiei Române, ISBN 978-973-27-3005-8, 2018	4	4.00	0.05

6	Lucrări in extenso (cel puțin 3 pagini) publicate în Proceedings-uri indexate ISI	11. A. Ionce, I.S. Stratulat, M.M Cazacu , A. Timofte, (2016), <i>Analiza unui areal natural de balneoclimatoterapie: Cacica, Județul Suceava</i> , Capitol din Partea III al cartii: Balneoclimatologia Românească. Istoric și perspective europene, coordonator I.S. Stratulat, Editura Academiei Române, ISBN 978-973-27-2704-1	4	4.00	0.05
		12. M.M. Cazacu , A. Timofte, G. Bulai, S. Gurlui, D. Nicolae, A. Nemuc, L. Belegante, C. Radu, (2016), <i>Advanced optical remote sensors for airborne and spaceborne platforms (DARLIOES)</i> , Capitol din cartea: Romanian projects and initiatives in support of Earth Observation, p. 37 - 40, Editura Tehnopress, ISBN: 978-606-687-281-2	8	6.50	0.03
		p=0,2/n.ef.	Nr. autori	Nr. autori efectivi (n.ef.)	0.47
		13. Dragoi (Oniu), L., Breabăn, I. G., & Cazacu, M. M. (2023). 2017 – 2020 trends of particulate matter PM10 concentrations in the cities of Suceava and Botoșani. <i>Present Environment and Sustainable Development</i> , 17(1), 335–349.	3	3.00	0.07
		14. Ciocan, G., Nemuc, A., Belegante, L., & Cazacu, M. M. (2025). Mineral dust intrusions in Southeastern Romania: insights from seventeen years of sun photometer data. <i>Journal of Optoelectronics and Advanced Materials</i> , 27(July-August 2025), 354–367.	4	4.00	0.05
		15. Pelin, V., Rusu, O., Cazacu, M. M. , Gurlui, S., Sandu, A. V., Radinschi, I., Ciocan, V., & Sandu, I. (2018). <i>Assessment of Hydrophobic Coating on Porous Calcareous Rocks Surface Exposed in Urban Ambient Air Pollution</i> . IOP Conference Series: Materials Science and Engineering, 374(1), 012091. https://doi.org/10.1088/1757-899X/374/1/012091	8	6.50	0.03
		16. Radinschi, I., Fratiman, V., Cazacu, M. M. , Ciocan, V., & Covatariu, G. (2018). <i>Javascript computer simulation for damped oscillations in a series RLC circuit, a tool to improve students' learning</i> . Proceedings of EDULEARN18 Conference, (pp. 6015–6024). https://doi.org/10.21125/edulearn.2018.1438	5	5.00	0.04

		17. Radinschi, I., Cazacu, M. M. , Covatariu, G., Ciocan, V., Verdes, M., & Helepciuc (Gradinaru), C. M. (2018). <i>The effect of the use of computer simulations and virtual physics laboratory in gender performance of physics learning</i> . ICERI Proceedings (pp. 0549–0555). https://doi.org/10.21125/iceri.2018.1112	6	5.50	0.04
		18. Gurlui, S., Cazacu, M. M. , Timofte, A., Rusu, O., Bulai, G., & Dimitriu, D. (2018). <i>Space- and time-resolved Raman and breakdown spectroscopy: Advanced lidar techniques</i> . EPJ Web of Conferences, 176, Article no. 01028, (pp. 1–4). https://doi.org/10.1051/epjconf/201817601028	6	5.50	0.04
		19. Cazacu, M. M. , Tudose, O., Balanici, D., & Balin, I. (2018). <i>Research and development of commercial lidar systems in Romania: Critical review of the ESYRO lidar systems developed by SC Enviroscopy SRL (ESYRO)</i> . EPJ Web of Conferences, Vol. 176, Article no. 11005, (pp. 1–4). https://doi.org/10.1051/epjconf/201817611005	4	4.00	0.05
		20. Pelin, V., Rusu, O., Sandu, I. G., Vasilache, V., Gurlui, S., Sandu, A. V., Cazacu, M. M. & Sandu, I. G. G. (2017). <i>Approaching on Colorimetric Change of Porous Calcareous Rocks Exposed in Urban Environmental Conditions from Iasi - Romania</i> . IOP Conference Series-Materials Science and Engineering, Vol. 209, Issue 1, Article no. 012080 (pp.:1 - 8). https://doi.org/10.1088/1757-899X/209/1/012080	8	6.50	0.03
		21. Covatariu, G., Cazacu, M. M. , Radinschi, I., Ciocan, V., Fratiman, V., & Turcanu, F. E. (2017). <i>Statistical survey of the outcome of effective use of computer simulations in students learning</i> . EDULEARN Proceedings: 9th International Conference on Education and New Learning Technologies (EDULEARN17), (pp. 887–893). ISBN 978-84-697-3777-4.	6	5.50	0.04
		22. Albina, B., Cazacu, M. M. , Timofte, A., Dimitriu, D. G., & Gurlui, S. O. (2014). <i>Studies of planetary boundary layer by infrared thermal imagery</i> . AIP Conference Proceedings, 1634(174), (pp. 174–179). https://doi.org/10.1063/1.4903034	5	5.00	0.04
		23. O.G. Tudose, M.M. Cazacu , A. Timofte, I. Balin, "ESYRO Lidar system developments for troposphere monitoring of aerosols and clouds properties", Proc. SPIE 8177, Remote Sensing of Clouds and the Atmosphere XVI, 817716 (26 Oct 2011); https://doi.org/10.1117/12.910640	4	4.00	0.05
7	Brevete de invenție internațională acordate	p=3/nefi	Nr. autori	Nr. autori efectivi (nefi)	0.00
		N/A		0.00	0.00

8	Brevete de invenție naționale acordate	p=0,5/nefi	Nr. autori	Nr. autori efectivi (nefi)	0.00
		N/A		0.00	0.00
9	Director/responsabil/coordonator pentru programe de studii, programe de formare continuă, proiecte educaționale și proiecte de infrastructură (proiectele de cercetare se exclud)	p=0,5			0.00
		N/A			0.00
					0.00
					0.00
					0.00
10	Director/responsabil pentru proiecte de cercetare în valoare Vi euro câștigate prin competiție națională sau internațională (proiectele de la punctul 9 se exclud). Sumele în lei sau în alte valute se convertesc în euro la cursul mediu din anul respectiv conform www.bnr.ro pentru perioada de după 1999 și la cursul din 1999 pentru perioada anterioară. Responsabilii de proiect sunt cei care conduc o echipă de cercetare, fiind menționați ca atare în proiectul depus; în cazul lor se consideră doar suma aferentă echipei conduse.	p=Vi/100000	Valoare contract		0.89
		23. PN-III-P1-1.1-TE-2019-1921, nr. 145/2020 , Studii de spectroscopie și imagistică la nano-scală a aerosolilor atmosferici pentru a determina influența lor asupra parametrilor optici, noiembrie 2020 – octombrie 2021 (curs euro mediu 2020 - 4.8371 ron - https://www.cursbnr.ro/curs-valutar-mediou)	89289		0.89
	TOTAL A1				2.91

A	2.91
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A2 - Activitatea de cercetare

