ASTR
Secția 1, Mecanică Tehnică

Anul 2024

1.Cărți publicate: 3

- **Negrean, I**., Curs. Mecanică teoretică, Dinamica, 2024, pagini 210, format A4
- Munteanu,V., Modrea, A., **Vlase, S**. Mecanica. Statica. *Note de curs*, 2024, Ediura University Press, Targu-Mures
- **Pisla, D.** (2024). Advances in Service and Industrial Robotics: RAAD 2024. Springer Nature.

2.Articole sau capitole în cărți sau monografii internaționale: 8.(Anexa 1);

- **articole în JESI : 8 (Anexa 2)**

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

- Lucrări la conferințe internaționale: 38(Anexa 3. 1);
- Articole clasificate ISI: 70 (Anexa 3. 2);
- Articole în Proceedings: 19 (Anexa 3. 3);
- Articole publicate în baze de date BDI: 24 (Anexa 3. 4);
- Articole publicate in buletine șt.: 2 (Anexa 3. 5);
- Citări în reviste indexate ISI: 1002;
- Citări în reviste indexate BDI: 1245.

Anexa 1. Capitole în cărți sau monografii naționale, internaționale: 8

1. **Condurache, D.**, "*Advances Representation of Higher-Order Kinematics of Motion. Hypercomplex Lie Groups and Lie Algebras*", April 2024, In book: Mechanisms and Machine Science, vol 154.Publisher: Springer, Cham. https://doi.org/10.1007/978-3-031-51085-4_14
2. **Condurache, D.,** Pisla, D., Giuseppe Carbone, Vaida., C. *"Advances in Service and Industrial Robotics",* RAAD 2024 May 2024, Publisher: Springer Cham, ISBN: 978-3-031-59256-0
3. **Condurache, D.,** *"A Generalization of the Bresse Properties in Higher-Order Kinematics"* July 2024, DOI: 10.1007/978-3-031-64057-5_12, In book: Advances in Robot Kinematics 2024, Publisher: Springer
4. **Condurache, D.**, Cojocari, M., Birlescu, I., Gherman, B. (2024). *"Automatic Differentiation of Serial Manipulator Jacobians Using Multidual Algebra".* In: Pisla, D., Carbone, G., Condurache, D., Vaida, C. (eds) Advances in Service and Industrial Robotics. RAAD 2024. Mechanisms and Machine Science, vol 157. Springer, Cham. https://doi.org/10.1007/978-3-031-59257-7_38
5. Chirosca, AM., **Rusu, L.,** 2024. Wind Climate Analysis at the Future Wind Farm Positions in the Mediterranean Sea. In: Chen, L. (eds) *Advances in Clean Energy Systems and Technologies*. Green Energy and Technology, Springer Nature, pp. 103-109. ISBN 978-3-031-49786-5. Link capitol https://doi.org/10.1007/978-3-031-49787-2_11 (Link carte: https://link.springer.com/book/10.1007/978-3-031-49787-2)
6. Chirosca, A. M., **Rusu, L.,** 2024. Study on the behaviour of a container ship in the Mediterranean Sea area, In: Guedes Soares & Santos (Eds), *Advances in Maritime Technology and Engineering*, Taylor & Francis Groupe, CRC Press, Vol. 2, pp. 221-226. ISBN 978-1-032-83107-7. Link carte: https://doi.org/10.1201/9781003508779
7. **V. Năstăsescu,** A. Toma - Chapter 8: Assessment of Radial Displacements in Rotating Disc of Uniform Thickness Made of Functionally Graded Material: A Comparative Quantitative Study, Science and Technology - Recent Updates and Future Prospects, Vol. 8, 09.07.2024, Print ISBN: 978-81-976653-2-5 , eBook ISBN: 978-81-976653-8-7, DOI: https://doi.org/10.9734/bpi/strufp/v8/1244 (pg. 165-184)
8. **V. Năstăsescu**, Gh. Barsan, O. Mocian - Chapter 3 : Influence of Material Property and Geometry on Acoustic Wave Propagation, Science and Technology - Recent Updates and Future Prospects, Vol. 10 , 14.08.2024, ISBN 978-93-48006-52-3 (Print), ISBN 978-93-48006-11-0 (eBook), DOI: https://doi.org/10.9734/bpi/strufp/v10, (pg. 38-55)

