

Rezultatele cercetarii Selectie 2015-2024

Lucrări indexate ISI/BDI

1. Alexandru, C. Analytical algorithm for the optimal kinematic design of the wheel suspension mechanisms. *Applied Mechanics and Materials*, vol. 772, 2015, p. 96-102, ISSN 1660-9336, DOI 10.4028/www.scientific.net/AMM.772.96.
2. Alexandru, C. Dynamic modeling and simulation of a 4-wheel integral steering vehicle. *Applied Mechanics and Materials*, vol. 811, 2015, p. 284-290, ISSN 1660-9336, DOI 10.4028/www.scientific.net/AMM.811.284.
3. Alexandru, C., Țotu, V. Method for the multi-criteria optimization of car wheel suspension mechanisms. *Ingeniería e Investigación*, vol. 36, nr. 2, 2016, p. 60-67, ISSN 0120-5609, DOI 10.15446/ing.investig.v36n2.52517, Accession Number WOS:000385596700009.
4. Alexandru, C. Mono-objective optimization of a photovoltaic tracking system with LPF controllers. *Applied Mechanics and Materials*, vol. 823, 2016, p. 7-12, ISSN 1660-9336, DOI 10.4028/www.scientific.net/AMM.823.7.
5. Alexandru, C. Analytical method for determining the static equilibrium position of the rear axles guiding mechanisms of the motor vehicles. *Applied Mechanics and Materials*, vol. 841, 2016, p. 59-64, ISSN 1662-7482, DOI 10.4028/www.scientific.net/AMM.841.59.
6. Alexandru, C. Simulation of a mechatronic dual-axis tracking system for PV panels. *Applied Mechanics and Materials*, vol. 859, 2016, p. 81-87, ISSN 1662-7482, DOI 10.4028/www.scientific.net/AMM.859.81.
7. Alexandru, C. A mechanical integral steering system for increasing the stability and handling of motor vehicles. *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science*, vol. 231, nr. 8, 2017, p. 1465-1480, ISSN 0954-4062, DOI 10.1177/0954406215624465, Accession Number WOS:000399692000006.
8. Alexandru, C. Numerical method for the kinematic analysis of the spatial multi-link mechanisms. *International Journal of Modeling and Optimization (IJMO)*, vol. 8, nr. 2, 2018, p. 101-105, ISSN 2010-3697, DOI 10.7763/IJMO.2018.V8.632.
9. Alexandru, C. Design and analysis in virtual prototyping environment of an innovative integral steering system for 2-axle cars. *Applied Mechanics and Materials*, vol. 880, 2018, p. 213-219, ISSN 1662-7482, DOI 10.4028/www.scientific.net/AMM.880.213.
10. Alexandru, C. Optimizing the mechanical device of a mono-axial sun tracking mechanism. *MATEC Web of Conferences*, vol. 184, 2018, Article Number 01001, ISSN 2261-236X, DOI 10.1051/matecconf/201818401001.
11. Alexandru, C. Optimizing the control system of a single-axis sun tracking mechanism. *MATEC Web of Conferences*, vol. 184, 2018, Article Number 01002, ISSN 2261-236X, DOI 10.1051/matecconf/201818401002.
12. Alexandru, C. Method for the quasi-static analysis of beam axle suspension systems used for road vehicles. *Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile*

- Engineering, vol. 233, nr. 7, 2019, p. 1818-1833, ISSN 0954-4070, DOI 10.1177/0954407018790159, Accession Number WOS:000474052400012.
- 13. Alexandru, C. Optimal design of the dual-axis tracking system used for a PV string platform. *Journal of Renewable and Sustainable Energy*, vol. 11, nr. 4, 2019, p. 043501(1-14), ISSN 1941-7012, DOI 10.1063/1.5109390, Accession Number WOS:000482886400008.
 - 14. Alexandru, C. Design of the mechatronic systems used for improving the efficiency of the solar energy conversion devices. *International Journal of Modeling and Optimization (IJMO)*, vol. 9, nr. 5, 2019, p. 254-258, ISSN 2010-3697, DOI 10.7763/IJMO.2019.V9.719.