Nr. crt.	Tipul activitatilor	Activitate autor				Punctaj
1	Articole științifice originale in extenso ca autor	I=AISI/n.ef.	AIS	Nr. autori	Nr. autori efectivi (n.ef.)	4.32
		48. Nicolae, D., Ciocan, G.-A., Nemuc, A., Nicolae, V., Talianu, C., Vasilescu, J., Dandocsi, A., Radu, C., Cazacu, M.-M. , Vulturescu, V., & Belegante, L. (2026). Examining the characteristics of aerosols: a statistical analysis based on a decade of lidar and photometer observations at the Eastern border of ACTRIS. <i>Atmos. Meas. Tech.</i> , 19, 1179–1199. https://doi.org/https://doi.org/10.5194/amt-19-1179-2026	1.109	11	8.00	0.14
		47. Timofte, A., Bostan, D. C., Apetroaie, C., Miclăuș, I. M., & Cazacu, M. M. (2025). The 50-Year Evolution of the Planetary Boundary Layer in the Southern Part of Romania: Comparison Between the Determinations by the Stull Method and the Reanalysis Data from ERA5. <i>Atmosphere</i> 2025, Vol. 16, Page 1247, 16(11), 1247. https://doi.org/10.3390/ATMOS16111247	0.533	5	5.00	0.11
		46. Tanasa, I., Cazacu, M. , Botan, D., Atkinson, J. D., Sebestyen, V., & Sluser, B. (2025). From Aerosol Optical Depth to Risk Assessment: A Novel Framework for Environmental Impact Statistics of Air Quality Using AERONET. <i>Environments</i> 2025, Vol. 12, Page 285, 12(8), 285. https://doi.org/10.3390/ENVIRONMENTS12080285	0.648	6	5.50	0.12
		45. Drăgoi, L., Cazacu, M.-M. , & Breabăn, I.-G. (2025). Evaluation of Scenarios for the Application of the Future PM2.5 and PM10 Standards: A Case Study of Three Urban Areas in Romania and Implications for Public Policies. <i>Environments</i> 2025, Vol. 12, Page 373, 12(10), 373. https://doi.org/10.3390/ENVIRONMENTS12100373	0.648	3	3.00	0.22
		44. Drăgoi, L., Cazacu, M. M. , & Breabăn, I. G. (2025). Analysis of the PM2.5/PM10 Ratio in Three Urban Areas of Northeastern Romania. <i>Atmosphere</i> , 16(6), 720. https://doi.org/10.3390/atmos16060720	0.533	3	3.00	0.18
		43. Ababei, R. V., Garofalide, S., Bulai, G., Dimitriu, G. D., Gurlui, S., & Cazacu, M. M. (2025). Unveiling the Correlation between Lyapunov Coefficients and Deep Learning Performance Using Ceilometer Data. <i>IEEE Geoscience and Remote Sensing Letters</i> , 22, 1–5. https://doi.org/10.1109/LGRS.2025.3557150	1.132	6	5.50	0.21

	42. Cazacu, M. M. , Roșu, A. I., Ababei, R. V., Roșu, A., Vasincu, D., Nica, D. C., Rusu, O., Bruma, A. B., & Agop, M. (2024). Investigating Nonlinear Dynamics in Atmospheric Aerosols during the Transition from Laminar to Turbulent Flow. <i>Atmosphere</i> , 15(3).	0.534	9	7.00	0.08
	41. Roman, A.-M., Cimpoeșu, R., Pricop, B., Cazacu, M. M. , Zegan, G., Istrate, B., Cocean, A., Chelariu, R., Moscu, M., Bădăraș, G., Cimpoeșu, N., & Ivănescu, M. C. (2024). Investigations on the Degradation Behavior of Processed FeMnSi-xCu Shape Memory Alloys. <i>Nanomaterials</i> 2024, Vol. 14, Page 330, 14(4), 330.	0.675	12	8.50	0.08
	40. Roman, A. M., Cimpoeșu, R., Pricop, B., Lohan, N. M., Cazacu, M. M. , Bujoreanu, L. G., Panaghie, C., Zegan, G., Cimpoeșu, N., & Murariu, A. M. (2023). Influence of Dynamic Strain Sweep on the Degradation Behavior of FeMnSi–Ag Shape Memory Alloys. <i>Journal of Functional Biomaterials</i> , 14(7), 377.	0.743	10	7.50	0.10
	39. Bostan, D., Miclăuș, I., Apetroaie, C., Voiculescu, M., Timofte, A., & Cazacu, M. M. (2023). Long-Range Transport Analysis Based on Eastern Atmospheric Circulation and Its Impact on the Dust Event over Moldavia , Romania in August 2022 Circulation and Its Impact on the Dust Event over Moldavia . <i>Atmosphere</i> , 14(August), 1366.	0.553	6	5.50	0.10
	38. Tanasa, I., Cazacu, M. , & Sluser, B. (2023). Air Quality Integrated Assessment: Environmental Impacts, Risks and Human Health Hazards. <i>Applied Sciences (Switzerland)</i> , 13(2). https://doi.org/10.3390/app13021222	0.428	3	3.00	0.14
	37. Roman, A. M., Chelariu, R., Cimpoesu, R., Stirbu, I., Ionita, I., Cazacu, M. M. , Prisecariu, B. A., Cimpoesu, N., Pietrusiewicz, P., & Sodor, A. (2022). Analysis of the corrosion rate of FeMn-Si biodegradable material. <i>Archives of Metallurgy and Materials</i> , 67(4), 1243–1250. https://doi.org/10.24425/amm.2022.141048	0.104	10	7.50	0.01
	36. Luțcanu, M., Coteață, M., Bernevig, M. A., Nechifor, C. D., Cazacu, M. M. , Paraschiv, P., Istrate, B., Bădăraș, G., Sandu, I. G., & Cimpoeșu, N. (2022). Obtaining and Analyzing the Al2O3-ZrO2 Ceramic Layers on Metallic Substrate. <i>Archives of Metallurgy and Materials</i> , 67(2), 479–485.	0.104	10	7.50	0.01
	35. Panaghie, C., Cimpoesu, N., Benchea, M., Roman, A., Manole, V., Alexandru, A., Cimpoesu, R., Cazacu, M. M. , Wnuk, I., & Zegan, G. (2022). “In-vitro” Tests on New Biodegradable Metallic Material Based on ZnMgY. <i>Archives of Metallurgy and Materials</i> , 67(2), 587–594.	0.104	10	7.50	0.01
	34. Cazacu, M. M. , Roșu, I. A., Bibire, L., Vasincu, D., Rotundu, A. M., & Agop, M. (2022). Theoretical and Experimental Designs of the Planetary Boundary Layer Dynamics through a Multifractal Theory of Motion. <i>Fractal and Fractional</i> , 6(12). https://doi.org/10.3390/fractalfract6120747	0.565	6	5.50	0.10