Anexa 2. Articole apărute în JESI – 8

1. **Costică Atanasiu,** Ștefan Sorohan "Buckling of perforated discs", Volume 9, Issue 1 / 2024, pp. 1-14
2. **Mircea Radeș.** Locating excitation points in structural dynamic testing, Volume 9, Issue 1 / 2024, pp. 15-22
3. **Daniela Tarnita**, Marius Georgescu, Gabriela Marinache, Diana Prunoiu, Danuț-NicolaeTarnita Study of human ankle joint stability during stairs up and stairs down, Volume 9, Issue 1 / 2024, pp. 23-32
4. **Doina Pisla**, Bogdan Gherman, Paul Tucan, Adrian Pisla, Nadim Hajjar, Andrei Cailean, Călin Vaida On the accuracy assessment of a parallel robot for the minimally invasive cancer treatment, Volume 9, Issue 3 / 2024, pp. 253 - 264
5. Eugen Rusu, Florin Onea, Alexandra Diaconita**, Liliana Rusu** Assessment of the solar and wind energy potential related to Romanian southern lakes
6. **Mircea Radeș** Using principal response analysis in rotordynamics, Volume 9, Issue 3 / 2024, p. 287 - 302
7. **Liliana Rusu** An overview of the renewable energy potențial in the coastal environment of the Black Sea, Volume 9, Issue 2 / 2024, p. 169 - 182
8. **Daniela Tarnita,** Marius Catana 3D Modelling and numerical simulations of menisci in normal and steoarthritic human knee joint, Volume 9, Issue 4 / 2024, p. 371 - 382

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

Anexa 3.1. Participări la conferințe științifice naționale, internaționale: 70

1. Badea, M.C, Hadăr, A., Năstăsescu, V., Bârsan, G., Adetu, A., Adetu, C., "Methods, Models*, and Methodologies for Numerical Modeling of Projectile Impact on a Plate"*, The 30th International Conference The Knowledge-Based Organization, 2024, Sibiu, Romania,

Conference Proceedings 3, Applied Technical Sciences and Advanced Military Technologie, pp. 29-36, ISBN 978-973-153-578-4

