

A8. Articole indexate WOS/ISI/ERIH cu factor de impact

1. Cristina Elena DODU, Mircea ANCĂU, An efficient algorithm for lot permutation flow shop scheduling problem, Proceedings of the Romanian Academy - Series A, 2021 (Zona alba); https://academiaromana.ro/sectii2002/proceedings/doc2021-IP/ip02/ip_ts10_Dodu_Ancau.pdf;
2. Ancău, M. Viral mutation-inspired evolutionary algorithm for permutation flowshop scheduling, Journal of Intelligent Manufacturing, (2024). (<https://doi.org/10.1007/s10845-024-02551-8>). (Zona rosie)
3. Tucan, Paul, Calin Vaida, Ionut Ulinici, Alexandru Banica, Alin Burz, Nicoleta Pop, Iosif Birlescu, Bogdan Gherman, Nicolae Plitea, Tiberiu Antal, Giuseppe Carbone, and Doina Pisla. 2021. "Optimization of the ASPIRE Spherical Parallel Rehabilitation Robot Based on Its Clinical Evaluation" International Journal of Environmental Research and Public Health 18, no. 6: 3281. <https://doi.org/10.3390/ijerph18063281>. ISI (4.614 - Q2 in 2021).
4. Pisla, Doina, Iuliu Nadas, Paul Tucan, Stefan Albert, Giuseppe Carbone, Tiberiu Antal, Alexandru Banica, and Bogdan Gherman. Development of a Control System and Functional Validation of a Parallel Robot for Lower Limb Rehabilitation. 2021. Actuators 10, no. 10: 277. <https://doi.org/10.3390/act10100277>, (ISI - 2.523 - Q2 in 2021)
5. Pisla, Doina, Nadim Al Hajjar, Bogdan Gherman, Corina Radu, Tiberiu Antal, Paul Tucan, Ruxanda Literat, and Calin Vaida. 2023. "Development of a 6-DOF Parallel Robot for Potential Single-Incision Laparoscopic Surgery Application" Machines 11, no. 10: 978. <https://doi.org/10.3390/machines11100978> (Q2 2.1 pe 2023)
6. Leordean Vasile Danut, Cosma Sorin-Cosmin, Balc Nicolae, and Dudescu Mircea Cristian, „Evaluating the Reliability of Powder Bed Fusion for Biomedical Materials: An Experimental Approach”, APPLIED SCIENCES-BASEL, vol. 15, no. 8, 2025. <https://doi.org/10.3390/app15084542>; / FI=2.5 / Q2 /
7. Cosma Sorin-Cosmin, Martin Melichar, Stelian Libu, Popan Ioan Alexandru, Glad Contiu, Cristina Teusan, Petru Berce and Balc Nicolae, „The Effect of Drag Finishing on Additively Manufactured Customized Dental Crowns”, METALS, vol. 15, no. 5, 2025. <https://doi.org/10.3390/met15050471>; / FI=2.5 / Q2 /
8. Stanciu Birlescu A., Vilau Cristian, and Balc Nicolae, „Analysis of the Mechanical Behavior of Tree-like Fractal Structures in SLM-Manufactured Components”, MATERIALS, vol. 18, no. 10, 2025. <https://doi.org/10.3390/ma18102215>; / FI=3.3 / Q2 /
9. Adrienn Matis, Min-Uh Ko, Richard Kraft and Balc Nicolae, „Process Development to Repair Aluminum Components, Using EHLA and Laser-Powder DED Techniques”, Journal Of Manufacturing And Materials Processing, vol. 9, no. 8, 2025. <https://doi.org/10.3390/jmmp9080255>; / FI=3.3 / Q2 /
10. Raul Ionut Riti, Claudiu Ioan Abrudan, Laura Bacali and Balc Nicolae, „Command Redefined: NeuralAdaptive Leadership in the Age of Autonomous Intelligence”, AI, vol. 6, no. 8, 2025. <https://doi.org/10.3390/ai6080176>; / FI=5 / Q1 /
11. Raul Ionut Riti, Abrudan Ioan, Bacali Laura, and Balc Nicolae, „WHO-WHAT-HOW: A Product Operating Model for Agile, Technology-Enabled Digital Transformation”,

ADMINISTRATIVE SCIENCES, vol. 15, no. 9, 2025.
<https://doi.org/10.3390/admsci15090368>; / FI=3.1 / Q2 /

12. Fabian Eichler, Balc Nicolae, Sebastian Bremen, and Julius Sauren, „Influence of Adjusted Melt Pool Geometries on Residual Stress in 316L LPBF Processes”, METALS, vol. 15, no. 9, 2025. <https://doi.org/10.3390/met15091010>; / FI=2.5 / Q2 /
13. Popan Ioan Alexandru, Cosma Sorin-Cosmin, Luca Alina Ioana, Bocanet Vlad Ioan, and Balc Nicolae, „Monitoring Equipment Malfunctions in Composite Material Machining: Acoustic Emission-Based Approach for Abrasive Waterjet Cutting”, APPLIED SCIENCES-BASEL, vol. 14, no. 11, 2024. <https://doi.org/10.3390/app14114901>; / FI=2.5 / Q2 /
14. Eichler F., Balc Nicolae, Bremen S., and Nink P., „Investigation of Laser Powder Bed Fusion Parameters with Respect to Their Influence on the Thermal Conductivity of 316L Samples”, Journal Of Manufacturing And Materials Processing, vol. 8, no. 4, 2024. <https://doi.org/10.3390/jmmp8040166>; / FI=3.3 / Q2 /
15. Popan Ioan Alexandru, Bocanet Vlad Ioan, Softic S., Luca Alina Ioana, Panc Nicolae Alin, and Balc Nicolae, „Artificial Intelligence Model Used for Optimizing Abrasive Water Jet Machining Parameters to Minimize Delamination in Carbon Fiber-Reinforced Polymer”, APPLIED SCIENCES-BASEL, vol. 14, no. 18, 2024. <https://doi.org/10.3390/app14188512>; FI=2.5 / Q2 /
16. Christian Nosner, Cosma Sorin-Cosmin, Contiu Glad, Petru Berce, and Balc Nicolae, „Design Of Customized Implant SLM Manufactured”, Acta Technica Napocensis Series-Applied Mathematics Mechanics And Engineering, vol. 67, no. 1, pp. 451-460, 2024; FI=0.2 /
17. Adrienn Matis and Balc Nicolae, „Industrial Implementation Of Hybrid Manufacturing For Repair”, Acta Technica Napocensis Series-Applied Mathematics Mechanics And Engineering, vol. 67, no. 1, pp. 29-36, 2024; FI=0.2 /
18. Angela Luft, Balc Nicolae, and Sebastian Bremen, „Experts' Perspectives on the Adoption Of Additive Manufacturing in the Industry and its Interrelated Implications in Production Structures”, Acta Technica Napocensis Series-Applied Mathematics Mechanics And Engineering, vol. 67, no. 1, pp. 159-166, 2024; FI=0.2 /
19. Anca Stanciu-birlescu, Vilau Cristian, Ioan Voina, Christian Noesner, and Balc Nicolae, „Mechanical properties evaluation of the samples made by SLM, with tree-like fractals internal structure”, Acta Technica Napocensis Series-Applied Mathematics Mechanics And Engineering, vol. 67, no. 1, 2024; FI=0.2 /
20. Tunc L.T., Sheikhi M., Moldovan Catalin Ionut, Gutiu E., and Balc Nicolae, „Non-planar 5-axis directional additive manufacturing of plastics: machine, process, and tool path”, Manufacturing Letters, vol. 41, pp. 951-956, 2024. <https://doi.org/10.1016/j.mfglet.2024.09.119>; // FI=2 / Q3 /
21. Fabian Eichler, Balc Nicolae, Sebastian Bremen, Markus Schleser, and Alexander Schwarz, „Research on reducing residual stresses of SLM parts made for downstream welding process”, Acta Technica Napocensis Series-Applied Mathematics Mechanics And Engineering, vol. 67, no. 1, pp. 69-78, 2024; FI=0.2
22. Karim Abbas, Balc Nicolae, Sebastian Bremen, and Lukas Hedwig, „Polyetheretherketone (PEEK) In Rapid Tooling: Advancements and Applications for Fused Filament Fabrication of