 - 15. Alexandru, C. Multi-body system simulation of the sun trackers used for PV panels. *IOP Conference Series: Materials Science and Engineering*, vol. 568, 2019, p. 012001(1-5), ISSN 1757-899X, DOI 10.1088/1757-899X/568/1/012001.
 - 16. Alexandru, C. Dynamic simulation of the adaptive sun tracking system used for an electric unmanned ground vehicle. *IOP Conference Series: Materials Science and Engineering*, vol. 568, 2019, p. 012019(1-5), ISSN 1757-899X, DOI 10.1088/1757-899X/568/1/012019.
 - 17. Alexandru, C. Design of the mechatronic systems used for improving the efficiency of the solar energy conversion devices. *International Journal of Modeling and Optimization (IJMO)*, vol. 9, nr. 5, 2019, p. 254-258, ISSN 2010-3697, DOI 10.7763/IJMO.2019.V9.719.
 - 18. Alexandru, C. Innovative bi-axial tracking mechanism for PV modules. *Renewable Energy and Power Quality Journal (REPQJ)*, vol. 18, 2020, p. 184-189, ISSN 2172-038X, DOI 10.24084/repqj18.266.
 - 19. Alexandru, C. A study on the semi-active suspension systems used for motor vehicles. *Journal of Research and Innovation for Sustainable Society (JRIS)*, vol. 2, nr. 1, 2020, p. 16-25, ISSN 2668-0416, DOI 10.33727/JRIS.2020.1.3:16-25.
 - 20. Alexandru, C. Analytical method for the kinematics of the multi-link guiding mechanisms used for vehicle rear axle suspension. *Journal of Research and Innovation for Sustainable Society (JRIS)*, vol. 2, nr. 2, 2020, p. 13-20, ISSN 2668-0416, DOI 10.33727/JRIS.2020.2.2:13-20.
 - 21. Alexandru, C. Method for the kinematic analysis of the vehicle axle guiding mechanisms. *International Journal of Modeling and Optimization (IJMO)*, vol. 10, nr. 4, 2020, p. 126-131, ISSN 2010-3697, DOI 10.7763/IJMO.2020.V10.759.
 - 22. Alexandru, C. Static analysis of a vehicle suspension with leaf springs and reaction bars. *IOP Conference Series: Materials Science and Engineering*, vol. 898, 2020, p. 012038(1-6), ISSN 1757-899X, DOI 10.1088/1757-899X/898/1/012038.
 - 23. Alexandru, C. A modular approach to the kinematics of the vehicle axle suspension linkages. *IOP Conference Series: Materials Science and Engineering*, vol. 898, 2020, p. 012041(1-6), ISSN 1757-899X, DOI 10.1088/1757-899X/898/1/012041.
 - 24. Alexandru, C. A comparative analysis between some dynamic models for the vehicle suspension system. *IOP Conference Series: Materials Science and Engineering*, vol. 997, 2020, p. 012069(1-6), ISSN 1757-899X, DOI 10.1088/1757-899X/997/1/012069.
 - 25. Alexandru, C. Optimization of the bi-axial tracking system for a photovoltaic platform. *Energies*, vol. 14, nr. 3, 2021, p. 535(1-30), ISSN 1996-1073, DOI 10.3390/en14030535, Accession Number WOS:000615051800001.

26. Alexandru C. Multi-objective optimization of a mechatronic solar tracking mechanism. International Journal of Modeling and Optimization (IJMO), vol. 11, nr. 4, 2021, p. 126-131 ISSN 2010-3697, DOI 10.7763/IJMO.2021.V11.789.
27. Alexandru, C. A study on the effect of the deformations in flexiblocks on the behavior of the vehicle axle suspension mechanisms. IOP Conference Series: Materials Science and Engineering, vol. 1169, 2021, p. 012001(1-6), ISSN 1757-899X, DOI 10.1088/1757-899X/1169/1/012001.
28. Alexandru, C. Design sensitivity analysis in the kinematics of the 4SS-axle guiding mechanism with Panhard bar. IOP Conference Series: Materials Science and Engineering, vol. 1169, 2021, p. 012002(1-5), ISSN 1757-899X, DOI 10.1088/1757-899X/1169/1/012002.
