ASTR
Secția 1, Mecanică Tehnică

Anul 2025

1.Cărți publicate: 7

1. Pisla, D. (2024). Advances in Service and Industrial Robotics: RAAD 2024. Springer Nature, Data publicarii: 2025
2. Vlase S., Marin,M., Oechsner, A.,Scutaru, M.L. Models in Statics for Engineers. Springer, 2025.
3. N. Dumitru, I. Dumitru, S. Crețu & Daniela Tarniță - Coordonatori Carte "In Memoriam Prof. univ. Emerit Dr. Ing. Iulian Popescu, Membru titular al Academiei de Stiințe Tehnice din Romania", Editura Universitaria, Craiova, ISBN- 978-606-14-2139-8 (147 pag)
4. Nastasescu V., Gh. Barsan, O. Mocian, Calculul unor elemente structurale din materiale gradate functional. Ed Academiei, V**.** ISBN: 978-973-27-3950-1.
5. Atanasiu C. Rezistența materialelor. Eseuri. București, Editura AGIR,2025,256 pag.
6. Barsanescu P.D., "Rezistenta materialelor 1", Ed. Tehnopress Iasi (acreditata CNCSIS), 420 pagini
7. Med Amine Laribi, Giuseppe Carbone, Pisla, D., Zeghloul, S. (2025). New Trends in Medical and Service Robotics: MESROB 2025. Springer Nature, Data publicării: 2025.

2.Articole sau capitole în cărți

2.1.Articole sau capitole în cărți sau monografii internaționale: 10

1. Xiaoting Rui, Gilbert-Rainer Gillich (Editors), Proceedings of the 3rd International Conference on Mechanical System Dynamics, Volume 1: ICMSD2025. In seria: LECTURE NOTES IN MECHANICAL ENGINEERING https://link.springer.com/book/9789819570928

2. Xiaoting Rui, Gilbert-Rainer Gillich (Editors), Proceedings of the 3rd International Conference on Mechanical System Dynamics, Volume 2: ICMSD2025. In seria: LECTURE NOTES IN MECHANICAL ENGINEERING https://link.springer.com/book/9789819570966
3. Xiaoting Rui, Gilbert-Rainer Gillich (Editors), Proceedings of the 3rd International Conference on Mechanical System Dynamics, Volume 3: ICMSD2025. In seria: LECTURE NOTES IN MECHANICAL ENGINEERING https://link.springer.com/book/9789819571048
4. Xiaoting Rui, Gilbert-Rainer Gillich (Editors), Proceedings of the 3rd International Conference on Mechanical System Dynamics, Volume 4: ICMSD2025. In seria: LECTURE NOTES IN MECHANICAL ENGINEERING https://link.springer.com/book/9789819571000
5. Xiaoting Rui, Gilbert-Rainer Gillich (Editors), Proceedings of the 3rd International Conference on Mechanical System Dynamics, Volume 5: ICMSD2025. In seria: LECTURE NOTES IN MECHANICAL ENGINEERING https://link.springer.com/book/9789819571086
6. Xiaoting Rui, Gilbert-Rainer Gillich (Editors), Proceedings of the 3rd International Conference on Mechanical System Dynamics, Volume 6: ICMSD2025. In seria: LECTURE NOTES IN MECHANICAL ENGINEERING https://link.springer.com/book/9789819571123
7. Xiaoting Rui, Gilbert-Rainer Gillich (Editors), Proceedings of the 3rd International Conference on Mechanical
8. Sorin V. Savu & Daniela Tarniță - Guest Editors Special Issue, Advanced Microwave Technology for Processing, jurnalul Applied Sciences (Q2), 2025
9. Mihalcea, A., Chirosca, A.M., Rusu, L., 2025. The Safety of Offshore Structures: Key Challenges, and International Regulatory Frameworks. Procedia Computer Science, 274, pp.594-602. https://doi.org/10.1016/j.procs.2025.12.058 - menționată afilierea ASTR
10. Silion, A., Rusu, L., Manolache, AI. (2025). Assessment of Offshore Wind Potential in the Six Countries with Access to the Black Sea. In: Chen, L. (eds) Clean Energy Research. Green Energy and Technology. Springer, Cham. https://doi.org/10.1007/978-3-031-99312-1_12

2.2. Articole în JESI; 1 articol publicat

***Doina Pîslă**, Bogdan Gherman, Jose Machado, Denis Buta, Alexandru Pușcă,Adrian Pîslă, Alexandru Neamțu, Tiberiu Antal, Călin Vaida.* On the robotic-assisted rehabilitation of the upper limb using collaborative robots. JESI Nr.1, 2025.

