UNIVERSITATEA TEHNICĂ “GHEORGHE ASACHI” DIN IAŞI
FACULTATEA: Construcţii de Maşini şi Management Industrial
Domeniul de licenţă: Inginerie Mecanică
Programul de studii :**Mecanică Fină şi Nanotehnologii**

Anexa B.9.5 Rezultatele activităţii de cercetare desfăşurate de personalul didactic şi de cercetare (ultimii 5 ani)

Nr. crt.		Rezulatele activității de cercetare (2020-2025)
1.	Cărți	1. **Chitariu Dragoș-Florin**, *Analiza influenței rigidității dispozitivelor modulare asupra preciziei de prelucrare*, Ed. Performantica, Iași, 2018. - 447 pag. ISBN 978-606-685-621-8 2. **Chitariu Dragoș-Florin,** *Construcţia şi exploatarea dispozitivelor modulare,* Ed. Performantica, Iași, 2024, 204 pag. ISBN 978-630-328-105-6 3. **Chitariu Dragoș-Florin**, Munteanu Adriana, Ciobanu Bogdan , Boca Mihai, Țugui Catalin Andrei, *Antreprenoriat Inovativ 2*, Ed. Performantica, Iași, 2020.160 pag 4. **Chitariu Dragoș-Florin**, *Acționare și Comanda Hidraulica a Mașinilor –unelte*, , Ed. Performantica, Iași, 2020. - 225 pag. 5. Dimitrie-Cristian Fodor, **Dragoș-Florin Chitariu** and Neculai-Eugen Seghedin, *Modern Limb Prosthetics: Classifications, Innovations,* Capitol *Challenges, and the Future of Human Augmentation*, *Bioinspired Technology and Biomechanics*, Ed. IntechOpen, Rijek, 2025, https://doi.org/10.5772/intechopen.115632. 6. Cătălin Gabriel Dumitraș, Mihaiță Horodincă, Adriana Munteanu, Florin Chifan, **Dragoș-Florin Chitariu** and George-Gabriel Chiriac, Capitol *Vibration in Metal Cutting Process,* Ed. IntechOpen, Rijek, 2025, https://doi.org/10.5772/intechopen.1009581 7. C.G.Dumitras, V.Ghizdovat, C.M.Rusu, E.Nazaretian, Fl. Nedeff, V.Nedeff, I. Ioja, M.Agop *Dynamical Systems - Latest Developments and Applications,* Edited by Mohammad Shamsuzzoha, chapter *Holographic-Type Behaviours in Complex Systems Dynamics from a Multifractal Perspective of* Motion, IntechOpen Ltd., London, United Kingdom, 2025, ISBN 978-1-83634-368-4 8. C.G. Dumitraș, M.Horodincă, A.Munteanu, Fl.Chifan, D.Fl.Chitariu, G.G.Chiriac, *Vibration Engineering - Analysis, Control and Utilization,* Edited by Ming Yuan, chapter *Vibration in Metal Cutting Process* IntechOpen Ltd., London, United Kingdom, 2025, ISBN 978-1-83634-806-1 9. M. Horodinca, Fl. Chifan, E. Paduraru, C.G. Dumitras, A. Munteanu, D.-Fl. Chitariu, *Cutting Processes for Materials in Manufacturing,* edited by JianWeng, Kejia Zhuang, Dongdong Xu, Benkai Li, Hongguang Liu, GangWang, chapter *A Study of 2D Roughness Periodical Profiles on a Flat Surface Generated by Milling with a Ball Nose End Mill,* MDPI AG, Basel, Switzerland, 2025 ISBN 978-3-7258-4077-9 10. C. Dumitraș, Enachi M., *Sisteme de scule modulate - o nouă abordare*, Editura Performantica, Iași, 2021, ISBN 978-606-685-825-0, 263 pag. (41 rânduri/pag) 11. Munteanu Adriana, Cioata Florentin, Sisteme de tolerante in constructia de masini, Editura Performantica, 281 pag, ISBN 978-630-328-145-2, 2025 12. Munteanu Adriana, Calitatea in sisteme de fabricație, Editura Performantica, 241 pag. , ISBN 978-630-328-146-9, 2025 13. Slătineanu, L., Nagit Gh., Dodun O., Coteaţă, M., Munteanu A., Besliu-Bancescu I., Gherman L, Hrituc A., Chimesta F., Goncales-Coelho A., Teixeira J.P, San Juan M., Santo L., Santos F. Non-traditional Manufacturing Processes Editura Tehnica-Info, Chisinau, 2020, ISBN 978-9975-63-454-0, 406 pag. 14. SEGHEDIN N. (ed.), Gheorghe Asachi-Un spirit enciclopedic. Ed. Universității Tehnice „Gheorghe Asachi” din Iași, 2023, 500 pag., ISBN 978-973-621-533-9.

UNIVERSITATEA TEHNICĂ “GHEORGHE ASACHI” DIN IAŞI
FACULTATEA: Construcţii de Maşini şi Management Industrial
Domeniul de licenţă: Inginerie Mecanică
Programul de studii :**Mecanică Fină şi Nanotehnologii**

2.	Reviste/ Jurnale ISI	**1.** V. Ghizdovat, E. Nazaretian, C. G. Dumitras, M. Agop, C. Placinta, C. Buzea, C. M. Rusu, D. Vasincu, Z. Borsos,*Correlative Dynamics of Complex Systems: A Multifractal Perspective of Motion Based on SL (2R) Symmetry*, Symmetry, 17(1), 27, 2024, DOI: 10.3390/sym17010027 **2.** M. Sha’at, M. Ignat, L. Sacarescu, A. Fl. Spac, Al. Barsan, V. Ghizdovat, E. Nazaretian, C. G. Dumitras, M. Agop, C. M. Rusu, L. Ochiuz ,*Multifractal Analysis and Experimental Evaluation of MCM-48 Mesoporous Silica as a Drug Delivery System for Metformin Hydrochloride*, Biomedicines, 12(12), 2838, 2024, DOI: 10.3390/biomedicines12122838 **3.** *D.Fl. CHITARIU, T.M. AGACHE, C.G. DUMITRAS, M. HORODINCĂ, Fl.D. EDUTANU, George-Gabriel CHIRIAC, Experimental Research On Positioning Accuracy Of Educational Robots*, ACTA TECHNICA NAPOCENSIS - Series: APPLIED MATHEMATICS, MECHANICS, And ENGINEERING, vol. 67, Issue 2s, 595-602, 2024, **4.** D.-Fl. Chitariu, M. Horodinca, C.-Gh. Mihai, N.-E. Bumbu, C. G. Dumitras, N.-E. Seghedin, Fl.-D. Edutanu, *Condition Monitoring of a Three-Phase AC Asynchronous Motor Based on the Analysis of the Instantaneous Active Electrical Power in No-Load Tests*, *Appl. Sci.* , *14*(14), 6124, 2024; https://doi.org/10.3390/app14146124 **5.** D.-Fl. Chitariu, M. Ilhan, C.G. Dumitras, Fl.-D. Edutanu, F.-V. Hrib, M. Horodincă, *Research On Measurement Of Elastic Roller Deformations In Roller Bearings By Image Correlation Method*, ACTA TECHNICA NAPOCENSIS - Series: APPLIED MATHEMATICS, MECHANICS, And ENGINEERING, vol. 67, Issue 1s, 267-274, 2024, **6.** M. Horodinca, Fl. Chifan, E. Paduraru, C. G. Dumitras, A. Munteanu, D.-Fl. Chitariu, *A Study of 2D Roughness Periodical Profiles on a Flat Surface Generated by Milling with a Ball Nose End Mill, Materials* , *17(*6), 1425, 2024; https://doi.org/10.3390/ma17061425 **7.** St Agop, M-Al. Paun, C. Bejinariu, T.-C. Petrescu, C. M. Rusu, A. M. Cazac, C. G. Dumitras, A. C. Hanganu, V.-Al. Paun, M. Agop, V.-P. Paun, *Constitutive Material Laws In The Multifractal Theory Of Motion (Part II),* UPB Scientific Bulletin, Series A: Applied Mathematics and Physics, vol 86, Issue 1, pp 137-150, 2024, ISSN 1223-7027 **8.** G-G Chiriac, C G Dumitraș, D Fl Chitariu, P Vizureanu, A V Sandu, *Influence of Gravity on Passively Cooled Heat Sink Using Experimental Data and Finite Element Analysis*, *Processes,* , *11*(3), 896, 2023; https://doi.org/10.3390/pr11030896 (revista cotată ISI - factor de impact: 3,352– zona galbenă) **9.** M. Horodinca, N-E Bumbu, D-Fl. Chitariu, A. Munteanu, C.G. Dumitras, Fl. Negoescu, C-Gh. Mihai, *On The Behaviour Of An AC Induction Motor As Sensor For Condition Monitoring Of Driven Rotary Machines*, *Sensors*, *23*(1), 488, 2023; https://doi.org/10.3390/s23010488(revista cotată ISI - factor de impact: 3,847– zona galbenă) **10.**Șt. Agop, M-Al. Paun, C.G Dumitras, M. Frasila, V-Al. Paun, M. Agop, V-P. Paun, G. Ștefan, *On A Special Symmetry In The Dynamics Of Complex Systems In A Holographic-Type Perspective*, U.P.B. Sci. Bull., Series A, Vol. 85, Iss. 1, pp. 178-188, 2023, ISSN 1223-7027 **11.**M. Frasila, M.-Al. Paun, C.G. Dumitras, V. Ghizdovat, C. M. Rusu, V.-Al. Paun, M. Agop, V.-P. Paun, *Some Physical Implications Of Absolute Geometries In The Description Of Complex Systems Dynamics,* U.P.B. Sci. Bull., Series A, Vol. 85, Iss. 2, p. 125-138, 2023*,* ISSN 1223-7027 **12.**E. Paduraru, C.G.Dumitras, D. Fl. Chitariu, M. Horodinca, Fl. Chifan, *Research on Additive Technique Parameter Optimization for Robotic Gripper Construction,* Machines, 11(6), 621, (2023), doi.org/10.3390/machines11060621(revista cotată ISI - factor de impact: 2,6– zona galbenă) **13.** B Rădulescu, Am Mihalache, Mc Rădulescu, L Slătineanu, A Hrițuc, O Dodun, G Nagîț, M Coteață, Selection of A Method For Machining An Archimedean Spiral Groove Acta Technica Napocensis, Series: Applied Mathematics, Mechanics, and Engineering Vol. 65, Issue Special I, February, 2022 **14.** MI Ripanu, AM Mihalache, L Slatineanu, M Mares, L Andrusca, A Hrituc, O Dodun, G Nagit, M Coteata, B Radulescu Tensile Strength of Threaded Rods Made by 3D Printing of Polymeric Material https://doi.org/10.37358/Mat.Plast.1964 ISSN 2668-8220 ISI SCOPUS