29. Alexandru, C. A method for finding the static equilibrium of the non-steered wheel suspension systems used in passenger cars. Applied Sciences, vol. 12, nr. 14, 2022, p. 7122(1-17), ISSN 2076-3417, DOI 10.3390/app12147122, Accession Number WOS:000833818100001.
30. Alexandru, C. Design sensitivity analysis in the kinematics of the 4SS-axle guiding mechanism in Chebyshev configuration. IOP Conference Series: Materials Science and Engineering, vol. 1256, 2022, p. 012020(1-5), ISSN 1757-899X, DOI 10.1088/1757-899X/1256/1/012020.
31. Alexandru, C. Modelling and simulation of a single-motor bi-axial sun tracking mechanism. IOP Conference Series: Materials Science and Engineering, vol. 1256, 2022, p. 012021(1-5), ISSN 1757-899X, DOI 10.1088/1757-899X/1256/1/012021.
32. Alexandru, C. PV tracking systems. Energies, vol. 16, nr. 6, 2023, p. 2769(1-3), ISSN 1996-1073, DOI 10.3390/en16062769, Accession Number WOS:000959881700001.
33. Alexandru, C. Modelling and simulation of a hydraulically operated solar tracker. Renewable Energy and Power Quality Journal (REPQJ), vol. 21, 2023, p. 527-532, ISSN 2172-038X, DOI 10.24084/repqj21.383.
34. Alexandru, C. Influence of the deformations in bushings on the dynamic behaviour of the vehicles' rear axle guidance systems. International Journal of Modeling and Optimization (IJMO), vol. 13, nr. 1, 2023, p. 19-23, ISSN 2010-3697, DOI 10.7763/IJMO.2023.V13.819.
35. Alexandru, C. Static analysis of a multi-link suspension system used for the rear beam axles of vehicles. Journal of Research and Innovation for Sustainable Society (JRRISS), vol. 5, nr. 2, 2023, p. 96-103, ISSN 2668-0416, DOI 10.33727/JRRISS.2023.2.12:96-103.
36. Alexandru, C. Simulation and optimization of a dual-axis solar tracking mechanism. Mathematics, vol. 12, nr. 7, 2024, p. 1034, ISSN 2227-7390, DOI 10.3390/math12071034, Accession Number WOS:001201058400001.
37. Alexandru, C. Optimal design of the two-loop control system for a single-axis solar tracker. Advances in Mechanism Design – Mechanisms and Machine Science, vol. 171, 2024, ISBN 978-3-031-70250-1, DOI 10.1007/978-3-031-70251-8_28, Accession Number WOS:001328769400028.
38. Alaci, S., Alexandru, C., Ciornel, F.C., Doroftei, I., Irimescu, L. Chaos illustrations in dynamics of mechanisms. Mechanisms and Machine Science: New Trends in Mechanism and Machine Science, vol. 89, 2020, p. 297-304, ISSN 2211-0984, DOI 10.1007/978-3-030-55061-5_34.
39. Enescu (Balas), M.L., Alexandru, C. Parametric optimization in virtual prototyping environment of the control device for a robotic system used in thin layers deposition. IOP Conference Series: Materials

Science and Engineering, vol. 147, 2016, p. 012087 (1-7), ISSN 1757-8981, DOI 10.1088/1757-899X/147/1/012087, Accession Number WOS:000390720200087.

40. Gavrilă, C.C., Velicu, R., Virtual Modeling, Detail Design and FEM Analysis for a Testing Device, International Conference of Mechanical Engineering (ICOME 2015), October 8-9, 2015, Craiova, Romania; published in Applied Mechanics and Materials Vol. 823, Current Solutions in Mechanical Engineering page 3-6, Trans Tech Publications, Switzerland, 2016
41. Gavrilă, C. C., Lateş, M.T., Velicu, R. 3D Modeling and Fem Analysis for Solar Panel Mounting System on a House Roof. În: Annals of the Oradea University, Fascicle of Management and Technological Engineering, Volume XVI, (XXVI) 2017, Oradea 2017, pag. 1–4, ISSN 2457-8347, ISSN-L 2285-3278.