	33. Radinschi, I., Grammenos, T., Spanou, A., Chattopadhyay, S., & Cazacu, M. M. (2022). Landau-Lifshitz and Weinberg Energy Distributions for the Static Regular Simpson-Visser Space-Time Geometry. <i>Symmetry</i> 2022, Vol. 14, Page 900, 14(5), 900. https://doi.org/10.3390/SYM14050900	0.406	5	5.00	0.08
	32. Nica, D.-C., Cazacu, M.-M. , Constantin, D.-E., Nedeff, V., Nedeff, F., Vasincu, D., Roşu, I.-A., & Agop, M. (2022). Boundary Layer via Multifractal Mass Conductivity through Remote Sensing Data in Atmospheric Dynamics. <i>Fractal and Fractional</i> , Vol. 6, Page 250, 6(5), 250. https://doi.org/10.3390/FRACTALFRACT6050250	0.565	8	6.50	0.09
	31. Roşu, I. A., Nica, D. C., Cazacu, M. M. , & Agop, M. (2022). Cellular Self-Structuring and Turbulent Behaviors in Atmospheric Laminar Channels. <i>Frontiers in Earth Science</i> , 9, 1344. https://doi.org/10.3389/FEART.2021.801020	0.956	4	4.00	0.24
	30. Roşu, I., Nica, D., Cazacu, M. M. , & Agop, M. (2021). Towards Possible Laminar Channels through Turbulent Atmospheres in a Multifractal Paradigm. <i>Atmosphere</i> , 12(8), Article 1038. https://doi.org/10.3390/atmos12081038	0.625	4	4.00	0.16
	29. Roşu, I. A., Cazacu, M. M. , & Agop, M. (2021). Multifractal model of atmospheric turbulence applied to elastic lidar data. <i>Atmosphere</i> , 12(2), 1–25. https://doi.org/10.3390/atmos12020226	0.625	3	3.00	0.21
	28. Radinschi, I., Grammenos, T., Chakraborty, G., Chattopadhyay, S., & Cazacu, M. M. (2021). Einstein and Møller Energy-Momentum Distributions for the Static Regular Simpson–Visser Space-Time. <i>Symmetry</i> , 13(9), Article 1622. https://doi.org/10.3390/sym13091622	0.435	5	5.00	0.09
	27. Radinschi, I., Grammenos, T., Sahoo, P. K., Chattopadhyay, S., & Cazacu, M. M. (2021). Einstein and Møller energies of a particular asymptotically Reissner–Nordström non-singular black hole solution. <i>Astronomische Nachrichten</i> . https://doi.org/10.1002/asna.202113917	0.361	5	5.00	0.07
	26. Radinschi, I., Sahoo, P. K., Grammenos, T., Chattopadhyay, S., & Cazacu, M.M. (2020). Localization of Energy and Momentum in an Asymptotically Reissner–Nordström Non-Singular Black Hole Space-Time Geometry. <i>Universe</i> , 6(5), Article 69. https://doi.org/10.3390/universe6050069	0.603	5	5.00	0.12
	25. Radinschi, I., Grammenos, T., Rahaman, F., Cazacu, M. M. , Spanou, A., & Chakraborty, J. (2020). On the energy of a non-singular black hole solution satisfying the weak energy condition. <i>Universe</i> , 6(10), Article 169. https://doi.org/10.3390/universe6100169	0.603	6	5.50	0.11
	24. Roşu, A. I., Cazacu, M. M. , Ghenadi, S. A., Bibere, L., & Agop, M. (2020). On a multifractal approach of turbulent atmosphere dynamics. <i>Frontiers in Earth Science</i> , 8, Article 216. https://doi.org/10.3389/feart.2020.00216	1.192	5	5.00	0.24

	23. Țîmpu, S., Sfică, L., Dobri, R.V., Cazacu, M.M. , Nita, A.I., & Birsan, M.V. (2020). Tropospheric Dust and Associated Atmospheric Circulations over the Mediterranean Region with Focus on Romania's Territory. <i>Atmosphere</i> , 11(4), Article 349. https://doi.org/10.3390/atmos11040349	0.625	6	5.50	0.11
	22. Cazacu, M. M. , Pelin, V., Radinschi, I., Sandu, I., Ciocan, V., Sandu, I. G., & Gurlui, S. (2020). Effects of meteorological factors on the hydrophobization of specific calcareous geomaterials from Repedea - Iasi area, under the urban ambient air exposure. <i>International Journal of Conservation Science</i> , 11(4), 1019–1030.	0.131	7	6.00	0.02
	21. Rosu, I.A., Ferrarese, S., Radinschi, I., Ciocan, V., & Cazacu, M. M. (2019). Evaluation of Different WRF Parametrizations over the Region of Iasi with Remote Sensing Techniques. <i>Atmosphere</i> , 10(9), Article 559. https://doi.org/doi:10.3390/atmos10090559	0.549	5	5.00	0.11
	20. Rosu, I.-A., Cazacu, M.-M. , Prelipceanu, O., & Agop, M. (2019). A Turbulence-Oriented Approach to Retrieve Various Atmospheric Parameters Using Advanced Lidar Data Processing Techniques. <i>Atmosphere</i> , 10(1), Article 38. https://doi.org/10.3390/atmos10010038	0.549	4	4.00	0.14
	19. Radinschi, I., Grammenos, T., Rahaman, F., Spanou, A., Cazacu, M. M. , Chattopadhyay, S., & Pasqua, A. (2018). Localization of Energy-Momentum for a Black Hole Spacetime Geometry with Constant Topological Euler Density. <i>Advances in High Energy Physics</i> , 2018, Article 5212696. https://doi.org/10.1155/2018/5212696	0.456	7	6.00	0.08
	18. Bulai, G., Rusu, O., Cazacu, M. M. , Tudorache, F., Chazallon, B., Focsa, C., & Gurlui, S. (2018). Structural, magnetic and humidity sensing properties of rare earth doped cobalt ferrite thin films synthesized by pulsed laser deposition. <i>Journal of Ovonic Research</i> , 14(2), 119–128.	0.089	7	6.00	0.01
	17. Cocean, A., Cocean, I., Cazacu, M. M. , Bulai, G., Iacomì, F., & Gurlui, S. (2018). Atmosphere self-cleaning under humidity conditions and influence of the snowflakes and artificial light interaction for water dissociation simulated by the means of COMSOL. <i>Applied Surface Science</i> , 443, 83–90.	0.671	6	5.50	0.12
	16. Cocean, A., Pelin, V., Cazacu, M. M. , Cocean, I., Sandu, I., Gurlui, S., & Iacomì, F. (2017). Thermal effects induced by laser ablation in non-homogeneous limestone covered by an impurity layer. <i>Applied Surface Science</i> , 424(3), 324–329. https://doi.org/10.1016/j.apsusc.2017.03.172	0.627	7	6.00	0.10
	15. Radinschi, I., Fratiman, V., Ciocan, V., & Cazacu, M. M. (2017). Interactive computer simulations for standing waves. <i>Computer Applications in Engineering Education</i> , 25(3), 521–529. https://doi.org/10.1002/cae.21818	0.101	4	4.00	0.03