- Rubber Molds”, *Acta Technica Napocensis Series-Applied Mathematics Mechanics and Engineering*, vol. 67, no. 1, pp. 13-22, 2024; **FI=0.2 /**
23. Cosma Sorin-Cosmin, Apostu D., Vilau Cristian, Popan Ioan Alexandru, Oltean-Dan D., Balc Nicolae, Tomoaie G., and Benea H. „Finite Element Analysis of Different Osseocartilaginous Reconstruction Techniques in Animal Model Knees”, *MATERIALS*, vol. 16, no. 7, 2023. <https://doi.org/10.3390/ma16072546>; / FI=3.2 **/ Q2**
 24. Jucan O.D., Gadalean R.V., Chicinas H.F., Balc Nicolae, and Popa Catalin Ovidiu, „The Assessment of the Transversal Rupture Strength (TRS) and Hardness of WC-Co Specimens Made via Additive Manufacturing and Sinter-HIP”, *METALS*, vol. 13, no. 6, 2023. <https://doi.org/10.3390/met13061051>; FI=2.5 **/ Q2**
 25. Cosma Sorin-Cosmin, Raul Ilie, Dudescu Mircea Cristian, Popan Ioan Alexandru, Petru Berce, Stanislaw Legutko, and Balc Nicolae, „Influence of SLM Parameters on CoCr Alloy”, *Acta Technica Napocensis Series-Applied Mathematics Mechanics And Engineering*, vol. 66, no. 2, pp. 215-222, 2023; **FI=0.2 /**
 26. Popan Ioan Alexandru, Cosma Sorin-Cosmin, Luca Alina Ioana, Panc Nicolae Alin, Filip Daniel Dumitru, and Balc Nicolae, „Correction of Shape Error at Cut-In and Cut-Out Points in Abrasive Waterjet Cutting of Carbon Fiber Reinforced Polymer (CFRP)”, *MACHINES*, vol. 11, no. 8, 2023. <https://doi.org/10.3390/machines11080800>; FI=2.5 **/ Q2**
 27. Rusu M., Balc Nicolae, Moldovan M., Cuc S., Petean I., COSMA SORIN-COSMIN, and Leordean Vasile Danut, „Recycled PET Composites Reinforced with Stainless Steel Lattice Structures Made by AM”, *POLYMERS*, vol. 15, no. 23, 2023. <https://doi.org/10.3390/polym15234591>; FI=4.9 **/ Q1**
 28. Stanciu Birlescu A. and Balc Nicolae, „Computational Model for Tree-like Fractals Used as Internal Structures for Additive Manufacturing Parts”, *APPLIED SCIENCES-BASEL*, vol. 13, no. 20, 2023. <https://doi.org/10.3390/app132011187>; FI=2.5 **/ Q2 /**
 29. Abbas K., Hedwig L., Balc Nicolae, and Bremen S., „Advanced FFF of PEEK: Infill Strategies and Material Characteristics for Rapid Tooling”, *POLYMERS*, vol. 15, no. 21, 2023. <https://doi.org/10.3390/polym15214293>; FI=4.9 **/ Q1**
 30. Pascu S. and Balc Nicolae, „Process Parameter Optimization for Hybrid Manufacturing of PLA Components with Improved Surface Quality”, *POLYMERS*, vol. 15, no. 17, 2023. <https://doi.org/10.3390/polym15173610>; FI=4.9 **/ Q1**
 31. Sergiu Pascu, Alexandru Harfas, and Balc Nicolae, „Conceptual Design And Execution Of A Flexible Hybrid Manufacturing System”, *Acta Technica Napocensis Series-Applied Mathematics Mechanics And Engineering*, vol. 66, no. 2, pp. 287-292, 2023; **FI=0.2 /**
 32. Gadalean R.V., Jucan O.-D., Chicinas H.F., Balc Nicolae, and Popa Catalin Ovidiu, „Additive Manufacturing of WC-Co by Indirect Selective Laser Sintering (SLS) Using High Bulk Density Powders”, *Archives Of Metallurgy And Materials*, vol. 67, no. 2, pp. 577-585, 2022. <https://doi.org/10.24425/amm.2022.137793>; / **FI=0.2 / Q4**
 33. Cosma Sorin-Cosmin, Christina Teusan, Peter Gogola, Simion Mihaela, Zuzana Gabalcova, Trif Adrian, Petru Berce, and Balc Nicolae, „Investigation of the Interface between Laser-Melted CoCr and a Stainless Steel Substrate”, *METALS*, vol. 12, no. 6, 2022. <https://doi.org/10.3390/met12060965>; FI=2.5 **/ Q2**

34. Cosma Sorin-Cosmin, Moldovan M., Simion Mihaela, and Balci Nicolae, „Impact of laser parameters on additively manufactured cobalt- chromium restorations”, JOURNAL OF PROSTHETIC DENTISTRY, vol. 128, no. 3, pp. 421-429, 2022. <https://doi.org/10.1016/j.prosdent.2020.11.043>; FI=4.8 / Q1 /
35. Popan Ioan Alexandru, Balci Nicolae, and Luca Alina Ioana, „Avoiding carbon fibre reinforced polymer delamination during abrasive water jet piercing: a new piercing method”, INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY, vol. 119, no. 1-2, pp. 1139-1152, 2022. <https://doi.org/10.1007/s00170-021-08294-7>; FI=3.1 / Q2
36. Abbas K., Balci Nicolae, Bremen S., and Skupin M., „Crystallization and Aging Behavior of Polyetheretherketone PEEK within Rapid Tooling and Rubber Molding”, JOURNAL OF MANUFACTURING AND MATERIALS PROCESSING, vol. 6, no. 5, 2022. <https://doi.org/10.3390/jmmp6050093>; FI=3.3 / Q2
37. Jucan O.D., Gadalean R.V., Chicinas H.F., Hering M., Balci Nicolae, and Popa Catalin Ovidiu, „Study on the indirect selective laser sintering (SLS) of WC-Co/PA12 powders for the manufacturing of cemented carbide parts”, International Journal Of Refractory Metals Hard Materials, vol. 96, 2021. <https://doi.org/10.1016/j.ijrmhm.2021.105498>; / FI=4.8 / Q1 /
38. Luca Alina Ioana, Popan Ioan Alexandru, COSMA SORIN-COSMIN, Ceclan Vasile - Adrian, and Balci Nicolae, „Experimental Study on 3D Printed Parts Made Of Continuous Fiberglass Reinforced Polymer”, Acta Technica Napocensis Series-Applied Mathematics Mechanics And Engineering, vol. 64, no. I, pp. 81-86, 2021; FI=0.2 /
39. Moldovan Catalin Ionut, Cosma Sorin-Cosmin, Nichita-Larisa Milodin, Christina Teusan, Petru Berce, and Balci Nicolae, „Finite Element Analyses of 3D Printed Composite Robot Component”, Acta Technica Napocensis Series-Applied Mathematics Mechanics And Engineering, vol. 64, no. I, pp. 141-152, 2021; FI=0.2
40. Cuc S., Burde A., Cosma Sorin-Cosmin, Leordean Vasile Danut, Rusu M., Balci Nicolae, Prodan D., Moldovan M., and Ene R., „Adhesion between Biocomposites and Different Metallic Structures Additive Manufactured”, COATINGS, vol. 11, no. 4, 2021. <https://doi.org/10.3390/coatings11040483>; FI=2.8 / Q2
41. Pradel P., Campbell R.I., and Balci Nicolae, „A Taxonomy Of Customers' Characteristics Influencing Product Personalisation”, Proceedings Of The Romanian Academy Series Amathematics Physics Technical Sciences Information Science, vol. 22, no. 2, pp. 153-161, 2021; FI=1 / Q3
42. Banabic D., Kami A., Comsa D.S., Eyckens P., Developments of the Marciniak-Kuczynski Model for Sheet Metal Formability: a Review, Journal of Materials Processing Technology (Special Issue in Honor of Prof. Marciniak), 287(2021) 116446 (IF=4.178); (zona rosie)
43. Da-Yong Chen, Yong Xu, Shi-Hong Zhang, Yan Ma, Ali Abd El-Aty, Dorel Banabic, Artur I. Pokrovsky, Alina A. Bakinovskaya, A novel method to evaluate high strain rate formability of sheet metals under impact hydroforming, Journal of Materials Processing Technology, 287(2021), 116553; (IF=4.178) (zona rosie)
44. Lucasz Madej, Dorel Banabic, Professor Zdzisław Marciniak—A life dedicated to metal forming, Journal of Materials Processing Technology, 287(2021), 1168762; (IF=4.178) (zona rosie)

