

UNIVERSITATEA TEHNICĂ "GHEORGHE ASACHI" DIN IAȘI
FACULTATEA DE CONSTRUCȚII DE MAȘINI ȘI MANAGEMENT INDUSTRIAL
DEPARTAMENTUL DE FIZICĂ

Concurs pentru ocuparea postului de Conferențiar Universitar, poz. 5

Disciplinele postului: FIZICĂ

FIȘA DE VERIFICARE
a îndeplinirii standardelor minime naționale de prezentare la concurs pentru postul de
conferențiar universitar/ cercetător științific II

publicat în Monitorul Oficial al României nr. 391 din data de 27.04.2022

Candidat: CAZACU MARIUS MIHAI / Data nașterii: 19.11.1981 Funcția actuală: Lector Universitar, Data numirii în funcția actuală: 25.09.2017, Instituția:, Universitatea Tehnică "Gheorghe Asachi" din Iași.

	REALIZAT	Condiții minime naționale	Criterii
Activitati	Cazacu Marius Mihai	Conferențiar	îndeplinite conferențiar
A	2.13	1	DA
I	2.74	2	DA
P	6.69	2	DA
C	26.77	20	DA
H	10.00	5	DA
TOTAL	10.19	5	DA

Se preia tabelul și definițiile corespunzătoare domeniului științific aferent, conform Anexei TUIASI.POB.08-A1.3.

(Modul de îndeplinire a standardelor minime naționale va fi prezentat în mod explicit și va trebui însoțit de dovezi)

Data: 15.06.2022
Candidat:
CAZACU MARIUS MIHAI



Anexa nr. 3_6129_2016 – COMISIA FIZICA

STANDARDE MINIMALE NECESARE ȘI OBLIGATORII PENTRU CONFERIREA TITLURILOR DIDACTICE DIN ÎNVĂȚĂMÂNTUL SUPERIOR

ȘI A GRADELOR PROFESIONALE DE CERCETARE – DEZVOLTARE

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

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		Nr. autori	Nr. autori efectivi (n.ef.)	0.00
		A1=4/n.ef.			
		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		Nr. autori	Nr. autori efectivi (n.ef.)	0.55
		A2=1/n.ef.			
		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
				0.00	0.00
3	Cărți în edituri internaționale recunoscute Web of Science în calitate de editor		Nr. autori	Nr. autori efectivi (n.ef.)	0.00
		p=0,5/n.ef.			
		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.)	0.13
		4. 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
				0.00	0.00
				0.00	0.00
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.)	0.13
		5. 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. 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
		7. 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
				0.00	0.00
6	Lucrări in extenso (cel puțin 3 pagini) publicate în Proceedings-uri indexate ISI	p=0,2/n.ef.	Nr. autori	Nr. autori efectivi (n.ef.)	0.43
		8. Coman, T. B., Cazacu, M. M. , & Radinschi, I. (2021). <i>Teaching strategy based on interactive use of computer simulations during COVID-19 pandemic</i> . INTED2021 Proceedings (pp. 10485–10490). IATED Academy, ISBN 978-84-09-27666-0	3	3.00	0.07
		9. Coman, T. B., Cazacu, M. M. , & Radinschi, I. (2021). <i>Developing virtual tools to complement experiments in the physics laboratory</i> . INTED2021 Proceedings (pp. 10499–10504). IATED Academy. ISBN 978-84-09-27666-0	3	3.00	0.07

		10. 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
		11. 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
		12. 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
		13. 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
		14. 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
		15. 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
		16. 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
		17. 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
7	Brevete de invenție internațională acordate	p=3/nefi	Nr. autori	Nr. autori efectivi (nefi)	0.00

[illegible]