3.Articole (cu sau fără menționarea apartenenței la ASTR)

* Lucrări la conferințe internaționale:	**37** (Anexa 3. 1)
* Articole clasificate ISI:	61 (Anexa 3. 2)
* Articole în Proceedings:	**12** (Anexa 3. 3) .
* Articole publicate în baze de date BDI:	**29** (Anexa 3. 4)
*Articole publicate in buletine șt.:	-
* Citări în reviste indexate ISI:	**1102**
* Citări în reviste indexate BDI:	**1245**

Anexa 3.1.Participări la conferințe științifice naționale, internaționale: 37

1. **Pisla Doina** În cadrul conferinței 9th IFToMM International Workshop on New Trends in Medical and Service Robotics (MESROB 2025) am sustinut lucrarea plenară intitulată "New challenges in robotic surgery for cancer treatment", https://iftomm-mesrob2025.sciencesconf.org/resource/page/id/11.
2. **Pisla Doina** În cadrul conferinței 4th Emergign and disruptive technologies impact on global security am susținut lucrarea plenară intitulată "Advanced technologies for medical robotics", https://www.armyacademy.ro/engleza/cercetare/EDT /2025/Programme_EDT_2025.pdf.
3. **Tarnita Daniela.** International Conference on Robotics in Alpe-Adria Danube Region- **RAAD 2025,** Belgrad, Serbia, iunie 2025
4. **Tarnita Daniela** International Conference New Trends in Medical and Service Robotics, **MESROB 2025,** Poitier, France, iulie 2025
5. **Tarnita Daniela** International Conference IFToMM for Sustainable Development Goals. **I4SDG 2025,** Villa San Giovanni, Italy.
6. **Tarnita Daniela** International **workshop Robotica fara frontiere-Abordari inovative in industrie, medicina si servicii, - Smart Diaspora, Cluj-Napoca, 4-7 noiembrie 2025**
7. Cerbu, C., **Hadăr, A.,** Roşca, I.C., Nistor, P.S., (2025), *"Considerations on the use of Digital Image Correlation in mechanical testing for material characterization"*, The 12th International Conference on Structural Analysis of Advanced Materials, 28-31 September 2025, Braşov, Romania