45. Weihao Jiang, Wenlong Xie, Hongwu Song, Lazarescu Lucian, Shihong Zhang, Dorel Banabic, A modified thin-wall tube push-bending process with polyurethane mandrel, International Journal of Advanced Manufacturing Technology, 106(2020), 2509–2521; (IF=2,496). (zona galbena)
46. Weijin Chen, Hongwu Song, Lucian Lazarescu, Yong Xu, Shi-Hong Zhang, Dorel Banabic, Formability analysis of hot-rolled dual-phase steel during the multistage stamping process of wheel disc, International Journal of Advanced Manufacturing Technology, 110(2020), 1563–1573; (IF=2,496). (zona galbena)
47. Johan Pilthammar, Dorel Banabic, Mats Sigvant, BBC05 with Non-Integer Exponent and Ambiguities in Nakajima Yield Surface Calibration, International Journal of Materials Forming, 14(2021), 577-593; (IF= 2.028) (zona galbena)
48. Ozan SINGAR, Dorel BANABIC, Numerical simulation of tailored hybrid blanks, Proc. of the Romanian Academy. Series A, 22(2021), 179-188 (IF=1.294) (zona alba)
49. Hong-wu Song, Wenlong Xie, Shi-Hong Zhang, Weihao Jiang, Lucian Lazarescu, Dorel Banabic, Granular media filler assisted push bending method of thin-walled tubes, International Journal of Mechanical Sciences, 198(2021) 106365; (IF=4,631) (zona rosie)
50. Ma, Y, Chen, SF, Chen, DY, Banabic, D, Song, HW. Xu, Y, Zhang, SH, Fan, XS, Wang, Q. Determination of the forming limit of impact hydroforming by frictionless full zone hydraulic forming test, International Journal of Materials Forming, 14(2021), 1221-1235; (IF= 2.028). (zona galbena)
51. D. Banabic, Petre Frangopol – A fighter in the public arena, Studia UBB Chemia, LXVI (2021), 21-22; (zona alba)
52. W. Xie, W. Jiang, Y. Wu, H. Song, S. Deng, L. Lăzărescu, S. Zhang, D. Banabic, Process parameter optimization for thin-walled tube push-bending using response surface methodology, International Journal of Advanced Manufacturing Technology, 118(2022), 3833 – 3847, DOI: 10.1007/s00170-021-08196-8 (IF=2,496) (zona galbena)
53. Hong□Liang Zhu, Yong Xu, Wei□Jin Chen, Shi□Hong Zhang, Dorel Banabic, Lucian Lăzărescu, Artur I. Pokrovsky, Research on hydroforming through combination of internal and external pressures for manufacturing the structure of double□layer tube with gap, International Journal of Materials Forming, 15 (2022) Article number: 55, DOI 10.1007/s12289-022-01699-z; (IF= 2.378) (zona galbena)
54. J. Yanagimoto, D. Banabic, M. Banu, L. Madej, Simulation of metal forming – Visualization of invisible phenomena in the digital era, CIRP Annals Manufacturing Technology, 71(2022), Vol 2, DOI: 10.1016/j.cirp.2022.05.007; (IF= 3.916) (zona rosie)
55. Han-wei LI, Hong-wu SONG, Shi-hong ZHANG, WAN Li, Chun-li JIA, Xue-ting CHAI, Guo-wei ZHANG, Lucian LĂZĂRESCU, Dorel BANABIC, Operating effect of filler on filling roll bending of integral panel, Transactions of Nonferrous Metals Society of China, 33(2023), 2314-2327 (DOI: 10.1016/S1003-6326(23)66261-2); (IF=4.7). (zona rosie)
56. Birleanu Corina Julieta, Cioaza M., Udrioiu R., Pustan Marius, Bere Petru Paul, Lazarescu Lucian. (2025). Enhanced Tribological and Mechanical Properties of Copper-Modified Basalt-Reinforced Epoxy Composites. POLYMERS, (17)(1). <https://doi.org/10.3390/polym17010091>; Q1

57. Birleanu Corina Julieta, Bere Petru Paul, Pustan Marius. (2025). Impact of CuSn10 Powder on Mechanical Properties and Tribological Performance of Novel Basalt Fiber-Reinforced Hybrid Composites. POLYMERS, (17)(9). <https://doi.org/10.3390/polym17091161>; Q1
58. Birleanu Corina Julieta, Udriou R., Cioaza M., Bere Petru Paul, Pustan Marius. (2025). Tribomechanical Analysis and Performance Optimization of Sustainable Basalt Fiber Polymer Composites for Engineering Applications. TECHNOLOGIES, (13)(6). <https://doi.org/10.3390/technologies13060249>; Q1
59. Mihai Parparita, Bere Petru Paul, Mircea Cioaza. (2025). A Novel Method for Manufacturing Molds for CFRP Prepreg Lamination Using Polymeric Acrylic Resin-Aluminum Trihydrate. Journal Of Manufacturing And Materials Processing, (9)(6). <https://doi.org/10.3390/jmmp9060195>; Q2
60. Zach T.F., Dudescu M.C., Bere Petru Paul. (2025). High-Temperature Tensile Performance of Fused Filament Fabricated Discontinuous Carbon Fiber-Reinforced Polyamide. POLYMERS, (17)(13). <https://doi.org/10.3390/polym17131732>; Q1
61. Birleanu Corina Julieta, Udriou R., Cioaza M., Bere Petru Paul, Pustan Marius. (2025). Basalt vs. Glass Fiber-Reinforced Polymers: A Statistical Comparison of Tribological Performance Under Dry Sliding Conditions. Journal Of Composites Science, (9)(8). <https://doi.org/10.3390/jcs9080444>; Q2
62. Birleanu Corina Julieta, Cioaza M., Rusu (cas. Serdean) Maria Florina, Pustan Marius, Bere Petru Paul, Contiu Glad. (2024). Tribological Investigation of Glass Fiber Reinforced Polymer Composites against 52100 Chrome Alloy Steel Based on ELECTRE Decision-Making Method. POLYMERS, (16)(1). <https://doi.org/10.3390/polym16010062>; Q1
63. Biruk-Urban K., Bere Petru Paul, Udriou R., Jozwik J., Beer-Lech K.. (2024). Understanding the Effect of Drilling Parameters on Hole Quality of Fiber-Reinforced Polymer Structures. POLYMERS, (16)(16). <https://doi.org/10.3390/polym16162370>; Q1
64. Mihai Parparita, Bere Petru Paul, Katarzyna Biruk-urban. (2024). Composite Sandwich Structures - An Overview. Acta Technica Napocensis Series-Applied Mathematics Mechanics And Engineering, (67)(1), 275-280; Q3
65. Birleanu Corina Julieta, Pustan Marius, Cioaza M., Bere Petru Paul, Contiu Glad, Dudescu Mircea Cristian, Filip Daniel Dumitru. (2023). Tribo-Mechanical Investigation of Glass Fiber Reinforced Polymer Composites under Dry Conditions. POLYMERS, (15)(12). <https://doi.org/10.3390/polym15122733>; Q1
66. Biruk-Urban K., Bere Petru Paul, Jozwik J.. (2023). Machine Learning Models in Drilling of Different Types of Glass-Fiber-Reinforced Polymer Composites. POLYMERS, (15)(23). <https://doi.org/10.3390/polym15234609>; Q1
67. Neamtu Bogdan Viorel, Nasui Mircea, Stoian G., Popa Florin, Marinca Traian - Florin, Bere Petru Paul, Lupu N., Chicinas Ionel. (2023). Influence of coating process on the magnetic properties of cold-sintered CoFeSiB@BaTiO₃ fibres based soft magnetic composites. CERAMICS INTERNATIONAL, (49)(24), 40914-40923. <https://doi.org/10.1016/j.ceramint.2023.10.078>; Q1
68. Katarzyna Biruk-Urban, Bere Petru Paul, Jerzy Józwik. (2023). Machine Learning Models in Drilling of Different Types of Glass-Fiber-Reinforced Polymer Composites. MDPI, (15)(23); 4609. Q1

69. Simion Mihaela, Vilau Cristian, Chiorean Radu Stefan, Bere Petru Paul, Neamtu Calin Ghe. Dan, Dudescu Mircea Cristian. (2023). Study Of The Mechanical Behavior Of A Tailgate Made Of Carbon Fiber Composite Material. Acta Technica Napocensis Series-Applied Mathematics Mechanics And Engineering, (66)(3), 333-340; Q3
70. Chiorean Radu Stefan, Vilau Cristian, Simion Mihaela, Bere Petru Paul, Neamtu Calin Ghe. Dan, Dudescu Mircea Cristian. (2023). Stiffness Analysis Of An Electric Car Composite Bumpers. Acta Technica Napocensis Series-Applied Mathematics Mechanics And Engineering, (66), 181-186; Q3
71. Dudescu Mircea Cristian, Bere Petru Paul, Neamtu Calin Ghe. Dan. (2022). Structural Analysis Of An Electric Car Chassis By Numerical And Experimental Methods. Acta Technica Napocensis Series-Applied Mathematics Mechanics And Engineering, (65)(4), 1103-1110. Q3
72. Biruk-Urban K., Jozwik J., Bere Petru Paul. (2022). Cutting Forces and 3D Surface Analysis of CFRP Milling. ADVANCES IN SCIENCE AND TECHNOLOGY-RESEARCH JOURNAL, (16)(2), 206-215. <https://doi.org/10.12913/22998624/147338>; Q3
73. Miturska-Baranska I., Jozwik J., Bere Petru Paul. (2022). Effect of Face Milling Parameters of Carbon Fiber Reinforced Plastics Composites on Surface Properties. ADVANCES IN SCIENCE AND TECHNOLOGY-RESEARCH JOURNAL, (16)(2), 26-38. <https://doi.org/10.12913/22998624/146376>; Q3
74. 19 Biruk-Urban K., Bere Petru Paul, Jozwik J., Lelen M.. (2022). Experimental Study and Artificial Neural Network Simulation of Cutting Forces and Delamination Analysis in GFRP Drilling. MATERIALS, (15)(23). <https://doi.org/10.3390/ma15238597>; Q1
75. Izabela Miturska-Barańska, Jerzy Józwik, Bere Petru Paul. (2022). Effect of Face Milling Parameters of Carbon Fiber Reinforced Plastics Composites on Surface Properties. astrj.com, (16)(2), 26-38; Q3
76. Bere Petru Paul, Dudescu Mircea Cristian, Neamtu Calin Ghe. Dan, Cocian C.. (2021). Design, Manufacturing and Test of CFRP Front Hood Concepts for a Light-Weight Vehicle. POLYMERS, (13)(9). <https://doi.org/10.3390/polym13091374>; Q1
77. Sabau Emilia, Bere Petru Paul, Moldovan M., Petean I., Borzan Cristina Stefana. (2021). Evaluation of Novel Ornamental Cladding Resistance, Comprised of GFRP Waste and Polyester Binder, within an Acid Environment. POLYMERS, (13)(3). <https://doi.org/10.3390/polym13030448>; Q1
78. Bere Petru Paul, Neamtu Calin Ghe. Dan, Udriou R.. (2020). Novel Method for the Manufacture of Complex CFRP Parts Using FDM-based Molds. POLYMERS, (12)(10)., <https://doi.org/10.3390/polym12102220>; Q1
79. Moldovan M.A., Bosca A.B., Roman C.R., Rotaru H., Prejmerean C., Prodan D., Bere Petru Paul, COSMA SORIN-COSMIN, Festila D., Ghergie M.C.. (2020). Bone Reaction to a Newly Developed Fiber-reinforced Composite Material for Craniofacial Implants. MATERIALE PLASTICE, (57)(2), 131-139. <https://doi.org/10.37358/MP.20.2.5359>; Q3
80. Chiorean Radu Stefan, Dudescu Mircea Cristian, Neamtu Calin Ghe. Dan, Bere Petru Paul, Marius Fartan. (2020). Design Considerations For A Modern Tram Bogie: From Sheet Metal To Multi-Layer Carbon Fiber Reinforced Composite Material. Acta Technica Napocensis Series-Applied Mathematics Mechanics And Engineering, (63)(2), 165-168; Q3