	TOTAL A1				2.13
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A	2.13
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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.)	2.74
		32. 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. Symmetry 2022, Vol. 14, Page 900, 14(5), 900. https://doi.org/10.3390/SYM14050900	<u>0.394</u>	5	5.00	0.08
		31. 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. Fractal and Fractional, Vol. 6, Page 250, 6(5), 250. https://doi.org/10.3390/FRACTALFRACT6050250	<u>0.535</u>	8	6.50	0.08
		30. Roșu, I. A., Nica, D. C., Cazacu, M. M. , & Agop, M. (2022). Cellular Self-Structuring and Turbulent Behaviors in Atmospheric Laminar Channels. Frontiers in Earth Science, 9, 1344. https://doi.org/10.3389/FEART.2021.801020	<u>1.192</u>	4	4.00	0.30
		29. Roșu, I., Nica, D., Cazacu, M. M. , & Agop, M. (2021). Towards Possible Laminar Channels through Turbulent Atmospheres in a Multifractal Paradigm. Atmosphere, 12(8), Article 1038. https://doi.org/10.3390/atmos12081038	<u>0.626</u>	4	4.00	0.16
		28. Roșu, I. A., Cazacu, M. M. , & Agop, M. (2021). Multifractal model of atmospheric turbulence applied to elastic lidar data. Atmosphere, 12(2), 1–25. https://doi.org/10.3390/atmos12020226	<u>0.626</u>	3	3.00	0.21
		27. 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. Symmetry, 13(9), Article 1622. https://doi.org/10.3390/sym13091622	<u>0.394</u>	5	5.00	0.08
		26. Radinschi, I., Grammenos, T., Sahoo, P. K., Chattopadhyay, S., & Cazacu, M. M. (2021). Einstein and Møller energies of a particular asymptotically Reissner-Nordström	<u>0.346</u>	5	5.00	0.07

	non-singular black hole solution. Astronomische Nachrichten. https://doi.org/10.1002/asna.202113917				
	25. 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. Universe, 6(5), Article 69. https://doi.org/10.3390/universe6050069	<u>0.603</u>	5	5.00	0.12
	24. 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. Universe, 6(10), Article 169. https://doi.org/10.3390/universe6100169	<u>0.603</u>	6	5.50	0.11
	23. Roşu, A. I., Cazacu, M. M. , Ghenadi, S. A., Bibere, L., & Agop, M. (2020). On a multifractal approach of turbulent atmosphere dynamics. Frontiers in Earth Science, 8, Article 216. https://doi.org/10.3389/feart.2020.00216	<u>1.192</u>	5	5.00	0.24
	22. 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. Atmosphere, 11(4), Article 349. https://doi.org/10.3390/atmos11040349	<u>0.626</u>	6	5.50	0.11
	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. Atmosphere, 10(9), Article 559. https://doi.org/doi:10.3390/atmos10090559	<u>0.549</u>	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. Atmosphere, 10(1), Article 38. https://doi.org/10.3390/atmos10010038	<u>0.549</u>	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. Advances in High Energy Physics, 2018, Article 5212696. https://doi.org/10.1155/2018/5212696	<u>0.456</u>	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. Journal of Ovonic Research, 14(2), 119–128.	<u>0.089</u>	7	6.00	0.01
	17. Cocean, A., Cocean, I., Cazacu, M. M. , Bulai, G., Iacomi, 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.	<u>0.671</u>	6	5.50	0.12