2. Constantin, B.N., **Hadăr A.,** Pastramă, S.D., *"Experimental Tests of the Strength for a Freight Wagon"*, 40th Danubia Adria Symposium on Advances in Experimental Mechanics (DAS 40), pp. 177-178, 24-27 September 2024, Gdańsk, Poland
3. **N.D.Stanescu** - Participare la al 30-lea International Congress on Sound and Vibration ICSV 30, Amsterdam, 8-11 iulie 2024.
4. **N.D.Stanescu** - Participare la Zilele ASTR, Universitatea din Craiova, 19-20 septembrie 2024
5. **N.D.Stanescu** - Participare 10th International Conference on Advanced Materials and Structures (AMS 2024), 30 mai-1 iunie 2024, Timisoara, Romania
6. **N.D.Stanescu** - Participare The 3rd International Conference on Mechanical System Dynamics (ICMSD 2024), 1-4 septembrie 2024, Beijing, China
7. **N.D.Stanescu** - Participare 70th International Conference on VIBROENGINEERING, 18-19 octombrie 2024, Cluj-Napoca, Romania
8. **Rusu, L.,** 2024. Climate Change Impact on the Sea State Conditions in the Mediterranean Sea Under RCP and SSP Scenarios, presented at the 2nd Asia Pacific Conference on Sustainable Development of Energy, Water and Environment Systems (AP SDEWES), held in hybrid mode, April 02-05, 2024, Gold Coast, Australia. https://www.goldcoast2024.sdewes.org/
9. **Rusu, L.,** 2024. Climate Change Impact on the Future Sea State Conditions in the Black Sea, , presented at the 17th International Coastal Symposium (ICS2024), 24-27 September, Doha, Qatar. https://www.ics2024.org/
10. **Rusu, L.,** 2024. Evaluarea efectelor schimbărilor climatice asupra climatului de val din Marea Neagră. Prezentare la Conferința internațională „Zilele ASTR – 2024", Ediția a XIX–a 19 și 20 Septembrie 2024, Craiova.
11. Bernardino, M., Schneider, M., **Rusu, L.,** 2024. A wave energy assessment for the Moroccan Coast, 8th Europe Congress of the International Association for Hydro-Environment Engineering and Research (IAHR 2024), 04-07 June 2024, Lisbon, Portugal. https://www.iahr2024.lnec.pt/
12. Mateescu, R., Golumbeanu, M., Vlasceanu, E., **Rusu, L.,** Budileanu, M., 2024. Downstream operational services supported by the Copernicus marine environment service for the western Black Sea's fisheries, THALASSA 2024 – Marine Sciences Conference, 28-29 May, Larnaca, Cyprus. https://www.cmmi.blue/thalassa-2024/
13. Chirosca, A.-M., **Rusu, L.,** 2024. Study on the behaviour of a container ship in the Mediterranean Sea area, 7th International Conference on Maritime Technology and Engineering, 14-16 May 2024, Lisbon, Portugal. http://www.centec.tecnico.ulisboa.pt/martech2024/
14. Ganea, D., **Rusu, L.,** 2024. Assessment of the offshore wind energy along the European cost line, IEEE conference on Advanced Topics on Measurement and Simulation (ATOMS), 28-30 August 2024, Constanta, Romania. http://atoms2024.org/index.html
15. Mateescu, E., Vlăsceanu, E., Gulten, R., Constantin, S., Serban, I., Tătui, F., **Rusu, L.,** 2024. Current coastal changes' evaluations developed for the western Black Sea shore, based on earth observation products, poster presentation at 17th International Conference - European Coastal Challenge Summit - LITTORAL24, 24-27 September 2024, Constanta, Romania. https://littoral24.univ-ovidius.ro/

16. Gulten, R., *Vlasceanu*, E., Mateescu, R., **Rusu, L.,** Niculescu, D., 2024. The hydrological and geomorphological effects induced during the winter storms produced in the northwestern Black Sea basin, in the context of the climate changes, 3rd World Conference on Meteotsunamis, 13-17 October 2024, Bodrum, Turkey. https://www.3rdmeteotsunami.org/
17. Chirosca, A.M., **Rusu, L.,** Popa, V.I., Rusu, E., 2024. Climate analysis along the navigation routes on the Danube, XXIVth International Multidisciplinary Scientific GeoConference Surveying, Geology and Mining, Ecology and Management – SGEM 2024, Section Hydrology and Water Resources, 29 June - 8 July 2024, Albena, Bulgaria.
18. Manolache, A.I., Chirosca, A-M, **Rusu, L.**, 2024. Assessment of wind and wave climate dynamics in the Mediterranean and Black Seas for renewable energy potential analysis, 9th International Conference on Advances on Clean Energy Research (ICACER 2024), held in hybrid mode, April 27-29, 2024, Lille, France. https://www.icacer.com/2024.html
19. Mateescu, R., Niculescu, D., Vlasceanu, E., **Rusu, L.**, Valdenbulche, L., 2024. Downstream operational services supported by the Copernicus marine environment service for Black Sea coastal and marine areas protection, online Smart Marine Conservation FORUM, 4-6 Martch 2024, Al Hoceima, Morocco. https://smart-marine-conservation-forum.spa-rac.org/
20. Mateescu, R., **Rusu, L.,** Vlasceanu, E., Niculescu, D., 2024. Coastal waves' gauge stations network extension in the Romanian coastal areas, Its support of the fisheries and experimental aquaculture farms management, poster presentation online Smart Marine Conservation FORUM, 4-6 Martch 2024, Al Hoceima, Morocco. https://smart-marine-conservation-forum.spa-rac.org/
21. Conferința "Zilele ASTR", septembrie 2024, lucrarea prezentată- **Iuliu Negrean,** "Acceleration Energies and Higher-Order Dynamic Equations in Analytical Mechanics"
22. International Conference on Robotics in Alpe-Adria Danube Region- RAAD 2024, Cluj Napoca, iunie 2024
23. IFToMM International Symposium on Robotics and Mechatronics, ISRM 2024, Djerba, Tunisia, aprilie 2024
24. IFToMM Symposium on Mechanism Design for Robotics, MEDER 2024, iunie 2024, Timisoara
25. The Joint International Conference of the XIV International Conference on Mechanisms and Mechanical Transmissions (MTM) and the XXVI International Conference on Robotics (ROBOTICS) Iasi, Romania, November 14 – 16, 2024
26. International Conference on Advanced Research in Engineering, Craiova, CARE 2024, 17-19 octombrie 2024
27. Conferința internațională Zilele ASTR 2024 – Craiova, 17-19 septembrie, 2024
28. Conferința „Zilele ASTR 2024" – Craiova, 17-19 septembrie –membru in comitetul de organizare
29. 10th International Conference Advanced Composite Materials Engineering- 22-23.10.2024, Brasov- membru în comitetul de organizare
30. Conferința „Zilele ASTR 2024" – Craiova, 17-19 septembrie –membru in comitetul de organizare
31. 10th International Conference Advanced Composite Materials Engineering- 22-23.10.2024, Brasov- membru în comitetul de organizare
32. Coropețchi, I.A., **Constantinescu D.M.**, Vasile, A., Sorohan, Șt., Apostol, D.A., A Critical Evaluation of Design Methods for Dual-Phase Composites Optimization, SISOM 2024 and