81. Sabau Emilia, Udroi R., Bere Petru Paul, Buransky I., Borzan Cristina Stefana. (2020). A Novel Polymer Concrete Composite with GFRP Waste: Applications, Morphology, and Porosity Characterization. APPLIED SCIENCES-BASEL, (10)(6). <https://doi.org/10.3390/app10062060>; Q2
82. Rece L., Florescu V., Modrea A., Jeflea V., Harničárová M., Valíček J., Borzan M., Optimization of the 2 ½ D Processing Method of Complex Parts, through a Predictive Algorithm for Controlling the Geometric Shape Deviations Resulting from Processing. Mathematics, ISI Q1 (Zona roșie), eISSN 2227-7390, Vol. 8, Issue 1, 10.3390/math8010059, Art.nr.59, 24 pages, Published:Dec 2020. Zona roșie. <https://doi.org/10.3390/math8010059>;
83. Grosz, EA; Borzan, M. Modular Robotics Configurator: A MATLAB Model-Based Development. Appl. Syst. Innov. 2025 , 8 , 21. <https://doi.org/10.3390/asi8010021>; Zona roșie
84. Šajgalík M., Kušnerová M., Harničárová M., Valíček J., Czán A., Czánová T., Drbúl M., Borzan M., Kmec J. Analysis and Prediction of the Machining Force Depending on the Parameters of Trochoidal Milling of Hardened Steel. Applied Science, ISI Q2 (Zona galbenă), eISSN 2076-3417, 2020-mdpi.com, vol. 10, Issue 5, 10.3390/app10051788; p.1788, 19 pages. <https://doi.org/10.3390/app10051788>;
85. Mital'ova Z., Litecka J., Mital D., Harnicarova M., Valicek J, Miron-Borzan C.S., Borzan M., Destructive Testing of Wood Plastic Composite. Materiale Plastice (Mater. Plast.), ISI Q3 (zona alba), Year 2020, Volume 57, Issue 2, pag. 215-227. Facor de impact 1,517.. <https://doi.org/10.37358/MP.20.2.5367>;
86. Kadnár M., Káčer P., Harničárová M., Valíček J., Tóth F., Bujna M., Kušnerová M, Mikuš R., Borzan M., Comparison of Linear Regression and Artificial Neural Network Models for the Dimensional Control of the Welded Stamped Steel Arms. Machines 2023, 11(3), 376; ISSN: 2075-1702 <https://doi.org/10.3390/machines11030376>;
87. Mitalova Z., Litecka J., Mital D., Harnicarova M., Valicek J, Miron-Borzan C.S., Borzan M., Destructive Testing of Wood Plastic Composite. Materiale Plastice (Mater. Plast.), Year 2020, Volume 57, Issue 2, pag. 208-214. <https://doi.org/10.37358/MP.20.2.5367>;
88. Drasovean, I., Borzan, M., Trif, A., The New Actuation Mechanism of the Screw Jack - Rotating Nut. Academic Journal of Manufacturing Engineering, 2023, 21(2), pp. 110-115. https://ajme.ro/PDF_AJME_2023_2/L14.pdf;
89. Drasovean, I., Borzan, M., Trif, A., A New Method for Measuring Internal Diameters. Academic Journal of Manufacturing Engineering, 2023, 21(3), pp. 23-26. https://ajme.ro/PDF_AJME_2023_3/L4.pdf;
90. Šafář, M., Voldřich, R., Harničárová, M. et al. Design of a method to optimise the dimensions of steel bearing rings for automotive applications. Int J Adv Manuf Technol 135, 5961–5986 (2024). <https://doi.org/10.1007/s00170-024-14866-0>;
91. Buga, A. , Borzan, M., Trif, A., Artificial Intelligence in the CAD Process: Machine Learning Models, Generative Optimisation, and their Impact on Design. Academic Journal of Manufacturing Engineering, 2025, 23(1), pp. 28–43. ISSN:1583-7904;
92. Šafář, M., Voldřich, R., Harničárová, M., Borzan, M., Tozan, H., Design of a method to optimise the dimensions of steel bearing rings for automotive applications. International Journal of Advanced Manufacturing Technology, 2024, 108510. IF 5,7, Design of a method

to optimise the dimensions of steel bearing rings for automotive applications | The International Journal of Advanced Manufacturing Technology;

93. Muresan, C. I., Ciupan, M., Ciupan, C. Optimization of Thermoforming of Polypropylene and Hemp Fiber Composite Materials Egg Carton Shape Parts by Radius Profile And Pitch. Acta Technica Napocensis Series-Applied Mathematics Mechanics And Engineering, Volume 68, Nr. 1, 2, Page 493-500, June 2025. <https://atna-mam.utcluj.ro/index.php/Acta/article/view/2750/2165>;
94. Ciupan, C., Ciupan, M. Designing a line for the continuous thermoforming of boards made of composite materials. Acta Technica Napocensis Series-Applied Mathematics Mechanics And Engineering, Volume 67, Page 413-420 Special Issue, February 2024. <https://atnamam.utcluj.ro/index.php/Acta/article/view/2399/1864>;
95. Cionca I, Ciupan, E., Ciupan, M., Ciupan, C. New Ecological Composite Materials For The Upholstered Furniture Industry. Acta Technica Napocensis Series-Applied Mathematics Mechanics And Engineering, Volume 66, Page 67-72 Special Issue, September 2023 <https://atna-mam.utcluj.ro/index.php/Acta/issue/view/71>;
96. Muresan C., Ciupan C., Pop E.S., Ciupan M. Optimization Of The Geometric Parameters Of Thermoformed Parts. Acta Technica Napocensis, vol. 65/1S/2022, pag. 143-150. <https://atnamam.utcluj.ro/index.php/Acta/article/view/1745/1406>, Febr;
97. Rusan C. I. Ciupan, C. Ciupan, M. Hurgoiu, D. Design and Stiffness of a Cnc Milling Router with Reconfigurable Aluminium Structure. Acta Technica Napocensis Series-Applied Math. Mechanics and Eng., Vol 66, 1S, 2023, <https://atnamam.utcluj.ro/index.php/Acta/article/view/2207>;
98. Rusan C., Ciupan C., Ciupan M. Design Of A Linear Hydraulic Micro-Turbine To Compensate The Energy Consumption Of A House. Acta Technica Napocensis, vol. 65/1S/2022, pag. 107-114. <https://atna-mam.utcluj.ro/index.php/Acta/issue/view/61>;
99. Rusan C., Ciupan C., Ciupan M. Optimization and Static Analysis of the Flp2000 Portal Milling Bed Frame From: Cast Iron Construction to Welded Construction. Acta Technica Napocensis, vol. 64/1/2021, pag. 173-180. <https://atna-mam.utcluj.ro/index.php/Acta/article/view/1567/1289>;
100. Ciupan, C., Ciupan E., Ciupan, M.(2025) Algorithm For Optimizing The Hydraulic Cylinder Placement For Multi-Scissor Lift Platforms. Acta Technica Napocensis Series-Applied Mathematics Mechanics And Engineering, accept [2684-4546-1-SM.pdf](#);
101. Ciupan, C., Chifor M., Ciupan, M. (2025) The evolution of unconventional technologies reflected through the number of patents. MTem 2025, ACTA TECHNICA NAPOCENSIS SERIES-APPLIED MATHEMATICS MECHANICS AND ENGINEERING, Volume xx, ISxx;
102. Muresan, C. I., Ciupan, C., Ciupan, E. (2025) Variation of the wall thickness of the parts obtained by thermoforming from thermoplastic composites reinforced with hemp fibers. MTem 2025, Acta Technica Napocensis Series-Applied Mathematics Mechanics And Engineering, Volume xx, ISxx;
103. Ciupan M., Rusan C., Ciupan C. Test Bench for Assessing the Accuracy and Synchronization of CNC Axes. The 13th International Symposium on Measurement and Quality Control - Quality and Accuracy in the Age of Data Driven Manufacturing, 3-5 sept