		15.C. G. Lates, C G Dumitras, P. Vizureanu, A. V. Sandu, *Heat Transfer Optimization of an Electronic Control Unit Immersed in Forced Liquid Coolant*, Applied Sciences, 13(9), 5310, (2023), https://doi.org/10.3390/app13095310 (revista cotată ISI - factor de impact: 2,7– zona galbenă) **16.**I. Craciun, T. Agache, C. G. Dumitras, *Analysis and economic strategies regarding the reduction of preventive maintenance costs*, Acta Technica Napocensis-Series: Applied Mathematics, Mechanics, and Engineering, Vol 65, No 4S, (2022), (revista cotată ISI - factor de impact: 0,07– zona gri **17.**C.G. Chiriac, C.G. Dumitraș, D. F. Chitariu , P. Vizureanu, S.V. Andrei, *Influence of Gravity on Passively Cooled Heat Sink Using Experimental Data and Finite Element Analys,* Processes, 11(3), 896, (2023), https://doi.org/10.3390/pr11030896 (revista cotată ISI - factor de impact: 3,352– zona galbenă) **18.**M. Horodinca, N.-E. Bumbu, D.-F. Chitariu, A. Munteanu, C.G. Dumitras, F. Negoescu, C.G. Mihai, *On the Behaviour of an AC Induction Motor as Sensor for Condition Monitoring of Driven Rotary Machines,* Sensors, 23 (1), 488, (2023), doi.org/10.3390/s23010488, (revista cotată ISI - factor de impact: 3,847– zona galbenă) **19.**Șt. Agop, M.-Al. Paun, C.G. Dumitras, M. Frasila, V.-Al. Paun, M. Agop, V.-P. Paun, G. Ștefan , *On A Special Symmetry In The Dynamics Of Complex Systems In A Holographic-Type Perspective*, U.P.B. Sci. Bull., Series A, Vol. 85, Iss. 1, 2023, ISSN 1223-7027 **20.**M. Frasila, M.-Al. Paun, C.G. Dumitras, V. Ghizdovat, C. M. Rusu, V.-Al. Paun, M. Agop, V.-P. Paun, *Some Physical Implications Of Absolute Geometries In The Description Of Complex Systems Dynamics,* U.P.B. Sci. Bull., Series A, Vol. 85, Iss. 2, 2023, ISSN 1223-7027 **21.**C.G.Dumitraș, D. F. Chitariu, F. Chifan, C.G. Lateș, M.Horodincă, *Surface Quality Optimization in Micromachining with Cutting Tool Having Regular Constructive Geometry*, Micromachines, 13(3), 422, (2022), //doi.org/10.3390/mi13030422, (revista cotată ISI - factor de impact: 3,523– zona galbenă) **22.**I.A. Roșu, D.-C. Nica, C.G. Dumitraș, D.F. Chitariu, L. Bibire, A. S. Ghenadi, V.-S. Dragan, M. Agop, *The Search for Atmospheric Laminar Channels: Experimental Results and Method Dissemination* Sensors, 22(1), 158, (2022), /doi.org/10.3390/s22010158, (revista cotată ISI - factor de impact: 3,847– zona galbenă) **23.**M Ciorap, D Andriţoi, R Ciorap, C.G. Dumitraş, *Study on the implementation of the Industry 4.0 concept in medical device manufacturing,* IOP Conference Series: Materials Science and Engineering, vol 1254, International Conference on Electromagnetic Fields, Signals and BioMedical Engineering (ICEMS-BIOMED 2022) 18/05/2022 - 20/05/2022 Sibiu, Romania, 2022, 10.1088/1757-899X/1254/1/012041 (lucrare indexata ISI) **24.**L. Ciurca, M. A. Paun, M. Barhalescu, M. Jarcau, C. G. Dumitras, A. Corabieru, V. A. Paun, Agop M., Paun V.P., *Non-linear Behaviors in the Dynamics of Complex Systems Through a Multifractal Hydrodynamic Model,* UPB Scientific Bulletin, series A, Applied Mathematics and Physics, vol 84 (4), 149-168, 2022, revista cotată ISI - factor de impact:1,160) **25.**I-A. Rosu, M.-A. Paun, M. Barhalescu, A. I. Saviuc, M. Jarcau, C.G. Dumitras, C. Placinta, V.-A. Paun, M. Agop, V.-P. Paun, *Bistable-Type Interactions Of Complex Systems In A Fractal Paradigm Of Motion,* UPB Scientific Bulletin, series A, Applied Mathematics and Physics, vol 84 (3), 167-176, 2022, revista cotată ISI - factor de impact:1,160) **26.**V. S. Dragan, M. A. Paun, M. Jarcau, C. G. Dumitras, C. Placinta, V. A. Paun, Agop M., Paun V. P., Rosu I. A., *Conductive-type behaviors in the dynamics of complex systems through scale relativity theory,* UPB Scientific Bulletin, series A, Applied Mathematics and Physics, vol 84 (2), 203-212, 2022, revista cotată ISI - factor de impact:1,160) **27.**S.D. Ionesi, L. Ciobanu, C.G. Dumitraș, M. Avădanei, I. Dulgheriu, I. Ionescu, M.C. Loghin, *FemAnalysis of Textile Reinforced Composite Materials Impact Behavior,* Materials, 14,7380, (2021), doi.org/10.3390/ma14237380, (revista cotată ISI - factor de impact:3,748 – zona roșie)