8. Talîngă. A.M., Ciolcă, M., Neagoe, C.A., Costea, M., Baciu, F., **Hadăr, A.,** (2025), *"Influence of 3D Printing Parameters on Mechanical and Elastic Characteristics"*, The 12th International Conference on Structural Analysis of Advanced Materials, 28-31 September 2025, Braşov, Romania
9. Deca, A.L., Stochioiu, C., **Hadăr, A.,** (2025), *"Prediction of Flax Fiber Behaviour Using Mechanical Testing and Finite Element Analysis"*, The 12th International Conference on Structural Analysis of Advanced Materials, 28-31 September 2025, Braşov, Romania.
10. Manea, M., **Hadăr, A.,** (2025), *"Progress and Constraints of Natural Fiber Reinforced Composites - an Extensive Review"*, The 12th International Conference on Structural Analysis of Advanced Materials, 28-31 September 2025, Braşov, Romania.
11. Andreea MÂNDRU, **Liliana Celia RUSU**, 2025. Simulări numerice pentru o navă la scară naturală în condiții de val regulat de întâlnire, Prezentare la Conferința internațională „Zilele ASTR – 2025", Ediția a XX–a 18 - 19 Septembrie 2025, Galați.
12. George COTOC, **Liliana Celia RUSU**, 2025. Studiu experimental al oscilațiilor libere ale unei nave în apă și aer utilizând senzori inerțiali, Prezentare la Conferința internațională „Zilele ASTR – 2025", Ediția a XX–a 18 - 19 Septembrie 2025, Galați.
13. Adriana SILION, **Liliana Celia RUSU**, 2025. Energia eoliană offshore: o resursă neexploatată a Mării Negre, Prezentare la Conferința internațională „Zilele ASTR – 2025", Ediția a XX–a 18 - 19 Septembrie 2025, Galați.
14. Ana-Maria CHIROȘCĂ, **Liliana Celia RUSU**, Eugen RUSU, 2025. Rolul hidrogenului verde în tranziția energetică: impact economic, tehnologii de producție și metode de stocare, Prezentare la Conferința internațională „Zilele ASTR – 2025", Ediția a XX–a 18 - 19 Septembrie 2025, Galați.
15. Mandru, A., **Rusu,** L., Pacuraru, F., 2025, September. Open water simulation of the KCS propeller. In *AIP Conference Proceedings*, Vol. 3315, No. 1, p. 400011, AIP Publishing LLC. https://doi.org/10.1063/5.0286491
16. **Daniela Tarnita**, Marius Catana, Ionut Daniel Geonea, Gabriela Marinache*, Danut Nicolae Tarnită, 2025. Kinematic Optimization of a Polycentric Prosthetic Knee Joint through Multibody Modeling, Proceedings of The ***14th IFToMM International Symposium on Science of Mechanisms and Machines***, **Advances in mechanisms and Machines Science**, MMS, Eds: M Neagoe, I Doroftei, E Lovasz, vol 198, Springer Cham, 978-3-032-14022-7, ian 2026.
17. Gabriela Marinache, Ionut Daniel Geonea, **Daniela Tarniță,** 2025. Kinematic Optimization of a Polycentric Prosthetic Knee Joint through Multibody Modeling, Proceedings of The ***14th IFToMM International Symposium on Science of Mechanisms and Machines***, **Advances in mechanisms and**

Machines Science, MMS, Eds: M Neagoe, I Doroftei, E Lovasz, vol 198, Springer Cham, 978-3-032-14022-7, ian 2026.

18. Ionut Geonea, Laurentiu Racila, Alina Elena Romanescu, Gabriela Marinache and **Daniela Tarnita**, Dynamic Analysis in MSC.ADAMS of Two Pantograph Mechanisms Used in Lower Limb Rehabilitation Exoskeletons, Proceedings of The ***14th IFToMM International Symposium on Science of Mechanisms and Machines***, **Advances in mechanisms and Machines Science**, MMS, Eds: M Neagoe, I Doroftei, E Lovasz, vol 198, Springer Cham, 978-3-032-14022-7, ian 202**6.**
19. Vasile A**., Constantinescu, D.**M., Coropețchi I.A., Sorohan Şt., Indreş A.I., Apostol D.A., Static and Low-Cyclic Compression Response of Sandwich Structures with Novel TPMS Cores, 36th International Symposium of the Institute of Solid Mechanics and Session of the Commission of Acoustics, SISOM 2025, September 11th - 12th, Bucharest, 2025
20. Coropețchi I.A., **Constantinescu, D.M**., Vasile, A., Sorohan Şt., Apostol D.A., Structural Optimization In The Latent Space Of A Two-Phase Composite Using A Variational Autoencoder, International Symposium of the Institute of Solid Mechanics and Session of the Commission of Acoustics, SISOM 2025, September 11th - 12th, Bucharest, 2025.
21. **Bratu Polidor** Conferința - AVSM- Timișoara 30mai 2025 - 2 lucrări.
22. **Bratu Polidor** Conferința - ASTR - Galați 18-19 Sept. 2025 - 5 lucrări.
23. **Bratu Polidor** Conferința - Dinamica Sistemelor- CLUJ 23-24 Sept.2025-2 lucrări.
24. **Bratu Polidor** Conferința de Instalații - Cluj 22-23 Sept.2025 - 1 lucrare.
25. **Bratu Polidor** Conferința de la UDJ Galați- - 29 Sept.-1 Oct.2025 - 7 lucrări.