2025, Cluj-Napoca. Acta Technica Napocensis Series-Applied Mathematics Mechanics And Engineering, Volume xx, ISxx;

104. Boczor GN, Frățilă D, Popescu A. Approach on the Prevention and Methods Of Eliminating Defects Occurring in the Selective Coating Process Using a 1K Material. Acta Technica Napocensis Series-Applied Mathematics Mechanics And Engineering, Volume 67 Issue1s Page173-178 Special Issue SI (2024);
105. Cristea, A.F., Bălcău, M.C., Frunză, D., Haragâș, S., Sas-Boca, I.M. (2025): Studies on the Materials Used in the Design of a Vibration Dissipating Device, Fixed on Hand, from a Functional and Ergonomic Point of View, Applied Sciences, 15 (16), 8856; <https://doi.org/10.3390/app15168856>; [FI 2,5] [zona galbenă]
106. Cristea, A.F., Bălcău, M.C., Haragâș, S. (2025): A Chronological Review of the Transmission and Effects of Mechanical Vibrations on the Hand-Arm System in an Occupational Workplace, Applied Sciences, 15 (3), 1182. <https://doi.org/10.3390/app15031182>; [FI 2,5] [zona galbenă]
107. Haragâș, S., Ninacs, R., Buiga, O., Tudose, L., Haragâș, A., Sas-Boca, I.M., Cristea, A.F. (2024): An Attempt to Establish a Mathematical Model for an Unconventional Worm Gear with Bearings, Applied Sciences, 14 (23), 10833. <https://doi.org/10.3390/app142310833>; [FI 2,5] [zona galbenă]
108. Alexandrescu, M., Cotețiu, R., Haragâș, S. (2024): Experimental research on shock absorption in the lubricating film at the narrow HD radial bearing, Acta Technica Napocensis, series: Applied Mathematics, Mechanics and Engineering, Vol. 67, Issue 4, pag.609-614, ISSN 1221-5872; [FI 0,2] [zona albă]
109. Ninacs, R., Haragâș, S. (2024): Design and optimal modeling of unconventional worm gear with bearings, The 27th Edition of Innovative Manufacturing Engineering & Energy Conference, (IManEE'23), Chișinău, Moldova, publicată în Acta Technica Napocensis, series: Applied Mathematics, Mechanics and Engineering, Vol. 67, Issue Special II, 2024, pag.569-576, ISSN 1221-5872; [FI 0,2] [zona albă]
110. Cristea, A.F., Bălcău, M.C., Haragâș, S. (2023): The effects of oil quality on the production process and work safety for the human operator, Acta Technica Napocensis, series: Applied Mathematics, Mechanics and Engineering, Vol. 66, Issue 4, pag.485-492, ISSN 1221-5872; [FI 0,1] [zona albă]
111. Haragâș, S., Buiga, O., Tudose, L. (2023): Experimental validation of the new theoretical model of interference fits, Acta Technica Napocensis, series: Applied Mathematics, Mechanics and Engineering, Vol. 66, Issue 2, pag.175-182, ISSN 1221-5872; [FI 0,1] [zona albă]
112. Miklos, E., Haragâș, S., Buiga, O. (2023): Specific aspects regarding the construction and maintenance of sealing elements in hydraulic systems, Acta Technica Napocensis, series: Applied Mathematics, Mechanics and Engineering, Vol. 66, Issue 2, pag.275-280, ISSN 1221-5872; [FI 0,1] [zona albă]
113. Haragâș, S., Cristea, F., Kicsi, V. (2023): The analysis efficiency of the demulsion agent injected into aluminum molds, Tribology International, 177, ISSN 0301-679X, doi: 10.1016/j.triboint.2022.107950; [FI 6,1] [zona roșie]

114. Ninacs, R., Cristea, A.F., Haragăș, S. (2022): Study regarding the kinematic and functional aspects of globoidal worm gear, *Acta Technica Napocensis, series: Applied Mathematics, Mechanics and Engineering*, Vol. 65, Issue 4, pag.499-504, ISSN 1221-5872; [FI 0,3] [zona albă]
115. Cristea, A.F., Ninacs, R., Haragăș, S. (2022): Studies regarding the kinematic and functioning of unconventional worm gear, *Acta Technica Napocensis, series: Applied Mathematics, Mechanics and Engineering*, Vol. 65, Issue 4, pag.437-442, ISSN 1221-5872; [FI 0,3] [zona albă]
116. Buiga, O., Haragăș, S. (2021): Optimal design of a 2K-h planetary gearbox input shaft, *Acta Technica Napocensis, series: Applied Mathematics, Mechanics and Engineering*, Vol. 64, Issue 2, pag.241-256, ISSN 1221-5872; [zona albă]
117. Fulea M, Mocan B, Dragomir M, Murar M. On Increasing Service Organizations' Agility: An Artifact-Based Framework to Elicit Improvement Initiatives. *Sustainability*. 2023; 15(13):10189. <https://doi.org/10.3390/su151310189>; (IF: 2023 3.889, Q2)
118. Mocan, B.; Schonstein, C.; Murar, M.; Neamtu, C.; Fulea, M.; Mocan, M.; Dragan, S.; Feier, H. Upper-Limb Robotic Exoskeleton for Early Cardiac Rehabilitation Following an Open-Heart Surgery - Mathematical Modelling and Empirical Validation. *Mathematics* 2023, 11(7), 1598; <https://doi.org/10.3390/math11071598>. (IF: 2023 2,59, Q1)<https://www.mdpi.com/2227-7390/11/7/1598>;
119. Mocan, B., Mocan, M., Fulea, M., Murar, M., Feier, H. Home-Based Robotic Upper Limbs Cardiac Telerehabilitation System. *International Journal of Environmental Research and Public Health*. 2022; 19 (18):11628 <https://doi.org/10.3390/ijerph191811628> (IF 2022 4,614, Q1;
120. Calborean, A., Macavei, S., Mocan, B. et al. Non-invasive laparoscopic detection of small tumors of the digestive tract using inductive sensors of proximity. *Sci Rep* 12, issue 1, 760 (2022). <https://doi.org/10.1038/s41598-022-04822-x> ISSN: 2045-2322; Nature-Scientific Reports, IF 2021 4.996, Q1; CiteScore: 5.134, Q1;
121. Mocan, B.; Schonstein, C.; Neamtu, C.; Murar, M.; Fulea, M.; Comes, R.; Mocan, M. CardioVR-ReTone—Robotic Exoskeleton for Upper Limb Rehabilitation following Open Heart Surgery: Design, Modelling, and Control. *Symmetry* 2022, 14, 81. <https://doi.org/10.3390/sym14010081> ISSN: 2073-8994; (IF 2021 2,940, Q2; CiteScore: 3.4, Q1;
122. Mocan, M., Vlaicu, S.I., Farcaș, A.D., Feier, H., Dragan, S., and Mocan, B., Cardiac Rehabilitation Early after Sternotomy Using New Assistive VR-Enhanced Robotic Exoskeleton—Study Protocol for a Randomised Controlled Trial, *Int. J. Environ. Res. Public Health* 2021, 18, no 22, 11922. <https://doi.org/10.3390/ijerph182211922>, 2021, EISSN 1660-4601 (IF 2021 3.390, Q1;
123. Bințișan, V., Calborean, A., Mocan, M., Macavei, S., Cordoș, A., Ciuce, C., Bințișan, A., Chira, R., Nagy, G., Surlin, V., Timofte, D., Nickel, F., Mueller, B., Dindelegan, G., Ciuce, C., Brad, S., Murar, M., Mocan, B., New inductive proximity sensor platform for precise localization of small colorectal tumors, *Materials Science and Engineering: C - MATERIALS FOR BIOLOGICAL APPLICATIONS*, Volume 106, Article 110146, 2020, ISSN 0928-4931, (<https://doi.org/10.1016/j.msec.2019.110146>), (IF 2020 7.328, CiteScore 11.5, Q1;