		28.S.D. Ionesi, L. Ciobanu, C.G. Dumitraș, M. Avădanei, I. Dulgheriu, I. Ionescu, M.C. Loghin, *FemAnalysis of Textile Reinforced Composite Materials Impact Behavior,* Materials, 14,7380, (2021), doi.org/10.3390/ma14237380, (revista cotată ISI - factor de impact:3,748 – zona roșie) **29.**L. Dobreci, A. Saviuc, T.-C. Petrescu, M-A. Paun, M. Frasila, F. Nedeff, V.-A. Paun, C.G. Dumitras, V.-P. Paun, M. Agop, *Towards interaction trough differentiable– non–differentiable scale transition in scale relativity theory,* UPB Scientific Bulletin, series A, Applied Mathematics and Physics, vol 83(2), 239-252, 2021, revista cotată ISI - factor de impact:1,160) **30.**M. Frasila, M.-A. Paun, C.G. Dumitras, T-C Petrescu, V-A Paun, V-P Paun, M. Agop, *Non-linear Behaviors of Airy Type on Scales Space From a Fractal Perspective,* UPB Scientific Bulletin, series A, Applied Mathematics and Physics, vol 83(4), 263-274, 2021, revista cotată ISI - factor de impact:1,160) **31.**G Dogan, I Mehmet, D F Chitariu, C G Dumitraş, V I Crîşmaru, *FEA Modelling of the Combined Hard TurningRolling Process Used at Bearing Rings,* 10th International Conference on Manufacturing Science and Eductation, MATEC Web of Conference, vol 343, 2021 doi.org/10.1051/matecconf/202134302004 **32.**CG Chiriac, CG Dumitraș, *Optimization of automotive cooling systems characteristics using finite element analysis,* 10th International Conference on Manufacturing Science and Eductation, MATEC Web of Conference, vol 343, 2021, doi.org/10.1051/matecconf/202134304001 **33.** I Mehmet, G Dogan, DF Chitariu, C Dumitraș, F Negoescu, *Research on advances in roller bearing manufacturing,* IOP Conference Series: Materials Science and Engineering, ModTech International Conference: Modern Technologies in Industrial Engineering IX (ModTech 2021) 23rd-26th June 2021, Eforie Nord, Romania, vol 1182, issue 1, 012405, 2021, 10.1088/1757-899X/1182/1/012045 (lucrare indexata ISI) **34.** D. F. Chitariu , F. Negoescu, M. Horodinca, C.G. Dumitras, G. Dogan, M. Ilhan , *An Experimental Approach on Beating in Vibration Due to Rotational Unbalance*, Appl. Sci. 10, 6899, (2020), doi:10.3390/app10196899 (revista cotată ISI - factor de impact:2,474– zona galbenă) **35.** D-F Chitariu, E Paduraru, G. Dogan, M. Ilhan, F. Negoescu, C-G Dumitras, A. Beznea, V. Stefanescu, I. Constantin, S. Berbece, M. Horodinca, *Experimental Research On Behaviour Of 3d Printed Gripper Soft Jaws,* Materiale Plastice (Mater. Plast.), 2020, Volume 57, Issue 4 https://doi.org/ 10.37358/ MP.20.4.5437 **36.** Olteanu, N.D.; Szuhanek, C.; Rosu, S.N.; Chitariu, D.F.; Seghedin, N.; Panaite, T.; Casalean, A.; Zetu, I.N. An Assessment of the Mechanical Deformation Behavior of Three Different Clear Aligner Materials: A Digital Image Correlation Analysis. Appl. Sci. 2024, 14, 7496. Revista Q1 – zona rosie, Factor de impact (2023) = 2.5 **37.** Dragos-Florin Chitariu, Emilian Paduraru, Gures Dogan,Mehmet Ilhan, Florin Negoescu, Catalin-Gabriel Dumitras, Adrian Beznea, Victorita Stefanescu, Iulian Constantin,Sorin Berbece, Mihaita Horodinca, Experimental Research on Behaviour of 3D Printed Gripper Soft Jaws, Mater. Plast., 57 (4), 2020, pp. 366-375. **38.** Mihaita Horodinca, Ionut Ciurdea, Dragos-Florin Chitariu, Adriana Munteanu, Mihai Boca, Some approaches on instantaneous angular speed measurement using a two-phase n poles AC generator as sensor, Measurement 157 (2020) 107636 Revista Q1 – zona rosie, Factor de impact (2020): 3.927 **39.** Ciorap Radu, CIORAP Mariana, David Valeriu, Andriţoi Doru, Corciovă Călin, ”Analisys of Brain Activity in case of magnetic field exposure”, ENVIRONMENTAL ENGINEERING AND MANAGEMENT JOURNAL, , vol. 12, nr.6, pag. 1223-1230, 2013, (FI = 1,258) **40.** CIORAP Mariana, Corciovă Călin, Turnea Marius, David Valeriu, ”Brain electrical activity recording in some electromagnetic environments”, ENVIRONMENTAL ENGINEERING AND MANAGEMENT JOURNAL, vol. 10 , nr.4, pag. 535-544, 2011, (FI = 1,004).

41. Blaga M, Seghedin NE, Horodincă M, Grosu C, Gaaloul H, Babay A, Dhouib S, Azouz B. Behaviour of Knitted Materials in a Vibrating Environment. Materials. 2025; 18(3):479. https://doi.org/10.3390/ma18030479. Revistă WOS Q2 2023.

42. Chitariu D-F, Horodinca M, Mihai C-G, Bumbu N-E, Dumitras CG, Seghedin N-E, Edutanu F-D. Condition Monitoring of a Three-Phase AC Asynchronous Motor Based on the Analysis of the Instantaneous Active Electrical Power in No-Load Tests. Applied Sciences. 2024; 14(14):6124. https://doi.org/10.3390/app1414612. Revistă WOS Q1 2023

43. Munteanu A., Chitariu D.F., Horodinca M., Dumitras, C. G.; Negoescu, F., Savin A., Chifan F., (2021), A Study on the Errors of 2D Circular Trajectories Generated on a 3D Printer, Applied Science-Basel, vol.11, nr. 24. Revistă WOS Q1 2023

44. Horodinca M, Chifan F, Paduraru E, Dumitras CG, Munteanu A, Chitariu D-F. A Study of 2D Roughness Periodical Profiles on a Flat Surface Generated by Milling with a Ball Nose End Mill. Materials. 2024; 17(6):1425. https://doi.org/10.3390/ma17061425. Revistă WOS Q2 2023.

45. Horodinca M, Bumbu N-E, Chitariu D-F, Munteanu A, Dumitras C-G, Negoescu F, Mihai C-G. On the Behaviour of an AC Induction Motor as Sensor for Condition Monitoring of Driven Rotary Machines. Sensors. 2023; 23(1):488. https://doi.org/10.3390/s2301048. Revistă WOS Q2 2023.

46. Mihăiţă Horodincă, Ionuţ Ciurdea, Dragoş-Florin Chitariu, Adriana Munteanu, Mihai Boca, (2020), Some approaches on instantaneous angular speed measurement using a two-phase n poles AC generator as sensor, Measurement, vol. 157, 107636. Revistă WOS Q1 2023.

47. David Alaluf, Renaud Bastaits, Kainan Wang, Mihaita Horodinca, Gregory Martic, Bilal Mokrani, Andre Preumont, (2018), Unimorph Mirror for Adaptive Optics in Space Telescopes, Applied Optics, Vol. 57, No. 14 . Revistă WOS Q3 2023

48. Bilal Mokrani, Renaud Bastaits, Iulian Romanescu, Mihaita Horodinca, Ioan Burda, André Preumont, (2018) Passive Damping of Rotationally Periodic Structures with Tuned Piezoelectric Inductive Shunt, Actuators, vol. 7 no. 4 41 Revistă WOS Q2 2023

49. Ionel Iulian Hurja, Paul Bârsănescu, Adriana Munteanu, Andrei-Marius,Mihalache, Adelina Hrițuc, Dragoș Cristian Achiței, Laurențiu Slătineanu, Highlighting The Presence Of Residual Stresses in Ring-Shaped Metallic Test Samples, TECHNICAL UNIVERSITY OF CLUJ-NAPOCA ACTA TECHNICA NAPOCENSIS,Series: Applied Mathematics, Mechanics, and Engineering Vol. 65, Issue Special IV, December, 2022, Indexata Web of Science/ Clarivate Analytics, WOS:000969679100028.