	14. Banica, A., Bobric, E. D., Cazacu, M. M. , Timofte, A., Gurlui, S., & Breaban, I. G. G. (2017). Integrated assessment of exposure to traffic-related air pollution in Iasi city, Romania. <i>Environmental Engineering and Management Journal</i> , 16(9), 2147–2163.	0.086	6	5.50	0.02
	13. Cazacu, M. M. , Tudose, O., Boscornea, A., Buzdugan, L., Timofte, A., & Nicolae, D. (2017). Vertical and temporal variation of aerosol mass concentration at Magurele – Romania during EMEP / PEGASOS campaign. <i>Romanian Reports in Physics</i> , 69(2), 1–15.	0.255	6	5.50	0.05
	12. Cazacu, M. M. , Tudose, O. G., Timofte, A., Rusu, O., Apostol, L., Leontie, L., & Gurlui, S. (2016). A case study of the behavior of aerosol optical properties under the incidence of a Saharan dust intrusion event. <i>Applied Ecology and Environmental Research</i> , 14(3), 183–194. http://dx.doi.org/10.15666/aeer/1403_183194	0.159	7	6.00	0.03
	11. Timofte, A., Belegante, L., Cazacu, M. M. , Albina, B., Talianu, C., & Gurlui, S. (2015). Study of planetary boundary layer height from LIDAR measurements and ALARO model. <i>Journal of Optoelectronics and Advanced Materials</i> , 17(7–8), 911–917.	0.078	6	5.50	0.01
	10. Belegante, L., Cazacu, M. M. , Timofte, A., Toanca, F., Vasilescu, J., Rusu, M. I., Ajtai, N., Stefanie, H. I., Vetres, I., Ozunu, A., & Gurlui, S. (2015). Case study of the first volcanic ash exercise in Romania using remote sensing techniques. <i>Environmental Engineering and Management Journal</i> , 14(11), 2503–2514.	0.074	11	8.00	0.01
	9. Cazacu, M. M. , Timofte, A., Unga, F., Albina, B., & Gurlui, S. (2015). AERONET data investigation of the aerosol mixtures over Iasi area, One-year time scale overview. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 153, 57–64. https://doi.org/10.1016/j.jqsrt.2014.09.004	0.756	5	5.00	0.15
	8. Papayannis, A., Nicolae, D., Kokkalis, P., Binietoglou, I., Talianu, C., Belegante, L., Tsaknakis, G., Cazacu, M. M. , Vetres, I., & Ilic, L. (2014). Optical, size and mass properties of mixed type aerosols in Greece and Romania as observed by synergy of lidar and sunphotometers in combination with model simulations: A case study. <i>Science of the Total Environment</i> , 500–501, 277–294. https://doi.org/10.1016/j.scitotenv.2014.08.101	1.132	10	7.50	0.15
	7. Unga, F., Cazacu, M. M. , Timofte, A., Bostan, D., Mortier, A., Dimitriu, D. G., Gurlui, S., & Goloub, P. (2013). Study of tropospheric aerosol types over Iasi , Romania , during summer of 2012. <i>Environmental Engineering and Management Journal</i> , 12(2), 297–303.	0.066	8	6.50	0.01

	6. Cazacu, M. M. , Timofte, A., Talianu, C., Nicolae, D., Danila, M. N., Unga, F., Dimitriu, D. G., & Gurlui, S. (2012). Grimsvotn Volcano: atmospheric volcanic ash cloud investigations, modelling-forecast and experimental environmental approach upon the Romanian area. <i>Journal of Optoelectronics and Advanced Materials</i> , 14(5–6), 517–522.	0.102	8	6.50	0.02
	5. Vetres, I., Ionel, I., Cazacu, M. M. , & Balin, I. (2012). Necessity of complementary vertically-resolved lidar observation for ground air pollution analysis in Western Romania. <i>Journal of Environmental Protection and Ecology</i> , 13(2), 409–419.	0.02	4	4.00	0.01
	4. Timofte, A., Cazacu, M. M. , Radulescu, R., Belegante, L., Dimitriu, D. G., & Gurlui, S. (2011). Romanian lidar investigation of the Eyjafjallajokull volcanic ash. <i>Environmental Engineering and Management Journal</i> , 10(1), 91–97.	0.085	6	5.50	0.02
	3. Cazacu, M. M. , Timofte, A., Balin, I., Dimitriu, D. G., & Gurlui, S. (2011). Complementary atmospheric urban pollution studies in the North-East region of Romania, Iasi county. <i>Environmental Engineering and Management Journal</i> , 10(1), 139–145.	0.085	5	5.00	0.02
	2. Covasnianu, A., Cazacu, M.M. , Libralesso, N., Galisson, L., Memier, M., & Balin, I. (2007). Digital Terrain Model by airborne LIDAR technique: an essential tool for hydrologic risks assessment. <i>Journal of Optoelectronics and Advanced Materials</i> , 9(11), 3529–3532.	0.161	6	5.50	0.03
	1. Iacomì, F., Apetroaei, N., Calin, G., Zoderiu, Gh., Cazacu, M. M. , Scarlat, C., Goian, V., Menzel, D., Jursic, I., & Schoenes, J. (2007). Structure and surface morphology of Mn-implanted TiO ₂ . <i>Thin Solid Films</i> , 515(16 SPEC. ISS.), 6402–6406. https://doi.org/10.1016/j.tsf.2006.11.188	0.653	10	7.50	0.09

2	Articole științifice originale în extenso ca prim autor sau autor corespondent, conform mențiunilor de pe articol. Nu se iau în considerare articolele la care autorii sunt indicați în ordinea alfabetică a numelui și candidatul este primautor exclusiv datorită numelui acestuia și ordonării alfabetice.	P=AI Si	AIS			11.75
		47. Timofte, A., Bostan, D. C., Apetroaei, C., Miclăuș, I. M., & Cazacu, M. M. (2025). The 50-Year Evolution of the Planetary Boundary Layer in the Southern Part of Romania: Comparison Between the Determinations by the Stull Method and the Reanalysis Data from ERA5. <i>Atmosphere</i> 2025, Vol. 16, Page 1247, 16(11), 1247. https://doi.org/10.3390/ATMOS16111247	0.553			0.55
		46. Tanasa, I., Cazacu, M. , Botan, D., Atkinson, J. D., Sebestyen, V., & Sluser, B. (2025). From Aerosol Optical Depth to Risk Assessment: A Novel Framework for Environmental Impact Statistics of Air Quality Using AERONET. <i>Environments</i> 2025, Vol. 12, Page 285, 12(8), 285. https://doi.org/10.3390/ENVIRONMENTS12080285	0.648			0.65