Session of the Commission of Acoustics, September 19th – 20th, 2024, Bucharest, Romania, 2024 2.

33. Coropețchi, I.A., **Constantinescu, D.M.**, Vasile, A., Sorohan, Şt., Apostol, D.A., Direct search methods for determining new designs of auxetic composite materials, 40th Danubia-Adria Symposium on Advances in Experimental Mechanics, September 24-27, 2024, Gdansk, Poland, 2024

34. Vasile, A., **Constantinescu, D.M.**, Coropețchi, I.A., Sorohan, Şt., Apostol, D.A., Compression response of sandwich structures with novel TPMS cores, 40th Danubia-Adria Symposium on Advances in Experimental Mechanics, September 24-27, 2024, Gdansk, Poland, 2024

35. Coropețchi, I.A., **Constantinescu, D.M.,** Vasile, A., Sorohan, Şt., Apostol, D.A., Comparative analysis of direct search methods for material design optimization, MDA24, 5th International Conference on Materials Design and Applications, 04-05 July 2024, Porto, Portugal, 2024

36. Vasile, A., **Constantinescu, D.M.,** Coropețchi, I.A., Sorohan, Şt., Apostol, D.A., Definition, fabrication and testing of sandwich structures with novel TPMS-based cores, MDA23, 5th International Conference on Materials Design and Applications, 04-05 July 2024, Porto, Portugal, 2024

37. În cadrul conferinței 3rd International Conference – Innovation in Engineering am susținut lucrarea plenară intitulată: Latest trends in medical robotics for rehabilitation, https://archive.icieng.eu/2024.

38. În cadrul conferinței 3rd International Conference on Advanced Research in Engineering (CARE) adn 7th International Conference on Mechanical Engineering (ICOME) am susținut lucrarea plenară intitulată: Innovative Robots and Technologies in Medicine Anexa3.

Anexa 3.2. Reviste clasificate ISI;