50. Laurențiu Slătineanu, Margareta Coteață, Oana Dodun, Florentin Cioată, Adriana Munteanu, Adelina Hrițuc, Gheorghe Nagîț, Andrei Mihalache Ergonomic Approach to Teaching Online Activity Using Principles of Axiomatic Design, ACTA TECHNICA NAPOCENSIS, Series: Applied Mathematics, Mechanics, and Engineering, Vol. 65, Issue 3, pag 843-845, Special SI, 2022, Indexata Web of Science/ Clarivate Analytics, WOS:000953026700038

51. Radulescu Bruno, Mihalache Andrei Marius, Hrituc Adelina, Radulescu Mara, Slatineanu Laurențiu, Munteanu Adriana, Dodun Oana, Nagit Gheorghe, Thermal Expansion of Plastics Used for 3D Printing, Polymers, Volum14, Tom 15, nr. 3061, DOI 10.3390/polym14153061, 2022. Indexata Web of Science/ Clarivate Analytics, WOS:000838950000001.

52. Nicolau M., Hrituc A., Mihalache M.A., Nagît G., Dusa P., Craciun E., Munteanu A., Dodun O., Slatineanu L., Perforation resistance of some materials in 3D printed parts, 27th International Conference of the European-Scientific-Association-on-Material-Forming (ESAFORM), 2024, MATERIAL FORMING, ESAFORM 2024 41 , pp.2514-2523, Indexata Web of Science/ Clarivate Analytics, WOS:001258853000277

		53. B Radulescu, AM Mihalache, A Hrituc, MC Radulescu, L Slatineanu, A Munteanu, O Dodun, G Nagit, Thermal Expansion of Plastics Used for 3D Printing Polymers 2022, 14(15), 3061; https://doi.org/10.3390/polym14153061- Q1-impact factor 4.9 **54.** B Radulescu, AM Mihalache, E Padurariu, A Hrituc, MC Radulescu, L Slatineanu, V Ermolai Tensile Behavior of Chain Links Made of Polymeric Materials Manufactured by 3D Printing Polymers 2023, 15(15), 3178; https://doi.org/10.3390/polym15153178 Q1-impact factor 4.9 **55.** A Hrituc, AM Mihalache, O Dodun, G Nagit, I Besliu-Bancescu, B Radulescu, L Slatineanu, Propagation of Sounds through Small Panels Made of Polymer Materials by 3D Printing Polymers 2024, 16(1), 5; https://doi.org/10.3390/polym16010005 Q1-impact factor 4.9
	Reviste/jurnale BDI	**1.** V. F. Hrib, Fl. Chifan, C. G. Dumitraş, *Comparative Study Between Conventional And Robotic Methods In 3D Printing*, Buletinul Institutului Politehnic din Iaşi, Secţia CONSTRUCŢII DE MAŞINI Volumul 69 (73), Numărul 4, pag.47-52 , 2023, DOI:10.2478/bipcm-2023-37 **2.** V.F. Hrib, F. Chifan, M. Ciorap, C G Dumitraş, *An Study Regarding A New Concept Of 3d Printing Using A 6 Axis Industrial Robotic Arm,* Buletinul Institutului Politehnic din Iaşi, Universitatea Tehnică „Gheorghe Asachi” din Iaşi. Vol. 69 (73), No. 3, 2023 Secţia CONSTRUCŢII DE MAŞINI DOI:10.2478/bipcm-2023-0026 **3.** I. Crăciun, Fl. Chifan, C G Dumitraş, *A New Approach On Preventive Maintenance In Industry,* Buletinul Institutului Politehnic din Iaşi, Universitatea Tehnică „Gheorghe Asachi” din Iaşi, Vol 69 (73), No 2, 2023, Secţia CONSTRUCŢII DE MAŞINI, DOI:10.2478/bipcm-2023-0013 **4.** G-G Chiriac, C G Dumitraş, I Mertic*, A Study On The Influence Of Thermal Interface Material In Passively Cooled Electrical Components With Attached Heatsink,* Buletinul Institutului Politehnic din Iaşi, Secţia CONSTRUCŢII DE MAŞINI Volumul 69 (73), Numărul 1, pag.96-104 , 2023, DOI:10.2478/bipcm-2023-0007 **5.** E Păduraru, C G Dumitraş, D Chitariu, F Chifan, *Research on Developing of a Reconfigurable Gripping Mechanism with Electric Drive*, Buletinul Institutului Politehnic din Iaşi, Secţia CONSTRUCŢII DE MAŞINI Volumul 68 (72), Numărul 4, pag.47-52 , 2022, DOI:10.2478/bipcm-2022-0035. **6.** I Crăciun, C G Dumitraş, *Research on the Maintenance of Common-Rail Injectors*, Buletinul Institutului Politehnic din Iaşi, Secţia CONSTRUCŢII DE MAŞINI Volumul 68 (72), Numărul 3, pag.124-136 , 2022, DOI:10.2478/bipcm-2022-0028 **7.** I Mehmet, D F Chitariu, C G Dumitraş, *Study Upon Cylindrical Roller Bearing Profile Optimisation Using FEA*, Buletinul Institutului Politehnic din Iaşi, Secţia CONSTRUCŢII DE MAŞINI Volumul 68 (72), Numărul 2, pag.92-105, 2022, doi.org/10.2478/bipcm-2022-0018 **8.** I Crăciun, I Mehmet, C G Dumitraş, *Study on the Implementation of Maintenance Policies in Industrial Engineering*, Buletinul Institutului Politehnic din Iaşi, Secţia CONSTRUCŢII DE MAŞINI Volumul 68 (72), Numărul 2, pag.9-24, 2022, doi.org/10.2478/bipcm-2022-0011 **9.** M Ciorap, D Gures, C G Dumitraş, *A Computer Aided Design Software Comparative Study with Applications in Industry 4.0–Smart Manufacturing*, Buletinul Institutului Politehnic din Iaşi, Secţia CONSTRUCŢII DE MAŞINI Volumul 68 (72), Numărul 1, pag.47-68, 2022, doi.org/10.2478/bipcm-2022-0004 **10.** L.P. Păvăloi , F. Negoescu, B. Ciobanu, C. G. Dumitraş, *Critical Analysis Of The Existing Solutions In The Field Of Metal 3d Printers,* Buletinul Institutului Politehnic din Iaşi, Secţia CONSTRUCŢII DE MAŞINI Volumul 66 (70), Numărul 3, pag. , 2020. **11.** G.G. Chiriac, C. G. Dumitraş, *Turbulence Enhancement Techniques in Cold Plates*, Buletinul Institutului Politehnic din Iaşi, Secţia CONSTRUCŢII DE MAŞINI Volumul 66 (70), Numărul 1, pag. 55-64, 2020. **12.** Mihăiță HORODINCĂ, Eduard-Neculai BUMBU, Dragoș Florin CHITARIU, Adriana MUNTEANU, Florin CHIFAN, George Iulian FIGURĂ. *A study of 2D profile for a cycloidal ring used in a cycloidal reducer,* Buletinul Institutului Politehnic din Iași, Secția Construcții de Mașini, ISSN 2537-4869, vol. 68(72) nr. 4 2022. Revistă BDI (Index Copernicus) https://sciendo.com/article/10.2478/bipcm-2022-0038. **13.** Dimitrie-Cristian Fodor, Dragoş-Florin Chitariu, Neculai-Eugen Seghedin, Testing a New Concept of a Self-Adaptive Transtibial Prosthesis, BULETINUL INSTITUTULUI POLITEHNIC DIN IAŞI, Publicat de Universitatea Tehnică „Gheorghe Asachi” din Iaşi, Volumul 69 (73), Numărul 3, 2023, Secţia, CONSTRUCŢII DE MAŞINI, pp. 123-131 **14.** Dragoş-Florin Chitariu, Florin-Daniel Eduţanu, Lucian Oancea, Constantin-Gheorghe Mihai, Cristiana Bişoc, Overview on Bearing Manufacturers Research and Development Directions,