124. Calborean, A., Macavei, S., Mocan, M., Ciuce, C., Cordos, A., Bintintan, A., Chira, R., Pestean, C., Pop, O., Barbu-Tudoran, L., Dindelegan, G., Surlin, V., Nickel, F., Mocan, B., Bintintan, V., Laparoscopic compatible device incorporating inductive proximity sensors for precise detection of gastric and colorectal small tumors, *Surgical Oncology*, V. 35, pp. 504-514, (<https://doi.org/10.1016/j.suronc.2020.10.012>), December 2020, ISSN 0960-7404 (IF 2020 3.4, CiteScore 3.4, Q2);
125. Bere, P., Dudescu, M., Neamtu, C., & Cocian, C. (2021). Design, Manufacturing and Test of CFRP Front Hood Concepts for a Light-Weight Vehicle. *POLYMERS*, 13(9). (Q1) <https://doi.org/10.3390/polym13091374>;
126. Bere, P., Neamtu, C., & Udriou, R. (2020). Novel Method for the Manufacture of Complex CFRP Parts Using FDM-based Molds. *POLYMERS*, 12(10). <https://doi.org/10.3390/polym12102220> (Q1);
127. Blagu, D., Szabo, D., Dragomir, D., Neamtu, C., & Popescu, D. (2022). Offering Carbon Smart Options through Product Development to Meet Customer Expectations. *SUSTAINABILITY*, 14(16). <https://doi.org/10.3390/su14169913> (Q2);
128. Chiorean, R. S., Dudescu, M. C., Neamtu, C. G., Bere, P., & Fartan, M. (2020). Design Considerations For A Modern Tram Bogie: From Sheet Metal To Multi-Layer Carbon Fiber Reinforced Composite Material. *Acta Technica Napocensis Series-Applied Mathematics Mechanics And Engineering*, 63(2), 165–168;
129. Chiorean, R., Vilau, C., Simion, M., Bere, P., Neamtu, C., & Dudescu, M. C. (2023). Stiffness Analysis Of An Electric Car Composite Bumpers. *Acta Technica Napocensis Series-Applied Mathematics Mechanics And Engineering*, 66, 181–186;
130. Chirca, M., Dranca, M., Oprea, C. A., Teodosescu, P. D., Pacuraru, A. M., Neamtu, C., & Breban, S. (2020). Electronically Controlled Actuators for a Micro Wind Turbine Furling Mechanism. *ENERGIES*, 13(16). <https://doi.org/10.3390/en13164207> (Q3);
131. Comes, R., Grec, C., Neamtu, C., Gazdac, C., & Mateescu-Suciu, L. (2021). Intangible Heritage?...Not Anymore From Photo To 3d Printed Cultural Heritage Assets Replicas The Two Missing Iron Discs From The Dacian Hillfort Of Piatra Rosie (Romania). *Journal Of Ancient History And Archaeology*, 8(1), 134–143. <https://doi.org/10.14795/j.v8i1.622>;
132. Comes, R., & Neamtu, C. (2022). Head-Mounted Display Wearable Devices Ergonomics And Usability. *Acta Technica Napocensis Series-Applied Mathematics Mechanics And Engineering*, 65(3), 619–628;
133. Comes, R., Neamtu, C., Buna, Z. L., Bodi, S., Popescu, D., Tompa, V., Ghinea, R., & Mateescu-Suciu, L. (2020). Enhancing Accessibility To Cultural Heritage Through Digital Content And Virtual Reality: A Case Study Of The Sarmizegetusa Regia Unesco Site. *Journal Of Ancient History And Archaeology*, 7(3), 124–139. <https://doi.org/10.14795/j.v7i3.561>;
134. Comes, R., Neamtu, C. G. D., Grec, C., Buna, Z. L., Gazdac, C., & Mateescu-Suciu, L. (2022). Digital Reconstruction of Fragmented Cultural Heritage Assets: The Case Study of the Dacian Embossed Disk from Piatra Rosie. *APPLIED SCIENCES-BASEL*, 12(16). <https://doi.org/10.3390/app12168131> (Q2);
135. Curta, R., Dragomir, M., Neamtu, C., Jac, M., & Ghinea, R. (2021). New Concept And Design Of A Smart Hospital Bed. *Acta Technica Napocensis Series-Applied Mathematics Mechanics And Engineering*, 64(4), 645–650;

136. Dragomir, M., Blagu, D. A., Popescu, S., Fulea, M., & Neamtu, C. (2022). How Well Are Manufacturing Companies in Transylvania, Romania Adapting to the Low-Carbon Economy in Order to Become Sustainable? *International Journal Of Environmental Research And Public Health*, 19(4). <https://doi.org/10.3390/ijerph19042118>;
137. Dulescu, M. C., Bere, P., & Neamtu, C. (2022). Structural Analysis Of An Electric Car Chassis By Numerical And Experimental Methods. *Acta Technica Napocensis Series-Applied Mathematics Mechanics And Engineering*, 65(4), 1103–1110;
138. Kesik, J., Zyla, K., Montusiewicz, J., Milosz, M., Neamtu, C., & Juszczak, M. (2023). A Methodical Approach to 3D Scanning of Heritage Objects Being under Continuous Display. *APPLIED SCIENCES-BASEL*, 13(1). <https://doi.org/10.3390/app13010441> (Q2);
139. Mocan, B., Neamtu, C., Fulea, M., Murar, M., Comes, R., Jac, M., Feier, H., & Mocan, M. (2021). CardioVR-ReTone - 14 DOFs Upper-Body Robotic Exoskeleton Designed To Support Cardiac Rehabilitation. *Acta Technica Napocensis Series-Applied Mathematics Mechanics And Engineering*, 64(3), 379–388;
140. Mocan, B., Schonstein, C., Murar, M., Neamtu, C., Fulea, M., Mocan, M., Dragan, S., & Feier, H. (2023). Upper-Limb Robotic Exoskeleton for Early Cardiac Rehabilitation Following an Open-Heart Surgery-Mathematical Modelling and Empirical Validation. *MATHEMATICS*, 11(7). <https://doi.org/10.3390/math11071598> (Q1);
141. Mocan, B., Schonstein, C., Neamtu, C., Murar, M., Fulea, M., Comes, R., & Mocan, M. (2022). CardioVR-ReTone-Robotic Exoskeleton for Upper Limb Rehabilitation following Open Heart Surgery: Design, Modelling, and Control. *SYMMETRY-BASEL*, 14(1). <https://doi.org/10.3390/sym14010081> (Q2);
142. Murar, M., Curta, R., Neamtu, C., & Mocan, C. (2024). Automation System of a Smart Hospital Bed. *Acta Technica Napocensis Series-Applied Mathematics Mechanics And Engineering*, 67(2), 199–204;
143. Neamtu, C., Buna, Z., Comes, R., Grec, C., & Rozsos, R. (2022). Smartphone-Based Photogrammetry Assessment In Industrial Engineering. *Acta Technica Napocensis Series-Applied Mathematics Mechanics And Engineering*, 65(4), 433–436;
144. Neamtu, C., Comes, R., Popovici, D. M., Bautu, A., Liliana, M. S., Syrotnik, A., & Popovici, M. I. (2024). Evaluating User Experience in the Context of Cultural Heritage Dissemination Using Extended Reality: A Case Study of the Dacian Bronze Matrix with Hollow Design. *ACM Journal On Computing And Cultural Heritage*, 17(2). <https://doi.org/10.1145/3639933> (Q3);
145. Pavlenko, I., Verbovyi, A., Neamtu, C., Ivanov, V., Ciszak, O., & Trojanowska, J. (2023). Fractional-order mathematical model of single-mass rotor dynamics and stability. *Alexandria Engineering Journal*, 76, 91–100. <https://doi.org/10.1016/j.aej.2023.06.024> (Q1);
146. Popescu, D., Bodi, S., Grec, C., Neamtu, C., Jac, M., & Curta, R. (2021). Photogrammetry Accuracy Evaluation Through 3D Scanning And Measurement Of A Custom-Designed Gauge. *Acta Technica Napocensis Series-Applied Mathematics Mechanics And Engineering*, 64(4), 761–766;
147. Popovici, D. M., Iordache, D., Comes, R., Neamtu, C. G. D., & Bautu, E. (2022). Interactive Exploration of Virtual Heritage by Means of Natural Gestures. *APPLIED SCIENCES-BASEL*, 12(9). <https://doi.org/10.3390/app12094452> (Q2);