42. Gavrilă, C. C., Lateş, M.T. Snow Fence Load On A House Roof With Tiles În: Annals of the Oradea University, Fascicle of Management and Technological Engineering, Volume XVII, (XXVII) 2018, Oradea 2018, pag. 37–41, ISSN 2457-8347, ISSN-L 2285-3278, Matec Web conf., vol 184, 2018.
43. Gavrila, C. C., Săulescu, R., Determining the Optimal Operating Parameters of a Wind System. În: Annals of the Oradea University, Fascicle of Management and Technological Engineering, Volume XVII, (XXVII) 2018, Oradea 2018, pag. 53–60, ISSN 2457-8347, ISSN-L 2285-3278, Matec Web conf., vol 184, 2018.
44. Gavrilă, C. C., Lateş, M.T. Metal Coin Error Study, Using 3D Modeling and FEM Analysis 2019 IOP Conf. Ser.: Materials Science and Engineering 568(1),012002
45. Gavrilă, C. C., Lateş, M.T. 3D Modelling and FEM Analysis on Die Clash Mint Error IOP Conf. Ser.: Materials Science and Engineering, Volume: 898, Article Number: 012040
46. Gavrilă, C. C., Lateş, M.T. Considerations about the friction inside on a transversal coupling IOP Conf. Ser.: Materials Science and Engineering, Volume: 916, Issue 1, Article Number: 012040, 2020. ISSN: 17578981 DOI: 10.1088/1757-899X/916/1/012040
47. Gavrilă, C. C., Lateş, M.T. 3D Modelling and FEM Analysis on Metal Coin Edge Punching Error IOP Conf. Ser.: Materials Science and Engineering, Volume: 1169, Article Number: 012006, 2021.
48. Gavrilă, C. C., Lateş, M.T. 3D Modelling and FEM Analysis on Holed Metal Coin Striking Die Mint Error IOP Conf. Ser.: Mater. Sci. Eng. 1256 012001, 2022.
49. Gavrilă,C.C., Lateş,M.T., Grebenișan,G., Sustainable Approach to Metal Coin Canceling Methods, Using3D Modeling and Finite Element Method Analysis. Sustainability 2024, 16, x. <https://doi.org/10.3390/>.
50. Jurj, L., Velicu, R. Influence of number of teeth and centrifugal force on forces distribution on silent chain transmissions, 7th International Conference on Advanced Concepts in Mechanical Engineering IOP Publishing IOP Conf. Series: Materials Science and Engineering, Iasi, 2017, publisched in: Mechanisms and Machine Science, 57, pp. 507-514, 2018- Springer
51. Jurj L, Velicu, R., Saulescu, R. Geometry of silent chain – involute sprocket, Annals of the Oradea University, Fascicle of Management and Technological Engineering, Oradea, 2018, MATEC Web of Conferences 184, 02003 (2018),
52. Jurj L, Velicu, R. On the benchmarking of friction in timing chains, Annals of the Oradea University, Fascicle of Management and Technological Engineering, Oradea, 2018, MATEC Web of Conferences 184, 02002 (2018)

53. Jurj, L., Velicu, R., Lateş, M., T., Geometry influence on silent chain – sprocket friction, Proceedings of the XTH International Conference on Product Design, Robotics, Advanced Mechanical & Mechatronic Systems and Innovation – PRASIC, November 8-9, 2018, Brasov IOP Conf. Series: Materials Science and Engineering 514 (2019) 012014
54. Lateş, M.T., Gavrilă, C. C. Influence of the silent chain link geometry on the link / chain guide contact 2019 IOP Conference Series: Materials Science and Engineering 568(1),012036
55. Lateş, M.T., Gavrilă, C. C. Comparative study of the friction phenomenon in the contact between the guide and the bush and silent chain links IOP Conf. Ser.: Materials Science and Engineering, Volume: 724, Issue 1, Article Number: 0120031, 2020. ISSN: 1757-8981
56. Lateş, M. T., Papuc, R., Gavrilă, C. C. Tribological modelling of the normal forces distribution on the toothed chain links. In: Annals of the Oradea University, Fascicle of Management and Technological Engineering, vol. XV (XXV)/1, Editura Universităţii din Oradea, 2016, ISSN 1583 – 0691. p. 97-102.