		2023 Journal Bulletin of the Polytechnic Institute of Iași. Machine constructions Section Volume 69, Issue 4, Pages 71-78. **15.** Florin Dimitriu, Neculai-Eugen Seghedin, Dragoș-Florin Chitariu, An Overview on Advances in Injection Moulding Remanufacturing, BULETINUL INSTITUTULUI POLITEHNIC DIN IAŞI, Publicat de Universitatea Tehnică „Gheorghe Asachi” din Iaşi, Volumul 69 (73), Numărul 1, 2023, Secţia, CONSTRUCŢII DE MAŞINI, pp. 9-17, **16.** Emilian Paduraru, Catalin Gabriel Dumitras, Dragos Florin Chitariu, Florin Chifan, Study on Optimizing Materials for 3D Gripper Printing, International Journal of Modern Manufacturing Technologies ISSN 2067–3604, Vol. XIV, pp. 174-180 No. 2 / 2022 https://doi.org/ 10.54684/ijmmt.2022.14.2.174, **17.** Mihăiţă Horodincă, Eduard Neculai Bumbu, Dragoş Florin Chitariu, Adriana Munteanu, Florin Chifan, George Iulian Frigura, A Study on the Synthesis of 2D Profiles for Cycloidal Discs Used in Cycloidal Reducers, BULETINUL INSTITUTULUI POLITEHNIC DIN IAŞI Publicat de Universitatea Tehnică „Gheorghe Asachi” din Iaşi, Volumul 68 (72), Numărul 4, pp 65-84, 2022, **18.** Mihăiţă Horodincă, Eduard Neculai Bumbu, Dragoş Florin Chitariu, Adriana Munteanu, Florin Chifan, George Iulian Frigura, A Study of 2D Profile for a Cycloidal Ring Used in a Cycloidal Reducer, Bull. Polytech. Inst. Iași Mach. Constr. Sect 68, pp 85-100. **19.** Emilian Păduraru, Cătălin Gabriel Dumitraș, Dragoș Chitariu, Florin Chifan, Research on Developing of a Reconfigurable Gripping Mechanism with Electric Drive, Bull. Polytech. Inst. Iași Mach. Constr. Sect, Volumul 68 (72), Numărul 4, 2022, Secţia CONSTRUCŢII DE MAŞINI **20.** Ilhan Mehmet , Dragoș Florin Chitariu, Cătălin Gabriel Dumitraș, STUDY UPON CYLINDRICAL ROLLER BEARING PROFILE OPTIMISATION USING FEA, Bull. Polytech. Inst. Iași Mach. Constr. Sect, Volumul 68 (72), Numărul 2, 2022, Secţia CONSTRUCŢII DE MAŞINI, DOI:10.2478/bipcm-2022-0018. **21.** Florin-Daniel Eduțanu, Mariana Ciorap, Lucian-Claudiu Grigoruță, Dragoș-Florin Chitariu, Ionuț Alin Bejenaru si Gabriel Signeanu - A systematic review of the principles of industry 4.0 , Buletinul Institutului Politehnic din Iaşi, publicat de Universitatea Tehnică „Gheorghe Asachi” din Iaşi, Volumul 71 (75), Numărul 2, 2025, Secţia Construcţii de Maşini, pag. 47-67, DOI: 10.2478/bipcm-2025-0017. **22.** F.-D. Edutanu, M. Ciorap, D.-F. Chitariu, Pillars of the industry 5.0 used in industrial engineering, Buletinul Institutului Politehnic din Iaşi, publicat de Universitatea Tehnică „Gheorghe Asachi” din Iaşi, Volumul 70 (74), Numărul 1, 2024, Secţia Construcţii de Maşini, pag. 47-67, DOI: 10.2478/bipcm-2024-0003. **23.** *M. Moruz, M. Ilea, M. Ciorap, D. Andrițoi, G. Iftimie, R. Ciorap,* Assessment of balance rehabilitation using an IoT force platform, World Wide Journal of Multidisciplinary Research and Development, 2023, vol 9, nr. 5, pag. 47-51. **24.** V.F. Hrib, F. Chifan, M. Ciorap, C G Dumitraș, An Study Regarding A New Concept Of 3d Printing Using A 6 Axis Industrial Robotic Arm, Buletinul Institutului Politehnic din Iaşi, Universitatea Tehnică „Gheorghe Asachi” din Iaşi. Vol. 69 (73), No. 3, 2023 Secţia CONSTRUCŢII DE MAŞINI DOI:10.2478/bipcm-2023-0026 **25.** M Ciorap, D Gures, C G Dumitraş, A Computer Aided Design Software Comparative Study with Applications in Industry 4.0–Smart Manufacturing, Buletinul Institutului Politehnic din Iaşi, Secţia CONSTRUCŢII DE MAŞINI Volumul 68 (72), Numărul 1, pag.47-68, 2022, doi.org/10.2478/bipcm-2022-0004 **26.** Chiriac, G.G., Prodan-Chiriac, G., Dumitraș, C.G., Chitariu, D.F., Bumbu, N.-E., Oancea, L. 2024. Evaluating Joule Heating Effects and Electrical Current Flow Through Copper Layers Inside PCB Using Finite Element Analysis. Buletinul Institutului Politehnic din Iași, Secția Construcții de Mașini, Universitatea Tehnică „Gheorghe Asachi” din Iași. **27.** Chiriac, G.G., Prodan-Chiriac, G., Dumitraș, C.G., Chitariu, D.F., Bumbu, N.-E., Oancea, L. 2024. PCB Copper Traces Stress Due to Thermal Expansion Caused by Joule Heating Effect. Buletinul Institutului Politehnic din Iași, Secția Construcții de Mașini, Universitatea Tehnică „Gheorghe Asachi” din Iași. **28.** Chiriac, G.G., Dumitraș, C.G., Mertic, I. 2023. A study on the influence of thermal interface material in passively cooled electrical components with attached heatsink. Buletinul Institutului Politehnic din Iași. 69 (73), 1. **29.** Chiriac, G.G., Dumitraș, C.G. 2021. Optimization of automotive cooling systems characteristics using finite element analysis. MATEC Web Conf. 343 04001.