1. Tălîngă, A.M., **Hadăr, A.,** Drăgoi, M.V., Nisipeanu, I., Ali, H.A., Suciu, C.P., *"YOLO-v8 in Capturing Imperfections Generated by Changing 3D Printer Parameters"*, U.P.B. Sci. Bull., Series C: Electrical Engineering and Computer Science, **86(4)**, 2024, pp. 253-266, ISSN 2286-3540, indexed: 2024-12-27, impact factor: 0.2, Q4
2. Drăgoi, M.V., Nisipeanu, I., Frimu, A., Tălîngă AM., **Hadăr, A.,** Dobrescu, T.G., Suciu, C.P., Manea, A.R.,*"Real-Time Home Automation System Using BCI Technology"*, Biomimetics, **9(10)**, 2024, 594, DOI10.3390/biomimetics9100594, impact factor: 3.4, Q1
3. Ursache, Ș., Cerbu, C., **Hadăr, A.,** Petrescu H.A., *"Effects of Rubber Core on the Mechanical Behaviour of the Carbon-Aramid Composite Materials Subjected to Low-Velocity Impact Loading Considering Water Absorption"*, Materials, **16(17)**, 2024, 4055, DOI10.3390/ma17164055, impact factor: 3.1, Q1
4. Iacob, M.C., Popescu, D., Stochioiu, C., Baciu, F., **Hadăr, A.,** *"Compressive behavior of thermoplastic polyurethane with an active agent foaming for 3D-printed customized comfort insoles"*, Polymer Testing, **137**, 2024, DOI10.1016/j.polymertesting.2024.108517, impact factor:4.7, Q1
5. Ursache, Ș., Cerbu, C., **Hadăr, A.,** *"Characteristics of Carbon and Kevlar Fibres, Their Composites and Structural Applications in Civil Engineering-A Review"*, Polymers, **16(1)**, 2024, DOI10.3390/polym16010127, impact factor: 4.7, Q1
6. Valentin RĂCĂȘAN, **Nicolae-Doru STĂNESCU**, On Spatial Systems of Bars Spherically Jointed at Their Ends and Having One Common End, Mathematics, MDPI, 2024, WOS: 001310991100001, FI: 2.3, Q1
7. Iosif Birlescu, Nicoleta Tohanean, Calin Vaida, Bogdan Gherman, Deborah Neguran, Alin Horsia, Paul Tucan, **Daniel Condurache**, Doina Pisla, "*Modeling and analysis of a parallel robotic system for lower limb rehabilitation with predefined operational workspace",* Mechanism and Machine Theory, Volume 198, 2024, 105674, ISSN 0094-114X, https://doi.org/10.1016/j.mechmachtheory.2024.105674 .\
8. **Condurache, D.**, Mihail Cojocari, Ioan-Adrian Ciureanu, 2024." *A Closed Form of Higher-Order Cayley Transforms and Generalized Rodrigues Vectors Parameterization of Rigid Motion" Mathematics* 13, no. 1: 114. https://doi.org/10.3390/math13010114
9. Bere, P., **Dudescu, C**., Parparit, M., Vilau, C. (2024). Design and Manufacture of Bent and Variable Section Tubes Made of FRP Composite. MM SCIENCE JOURNAL, Vol. 2024, pp. 7511-7517, https:/doi.org/10.17973/MMSJ.2024_10_2024071\
10. Muresanu, A. D., & **Dudescu, M. C**. (2024). Modelling of a Cylindrical Battery Mechanical Behavior under Compression Load. *Batteries*, *10*(10), 353.
11. Muresanu, A. D., **Dudescu, M. C**., & Tica, D. (2024). Study on the Crashworthiness of a Battery Frame Design for an Electric Vehicle Using FEM. *World Electric Vehicle Journal*, *15*(11), 534
12. Zach, T. F., **Dudescu, M. C**. (2024). *The Three-Dimensional Printing of Composites: A Review of the Finite Element/Finite Volume Modelling of the Process*. Journal of Composites Science, 8(4), 146. https://doi.org/10.3390/jcs8040146