În cazul publicațiilor HEPP (High Energy Partide Physics) cu număr mare de autori, dacă articolul are la bază o notă internă a cărei aprobare în vederea trimiterii la publicare a fost susținută de către autor, atunci autorul este considerat prim autor.	45. Drăgoi, L., Cazacu, M.-M. , & Breabăn, I.-G. (2025). Evaluation of Scenarios for the Application of the Future PM2.5 and PM10 Standards: A Case Study of Three Urban Areas in Romania and Implications for Public Policies. <i>Environments</i> 2025, Vol. 12, Page 373, 12(10), 373. https://doi.org/10.3390/ENVIRONMENTS12100373	0.648			0.65
	42. Cazacu, M. M. , Roșu, A. I., Ababei, R. V., Roșu, A., Vasincu, D., Nica, D. C., Rusu, O., Bruma, A. B., & Agop, M. (2024). Investigating Nonlinear Dynamics in Atmospheric Aerosols during the Transition from Laminar to Turbulent Flow. <i>Atmosphere</i> , 15(3).	0.534			0.53
	39. Bostan, D., Miclăuș, I., Apetroaie, C., Voiculescu, M., Timofte, A., & Cazacu, M.-M. (2023). Long-Range Transport Analysis Based on Eastern Atmospheric Circulation and Its Impact on the Dust Event over Moldavia , Romania in August 2022 Circulation and Its Impact on the Dust Event over Moldavia ,. <i>Atmosphere</i> , 14(August), 1366.	0.553			0.55
	38. Tanasa, I., Cazacu, M. , & Sluser, B. (2023). Air Quality Integrated Assessment: Environmental Impacts, Risks and Human Health Hazards. <i>Applied Sciences</i> (Switzerland), 13(2). https://doi.org/10.3390/app13021222	0.428			0.43
	34. Cazacu, M. M. , Roșu, I. A., Bibire, L., Vasincu, D., Rotundu, A. M., & Agop, M. (2022). Theoretical and Experimental Designs of the Planetary Boundary Layer Dynamics through a Multifractal Theory of Motion. <i>Fractal and Fractional</i> , 6(12). https://doi.org/10.3390/fractalfract6120747	0.565			0.57
	31. Roșu, I. A., Nica, D. C., Cazacu, M. M., & Agop, M. (2022). Cellular Self-Structuring and Turbulent Behaviors in Atmospheric Laminar Channels. <i>Frontiers in Earth Science</i> , 9, 1344. https://doi.org/10.3389/FEART.2021.801020	0.956			0.96
	30. Roșu, I., Nica, D., Cazacu, M. M. , & Agop, M. (2021). Towards Possible Laminar Channels through Turbulent Atmospheres in a Multifractal Paradigm. <i>Atmosphere</i> , 12(8), Article 1038. https://doi.org/10.3390/atmos12081038	0.625			0.63
	29. Roșu, I. A., Cazacu, M. M. , & Agop, M. (2021). Multifractal model of atmospheric turbulence applied to elastic lidar data. <i>Atmosphere</i> , 12(2), 1–25. https://doi.org/10.3390/atmos12020226	0.625			0.63
	28. Radinschi, I., Grammenos, T., Chakraborty, G., Chattopadhyay, S., & Cazacu, M. M. (2021). Einstein and Møller Energy-Momentum Distributions for the Static Regular Simpson–Visser Space-Time. <i>Symmetry</i> , 13(9), Article 1622. https://doi.org/10.3390/sym13091622	0.435			0.44
	26. Radinschi, I., Sahoo, P. K., Grammenos, T., Chattopadhyay, S., & Cazacu, M.M. (2020). Localization of Energy and Momentum in an Asymptotically Reissner-Nordström Non-Singular Black Hole Space-Time Geometry. <i>Universe</i> , 6(5), Article 69. https://doi.org/10.3390/universe6050069	0.603			0.60

	25. Radinschi, I., Grammenos, T., Rahaman, F., Cazacu, M. M. , Spanou, A., & Chakraborty, J. (2020). On the energy of a non-singular black hole solution satisfying the weak energy condition. <i>Universe</i> , 6(10), Article 169. https://doi.org/10.3390/universe6100169	0.603			0.60
	24. Roşu, A. I., Cazacu, M. M. , Ghenadi, S. A., Bibere, L., & Agop, M. (2020). On a multifractal approach of turbulent atmosphere dynamics. <i>Frontiers in Earth Science</i> , 8, Article 216. https://doi.org/10.3389/feart.2020.00216	1.192			1.19
	22. Cazacu, M. M. , Pelin, V., Radinschi, I., Sandu, I., Ciocan, V., Sandu, I. G., & Gurlui, S. (2020). Effects of meteorological factors on the hydrophobization of specific calcareous geomaterials from Repedea - Iasi area, under the urban ambiental air exposure. <i>International Journal of Conservation Science</i> , 11(4), 1019–1030.	0.131			0.13
	21. Rosu, I.A., Ferrarese, S., Radinschi, I., Ciocan, V., & Cazacu, M. M. (2019). Evaluation of Different WRF Parametrizations over the Region of Iasi with Remote Sensing Techniques. <i>Atmosphere</i> , 10(9), Article 559. https://doi.org/doi:10.3390/atmos10090559	0.549			0.55
	20. Rosu, I.-A., Cazacu, M.-M. , Prelipceanu, O., & Agop, M. (2019). A Turbulence-Oriented Approach to Retrieve Various Atmospheric Parameters Using Advanced Lidar Data Processing Techniques. <i>Atmosphere</i> , 10(1), Article 38. https://doi.org/10.3390/atmos10010038	0.549			0.55
	15. Radinschi, I., Fratiman, V., Ciocan, V., & Cazacu, M. M. (2017). Interactive computer simulations for standing waves. <i>Computer Applications in Engineering Education</i> , 25(3), 521–529. https://doi.org/10.1002/cae.21818	0.101			0.10
	13. Cazacu, M. M. , Tudose, O., Boscornea, A., Buzdugan, L., Timofte, A., & Nicolae, D. (2017). Vertical and temporal variation of aerosol mass concentration at Magurele – Romania during EMEP / PEGASOS campaign. <i>Romanian Reports in Physics</i> , 69(2), 1–15.	0.255			0.26
	12. Cazacu, M. M. , Tudose, O. G., Timofte, A., Rusu, O., Apostol, L., Leontie, L., & Gurlui, S. (2016). A case study of the behavior of aerosol optical properties under the incidence of a Saharan dust intrusion event. <i>Applied Ecology and Environmental Research</i> , 14(3), 183–194. http://dx.doi.org/10.15666/aeer/1403_183194	0.159			0.16
	10. Belegante, L., Cazacu, M. M. , Timofte, A., Toanca, F., Vasilescu, J., Rusu, M. I., Ajtai, N., Stefanie, H. I., Vetres, I., Ozunu, A., & Gurlui, S. (2015). Case study of the first volcanic ash exercise in Romania using remote sensing techniques. <i>Environmental Engineering and Management Journal</i> , 14(11), 2503–2514.	0.074			0.07

	9. Cazacu, M. M. , Timofte, A., Unga, F., Albina, B., & Gurlui, S. (2015). AERONET data investigation of the aerosol mixtures over Iasi area, One-year time scale overview. Journal of Quantitative Spectroscopy and Radiative Transfer, 153, 57–64. https://doi.org/10.1016/j.jqsrt.2014.09.004	0.756			0.76
	6. Cazacu, M. M. , Timofte, A., Talianu, C., Nicolae, D., Danila, M. N., Unga, F., Dimitriu, D. G., & Gurlui, S. (2012). Grimsvotn Volcano: atmospheric volcanic ash cloud investigations, modelling-forecast and experimental environmental approach upon the Romanian area. Journal of Optoelectronics and Advanced Materials, 14(5–6), 517–522.	0.102			0.10
	5. Vetres, I., Ionel, I., Cazacu, M. M. , & Balin, I. (2012). Necessity of complementary vertically-resolved lidar observation for ground air pollution analysis in Western Romania. Journal of Environmental Protection and Ecology, 13(2), 409–419.	0.02			0.02
	3. Cazacu, M. M. , Timofte, A., Balin, I., Dimitriu, D. G., & Gurlui, S. (2011). Complementary atmospheric urban pollution studies in the North-East region of Romania, Iasi county. Environmental Engineering and Management Journal, 10(1), 139–145.	0.085			0.09