		30. Bumbu, N.E.; Horodinca, M. (2023) An Approach on the Description of a Flat Driving Belt Behaviour Mirrored in Transmitted Mechanical Power, International Journal of Modern Manufacturing Technologies,2023, 15 (2),7-19. Revistă indexată BDI (Index Copernicus). **31.** Khdair, M.;, Constantin-Gheorghe Mihai, C.G.;Bumbu, N.E., Horodincă, M. (2023) Improving Instantaneous Angular Speed Monitoring by Means of Sinusoidal Emf Signals Delivered by a Two-Phase N Poles AC Generator Used as a Sensor. Bulletin of the Polytechnic Institute of Iași. Machine constructions Section, Vol.69 (Issue 3), pp. 69-83. Revistă indexată BDI (Index Copernicus). **32.** Horodinca, M. (2023). A Study on Tool Path Generation in 2D ContourMilling of Cycloidal Discs and Rings Used in Cycloidal Reducers, Bulletin of the Polytechnic Institute of Iași. Machine constructions Section, Vol.69 (Issue 1), pp. 19-35. Revistă indexată BDI (Index Copernicus). **33.** Bumbu N. and Horodincă M. (2022) A Study on the Evolution of the Supplying Current Absorbed By an AC Driving Motor During a Transient Regime on a Lathe Headstock Gearbox. Bulletin of the Polytechnic Institute of Iași. Machine constructions Section, Vol.68 (Issue 1), pp. 25-34. Revistă BDI (30/2=15 puncte). Revistă indexată BDI (Index Copernicus). **34.** Bumbu N. and Horodincă M. (2022) A Study on the Dynamics of an AC Induction Motor Rotor Based on the Analysis of Free Response at Impulse Excitation. Bulletin of the Polytechnic Institute of Iași. Machine constructions Section, Vol.68 (Issue 3), pp. 57-74. Revistă BDI (30/2=15 puncte). Revistă indexată BDI (Index Copernicus). **35.** Horodincă M.,Bumbu E.,Munteanu A.,Chitariu D. and Chifan F. (2022) A Study on the Synthesis of 2D Profiles for Cycloidal Discs Used in Cycloidal Reducers. Bulletin of the Polytechnic Institute of Iași. Machine constructions Section, Vol.68 (Issue 4), pp. 65-84. Revistă indexată BDI (Index Copernicus). **36.** Horodincă M., Bumbu E.,Chitariu D.,Munteanu A.,Chifan F. and Frigura G. (2022) A Study of 2D Profile for a Cycloidal Ring Used in a Cycloidal Reducer. Bulletin of the Polytechnic Institute of Iași. Machine constructions Section, Vol.68 (Issue 4), pp. 85-100. Revistă indexată BDI (Index Copernicus). **37.** Mihai Boca, Mihaita Horodinca, (2020), The possibilities to use a signal for describing the elastic deflection behaviour of a workpiece processed by turning, International Journal of Modern Manufacturing Technologies, Vol. XII, No. 2 / 2020, pp. 17-22 (Scopus, Index Copernicus). **38.** Mihăiţă Horodincă (2020) An approach on simulation of involute tooth profile used on cylindrical gears, BULETINUL INSTITUTULUI POLITEHNIC DIN IAŞI, Publicat de Universitatea Tehnică „Gheorghe Asachi” din Iaşi, Volumul 66(70), Numărul 2, 2020, pag. 21-35, Secţia CONSTRUCŢII DE MAŞINI, Revistă indexată BDI (Index Copernicus). **39.** Mihăiţă Horodincă (2020) An approach on simulation of sine gear profile used on cylindrical gears, BULETINUL INSTITUTULUI POLITEHNIC DIN IAŞI, Publicat de Universitatea Tehnică „Gheorghe Asachi” din Iaşi, Volumul 66(70), Numărul 2, 2020, pag. 37-52, Secţia CONSTRUCŢII DE MAŞINI, Revistă indexată BDI (Index Copernicus). **40.** Andreea Mădălina Pană, Bruno Rădulescu, Mara Cristina Rădulescu, Adriana Munteanu, Andrei Marius Mihalache, Adelina Hrițuc, Laurențiu Slătineanu, Selecting A Device Solution For Assessing The Circularity Deviation Of A Disc-Type Part, Journal Proceedings in Manufacturing Systems, Volume 19, Issue 1, 2024, 35-42, ISSN 2067-9238, INDEX COPERNICUS **41.** Munteanu Adriana, Păduraru Emilian, Cioată Florentin, Ciobanu Maria, Morphological Matrices Application in Case of Location-Positioning Devices with Tiltable Plate, BULETINUL INSTITUTULUI POLITEHNIC DIN IAŞI Publicat de Universitatea Tehnică „Gheorghe Asachi” din Iaşi Volumul 69 (73), Numărul 1, 2023 Secţia CONSTRUCŢII DE MAŞINI DOI:10.2478/bipcm-2023-0009 **42.** Constantin-Gheorghe Mihai, Mohammed Khdair, Adriana Munteanu, Mihaita Horodinca, Converting a Linear Accelerometer Into a Velocity and Displacement Sensor by Means of Indefinite Numerical integration. Experimental Approach, https://doi.org/10.2478/9788367405799-010, THE XXVIII-th INTERNATIONAL CONFERENCE of INVENTICS "INVENTICA 2024" Proceedings, Indexata EBSCO, ExLibris, Google Scholar **43.** Emilian Păduraru, Adriana Munteanu, Florin Chifan, The Pugh Matrix Application in Case of Robot Grippers, THE XXVIII-th INTERNATIONAL CONFERENCE of INVENTICS "INVENTICA 2024" Proceedings, 978-83-67405-79-9, https://doi.org/10.2478/9788367405799-002, EBSCO, Google Books, Google Scholar **44.** Dragoș Florin Chitariu, Adriana Munteanu, The Role Of Ai In Mechanical Engineering Design, THE XXVIII-th INTERNATIONAL CONFERENCE of INVENTICS "INVENTICA 2024"

		Proceedings, https://doi.org/10.2478/9788367405799-013, Indexata EBSCO, ExLibris, Google Scholar **45.** Seghedin N. E., Chitariu D.F. Munteanu A., Bocăneț AM, Informatics System For Intellectual Property Rights Protection In The Technological Fixtures Domain, The 16th International Scientific Conference eLearning and Software for Education, Bucharest, ISSN: 2066 - 026X, Nr.1,pag. 597-602, Indexat EBSCO, 2020 **46.** B RADULESCU MC Radulescu THE VARIATION OF TEMPERATURE WITH THE HEIGHTS OF 3D PRINTED ABS PARTS 2023 buletinul institutului politehnic iasi. Sectiunea Constructii de Masini, Volum 69 (2023) Issue 1 (Martie 2023) **47.** B RADULESCU MC Radulescu EMPLOYING HIGH SPEED MACHINING ON A COMPLEX PART 2023 buletinul institutului politehnic iasi. Sectiunea Constructii de Masini, Volum 69 (2023) Issue 2 (Iunie 2023) **48.** B RADULESCU A Pana, MC Radulescu, A Hrituc, A Munteanu, A Mihalache, O Dodun, G Nagit, L Slatineanu Evaluation on a lathe of circularity deviation and factors that could affect its measurement accuracy, Proceedings in Manufacturing Systems, Volumul 18, Nr 1 pp 13-18, 2023 **49.** B Radulescu, L Slatineanu, MC Radulescu, A Hrituc Surface roughness when turning one sheeted revolution hyperboloid surface Proceedings in Manufacturing Systems, Volumul 17, Nr 1 pp 17-22 2022 **50.** B RADULESCU MC Radulescu HUMAN EXPERIENCE IN HSM VERSUS AI IN HSM 2023 buletinul institutului politehnic iasi. Sectiunea Constructii de Masini Volum 69 Issue 3 (Ianuarie 2024) DOI 10.2478/bipcm-2023-0027 **51.** MC RADULESCU B Radulescu Simulation-of-a-CNC-Machining-Program 2022 buletinul institutului politehnic iasi. Sectiunea Constructii de Masini Volum 68 Issue 4 (Februarie 2023) DOI: 10.2478/bipcm-2022-0040 **52.** B RADULESCU MC Radulescu Employng-Reworking-Areas-to-Reduce-the-Cost buletinul institutului politehnic iasi. Sectiunea Constructii de Masini, Volum 67 Issue 1 (Februarie 2021) DOI: 10.2478/bipcm-2022-0039 **53.** B RADULESCU MC Radulescu Taguchis-Method-Implemented-for-Wind-Blade-Design 2021 buletinul institutului politehnic iasi. Sectiunea Constructii de Masini, Volum 67 Issue 1 (Martie 2021) DOI: 10.2478/bipcm-2021-0004 **54.** B RADULESCU MC Radulescu Cost-Structure-for-a-Small-Mechanical-Company 2021 buletinul institutului politehnic iasi Sectiunea Constructii de Masini,Volumul 67 Issue 4 (Decembrie 2021) **55.** B RADULESCU MC Radulescu Employing the Technique of Experimental Plans for a Wind Blade Design 2020 buletinul institutului politehnic iasi Sectiunea Constructii de Masini, Volum 66 Issue 1 (Martie 2020) **56.** MC RADULESCU B Radulescu Ortogonal Experimental Plans for a Wind Turbine Blade Design 2020 buletinul institutului politehnic iasi. Sectiunea Constructii de Masini, Volumul 66, Issue 1 (martie 2020) **57.** B RADULESCU MC Radulescu The Process of Generating Complex Shapes 2017 buletinul institutului politehnic iasi. Sectiunea Constructii de Masini, Volumul 63 Issue 2 (Noiembrie 2017) **58.** MC RADULESCU B Radulescu Machining Complex Shape 2017 buletinul institutului politehnic iasi. Sectiunea Constructii de Masini, Volumul 63 Issue 2 (Noiembrie 2017) **59.** B RADULESCU MC Radulescu The Small-Medium Enterprises Role in the Romanian Economy 2016 buletinul institutului politehnic iasi Sectiunea Constructii de Masini, Volumul 62 Issue 3 (Octombrie 2016) **60.** MC RADULESCU B Radulescu Example of a Expert System Used in Engineering Design 2016 buletinul institutului politehnic iasi, Sectiunea Constructii de Masini, Volumul 62, Issue 3 (Octombrie 2016) **61.** MC RADULESCU B Radulescu Optimizing Tools Diameters and Tool Path Style to Improve Time Machining 2015 buletinul institutului politehnic iasi Sectiunea Constructii de Masini, Volumul 61 Issue 4 (Octombrie 2015) **62.** B RADULESCU MC Radulescu Specific Conditions of Using Milling Inserts 2014 buletinul institutului politehnic iasi Sectiunea Constructii de Masini, Volumul 60 Issue 1 (Octombrie 2013) **63.** B RADULESCU MC Radulescu Investment and decision elements for thermal or water jet cutting machine, Sectiunea Constructii de Masini, Volumul 60 Issue 1 (Octombrie 2013)