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. <i>Applied Surface Science</i> , 424(3), 324–329. https://doi.org/10.1016/j.apsusc.2017.03.172	<u>0.627</u>	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	<u>0.101</u>	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.	<u>0.086</u>	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.	<u>0.255</u>	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	<u>0.159</u>	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.	<u>0.078</u>	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.	<u>0.074</u>	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	<u>0.756</u>	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	<u>1.132</u>	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. Environmental Engineering and Management Journal, 12(2), 297–303.	<u>0.066</u>	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. Journal of Optoelectronics and Advanced Materials, 14(5–6), 517–522.	<u>0.102</u>	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. Journal of Environmental Protection and Ecology, 13(2), 409–419.	<u>0.02</u>	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. Environmental Engineering and Management Journal, 10(1), 91–97.	<u>0.085</u>	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. Environmental Engineering and Management Journal, 10(1), 139–145.	<u>0.085</u>	5	5.00	0.02
		2. Covasniianu, 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.	<u>0.161</u>	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 TiO2. Thin Solid Films, 515(16 SPEC. ISS.), 6402–6406. https://doi.org/10.1016/j.tsf.2006.11.188	<u>0.653</u>	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	P=AlSi	AIS			6.69
		29. Roșu, I., Nica, D., Cazacu, M. M. , & Agop, M. (2021). Towards Possible Laminar Channels through Turbulent Atmospheres in a Multifractal Paradigm. Atmosphere, 12(8), Article 1038. https://doi.org/10.3390/atmos12081038	<u>0.626</u>			0.63
		28. Roșu, I. A., Cazacu, M. M. , & Agop, M. (2021). Multifractal model of atmospheric turbulence applied to elastic lidar data. Atmosphere, 12(2), 1–25. https://doi.org/10.3390/atmos12020226	<u>0.626</u>			0.63
		27. 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. Symmetry, 13(9), Article 1622. https://doi.org/10.3390/sym13091622	<u>0.394</u>			0.39

<p>considerare articolele la care autorii sunt indicați în ordinea alfabetică a numelui și candidatul este primautor exclusiv datorită numelui acestuia și ordonării alfabetice. 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.</p>	<p>25. 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. Universe, 6(5), Article 69. https://doi.org/10.3390/universe6050069</p>	0.603			0.60
	<p>24. 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. Universe, 6(10), Article 169. https://doi.org/10.3390/universe6100169</p>	0.603			0.60
	<p>23. Roșu, A. I., Cazacu, M. M., Ghenadi, S. A., Bibere, L., & Agop, M. (2020). On a multifractal approach of turbulent atmosphere dynamics. Frontiers in Earth Science, 8, Article 216. https://doi.org/10.3389/feart.2020.00216</p>	1.192			1.19
	<p>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. Atmosphere, 10(9), Article 559. https://doi.org/doi:10.3390/atmos10090559</p>	0.549			0.55
	<p>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. Atmosphere, 10(1), Article 38. https://doi.org/10.3390/atmos10010038</p>	0.549			0.55
	<p>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</p>	0.101			0.10
	<p>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.</p>	0.255			0.26
	<p>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</p>	0.159			0.16
	<p>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.</p>	0.074			0.07
	<p>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</p>	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	2.74
P	6.69

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	<p>p=ci/n.ef., ci - numarul de citari in reviste ISI ale publicatiei i</p> <p>Lucrare citată: 30. Roșu, I. A., Nica, D. C., Cazacu, M. M., & Agop, M. (2022). Cellular Self-Structuring and Turbulent Behaviors in Atmospheric Laminar Channels. Frontiers in Earth Science, 9, 1344. https://doi.org/10.3389/FEART.2021.801020</p> <p>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. 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</p> <p>Lucrare citată: 29. Roșu, I., Nica, D., Cazacu, M. M., & Agop, M. (2021). Towards Possible Laminar Channels through Turbulent Atmospheres in a Multifractal Paradigm. Atmosphere, 12(8), Article 1038. https://doi.org/10.3390/atmos12081038</p>	Nr. de citari ISI	Nr. autori	Nr. autori efectivi (n.ef.)	26.77
			2	4	4.00	0.50
			1	6	5.50	0.18
			2	4	4.00	0.50

	<p>Lucrare citată: 28. 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</p>	2	3	3.00	0.67
	<p>Lucrare citată: 23. 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</p>	4	5	5.00	0.80
	<p>Lucrare citată: 22. Țîmpu, S., Sfîcă, 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</p>	8	6	5.50	1.45
	<p>Lucrare citată: 30. 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.</p>	2	7	6.00	0.33
	<p>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</p>	4	5	5.00	0.80
	<p>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</p>	5	4	4.00	1.25
	<p>Lucrare citată: 31. 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.</p>	1	8	6.50	0.15
	<p>Lucrare citată: 10. 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. <i>IOP Conference Series: Materials Science and Engineering</i>, 374(1), 012091. https://doi.org/10.1088/1757-899X/374/1/012091</p>	2	8	6.50	0.31
	<p>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. <i>Advances in High Energy Physics</i>, 2018, Article 5212696. https://doi.org/10.1155/2018/5212696</p>	2	7	6.00	0.33