Anexa 3.2. Reviste clasificate ISI; 61

1. TA**RNITA, D**. and CHIHAIA, C.E.**, 2025. Study of stresses and vibrations of a virtual elbow orthosis model based on finite element analysis. *Acta technica napocensis-series: Applied mathematics, mechanics, and engineering*, , *68*(1 & 2), 373-380.
2. GEONEA, I., DUMITRU, N., MARGINE, A., COPILUSI, C., MARINACHE, G. and **TARNITA, D.**, 2025. Structural synthesis and dynamic analysis of a new human leg motion assistance mechanism**.** *Acta technica napocensis-series: Applied mathematics, mechanics, and engineering*, *68*(1 & 2), 73-82.
3. ONCESCU, TA**, BOSTINA, St., VILCELEANU, MV., CHIHAIA, C., ALBU, CB., GEONEA, I., DUMITRU, I., and TARNITA, Daniela. "Analysis of seat to head transmissibility of vibrations for a tractor driver, on an uneven land, based on biometrics acquisition system. *Acta technica napocensis-series: Applied mathematics, mechanics, and engineering*, 68, no. 1 & 2 (2025), 239-246.
4. BERCEANU, C., CHIHAIA, C., MARGHITU, D.B. and TARNITA, D., 2025. Human and robot finger kinematic analysis using wavelet theory**.** Acta technica napocensis-series: Applied mathematics, mechanics, and engineering, 68(1 & 2), 119-124.
5. C. CHIHAIA**, G MARINACHE**, E. ALBU, M TEODORESCU, Daniela TARNITA*, Experimental evaluation of the effect of shoulder position on forearm pronation and supination, Acta Technica Napocensis**,** Vol 68, No.1, 2025 , 157-164.
6. Iliuta, D**., Tarnita, D.,** Mesina, M., Capitanescu, B., Zlatian, O. and Tarniță, D.N., 2025. Research regarding the subjective improvement of knee joint function after treatment with hydrolysed collagen formulation. Balneo & PRM Research Journal**,** *16*(2):818, **Q3.**
7. Iliuta, D., Tarnita D.*, Zlatian O., Rogoveanu O., Petcu A., Tarniță D.N. - Influence of treatment with a hydrolyzed collagen formulation on the movements of the human knee with early-stage gonarthrosis Balneo and PRM Research Journal 2025, 16(2): 527, **Q3**
8. Pisla, D. Fuzzy Adaptive Control for a 4-DOF Hand Rehabilitation Robot. *Actuators*, *14*(7), 351. https://doi.org/10.3390/act14070351.
9. Vaida, C., Ciocan, A., Caprariu, A., Radu, C., Hajjar, N. A., & **Pisla, D.** (2025). A 3D-Printed Anatomical Pancreas Model for Robotic-Assisted Minimally Invasive Surgery. Journal of Functional Biomaterials, 16(6), 207. https://doi.org/10.3390/jfb16060207.