148. Simion, M., Vilau, C., Chiorean, R., Bere, P., Neamtu, C., & Dudescu, C. (2023). Study Of The Mechanical Behavior Of A Tailgate Made Of Carbon Fiber Composite Material. *Acta Technica Napocensis Series-Applied Mathematics Mechanics And Engineering*, 66(3), 333–340;
149. Solcan, S., Bodi, S., Comes, R., Rozsos, R. S., Neamtu, C., & Cocean, C. (2021). Design And Ergonomic Analysis Of Car Doors Made From Composite Materials. *Acta Technica Napocensis Series-Applied Mathematics Mechanics And Engineering*, 64(I), 181–188;
150. Optimal tool path strategies for decreasing the manufacturing time of one thermoforming mold, A. Păcurar, R. Păcurar, B. Eross, C.M. Borzan, WOS:000694719400008, *Acta Technica Napocensis-Series: Applied Mathematics, Mechanics and Engineering*, Vol. 64, Issue 1, 1221 – 5872, 2021. (Q4);
151. Designing and manufacturing of an ankle orthosis using 3d printing technology, A. Păcurar, A. Tomșea, C. Vilău, E. Guțiu, R. Păcurar, WOS:000731519800006, *Acta Technica Napocensis-Series: Applied Mathematics, Mechanics and Engineering*, Vol. 64, Issue 4, 1221 – 5872, 2021. (Q4);
152. Designing and manufacturing of an internal combustion engine connecting rod made of AlSi10Mg material using selective laser melting technology, R. Păcurar, D. Chincișan, C. Vilău, A. Păcurar, WOS:000731519800004, *Acta Technica Napocensis-Series: Applied Mathematics, Mechanics and Engineering*, Vol. 64, Issue 4, 1221 – 5872, 2021. (Q4);
153. Mathematical Approach in Complex Surfaces Toolpaths, F. Popișter, D. Popescu, A. Păcurar, R. Păcurar, <https://doi.org/10.3390/math9121360>, WOS:000666533500001, *Mathematics*, 9, 1360, 2227-7390, 2021. (Q1);
154. Thin Films Deposition of Ta₂O₅ and ZnO by E-Gun Technology on Co-Cr Alloy Manufactured by Direct Metal Laser Sintering, D.-I. Băilă, C. Vițelaru, R. Trușcă, L.R. Constantin, A. Păcurar, C.A. Parau, R. Păcurar, <https://doi.org/10.3390/ma14133666>, WOS:000671401000001, *Materials* 14, 3666, 2021, 1996-1944. (Q1);
155. Selective Laser Sintering of PA 2200 for Hip Implant Applications: Finite Element Analysis, Process Optimization, and Morphological and Mechanical Characterization, R. Păcurar, P. Berce, A. Petrilak, O. Nemeș, C.Ș.M. Borzan, M. Harničárová, A. Păcurar, <https://doi.org/10.3390/ma14154240>, WOS:000682045700001, *Materials* 14, 4240, 2021, 1996-1944. (Q1);
156. Cast Iron Parts Obtained in Ceramic Molds Produced by Binder Jetting 3D Printing- Morphological and Mechanical Characterization, R. Păcurar, P. Berce, O. Nemeș, D.-I. Băilă, D.S. Stan, A. Oarcea, F. Popișter, C.M. Borzan, S. Maricic, S. Legutko, A. Păcurar, <https://doi.org/10.3390/ma14164502>, WOS:000690632100001, *Materials*, 14, 4502, 2021, 1996-1944.(Q1);
157. Mechanical and Wetting Properties of Ta₂O₅ and ZnO Coatings on Alloy Substrate of Cardiovascular Stents Manufactured by Casting and DMLS, Băilă, D.-I.; Păcurar, R.; Savu, T.; Zaharia, C.; Trușcă, R.; Nemeș, O.; Górski, F.; Păcurar, A.; Pleșa, A.; Sabău, E., <https://doi.org/10.3390/ma15165580>, WOS:000845530200001, *Materials* 2022, 15, 5580, 1996-1944. (Q1);
158. The 3D printed astronautical probe simulation analyzing the free-fall, S. Maricic, I. Mrsa, R. Păcurar, Z. Mrsa, WOS:000838236300006, *Acta Technica Napocensis-Series: Applied Mathematics, Mechanics and Engineering*, Vol. 65, Issue 2, 2022, 1221-5872. (Q4);

159. An Experimental Study on the Impact of Layer Height and Annealing Parameters on the Tensile Strength and Dimensional Accuracy of FDM 3D Printed Parts, Stojković, Jelena R., Rajko Turudića, Nikola Vitković, Filip Górski, Ancuța Păcurar, Alin Pleșa, Alexandru Ianoși-Andreeva-Dimitrova, and R. Păcurar, <https://doi.org/10.3390/ma16134574>, WOS:001028415000001, Materials 2023, 16, no. 13: 4574, 1996-1944. (Q1);
160. Extra-articular distal humerus plate 3D model creation by using the method of anatomical features, Nikola Vitković, Jelena R Stojković, Nikola Korunović, Emil Teuțan, Alin Pleșa, Alexandru Ianoși-Andreeva-Dimitrova, Filip Górski, Răzvan Păcurar, <https://DOI10.3390/ma16155409> , WOS:001046286900001, Materials 2023, 16, no. 15, 5409, 1996-1944. (Q1);
161. Răzvan Păcurar, Sorin Comșa, Emilia Sabău, Eugen Guțiu, Alexandru Ianoși-Andreeva Dimitrova, Alin Pleșa, Martin Zelenay, Diana-Irinel Băilă, Magdalena Żukowska, Filip Górski, Research On The Design And Manufacturing Of A Wrist-Hand Orthosis By Fused Deposition Modelling, WOS:001236162800012, Acta Technica Napocensis-Series: Applied Mathematics, Mechanics, And Engineering, vol 66, no 4, pp499-504, 1221-5872.(Q4);
162. Răzvan Păcurar, Dan-Sorin Comșa, Emilia Sabău, Emil Teuțan, Martin Zelenay, Diana-Irinel Băilă, Wiesław Kuczko, Filip Górski, Research On The Design And Manufacturing Of An Upper-Limb Prosthesis By Fused Deposition Modelling, WOS:001236162800004, ACTA TECHNICA NAPOCENSIS-Series: APPLIED MATHEMATICS, MECHANICS, And ENGINEERING, vol 66, no 4, 1221-5872. (Q4);
163. Filip Górski, Dominik Rybarczyk, Radosław Wichniarek, Natalia Wierzbicka, Wiesław Kuczko, Magdalena Żukowska, Roman Regulski, Razvan Pacurar, Dan-Sorin Comsa, Diana-Irinel Baila, Martin Zelenay, Filippo Sanfilippo, Development and testing of an individualized sensorised 3D printed upper limb bicycle prosthesis for adult patients. DOI10.3390/app132312918, WOS:001116054200001, Applied Sciences, 2023, vol. 13, no 23, 2076-3417. (Q1) Siwec;
164. Filip Górski, Aleksandra Grohs, Wiesław Kuczko, Magdalena Żukowska, Radosław Wichniarek, Sabina Diana-Irinel Băilă, Martin Zelenay, Răzvan Păcurar, Filippo Sanfilippo, Development and studies of VR-assisted hand therapy using a customized biomechatronic 3D printed orthosis, DOI10.3390/electronics13010079, WOS:001139324000001, Journal Electronics, MDPI, vol 13, no. 1, 2079 9292. (Q2);
165. Justyna Rybarczyk, Filip Górski, Wiesław Kuczko, Radosław Wichniarek, Sabina Siwec, Nikola Vitkovic, Răzvan Păcurar, Mechanical Properties of Carbon Fiber Reinforced Materials for 3D Printing of Ankle Foot Orthoses, doi.org/10.12913/22998624/188819, WOS:001310376900017, Advances in Science and Technology Research Journal 2024, 18(4), 191–215, 2299-8624. (Q3);
166. Pacurar, RI; Sanfilippo, F; Okter, MB; Baila, DI; Zaharia, C; Nicoara, AI; Radu, IC; Savu, T; Górski, F; Kuczko, W; Wichniarek, R; Comsa, DS; Zelenay, M; Wozniak, P., Use of high-performance polymeric materials in customized low-cost robotic grippers for biomechatronic applications: experimental and analytical research, DOI10.3389/fmats.2024.1304339, WOS:001156120400001, FRONTIERS IN MATERIALS 2024, vol. 11, 2296 8016. (Q3);
167. Nazia Ejaz, Saad Jawaid Khan, Fahad Azim, Muhammad Asif, Emil Teuțan, Alin Pleșa, Răzvan Păcurar, Sergiu-Dan Stan, Automatic Gait Classification Model Empowered by