I	4.32
P	11.75

A3 - Recunoasterea impactului activitatii

Nr. crt.	Tipul activitatilor	Activitate autor				Punctaj
1	Citări în reviste științifice cu factor de impact care se regăsesc în InCites Journal Citation Reports sau în cărți în edituri recunoscute Web of Science. Nu se iau în considerare citările provenind din articole care au ca autor sau coautor candidatul	c=ci/n.ef., ci - numarul de citari in reviste ISI ale publicatiei i	Nr. de citari ISI	Nr. autori	Nr. autori efectivi (n.ef.)	48.42
		Lucrare citată: 44. Drăgoi, L., Cazacu, M. M. , & Breabăn, I. G. (2025). Analysis of the PM2.5/PM10 Ratio in Three Urban Areas of Northeastern Romania. Atmosphere, 16(6), 720. https://doi.org/10.3390/atmos16060720	2	3	3.00	0.67
		Lucrare citată: 41. Roman, A.-M., Cimpoeșu, R., Pricop, B., Cazacu, M. M. , Zegan, G., Istrate, B., Cocean, A., Chelariu, R., Moscu, M., Bădărău, G., Cimpoeșu, N., & Ivănescu, M. C. (2024). Investigations on the Degradation Behavior of Processed FeMnSi-xCu Shape Memory Alloys. Nanomaterials 2024, Vol. 14, Page 330, 14(4), 330.	5	12	8.50	0.59
		Lucrare citată: 42. Cazacu, M. M. , Roșu, A. I., Ababei, R. V., Roșu, A., Vasincu, D., Nica, D. C., Rusu, O., Bruma, A. B., & Agop, M. (2024). Investigating Nonlinear Dynamics in Atmospheric Aerosols during the Transition from Laminar to Turbulent Flow. Atmosphere, 15(3).	1	9	7.00	0.14
		Lucrare citată: 39 Bostan, D., Miclăuș, I., Apetroaie, C., Voiculescu, M., Timofte, A., & Cazacu, M.-M. (2023). Long-Range Transport Analysis Based on Eastern Atmospheric Circulation and Its Impact on the Dust Event over Moldavia , Romania in August 2022 Circulation and Its Impact on the Dust Event over Moldavia ,. Atmosphere, 14(August), 1366.	2	6	5.50	0.36
		Lucrare citată: 38. Tanasa, I., Cazacu, M. , & Sluser, B. (2023). Air Quality Integrated Assessment: Environmental Impacts, Risks and Human Health Hazards. Applied Sciences (Switzerland), 13(2). https://doi.org/10.3390/app13021222	8	3	3.00	2.67
		Lucrare citată: Luțcanu, M., Munteanu, C., Kicsi, G., Roman, A. M., Croitoru, C. G., Prisecariu, B. A., Cazacu, M. M. , Știrbu, I., Chicet, D. L., & Cimpoeșu, N. (2023). Analysis of water jet cutting of metal-ceramic elements made through atmospheric plasma spraying technique. Materials Today: Proceedings, 72, 550–553. https://doi.org/10.1016/j.matpr.2022.10.037	3	10	7.50	0.40

	Lucrare citată: 32 Nica, D.-C., Cazacu, M.-M., Constantin, D.-E., Nedeff, V., Nedeff, F., Vasincu, D., Roșu, I.-A., & Agop, M. (2022). Boundary Layer via Multifractal Mass Conductivity through Remote Sensing Data in Atmospheric Dynamics. <i>Fractal and Fractional</i>, Vol. 6, Page 250, 6(5), 250. https://doi.org/10.3390/FRACTALFRAC6050250	1	8	6.50	0.15
	Lucrare citată: 36. Luțcanu, M., Coteață, M., Bernevig, M. A., Nechifor, C. D., Cazacu, M. M., Paraschiv, P., Istrate, B., Bădăraș, G., Sandu, I. G., & Cimpoeșu, N. (2022). Obtaining and Analyzing the Al₂O₃-ZrO₂ Ceramic Layers on Metallic Substrate. <i>Archives of Metallurgy and Materials</i>, 67(2), 479–485.	2	10	7.50	0.27
	Lucrare citată: 35. Panaghie, C., Cimpoeșu, N., Benchea, M., Roman, A., Manole, V., Alexandru, A., Cimpoeșu, R., Cazacu, M. M., Wnuk, I., & Zegan, G. (2022). “In-vitro” Tests on New Biodegradable Metallic Material Based on ZnMgY. <i>Archives of Metallurgy and Materials</i>, 67(2), 587–594.	3	10	7.50	0.40
	Lucrare citată: 31. Roșu, I. A., Nica, D. C., Cazacu, M. M., & Agop, M. (2022). Cellular Self-Structuring and Turbulent Behaviors in Atmospheric Laminar Channels. <i>Frontiers in Earth Science</i>, 9, 1344. https://doi.org/10.3389/FEART.2021.801020	2	4	4.00	0.50
	Lucrare citată: 2. Buzea, C. G., Eva, L., Prelipceanu, M., Cazacu, M. M., Garofalide, S., & Agop, M. (2021). Coronavirus disease COVID-19 tracking the global outbreak. SEIR compartmental model applied to SARS-CoV-2 epidemic in Romania. <i>Biomedical Engineering Tools for Management for Patients with COVID-19</i>, 87–102, Capitolul 5, https://doi.org/10.1016/B978-0-12-824473-9.00002-1	1	6	5.50	0.18
	Lucrare citată: 30. Roșu, I., Nica, D., Cazacu, M. M., & Agop, M. (2021). Towards Possible Laminar Channels through Turbulent Atmospheres in a Multifractal Paradigm. <i>Atmosphere</i>, 12(8), Article 1038. https://doi.org/10.3390/atmos12081038	3	4	4.00	0.75
	Lucrare citată: 29. Roșu, I. A., Cazacu, M. M., & Agop, M. (2021). Multifractal model of atmospheric turbulence applied to elastic lidar data. <i>Atmosphere</i>, 12(2), 1–25. https://doi.org/10.3390/atmos12020226	3	3	3.00	1.00
	Lucrare citată: 28. Radinschi, I., Grammenos, T., Chakraborty, G., Chattopadhyay, S., & Cazacu, M. M. (2021). Einstein and Møller Energy-Momentum Distributions for the Static Regular Simpson–Visser Space-Time. <i>Symmetry</i>, 13(9), Article 1622. https://doi.org/10.3390/sym13091622	6	5	5.00	1.20
	Lucrare citată: 3. Mireștean, C. C., Agop, M., Buzea, C. G., Cazacu, M. M., Prelipceanu, M., Iancu, R. I., & Iancu, D. T. (2021). Radiotherapy challenges in COVID era. <i>Biomedical Engineering Tools for Management for Patients with COVID-19</i>, 41–72, Capitolul 3, https://doi.org/10.1016/B978-0-12-824473-9.00009-4	2	7	6.00	0.33