		64. Dimitrie-Cristian Fodor, Neculai-Eugen Seghedin, PROTEZAREA AMPUTAȚILOR: ASPECTE ISTORICE DIN PERSPECTIVA RĂZBOIULUI ȘI A MEDICINEI MILITARE (AMPUTEE PROSTHETICS: HISTORICAL ASPECTS FROM THE PERSPECTIVE OF WAR AND MILITARY MEDICINE), Scientific Journal of the Romanian Committee for History and Philosophy of Science and Technology, TOME I (XLI), NO. 1-2, 2022 (publicat și apărut în 2023), Editura Academiei Române (https://noesis.crifst.ro/wp-content/uploads/noesis-1-2-2022_II.pdf). **65.** SEGHEDIN N., Cristofor I. Simionescu – un slujitor al altarului națiunii. Revista Academica, decembrie, 2022. **66.** M. Hammad, A. Amin, C. Ursu, I. Rosca, D. Peptanariu, L. Qian, V. Nica, S. Hardt, H. Wiggers, D. Segets, Hierarchical assembly of iron-oxide supraparticles for enhanced photothermal antibacterial activity, Colloid and Interface Science Communications 67, 2025, 100843, DOI10.1016/j.colcom.2025.100843 **67.** M. Damoc, C. Ursu, V. Tiron, G. Bulai, A. Stoica, A. Macsim, C.Varganici, A. Bele, M. Dascalu, M. Cazacu, Thermal Actuators Relying on Elastomer-Dispersed Liquid Crystals: From Imines with Supramolecular Chirality and Ferroelectricity to Soft Robots, ACS Appl. Mater. Inter-faces 2025, 17, 4185, DOI10.1021/acsami.4c18088 **68.** C. Ursu, A.-M. Resmerita, R.I. Tigoianu, A. Farcas, Aromatic Co-polyazomethine polyrotaxane with enhanced solubility applied as a hole carrier in ap–n heterojunction diode. ACS Appl. Polym. Mater. 6, 14872–14884, 2024, DOI10.1021/acsapm.4c03090. **69.** Sardaru, M.-C.; Rosca, I.; Ursu, C.; Dascalu, I.-A.; Ursu, E.-L.; Morariu, S.; Rotaru, A., Photothermal Hydrogel Composites Featuring G4-Carbon Nanomaterial Networks for Staphylococcus aureus Inhibition, ACS OMEGA 9, 2024; DOI: 10.1021/acsomega.3c07724 **70.** Stoica, I.; Barzic, A.I.; Ursu, C.; Stoian, G.; Hitruc, E.G.; Sava, I., Atomic Force Microscopy Probing and Analysis of Polyimide Supramolecular Systems for Sensor Devices, SENSORS 23, 2023; https://doi.org/10.3390/s23094489 **71.** Barzic, A.I.; Sava, I.; Albu, R.M.; Ursu, C.; Lisa, G.; Stoica, I. Polyimide-Derived Supramolecular Systems Containing Various Amounts of Azochromophore for Optical Storage Uses, POLYMERS 15, 2023; https://doi.org/10.3390/polym15041056 **72.** Rusu, B.-G.; Ursu, C.; Olaru, M.; Barboiu, M. Frequency-Tuned Porous Polyethylene Glycol Films Obtained in Atmospheric-Pressure Dielectric Barrier Discharge (DBD) Plasma, APPL. SCI. 13, 2023; https://doi.org/10.3390/app13031785 **73.** Ursu, C; Nica, P; Rusu, G.; Vitelaru, C.; Popa, G. and Focsa, C.; Laser absorption spectroscopy on a transient aluminum plasma generated by excimer laser ablation, SPECTROCHIM. ACTA, PART B 196, 2022; https://doi.org/10.1016/j.sab.2022.106510 **74.** Nica, P.-E.; Ursu, C.; Focsa, C.; Long-range oscillations of a laser-produced carbon plasma recorded by an electrostatic energy analyzer, JOURNAL OF APPLIED PHYSICS 129, 2021; DOI10.1063/5.0031275. **75.** Nica, P.; Ursu, C. and Focsa, C.; Electrical characterization of carbon plasma generated by excimer laser ablation of graphite, APPLIED SURFACE SCIENCE 540, 2021, DOI10.1016/j.apsusc.2020.148412. **76.** M. Murariu, A.-V. Oancea, C. Ursu, G. Rusu, C. Cotofana, B. Simionescu, M. Olaru, Chapter 20 - Surface properties of POSS nanocomposites, Editor(s): Sabu Thomas, Lakshmipriya Somasekharan, Polyhedral Oligomeric Silsesquioxane (POSS) Polymer Nanocomposites, Elsevier, 2021, 421-448, ISBN 9780128213476, https://doi.org/10.1016/B978-0-12-821347-6.00002-0. **77.** Racles, C; Ursu, C; Dascalu, M; Asandulesa, M; Tiron, V; Bele, A; Tugui, C; Teodoroff-Onesim, S; Multi-stimuli responsive free-standing films of DR1-grafted silicones, CHEMICAL ENGINEERING JOURNAL 401, 2020, DOI10.1016/j.cej.2020.126087 **78.** Nica, P.E. and Ursu, C.; Formation mechanisms of carbon dimer in excimer laser produced plasma, EUROPEAN PHYSICAL JOURNAL D 74, 2020, DOI10.1140/epjd/e2020-10362-6 **79.** Lipsa, F. D.; Ursu, E. L.; Ursu, C.; Ulea, E.; Cazacu, A.; Evaluation of the Antifungal Activity of Gold-Chitosan and Carbon Nanoparticles on Fusarium oxysporum, AGRONOMY-BASEL 10, 2073-4395, 2020, DOI10.3390/agronomy10081143. **80.** Shova, S.; Vlad, A.; Damoc, M.; Tiron, V.; Dascalu, M.; Novitchi, G.; Ursu, C.; Cazacu, M.; Nanoscale Coordination Polymer of Dimanganese(II) as Infinite, Flexible Nanosheets with Photo-Switchable Morphology, EUROPEAN JOURNAL OF INORGANIC CHEMISTRY 2020, 2043-2054, 2020, DOI10.1002/ejic.202000098.

		81. Nica, P.-E.; Ursu, C.; Focsa, C.; Long-range oscillations of a laser-produced carbon plasma recorded by an electrostatic energy analyzer, JOURNAL OF APPLIED PHYSICS 129, 2021; DOI10.1063/5.0031275. **82.** Nica, P.; Ursu, C. and Focsa, C.; Electrical characterization of carbon plasma generated by excimer laser ablation of graphite, APPLIED SURFACE SCIENCE 540, 2021, DOI10.1016/j.apsusc.2020.148412. **83.** M. Murariu, A.-V. Oancea, C. Ursu, G. Rusu, C. Cotofana, B. Simionescu, M. Olaru, Chapter 20 - Surface properties of POSS nanocomposites, Editor(s): Sabu Thomas, Lakshmipriya Somasekharan, Polyhedral Oligomeric Silsesquioxane (POSS) Polymer Nanocomposites, Elsevier, 2021, 421-448, ISBN 9780128213476, https://doi.org/10.1016/B978-0-12-821347-6.00002-0. **84.** Racles, C; Ursu, C; Dascalu, M; Asandulesa, M; Tiron, V; Bele, A; Tugui, C; Teodoroff-Onesim, S; Multi-stimuli responsive free-standing films of DR1-grafted silicones, CHEMICAL ENGINEERING JOURNAL 401, 2020, DOI10.1016/j.cej.2020.126087 **85.** Nica, P.E. and Ursu, C.; Formation mechanisms of carbon dimer in excimer laser produced plasma, EUROPEAN PHYSICAL JOURNAL D 74, 2020, DOI10.1140/epjd/e2020-10362-6 **86.** Lipsa, F. D.; Ursu, E. L.; Ursu, C.; Ulea, E.; Cazacu, A.; Evaluation of the Antifungal Activity of Gold-Chitosan and Carbon Nanoparticles on Fusarium oxysporum, AGRONOMY-BASEL 10, 2073-4395, 2020, DOI10.3390/agronomy10081143. **87.** Shova, S.; Vlad, A.; Damoc, M.; Tiron, V.; Dascalu, M.; Novitchi, G.; Ursu, C.; Cazacu, M.; Nanoscale Coordination Polymer of Dimanganese(II) as Infinite, Flexible Nanosheets with Photo-Switchable Morphology, EUROPEAN JOURNAL OF INORGANIC CHEMISTRY 2020, 2043-2054, 2020, DOI10.1002/ejic.202000098.
3.	Brevete	1. Seghedin N., Chitariu Dragoș, Zetu Irina, RO131347B1/ Dispozitiv pentru măsurarea forțelor de frecare fir-bracket din aparatele ortodontice, RO131347B1/2024 2. Seghedin N., Chitariu Dragoș, Dispozitiv pentru măsurarea forțelor șl momentelor de așchiere la prelucrarea cu bare de alezat, RO133578 B1/2024 3. Bocăneţ Ana Maria; Chitariu Dragoş-Florin; Păduraru Emilian, Brevet RO 132975 B1, Echipamente pentru sfărmarea-compactarea așchiilor și separarea-colectarea lichidului de răcire ungere de la mașina-unealtă din 30.08.2023. 4.Cioata Florentin, **Munteanu Adriana,** Dispozitiv portabil pentru controlul concentricitatii si coaxialitatii suprafetelor cilindrice interioare, Oficiul de Stat pentru Inventii şi Marci, nr.133001, 2024