- Machine Learning for People with and without Osteoporosis Using Smart Walker, DOI10.3390/app14093874, WOS:001219984700001, Applied Sciences, 2024, vol 14, no 4, 2076-3417. (Q1);
168. Stanković, Z.Z.; Rajic, M.N.; Božić, Z.; Milosavljević, P.; Păcurar, A.; Borzan, C.; Păcurar, R.; Sabău, E., The Volatility Dynamics of Prices in the European Power Markets during the COVID-19 Pandemic Period, <https://doi.org/10.3390/su16062426>, WOS:001192411500001, Sustainability 2024, 16, 2426, 2071-1050. (Q2);
 169. Mitić, J.; Vitković, N.; Trajanović, M.; Górski, F.; Păcurar, A.; Borzan, C.; Sabău, E.; Păcurar, R., Utilizing Artificial Neural Networks for Geometric Bone Model Reconstruction in Mandibular Prognathism Patients, <https://doi.org/10.3390/math12101577>, WOS:001231655200001, Mathematics 2024, 12, 1577, 2227-7390. (Q1);
 170. Yuliia Denysenko, Filip Górski, Răzvan Păcurar, Natalia Soczyńska, Radosław Wichniarek, Evaluating the Suitability of Additive Manufacturing for Fabricating Prosthetic Fingers in Upper Limb Prostheses, Applied Sciences, 2025, 15(21), 11684; <https://doi.org/10.3390/app152111684> (Q1);
 171. Filip Gorski, Olga Komorowska, Przemysław Zawadzki, Wiesław Kuczko, Magdalena Żukowska, Remigiusz Łabudzki, Răzvan Păcurar, AUTOMATION OF DESIGN OF MODULAR UPPER LIMB PROSTHESES, Facta Universitatis, Series: Mechanical Engineering, 2025/2/10 (Q1);
 172. Marija Stamenković Atanasov, Ivan R Pavlović, Julijana Simonović, Cristina Borzan, Ancuța Păcurar, Răzvan Păcurar, Forced Dynamics of Elastically Connected Nano-Plates and Nano-Shells in Winkler-Type Elastic Medium, Applied Sciences, 2025, Vol 15, Issue 5, pp.2076-3417, ISSN 2076-3417, DOI 10.3390/app15052765 (Q1);
 173. Yuliia Denysenko, Filip Górski, Răzvan Păcurar, Natalia Soczyńska, Radosław Wichniarek, Evaluating the Suitability of Additive Manufacturing for Fabricating Prosthetic Fingers in Upper Limb Prostheses, Applied Sciences, 2025, 15(21), 11684; <https://doi.org/10.3390/app152111684> (Q1);
 174. Filip Gorski, Olga Komorowska, Przemysław Zawadzki, Wiesław Kuczko, Magdalena Żukowska, Remigiusz Łabudzki, Răzvan Păcurar, AUTOMATION OF DESIGN OF MODULAR UPPER LIMB PROSTHESES, Facta Universitatis, Series: Mechanical Engineering, 2025/2/10 (Q1);
 175. Marija Stamenković Atanasov, Ivan R Pavlović, Julijana Simonović, Cristina Borzan, Ancuța Păcurar, Răzvan Păcurar, Forced Dynamics of Elastically Connected Nano-Plates and Nano-Shells in Winkler-Type Elastic Medium, Applied Sciences, 2025, Vol 15, Issue 5, pp.2076-3417, ISSN 2076-3417, DOI 10.3390/app15052765 (Q1) Optimized;
 176. Petru Berce, Razvan Pacurar, Challenges and Trends in Additive Manufacturing for Metallic Applications: Toward Processes and <https://doi.org/10.3390/met15050525>, (Q2) Performance, Metals 2025, 15(5), 525;
 177. M. Nasui, R.B. Sonher, T. Petrisor Jr., E. Ware, E.G. Tuns, R. Pacurar, M.S. Gabor, New approach for oriented BaTiO₃ thin films with piezoelectric properties through chemical synthesis, Journal of Alloys and Compounds, Volume 1036, 20 July 2025, 182008 (Q1);

178. Oezden, R., Popa, M.S.: The accuracy and reproducibility of measuring sensors on work pieces with varying properties. Vol 59, No 4, S. 409-412: ISSN: 1221-5872. Acta Technica Napocensis Applied Mathematics, Mechanics and Engineering, 2016;
179. Oezden, R., Popa, M.S.: Investigation of geometric parameters' influences on the measurement uncertainty by various measuring sensors. IManE&E (Innovative Manufacturing Engineering and Energy International Conference) Volume 112. Iasi, 2017;
180. Oezden, R., Popa, M.S., Danho, S.: Analysis and impact of different ambiguities in industrial technical product drawings. IManE&E (Innovative Manufacturing Engineering and Energy International Conference) Volume 564. Pitesti, 2019;
181. Aclan, M., Popa, M.S., Oezden, R.: Analysis of shape deviations of technical polyamide workpieces in different defined time intervals. IManE&E (Innovative Manufacturing Engineering and Energy International Conference) Volume 564. Pitesti, 2019;
182. Oezden, R., Popa, M.S., Kortekamp, M., Aclan, M.: Correlation of Geometrical Specifications for Flexible Quality Control in the Manufacturing of Plastic Products. Technical Gazette Vol. 28/No. 5. Slavonski Brod, 2020;
183. P. Bondor, D. O. Rusu, I. D. Voina, G. Contiu, M. S. Popa, Influence of Variation of Cutting Speed on Wear, Cutting Forces and Tool Temperature during Performance Drilling, Tehnički vjesnik, Vol. 30, Nr. 1, Pag. 354-360, 2023;
184. Neamtu, C., Marutoiu V.C, Bratu, I., Marutoiu, O.F., Marutoiu, C., Chirila, I, Dragomir, M., Popescu, D. Multidisciplinary Investigation of the Imperial Gates of the 17th Century Wooden Church in Salisca, Cluj County, Romania, Sustainability, Volume 10, Issue 5, indexed in ISI WoS Q2;
185. Comes, R.; Neamtu, C.; Buna, Z.L.; Bodi, S.; Popescu, D.; Tompa, V.; Ghinea, R.; Mateescu-Suciu, L. Enhancing accessibility to cultural heritage through digital content and virtual reality: a case study of the Sarmizegetusa Regia UNESCO site. J. Anc. Hist. Archaeol. 2020, 7, 124–139, doi:10.14795/j.v7i3.561;
186. Popescu S., Rusu D., Dragomir M., Popescu D., Nedelcu Ș., Competitive Development Tools in Identifying Efficient Educational Interventions for Improving Pro-Environmental and Recycling Behavior, International Journal of Environmental Research and Public Health, 2020, 17(1):156, <https://doi.org/10.3390/ijerph17010156>, IF (2019) = 2,849, AIS (2019) = 0,660, zona Q1 “roșie”;
187. Popescu, D.; Dragomir, M.; Popescu, S.; Dragomir, D. Building Better Digital Twins for Production Systems by Incorporating Environmental Related Functions—Literature Analysis and Determining Alternatives. Appl. Sci. 2022, 12, 8657. <https://doi.org/10.3390/app12178657>, indexed in ISI WoS Q2;
188. Neamțu, Călin; Bratu, Ioan; Măruțoiu, Constantin; Măruțoiu, Victor Constantin; Nemeș, Olivia Florena; Comes, Radu; Bodi, Ștefan *; Buna, Zsolt Levente; Popescu, Daniela; Component Materials, 3D Digital Restoration, and Documentation of the Imperial Gates from the Wooden Church of Voivodeni, Sălaj County, Romania; Applied Sciences, Vol. 11, Iss. 8, 2021, pp. 3422-3439, DOI: 10.3390/app11083422. Indexed in ISI WoS Q2;
189. Popișter, Florin; Popescu, Daniela; Păcurar, Ancuța Păcurar, Răzvan; Mathematical Approach in Complex Surfaces Toolpaths; Mathematics, Vol. 9, Iss. 12, art. no. 1360, doi:10.3390/math9121360, Indexed in ISI WoS Q1;

190. Pokorni, Bastian; Popescu, Daniela; Constantinescu, Carmen; Design of cognitive assistance systems in manual assembly based on quality function deployment; Applied Sciences, Vol. 12, Iss. 8, Art. no. 3887, doi:10.3390/app12083887 Indexed in ISI WoS Q2;
191. Blagu, Diana; Szabo, Denisa; Dragomir, Diana; Neamțu, Călin; Popescu, Daniela; Offering Carbon Smart Options through Product Development to Meet Customer Expectations; Vol. 14, Iss. 16, art. no. 9913, doi:10.3390/su14169913 Indexed in ISI WoS Q1;
192. Dragomir, M; Tofana, S; Dragomir, D; Tîtu, AM; Popescu, D; Assessing Circularity in the Wood Industry-Methodology, Tool and Results; Forests, 2023, 14(10):1935, eISSN 1999-4907 Indexed in ISI WoS Q1;
193. Haragâș, S., Ninacs, R., Buiga, O., Tudose, L., Haragâș, A., Sas-Boca, I.M., Cristea, A.F. (2024): An Attempt to Establish a Mathematical Model for an Unconventional Worm Gear with Bearings, Applied Sciences, 14 (23), 10833. <https://doi.org/10.3390/app142310833>; [FI 2,5] [zona galbenă]
194. Haragâș, S., Buiga, O., Tudose, L. (2023): Experimental validation of the new theoretical model of interference fits, Acta Technica Napocensis, series: Applied Mathematics, Mechanics and Engineering, Vol. 66, Issue 2, pag.175-182, ISSN 1221-5872; [FI 0,1] [zona albă]
195. Ursache, C., Șerdean, F.M., Tudose, L., Cultural Algorithm Parameter Control Using Levy Flight, Acta Technica Napocensis, Series: Applied Mathematics, Mechanics, and Engineering, Vol 66, No 4 (2023), <https://atna-mam.utcluj.ro/index.php/Acta/article/view/2267>, pp. 551-556; [FI 0,1] [zona albă]