		Lucrare citată: 24. Roșu, A. I., Cazacu, M. M. , Ghenadi, S. A., Bibere, L., & Agop, M. (2020). On a multifractal approach of turbulent atmosphere dynamics. <i>Frontiers in Earth Science</i> , 8, Article 216. https://doi.org/10.3389/feart.2020.00216	9	5	5.00	1.80
		Lucrare citată: 23. Țîmpu, S., Sfică, L., Dobri, R.V., Cazacu, M.M. , Nita, A.I., & Birsan, M.V. (2020). Tropospheric Dust and Associated Atmospheric Circulations over the Mediterranean Region with Focus on Romania's Territory. <i>Atmosphere</i> , 11(4), Article 349. https://doi.org/10.3390/atmos11040349	17	6	5.50	3.09
		Lucrare citată: 27. Radinschi, I., Grammenos, T., Sahoo, P. K., Chattopadhyay, S., & Cazacu, M. M. (2021). Einstein and Møller energies of a particular asymptotically Reissner–Nordström non-singular black hole solution. <i>Astronomische Nachrichten</i> . https://doi.org/10.1002/asna.202113917	1	5	5.00	0.20
		Lucrare citată: 26. Radinschi, I., Sahoo, P. K., Grammenos, T., Chattopadhyay, S., & Cazacu, M.M. (2020). Localization of Energy and Momentum in an Asymptotically Reissner-Nordström Non-Singular Black Hole Space-Time Geometry. <i>Universe</i> , 6(5), Article 69. https://doi.org/10.3390/universe6050069	3	5	5.00	0.60
		Lucrare citată: 25. Radinschi, I., Grammenos, T., Rahaman, F., Cazacu, M. M. , Spanou, A., & Chakraborty, J. (2020). On the energy of a non-singular black hole solution satisfying the weak energy condition. <i>Universe</i> , 6(10), Article 169. https://doi.org/10.3390/universe6100169	2	6	5.50	0.36
		Lucrare citată: 22. Cazacu, M. M. , Pelin, V., Radinschi, I., Sandu, I., Ciocan, V., Sandu, I. G., & Gurlui, S. (2020). Effects of meteorological factors on the hydrophobization of specific calcareous geomaterials from Repedea - Iasi area, under the urban ambient air exposure. <i>International Journal of Conservation Science</i> , 11(4), 1019–1030.	7	7	6.00	1.17
		Lucrare citată: 21. Rosu, I.A., Ferrarese, S., Radinschi, I., Ciocan, V., & Cazacu, M. M. (2019). Evaluation of Different WRF Parametrizations over the Region of Iasi with Remote Sensing Techniques. <i>Atmosphere</i> , 10(9), Article 559. https://doi.org/doi:10.3390/atmos10090559	7	5	5.00	1.40
		Lucrare citată: 20. Rosu, I.A., Cazacu, M.M. , Prelipceanu, O., & Agop, M. (2019). A Turbulence-Oriented Approach to Retrieve Various Atmospheric Parameters Using Advanced Lidar Data Processing Techniques. <i>Atmosphere</i> , 10(1), Article 38. https://doi.org/10.3390/atmos10010038	6	4	4.00	1.50
		Lucrare citată: 52. Pelin, V., Rusu, O., Cazacu, M. M. , Sandu, I., Gurlui, S., Ciocan, V., Radinschi, I., & Sandu, I. G. (2018). Comparative assessment on colorimetric change of calcareous geomaterials exposed in urban and periurban environmental conditions from Iasi city – Romania. <i>Annals of the Academy of Romanian Scientists, Series on Engineering Sciences Volume</i> , 10(1), 17–28.	1	8	6.50	0.15

	Lucrare citată: 15. Pelin, V., Rusu, O., Cazacu, M. M., Gurlui, S., Sandu, A. V., Radinschi, I., Ciocan, V., & Sandu, I. (2018). Assessment of Hydrophobic Coating on Porous Calcareous Rocks Surface Exposed in Urban Ambient Air Pollution. IOP Conference Series: Materials Science and Engineering, 374(1), 012091. https://doi.org/10.1088/1757-899X/374/1/012091	4	8	6.50	0.62
	Lucrare citată: 19. Radinschi, I., Grammenos, T., Rahaman, F., Spanou, A., Cazacu, M. M., Chattopadhyay, S., & Pasqua, A. (2018). Localization of Energy-Momentum for a Black Hole Spacetime Geometry with Constant Topological Euler Density. Advances in High Energy Physics, 2018, Article 5212696. https://doi.org/10.1155/2018/5212696	3	7	6.00	0.50
	Lucrare citată: 18. Bulai, G., Rusu, O., Cazacu, M. M., Tudorache, F., Chazallon, B., Focsa, C., & Gurlui, S. (2018). Structural, magnetic and humidity sensing properties of rare earth doped cobalt ferrite thin films synthesized by pulsed laser deposition. Journal of Ovonic Research, 14(2), 119–128.	7	7	6.00	1.17
	Lucrare citată: 17. Cocean, A., Cocean, I., Cazacu, M. M., Bulai, G., Iacomini, F., & Gurlui, S. (2018). Atmosphere self-cleaning under humidity conditions and influence of the snowflakes and artificial light interaction for water dissociation simulated by the means of COMSOL. Applied Surface Science, 443, 83–90.	2	6	5.50	0.36
	Lucrare citată: 49. Sfică, L., Iordache, I., Ichim, P., Leahu, A., Cazacu, M. M., Gurlui, S., & Trif, C.-R. (2018). The Influence of Weather Conditions and Local Climate on Particulate Matter (PM10) Concentration in Metropolitan Area of Iasi, Romania. Present Environment and Sustainable Development, 12(2), 47–69. https://doi.org/10.2478/pesd-2018-0029	12	7	6.00	2.00
	Lucrare citată: 19. Cazacu, M. M., Tudose, O., Balanici, D., & Balin, I. (2018). Research and development of commercial lidar systems in Romania: Critical review of the ESYRO lidar systems developed by sc enviroscopy SRL (ESYRO). In D. Nicolae, A. Makoto, A. Vassilis, D. Balis, A. Behrendt, A. Comeron, F. Gibert, E. Landulfo, M. McCormick, C. Senff, I. Veselovskii, & U. Wandering (Eds.), EPJ Web of Conferences (Vol. 176, pp. 1–4). https://doi.org/10.1051/epjconf/201817611005	1	4	4.00	0.25
	Lucrare citată: 13. Cazacu, M. M., Tudose, O., Boscornea, A., Buzdugan, L., Timofte, A., & Nicolae, D. (2017). Vertical and temporal variation of aerosol mass concentration at Magurele – Romania during EMEP / PEGASOS campaign. Romanian Reports in Physics, 69(2), 1–15.	4	6	5.50	0.73