10. Covaciu, F., Gherman, B., Vaida, C., Pisla, A., Tucan, P., Caprariu, A., & **Pisla, D.** (2025). A Combined Mirror–EMG Robot-Assisted Therapy System for Lower Limb Rehabilitation. Technologies, 13(6), 227. https://doi.org/10.3390/technologies13060227.
11. Tucan, P., Ciocan, A., Gherman, B., Radu, C., Vaida, C., Hajjar, N. A., Chablat, D., & **Pisla, D.** (2025). Design Optimization of a Parallel Robot for Laparoscopic Pancreatic Surgery Using a Genetic Algorithm. Applied Sciences, 15(8), 4383. https://doi.org/10.3390/app1508438
12. Birlescu, I., Mihaly, V., Vaida, C., Caprariu, A., Tucan, P., Machado, J., & **Pisla, D.**(2025). Numerical Approach for Trajectory Smoothing for LegUp Rehabilitation Parallel Robot. *Mathematics*, *13*(8), 1241. https://doi.org/10.3390/math13081241.
13. Pisla, D., Hajjar, N. A., Rus, G., Gherman, B., Ciocan, A., Radu, C., Vaida, C., & Chablat, D. (2025). Development of an Augmented Reality Surgical Trainer for Minimally Invasive Pancreatic Surgery. Applied Sciences, 15(7), 3532. https://doi.org/10.3390/app15073532.
14. Vaida, C., Birlescu, I., Gherman, B., Condurache, D., Chablat, D., & **Pisla, D.** (2025). An analysis of higher-order kinematics formalisms for an innovative surgical parallel robot. Mechanism and Machine Theory, 209, 105986.
15. Vaida, C., Rus, G., & **Pisla, D.** (2025). A Sensor-Based Classification for Neuromotor Robot-Assisted Rehabilitation. Bioengineering, 12(3), 287. tps://doi.org/10.3390/bioengineering12030287.
16. Gherman, B., Zima, I., Vaida, C., Tucan, P., Pisla, A., Birlescu, I., Machado, J., & **Pisla, D.** (2025). Robotic Systems for Hand Rehabilitation—Past, Present and Future. Technologies, 13(1), 37. https://doi.org/10.3390/technologies13010037.
17. Vaida, C., Pop, G., Tucan, P., Gherman, B., & **Pisla, D.** (2025). Multi-Parametric Optimization of 3D-Printed Components. Polymers, 17(1), 27.
18. C. Badea,G. Zisopol,**V. Năstăsescu,** A. Hadar A Research on the Impact of 20 mm × 102 mm Armor-Piercing Frangible Projectiles on Multilayer Armor. **Engineering, Technology & Applied Science Research**, Vol. 15, No. 5, 2025, pg. 26833-26837, DOI: **WOS, Q2**
19. M. C. Badea,G. Zisopol,A. Hadar,**V. Năstăsescu** The Penetration Capacity of a 20 × 102 mm Frangible Armor Piercing Projectile. **Engineering, Technology & Applied Science Research**, Vol. 15, No. 3, 2025, pg. 22996-23001, DOI: 10.48084/etasr.10708, **WOS, Q2**\
20. Negrean, I. , S., Acceleration Energies and Higher-Order Dynamic Equations in Analytical Mechanics, Mathematics 2025, 13, 1644 https://doi.org/10.3390/math13101644, 29 pagini;

21. Ciolcă, M., Cormos, R., Neagoe, A.C., **Hadăr, A.,** (2025), "A Comparative Study on the Finite Element Analysis of Multilayered Honeycomb Composite Materials for Aerospace Structures", Materials - Q2, **18(8)**, 2025, 1744, DOI10.3390/ma18081744
22. Stanciu, A.C., Butolo, M., Goga, N., **Hadăr, A.,** Baciu, F., Alexandru, C., Dinu, B., Petre, I., Suciu, G., Canale, F., (2025), "Developing an Intelligent Material Classification System for Plastic and Other Materials", Mater. Plast., **62(1)**, 2025, pp. 1-17
23. **Youssef Cherradi,Camelia Cerbu,Ioan Calin Rosca,Adnane Seman,Hamid El Qarnia,Ahmed Dimokrati andMustafa Benyoucef** Acoustic, Mechanical, and Thermal Characterization of Polyvinyl Acetate (PVA)-Based Wood Composites Reinforced with Beech and Oak Wood Fibers ***Polymers* 2025, *17*(2), 142;** https://doi.org/10.3390/polym17020142 –
24. Silion, A. and Rusu, L., 2025. A Review Concerning the Offshore Wind and Wave Energy Potential in the Black Sea. *Journal of Marine Science and Engineering*, *13*(9), p.1643. https://doi.org/10.3390/jmse13091643 (Factor impact 2024 - 2,8)
25. Rusu, L., 2025. Climate change impact on the sea state conditions in the Mediterranean Sea under RCP and SSP emission scenarios. *Renewable Energy*, *243*, p.122616. https://doi.org/10.1016/j.renene.2025.122616 (Factor impact 2024 – 9,1)
26. Chirosca, AM., Rusu, 2025. L. Projections of wind and wave climate on the main routes of the Mediterranean and Black Seas. *J. Ocean Eng. Mar. Energy*, 11, 149–167. https://doi.org/10.1007/s40722-024-00375-5
27. Iacovescu, SA; **Bratu, PP and Stanescu**, ND Influence of Different Mechanical Parameters on the Dynamics of a Medical Device. 2025, ROMANIAN JOURNAL OF ACOUSTICS AND VIBRATION, 22 (1) , pp.39-45
28. Nicolae, G; Nitu, CM**; Bratu Polidor**; Dogaru, M. Vibrations Transmitted to The Human Body Under the Dynamic Action of Surfaces and Mechanical Contact Points with Impact on Human Health 2025, ROMANIAN JOURNAL OF ACOUSTICS AND VIBRATION, 22 (1) , pp.66-72
29. Nicolae, G**; Bratu, P**; (...); Dogaru, M. Analysis of the Support Vibrations For the ELI-NP System with Impact on the Human Body and Optoelectronic Equipment. 2025, ROMANIAN JOURNAL OF ACOUSTICS AND VIBRATION, 22 (1) , pp.73-80
30. Guendaoui, S; El Akkad, A; Vlase, S.; Marin, M. NURBS Morphing Optimization of Drag and Lift in a Coupe-Class Vehicle Using Symmetry-Plane Comparison of Aerodynamic Performance. 2025, SYMMETRY-BASEL, 17 (9)