57. Lateş, M. T., R. Papuc. FEM modelling of the lubrication in guide – chain link contacts. In: Annals of the Oradea University, Fascicle of Management and Technological Engineering, vol. XV (XXV)/1, Editura Universităţii din Oradea, 2016, ISSN 1583 – 0691. pp.43-46.
58. Lateş, M. T., Gavrilă, C., Papuc, R. Frictional contact study of the chain link/polyamide contact. Mechanisms and Machine Science, 57, 2018, pp. 497-506.
59. Lateş, M.T., Velicu, R.G., Jurj L. Influence of pitch and exploitation on the frictional behaviour of the silent chains. Proceedings of the Institution of Mechanical Engineers. Part D. Journal of Automobile Engineering. ISSN 2041-2991, 2019.
60. Lateş, M. T., Velicu, R. G., Gavrila, C. C. Temperature, pressure and velocity influence on the tribological properties of PA66 and PA46 polyamides. Materials, Vol.12, Issue 20, . Article Number: 3452, 2019, ISSN 1996-1944.
61. Lateş, M. T., Gavrilă, C. C. Comparative study of the friction phenomenon in the contact between the guide and the bush and silent chain links. Materials Science and Engineering, Volume: 724, Issue 1, Article Number: 0120031, 2020. ISSN: 1757-8981.
62. Lateş, M. T., Gavrilă, C. C. Study of the bearing friction inside on a mobile coupling joint. International Journal of Modern Manufacturing Technologies, Volume: XIV, Nr. 3, 2022. ISSN: 2067-3604.
63. Marcu, A., Alexandru, C., Barbu, I. Modeling and simulation of a dual-axis solar tracker for PV modules. IOP Conference Series: Materials Science and Engineering, vol. 514, 2019, p. 012036(1-6), ISSN 1757-899X, DOI 10.1088/1757-899X/514/1/012036.
64. Marcu, A., Alexandru, C., Barbu, I. Dynamic optimization of a dual-axis solar tracker for PV modules. IOP Conference Series: Materials Science and Engineering, vol. 514, 2019, p. 012037(1-6), ISSN 1757-899X, DOI 10.1088/1757-899X/514/1/012037.
65. Moldovan, C., Staretu, I., Capturing human hand movements with a webcam to control an anthropomorphic gripper. Procedia Manufacturing, Volume 22, 2018, pp. 519-526.
66. Papuc, R., Velicu, R., Lateş, M. T. Guide – chain contact pressure tribological analysis. In: Annals of the Oradea University, Fascicle of Management and Technological Engineering, vol. XIV (XXIV), Nr.1, Editura Universităţii din Oradea, 2015, ISSN 1583 – 0691. p. 169-174.

67. Papuc, R., Gavrilă, C., Lateş, M. T. Modeling the pressure distribution in the contact between guide and chain. In: Bulletin of the Transilvania University of Braşov, vol. 9 (58). Nr.2, Special Issue, Series 1 Engineering Sciences, 2016, ISSN 2065 – 2119, pp.197-202.
68. Papuc, R., Lateş, M. T., Velicu R. The tribological modeling of the tensioning guide - toothed chain contact. Applied Mechanics and Materials, vol. 880, 2018, p. 9-14, ISSN 1662-7482.
69. Saulescu, R., Jurj, L., Velicu, R. Centrifugal effect on shaft's release of chain transmissions 8th International Conference on Advanced Concepts in Mechanical Engineering (ACME) IOP Conference Series-Materials Science and Engineering Vol. 444 Article Number: 052006, 2018
70. Saulescu, R., Velicu, R., Lateş, M. T. Geometric modeling of the contact point between the bushing and sprocket in chain drives. 13TH International Conference on Tribology (ROTRIB'16) Book Series: IOP Conference Series-Materials Science and Engineering Volume: 174 Article Number: UNSP 012049 SEP 22-24, 2017.