	Lucrare citată: 20. Pelin, V., Rusu, O., Sandu, I. G., Vasilache, V., Gurlui, S., Sandu, A. V., Cazacu, M. M., & Sandu, I. G. (2017). Approaching on Colorimetric Change of Porous Calcareous Rocks Exposed in Urban Environmental Conditions from Iasi - Romania. IOP Conference Series-Materials Science and Engineering, 209(1), 1–8. https://doi.org/10.1088/1757-899X/209/1/012080	10	8	6.50	1.54
	Lucrare citată: 14. Banica, A., Bobric, E. D., Cazacu, M. M., Timofte, A., Gurlui, S., & Breaban, I. G. G. (2017). Integrated assessment of exposure to traffic-related air pollution in Iasi city, Romania. Environmental Engineering and Management Journal, 16(9), 2147–2163.	12	6	5.50	2.18
	Lucrare citată: 15. Radinschi, I., Fratiman, V., Ciocan, V., & Cazacu, M. M. (2017). Interactive computer simulations for standing waves. Computer Applications in Engineering Education, 25(3), 521–529. https://doi.org/10.1002/cae.21818	10	4	4.00	2.50
	Lucrare citată: 16. Cocean, A., Pelin, V., Cazacu, M. M., Cocean, I., Sandu, I., Gurlui, S., & Iacomi, F. (2017). Thermal effects induced by laser ablation in non-homogeneous limestone covered by an impurity layer. Applied Surface Science, 424(3), 324–329. https://doi.org/10.1016/j.apsusc.2017.03.172	22	7	6.00	3.67
	Lucrare citată: 36. Radinschi, I., Covatariu, G., & Cazacu, M. (2016). Maple Program for Studying Physics Phenomena with Applications in Civil Engineering. Journal Intersections, 13(2), 108–119.	1	3	3.00	0.33
	Lucrare citată: 12. Cazacu, M. M., Tudose, O. G., Timofte, A., Rusu, O., Apostol, L., Leontie, L., & Gurlui, S. (2016). A case study of the behavior of aerosol optical properties under the incidence of a Saharan dust intrusion event. Applied Ecology and Environmental Research, 14(3), 183–194. http://dx.doi.org/10.15666/aeer/1403_183194	1	7	6.00	0.17
	Lucrare citată: 11. Timofte, A., Belegante, L., Cazacu, M. M., Albina, B., Talianu, C., & Gurlui, S. (2015). Study of planetary boundary layer height from LIDAR measurements and ALARO model. Journal of Optoelectronics and Advanced Materials, 17(7–8), 911–917.	7	6	5.50	1.27
	Lucrare citată: 10. Belegante, L., Cazacu, M. M., Timofte, A., Toanca, F., Vasilescu, J., Rusu, M. I., Ajtai, N., Stefanie, H. I., Vetres, I., Ozunu, A., & Gurlui, S. (2015). Case study of the first volcanic ash exercise in Romania using remote sensing techniques. Environmental Engineering and Management Journal, 14(11), 2503–2514.	2	11	8.00	0.25
	Lucrare citată: 9. Cazacu, M. M., Timofte, A., Unga, F., Albina, B., & Gurlui, S. (2015). AERONET data investigation of the aerosol mixtures over Iasi area, One-year time scale overview. Journal of Quantitative Spectroscopy and Radiative Transfer, 153, 57–64. https://doi.org/10.1016/j.jqsrt.2014.09.004	4	5	5.00	0.80

	Lucrare citată: 8. Papayannis, A., Nicolae, D., Kokkalis, P., Biniotoglou, I., Talianu, C., Belegante, L., Tsaknakis, G., Cazacu, M. M., Vetres, I., & Ilic, L. (2014). Optical, size and mass properties of mixed type aerosols in Greece and Romania as observed by synergy of lidar and sunphotometers in combination with model simulations: A case study. Science of the Total Environment, 500–501, 277–294. https://doi.org/10.1016/j.scitotenv.2014.08.101	22	10	7.50	2.93
	Lucrare citată: Danila, M. N., Cazacu, M. M., & Gurlui, S. (2012). Python utility: Laser-atmosphere interaction extended to network data management. 5TH ROMANIA TIER 2 FEDERATION GRID, CLOUD & HIGH PERFORMANCE COMPUTING SCIENCE (RO-LCG), 90–92. http://ieeexplore.ieee.org/articleDetails.jsp?arnumber=6528254	1	3	3.00	0.33
	Lucrare citată: 7. Unga, F., Cazacu, M. M., Timofte, A., Bostan, D., Mortier, A., Dimitriu, D. G., Gurlui, S., & Goloub, P. (2013). Study of tropospheric aerosol types over Iasi, Romania, during summer of 2012. Environmental Engineering and Management Journal, 12(2), 297–303.	1	8	6.50	0.15
	Lucrare citată: 6. Cazacu, M. M., Timofte, A., Talianu, C., Nicolae, D., Danila, M. N., Unga, F., Dimitriu, D. G., & Gurlui, S. (2012). Grimsvoth Volcano: atmospheric volcanic ash cloud investigations, modelling-forecast and experimental environmental approach upon the Romanian area. Journal of Optoelectronics and Advanced Materials, 14(5–6), 517–522.	6	8	6.50	0.92
	Lucrare citată: 5. Vetres, I., Ionel, I., Cazacu, M. M., & Balin, I. (2012). Necessity of complementary vertically-resolved lidar observation for ground air pollution analysis in Western Romania. Journal of Environmental Protection and Ecology, 13(2), 409–419.	4	4	4.00	1.00
	Lucrare citată: 4. Timofte, A., Cazacu, M. M., Radulescu, R., Belegante, L., Dimitriu, D. G., & Gurlui, S. (2011). Romanian lidar investigation of the Eyjafjallajökull volcanic ash. Environmental Engineering and Management Journal, 10(1), 91–97.	6	6	5.50	1.09
	Lucrare citată: 56. O.G. Tudose, M.M. Cazacu, A. Timofte, I. Balin, "ESYRO Lidar system developments for troposphere monitoring of aerosols and clouds properties", Proc. SPIE 8177, Remote Sensing of Clouds and the Atmosphere XVI, 817716 (26 Oct 2011); https://doi.org/10.1117/12.910640	1	4	4.00	0.25
	Lucrare citată: 3. Cazacu, M. M., Timofte, A., Balin, I., Dimitriu, D. G., & Gurlui, S. (2011). Complementary atmospheric urban pollution studies in the North-East region of Romania, Iasi county. Environmental Engineering and Management Journal, 10(1), 139–145.	8	5	5.00	1.60

		Lucrare citată: 2. Covasnianu, A., Cazacu, M.M. , Libralesso, N., Galisson, L., Memier, M., & Balin, I. (2007). Digital Terrain Model by airborne LIDAR technique: an essential tool for hydrologic risks assessment. Journal of Optoelectronics and Advanced Materials, 9(11), 3529–3532.	1	6	5.50	0.18
		Lucrare citată: 1. Iacomi, F., Apetroaei, N., Calin, G., Zoderiu, Gh., Cazacu, M. M. , Scarlat, C., Goian, V., Menzel, D., Jursic, I., & Schoenes, J. (2007). Structure and surface morphology of Mn-implanted TiO ₂ . Thin Solid Films, 515(16 SPEC. ISS.), 6402–6406. https://doi.org/10.1016/j.tsf.2006.11.188	13	10	7.50	1.73
			Indice Hirsch	12		

C	48.42
H	12.00

	PUNCTAJ REALIZAT	Conditii minimale	Criterii îndeplinite
Activitati	Cazacu Marius Mihai	Conform cu CNATCU, Ordin 6129/2016 (pentru abilitare, CSI, prof. univ.)	
A	2.91	2	DA
I	4.32	4	DA
P	11.75	4	DA
C	48.42	40	DA
H	12.00	10	DA
TOTAL T	15.77	12	DA