13. Cimpoieș, V. I., **Dudescu, M. C**. (2024). *Numerical and Experimental Stiffness Evaluation of Quilling Inspired Structures*. Acta Technica Napocensis-Series: Applied Mathematics, Mechanics, and Engineering, 67(1), 81-88.
14. Berar, AM, **Dudescu, M.C**., Carbonel, M., Bocanet, V., Buduru, S.D. (2024). In-Vitro Comparative Study of Compressive Strength In CAD/CAM Dental Materials, ROMANIAN JOURNAL OF ORAL REHABILITATION, 16(2), 119-134, DOI 10.6261/RJOR.2024.2.16.13.
15. Pop, S.I., **Dudescu, M**., Ana, P., Kerekes-Mathe, B.E., Mitariu, M., Bud, E. Mitariu, L., Pacurar, M., Pop, R.V. (2024). Evaluation Of the Biomechanical Properties of in Vivo Used Orthodontic Mini-Implants, ROMANIAN JOURNAL OF ORAL REHABILITATION, 16 (1) 238-245, DOI 10.6261/RJOR.2024.1.16.20
16. Forward Fall Detection Using Inertial Data and Machine Learning, C Tufisi, ZI Praisach, **GR Gillich**, AI Bichescu, TL Heler, Applied Sciences 14 (22), 10552
17. A Stacked Neural Network Model for Damage Localization, CV Rusu, **GR Gillich**, C Tufisi, N Gillich, TH Bui, C Ionut, Sensors 24 (21), 7019
18. Signal Time-Shifting Effects on DFT Spectra, P Prvulović, **GR Gillich,** Đ Babić, Romanian Journal of Acoustics and Vibration 20 (1), 112-116
19. **Rusu, L.,** 2024. An analysis of the expected wave conditions in the Mediterranean Sea in the context of global warming. *Ocean Engineering*, 301, p.117487. https://doi.org/10.1016/j.oceaneng.2024.117487
20. **Rusu, L.,** 2024. An analysis of the environmental matrix in the Adriatic Sea – past and future projections, *J. sustain. dev. energy water environ. syst.*, 12(2), 1110480. https://doi.org/10.13044/j.sdewes.d11.0480, https://www.sdewes.org/jsdewes/pid11.0480
21. **Rusu, L.,** 2024. Climate Change Impact on the Future Sea State Conditions in the Black Sea. *Journal of Coastal Research*, SI113, 200-204.
22. Răileanu, A.B., **Rusu, L.,** Marcu, A. and Rusu, E., 2024. The Expected Dynamics for the Extreme Wind and Wave Conditions at the Mouths of the Danube River in Connection with the Navigation Hazards. *Inventions*, *9*(2), p.41. https://doi.org/10.3390/inventions9020041
23. Mandru, A., **Rusu, L.,** Bekhit, A., Pacuraru, F., 2024. Numerical Study of a Model and Full-Scale Container Ship Sailing in Regular Head Waves. *Inventions*, *9*(1), p.22. https://doi.org/10.3390/inventions9010022
24. deCastro, M., **Rusu, L.,** Pérez, B.A., Ribeiro, A., Costoya, X., Carvalho, D. and Gomez-Gesteira, M., 2024. Different Approaches to Analyze the Impact of Future Climate Change on the Exploitation of Wave Energy. *Renewable Energy*, 220, 119569. https://doi.org/10.1016/j.renene.2023.119569
25. **Negrean, I.,** Crisan, A., Vlase, S., „D'Alembert-Lagrange Principle in Symmetry of Advanced Dynamics of Systems", Symmetry 2024, 16, 1105, https://doi.org/10.3390/sym16091105
26. Mare, I., **Negrean, I.,** Crișan, A., „ Polynomial Functions in Robot Dynamics", RJAV vol 21, issue 1/2024, ISSN 1584-7284, pp. 91-102
27. Mare, I., **Negrean, I.,** Vlase, S., „Gibbs-Appell Equations used in Finite Element Analysis of Elastic Materials with Voids having a Plane Motion", RJAV vol 21, issue 1/2024, ISSN 1584- 7284, pp. 83-90