31. Kumar, R; Marin, M and Vlase, S. The Effect of Viscosity on Energy Ratios in Elastic Materials with Piezoelectric Properties, Considering Two Temperature Levels and a Three-Phase Lag. 2025, MECHANICS OF SOLIDS, 60 (3) , pp.2033-2047.
32. Nedelescu, C; Itu, C; Vlase, S.; Benea, BC. Resplace of the Car-Driver-Passenger System in a Frontal Crash Using a Water Impact Attenuator. 2025, VEHICLES, 7 (3)
33. Keerthika, R; Niranjan, SP and Vlase, S. Fuzzy-Based Control System for Solar-Powered Bulk Service Queueing Model with Vacation. 2025, APPLIED SCIENCES-BASEL, 15 (13).
34. Katouzian, M and Vlase, S. A Review of the Methods Used in the Study of Creep Behavior of Fiber-Reinforced Composites and Future Developments. 2025, APPLIED SCIENCES-
35. Negrean, I; Crisan, AV and Vlase, S. Acceleration Energies and Higher-Order Dynamic Equations in Analytical Mechanics. 2025, MATHEMATICS, 13 (10)
36. Niranjan, SP; Aswini, K; Vlase, S.; Scutaru, ML. Performance Prediction of Store and Forward Telemedicine Using Graph Theoretic Approach of Symmetry Queueing Network. 2025, SYMMETRY-BASEL, 17 (5)
37. Latha, S.R.D.; Niranjan, SP; Vlase S.; Scutaru, M.L. Enhancing Efficient Data Transmission in IBM WebSphere Using Relational Data eXchange (RDX) Mechanism and Tandem Queue. 2025, AXIOMS, 14 (4)
38. Katouzian, M and Vlase, S. A Model to Study the Creep Behavior of Carbon Fiber/Epoxy Resin Composites Under Temperature. 2025, APPLIED SCIENCES-BASEL, 15 (8)
39. Stanciu, AE; Bencze, A; Vlase, S.; Öchsner, A. Effects of infill parameter variations on mechanical properties in 3D printed structures: comparative study with fem analysis. 2025, JOURNAL OF COMPUTATIONAL APPLIED MECHANICS, 56 (2) , pp.318-330.
40. Elfakkoussi, S; Gouzi, MB; Vlase, S.; Scutaru, ML. Integrate the Isogeometric Analysis Approach Based on the T-Splines Function for the Numerical Study of a Liquefied Petroleum Gas (LPG) Cylinder Subjected to a Static Load. 2025,APPLIED SCIENCES-BASEL, 15 (6)
41. Frincu, C; Stroe, I; Vlase S; Staretu, I. Design and Calibration of a Sensory System of an Adaptive Gripper. 2025, APPLIED SCIENCES-BASEL, 15 (6)
42. Itu, C; Scutaru, ML and Vlase, S VIBRATION BEHAVIOR OF THE TUBULAR CHASSIS FOR A CAR USED IN FORMULA STUDENT RACE. 2025