	<p>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.</p>	6	7	6.00	1.00
	<p>Lucrare citată: 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. Applied Surface Science, 443, 83–90.</p>	1	6	5.50	0.18
	<p>Lucrare citată: 33. Sfiică, 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</p>	4	7	6.00	0.67
	<p>Lucrare citată: 34. 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. Wandinger (Eds.), EPJ Web of Conferences (Vol. 176, pp. 1–4). https://doi.org/10.1051/epjconf/201817611005</p>	1	4	4.00	0.25
	<p>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.</p>	4	6	5.50	0.73
	<p>Lucrare citată: 15. 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</p>	5	8	6.50	0.77
	<p>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.</p>	7	6	5.50	1.27
	<p>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</p>	8	4	4.00	2.00
	<p>Lucrare citată: 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</p>	8	7	6.00	1.33

	limestone covered by an impurity layer. Applied Surface Science, 424(3), 324–329. https://doi.org/10.1016/j.apsusc.2017.03.172				
	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.	<u>1</u>	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	<u>1</u>	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.	<u>5</u>	6	5.50	0.91
	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.	<u>1</u>	11	8.00	0.13
	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	<u>4</u>	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	<u>18</u>	10	7.50	2.40
	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.	<u>1</u>	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). Grimsvothn 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.	<u>6</u>	8	6.50	0.92

	<p>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. <i>Journal of Environmental Protection and Ecology</i>, 13(2), 409–419.</p>	<u>4</u>	4	4.00	1.00
	<p>Lucrare citată: 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.</p>	<u>6</u>	6	5.50	1.09
	<p>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. <i>Environmental Engineering and Management Journal</i>, 10(1), 139–145.</p>	<u>7</u>	5	5.00	1.40
	<p>Lucrare citată: 37 Covasnianu, A., Tudose, O. G., Cazacu, M. M., Nichersu, I., Memier, M., & Balin, I. (2010). R.E.E.L.D. (Economical and Ecological Reconstruction of the DanubeFlood Plain) Campaign: airborne LIDAR data and GIS technique outputs. <i>Geophysical Research Abstracts</i>, EGU2010-3982–1.</p>	<u>1</u>	6	5.50	0.18
	<p>Lucrare citată: 38. M.M. Cazacu, P. Ristori, O. Tudose, A. Balanici, D. Nicolae, V. Ristici, D. Balin and I. Balin, mESY LIDAR - a new cost-effective, versatile and powerful lidar configuration for tropospheric aerosols, clouds and water vapor investigations, <i>Geophysical Research Abstracts</i>, Vol. 11, EGU2009-4625-3, 2009</p>	<u>1</u>	8	6.50	0.15
	<p>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. <i>Journal of Optoelectronics and Advanced Materials</i>, 9(11), 3529–3532.</p>	<u>1</u>	6	5.50	0.18
	<p>Lucrare citată: 1. Iacomi, F., Apetroaei, N., Calin, G., Zodieriu, Gh., Cazacu, M. M., Scarlat, C., Goian, V., Menzel, D., Jursic, I., & Schoenes, J. (2007). Structure and surface morphology of Mn-implanted TiO2. <i>Thin Solid Films</i>, 515(16 SPEC. ISS.), 6402–6406. https://doi.org/10.1016/j.tsf.2006.11.188</p>	<u>11</u>	10	7.50	1.47
		Indice Hirsch	<u>10</u>		

C	26.77
H	10.00

	REALIZAT	Conditii minimale		Criterii	Criterii
Activitati	Cazacu Marius Mihai	CONF	PROF	CONF	PROF
A	2.13	1	2	DA	DA
I	2.74	2	4	DA	NU
P	6.69	2	4	DA	DA
C	26.77	20	40	DA	NU
H	10.00	5	10	DA	DA
TOTAL	10.19	5	12	DA	NU