28. Mare, I., **Negrean, I.**, „Advanced Kinematics Modeling of a 2RTR Serial Robot", Acta Technica Napocensis Series-Applied Mathematics Mechanics and Engineering, ISSN 1221-5872, vol 67, issue III, august 2024, pp. 343-354.
29. Vasile, A., **Constantinescu, D.M.,** Coropețchi, I.C., Sorohan, Șt, Apostol, D.A., Assessment of the Additive Fabrication Quality of Sandwich Structures with Novel Triply Periodic Minimal Surface Cores, Solids, vol. 5(4), pp. 665-680, 2024, https://doi.org/10.3390/solids5040045, WOS: , IF=2,4
30. 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, Early Access online, 2024, https://doi.org/10.1177/14644207241294056, WOS: 001354244800001, IF=2,5
31. Vasile, A., **Constantinescu, D.M., C**oropețchi, I.C., Sorohan, Șt, Apostol, D.A., Definition, Fabrication, and Compression Testing of Sandwich Structures with Novel TPMS-Based Cores, Materials, vol. 17(21), 5150, 2024, https://doi.org/10.3390/ma17215150, WOS: 001351774100001, IF=3,1
32. Indreș, A.I., **Constantinescu, D.M.,** Mocian, O.A., Sorohan, Șt, Particularities on the LowVelocity Impact Behavior of 3D-Printed Sandwich Panels with Re-Entrant and Honeycomb Core Topologies, Journal of Composites Science, vol. 8, 426, 2024, https://doi.org/10.3390/jcs8100426, WOS: 001342654200001, IF=3.0
33. **Sorin Vlase**, Calin Itu, Marin Marin, Maria Luminta Scutaru, Florin Sabou, Radu Necula- Vibration analysis of the Gamma-Ray element in the ELI-NP interaction chamber (IC)- Journal of Computational Applied Mechanics 2024, 55(2): 275-288, 2024, FI=1.5
34. **Vlase, S,** Marin, M , Standard Deformations of Nonlinear Elastic Structural Elements with Power-Law Constitutive Model, MATHEMATICS, 2024, FI=2.3
35. Mostafa Katouzian, **Sorin Vlase** , Calin Itu and Maria Luminita Scutaru - Calculation of Homogenized Mechanical Coefficients of Fiber-Reinforced Composite Using Finite Element Method, Materials, 2024, FI=3.1
36. Calin Itu, Maria Luminita Scutaru and **Sorin Vlase** , Elastic Constants of Polymeric Fiber Composite Estimation Using Finite Element Method, 2024, FI=4.7
37. Scutaru, ML; **Vlase, S ;** Marin, M - Analytical mechanics methods in finite element analysis of multibody elastic system, BOUNDARY VALUE PROBLEMS , 2024, FI=1
38. Scutaru, ML; **Vlase, S ;** Marin, M , Flap and Wing Dynamics for a Light Sport Aircraft Analysis Using a Topological Model APPLIED SCIENCES-BASEL, 2024, FI=2.5
39. Petrici, AV ; Scutaru, ML ; Munteanu, VM; **Vlase S-** Use of New and Light Materials in Automotive Engineering for Towing System, 2024, APPLIED SCIENCES-BASEL, FI=2.5
40. El Fakkoussi, S ; **Vlase, S;** Marin, M ; Koubaiti, O ; Elkhalfi, A ; Moustabchir, H - Predicting Stress Intensity Factor for Aluminum 6062 T6 Material in L-Shaped Lower Control Arm (LCA) Design Using Extended Finite Element Analysis, Materials, 2024, FI=3.3
41. Marin, M; **Vlase, S**; Neagu, D , On a composite obtained by a mixture of a dipolar solid with a Moore-Gibson-Thompson media, , 2024, FI=1
42. Montassir, S ; Moustabchir, H ; El Khalfi, A ; **Vlase, S;** Scutaru, ML , Numerical Study of Crack Prediction and Growth in Automotive Wheel Rims, Materials, 2024, FI=3.3

43. Katouzian, M ; **Vlase, S** ; Marin, M, Elastic moduli for a rectangular fibers array arrangement in a two phases composite, JOURNAL OF COMPUTATIONAL APPLIED MECHANICSarrow_drop_down, 2024, FI=1.5

44. Marin, M ; Öchsner, A ; **Vlase, S** , On the initial boundary values problem for a mixture of two Cosserat bodies with voids, CONTINUUM MECHANICS AND THERMODYNAMIC, 2024, FI=1.9

45. Koubaiti, O ; El Ouadefli, L ; Elkhalfi, A ; El Akkad, A; **Vlase, S ;** Marin, M - Isogeometric Resolution of the Brinkman-Forchheimer-Darcy, JOURNAL OF APPLIED AND COMPUTATIONAL MECHANICS, 2024, FI=2.8

46. **Vlase, S** ; Itu, C- The Properties of Structures with Two Planes of Symmetry, SYMMETRY-BASEL, 2024, FI=2.2

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