43. Marin, M; Öchsner, A; Vlase, S.; Pirlog, S. A study of a thermoelastic body possessing microtemperatures. 2025, CONTINUUM MECHANICS AND THERMODYNAMICS, 37 (2)
44. Vlase, S; Öchsner, A and Marin, M. Dynamic properties of the structures with three level of symmetry. 2025, CONTINUUM MECHANICS AND THERMODYNAMICS, 37 (2)
45. Gouzi, MB; Hajjia, A; Vlase, S.; Scutaru, ML Enhancement of Thermomechanical Protocol for Automotive Brake Using the Symmetry of the Disc: Numerical Validation and Material Selection. 2025, SYMMETRY-BASEL, 17 (2)
46. Hajjia, A; Gouzi, MB; Vlase,S; Luminita, M. Finite Element Analysis of Functionally Graded Mindlin-Reissner Plates for Aircraft Tapered and Interpolated Wing Defluxion and Modal Analysis. 2025, MATHEMATICS, 13 (4).
47. Marin, M; Vlase, S; Hapenciuc, OM. Behaviour of solutions for a thermoelastic Cosserat medium with temperature gradients. 2025, CONTINUUM MECHANICS AND THERMODYNAMICS, 37 (1
48. Niranjan, SP; Latha, SD; Vlase, S.; Scutaru, ML Analysis of Bulk Queueing Model with Load Balancing and Vacation. 2025, AXIOMS, 14 (1)
49. **Nenciu, A., Apostol, D.A., Constantinescu, D.M**., The effect of continuous carbon fiber reinforcement on 3D-printed honeycomb and re-entrant sandwich panels subjected to in-plane compression, *Materials*, vol. *18*(24), 5594, 2025, https://doi.org/10.3390/ma10.3390/ma18245594, WOS: 001647085600001, IF=3,2
50. **Coropețchi, I.C., Constantinescu, D.M., Vasile, A.,** Indreş**, A.I.,** Sorohan, Șt, **Apostol, D.A.,** Direct search methods for determining new designs of auxetic composite materials, Journal of Theoretical and Applied Mechanics, vol. 63(3), pp. 479-489, 2025, https://doi.org/10.15632/jtam-pl/200711, WOS: 001541005700003, IF=1
51. **Vasile, A., Coropețchi,** I.C., Indreş**, A.I., Constantinescu, D.M**., Sorohan, Șt, **Apostol, D.A.,** Response of sandwich structures with novel TPMS cores under cyclic uniaxial compression, Journal of Theoretical and Applied Mechanics, vol. 63(3), pp. 535-543, 2025, https://doi.org/10.15632/jtam-pl/202686, WOS: 001541005700008, IF=1
52. **Vasile, A., Constantinescu, D.M., Coropețchi,** I.C., Indreş**, A.I.,** Sorohan, Șt, Low-Velocity Impact Response of Novel TPMS and Stochastic Lattice Cores of Sandwich Structures, *Materials*, vol. *18*(12), 2889, 2025, https://doi.org/10.3390/ma18122889, WOS: 001516087300001, IF=3,2
53. **Coropețchi, I.C., Constantinescu, D.M., Vasile, A.,** Indreş**, A.I.,** Sorohan, Șt, Design of novel auxetic bi-materials using convolutional neural networks,

Materials, vol. *18*(8), 1772, 2025, https://doi.org/10.3390/ma18081772, WOS: 001475416800001, IF=3,2

54. **Coropețchi, I.C., Constantinescu, D.M., Vasile, A.,** Sorohan, Șt**, Apostol, D.A.,** Comparative analysis of direct search methods for material design optimization, Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, vol. 239(4), pp. 642-660, 2025, https://doi.org/10.1177/14644207241294056, WOS: 001354244800001, IF=2,2
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