56. E. Paduraru, C.G.Dumitras, D. Fl. Chitariu, M. Horodinca, Fl. Chifan, *Research on Additive Technique Parameter Optimization for Robotic Gripper Construction,* Machines, 11(6), 621, (2023), doi.org/10.3390/machines11060621(revista cotată ISI - factor de impact: 2,6– zona galbenă)

57. C. G. Lates, C G Dumitras, P. Vizureanu, A. V. Sandu, *Heat Transfer Optimization of an Electronic Control Unit Immersed in Forced Liquid Coolant*, Applied Sciences, 13(9), 5310, (2023), https://doi.org/10.3390/app13095310 (revista cotată ISI - factor de impact: 2,7– zona galbenă)

58. I. Craciun, T. Agache, C. G. Dumitras, *Analysis and economic strategies regarding the reduction of preventive maintenance costs*, Acta Technica Napocensis-Series: Applied Mathematics, Mechanics, and Engineering, Vol 65, No 4S, (2022), (revista cotată ISI - factor de impact: 0,07– zona gri

59. C.G. Chiriac, C.G. Dumitraș, D. F. Chitariu , P. Vizureanu, S.V. Andrei, *Influence of Gravity on Passively Cooled Heat Sink Using Experimental Data and Finite Element Analys,* Processes, 11(3), 896, (2023), https://doi.org/10.3390/pr11030896

60. V. Ghizdovat, E. Nazaretian, C. G. Dumitras, M. Agop, C. Placinta, C. Buzea, C. M. Rusu, D. Vasincu, Z. Borsos,*Correlative Dynamics of Complex Systems: A Multifractal Perspective of Motion Based on SL (2R) Symmetry*, Symmetry, 17(1), 27, 2024, DOI: 10.3390/sym17010027

61. M. Sha’at, M. Ignat, L. Sacarescu, A. Fl. Spac, Al. Barsan, V. Ghizdovat, E. Nazaretian, C. G. Dumitras, M. Agop, C. M. Rusu, L. Ochiuz ,*Multifractal Analysis and Experimental Evaluation of MCM-48 Mesoporous Silica as a Drug Delivery System for Metformin Hydrochloride,* Biomedicines, 12(12), 2838, 2024, DOI: 10.3390/biomedicines12122838

62. *D.Fl. CHITARIU, T.M. AGACHE, C.G. DUMITRAS, M. HORODINCĂ, Fl.D. EDUTANU, George-Gabriel CHIRIAC, Experimental Research On Positioning Accuracy Of Educational Robots,* ACTA TECHNICA NAPOCENSIS - Series: APPLIED MATHEMATICS, MECHANICS, And ENGINEERING, vol. 67, Issue 2s, 595-602, 2024,

63. D.-Fl. Chitariu, M. Horodinca, C.-Gh. Mihai, N.-E. Bumbu, C. G. Dumitras, N.-E. Seghedin, Fl.-D. Edutanu, *Condition Monitoring of a Three-Phase AC Asynchronous Motor Based on the Analysis of the Instantaneous Active Electrical Power in No-Load Tests*, *Appl. Sci.* , *14*(14), 6124, 2024; https://doi.org/10.3390/app14146124

64. D.-Fl. Chitariu, M. Ilhan, C.G. Dumitras, Fl.-D. Edutanu, F.-V. Hrib, M. Horodincă, *Research On Measurement Of Elastic Roller Deformations In Roller Bearings By Image Correlation Method,* ACTA TECHNICA NAPOCENSIS - Series: APPLIED MATHEMATICS, MECHANICS, And ENGINEERING, vol. 67, Issue 1s, 267-274, 2024,

65. M. Horodinca, Fl. Chifan, E. Paduraru, C. G. Dumitras, A. Munteanu, D.-Fl. Chitariu, *A Study of 2D Roughness Periodical Profiles on a Flat Surface Generated by Milling with a Ball Nose End Mill, Materials* , *17(*6), 1425, 2024; https://doi.org/10.3390/ma17061425

66. St Agop, M-Al. Paun, C. Bejinariu, T.-C. Petrescu, C. M. Rusu, A. M. Cazac, C. G. Dumitras, A. C. Hanganu, V.-Al. Paun, M. Agop, V.-P. Paun, *Constitutive Material Laws In The Multifractal Theory Of Motion (Part II),* UPB Scientific Bulletin, Series A: Applied Mathematics and Physics, vol 86, Issue 1, pp 137-150, 2024, ISSN 1223-7027

67. G-G Chiriac, C G Dumitraș, D Fl Chitariu, P Vizureanu, A V Sandu, *Influence of Gravity on Passively Cooled Heat Sink Using Experimental Data and Finite Element Analysis, Processes,* , *11*(3), 896, 2023; https://doi.org/10.3390/pr11030896 (revista cotată ISI - factor de impact: 3,352– zona galbenă)

68. M. Horodinca, N-E Bumbu, D-Fl. Chitariu, A. Munteanu, C.G. Dumitras, Fl. Negoescu, C-Gh. Mihai, *On The Behaviour Of An AC Induction Motor As Sensor For Condition Monitoring Of Driven Rotary Machines*, *Sensors*, *23*(1), 488, 2023; https://doi.org/10.3390/s23010488(revista cotată ISI - factor de impact: 3,847– zona galbenă)

69. Șt. Agop, M-Al. Paun, C.G Dumitras, M. Frasila, V-Al. Paun, M. Agop, V-P. Paun, G. Ștefan, *On A Special Symmetry In The Dynamics Of Complex Systems In A Holographic-Type Perspective*, U.P.B. Sci. Bull., Series A, Vol. 85, Iss. 1, pp. 178-188, 2023, ISSN 1223-7027

70. M. Frasila, M.-Al. Paun, C.G. Dumitras, V. Ghizdovat, C. M. Rusu, V.-Al. Paun, M. Agop, V.-P. Paun, *Some Physical Implications Of Absolute Geometries In The Description Of Complex Systems Dynamics,* U.P.B. Sci. Bull., Series A, Vol. 85, Iss. 2, p. 125-138, 2023, ISSN 1223-7027

71. E. Paduraru, C.G.Dumitras, D. Fl. Chitariu, M. Horodinca, Fl. Chifan, *Research on Additive Technique Parameter Optimization for Robotic Gripper Construction,* Machines, 11(6), 621, (2023), doi.org/10.3390/machines11060621(revista cotată ISI - factor de impact: 2,6– zona galbenă)

72. C. G. Lates, C G Dumitras, P. Vizureanu, A. V. Sandu, *Heat Transfer Optimization of an Electronic Control Unit Immersed in Forced Liquid Coolant*, Applied Sciences, 13(9), 5310, (2023), https://doi.org/10.3390/app13095310 (revista cotată ISI - factor de impact: 2,7– zona galbenă)

73. I. Craciun, T. Agache, C. G. Dumitras, *Analysis and economic strategies regarding the reduction of preventive*