71. Saulescu, R. M. Neagoe. Dynamic Response of a Single-Rotor Wind Turbine with Planetary Speed Increaser and Counter-Rotating Electric Generator in Starting Transient State. Applied Sciences 2025, 15, 191; doi.org/10.3390/app15010191
72. Saulescu, R. C. Jaliu., M. Neagoe, D. Ciobanu, N. Cretescu. Comparative analysis of torque-adding wind energy conversion systems with a counter-rotating vs. conventional electric generator. Front. Energy Res., 2023, 11; doi.org/10.3389/fenrg.2023.1215509
73. Saulescu, R., M. Neagoe, C. Jaliu, O. Munteanu. A Comparative Performance Analysis of Counter-Rotating Dual-Rotor Wind Turbines with Speed-Adding Increasers. Energies 2021, 14(9), 2294; doi: 10.3390/en14092594
74. Saulescu, R., M. Neagoe, C. Jaliu. Conceptual Synthesis of Speed Increasers for Wind Turbine Conversion Systems. Energies 2018, 11, 2257; doi:10.3390/en11092257
75. Saulescu, R., M Neagoe, C Jaliu. Improving the Energy Performance of Wind Turbines Implemented in the Built Environment Using Counter-rotating Planetary Transmissions, Iasi, Romania, 2016, journal: Materials Science and Engineering – IOP Conference Series: Materials Science and Engineering 147 (1), 012089. doi:10.1088/1757-899X/147/1/012089
76. Saulescu, R., M Neagoe, O Munteanu, N Cretescu. Performance Analysis of a Novel Planetary Speed Increaser used in Single-Rotor Wind Turbines with Counter-Rotating Electric Generator. Iasi, Romania, 2016, journal: Materials Science and Engineering – IOP Conference Series: Materials Science and Engineering 147 (1), 012090, doi:10.1088/1757-899X/147/1/012090
77. SĂVESCU, D. About Competitive Strategy in Companies. Proceedings of International Conference on Industrial Technology and Management Science - ITMS 2015, Atlantis Press, pp. 24-26, ISBN 978-94-6252-123-0 (ISI, ERI Compendex, Indexing DOI)
78. SĂVESCU, D. Some Aspects Regarding Project Management. Proceedings of International Conference on Industrial Technology and Management Science - ITMS 2015, Atlantis Press, pp. 27-30, ISBN 978-94-6252-123-0 (ISI, ERI Compendex, Indexing DOI)
79. SĂVESCU, D., BUDALĂ, A. Some aspects regarding communication in project management. Proceedings of the Annual Session of Scientific Papers, Analele Universităii din Oradea, 2016, vol. XV(XXV), pag. 161-164, ISBN 978-606-10-1537-5 (B+).

80. SĂVESCU, D. Aspects of Risks Issues in Entrepreneurship. Part I, 6th International Conference in Applied Social Science, ICASS 2017, 7-8 May, Singapore, vol. 97, pp. 217-222, IERI&PRESS USA, ISBN 978-1-61275-520-3 (ISI).
81. SĂVESCU, D. Aspects of Risks Issues in Entrepreneurship. Part II, 6th International Conference in Applied Social Science, ICASS 2017, 7-8 May, Singapore, vol. 97, pp. 223-228, IERI&PRESS USA, ISBN 978-1-61275-520-3 (ISI).
82. SĂVESCU, D. Some aspects regarding negotiation in business. IOP Conference Series: Materials Science and Engineering, 514 (2019), paper 012042, IOP Publishing, doi:10.1088/1757-899X/514/1/012042 (PRASIC).
83. SĂVESCU, D. Aspects regarding intellectual property policy for universities and R&D institutions. Proceedings of the Annual Session of Scientific Papers, Analele Universităii din Oradea, vol. XVIII(XXVIII), Vol 1, 2019, pag. 299 - 303, ISSN 2457-8347 (B+).
84. SĂVESCU, D. Some aspects regarding factors to be considered when discussing a licensing agreement. Fiabilitate si Durabilitate - Fiability & Durability No 1(23)/ 2019 Editura "Academica Brâncuși", Târgu Jiu, pag. 202-207, ISSN 1844 – 640X (B+).
85. SĂVESCU, D. Characteristics of education in entrepreneurial economy. Journal of Research and Innovation for Sustainable Society (JRISS) Volume 1, Issue 2, 2019 ISSN: 2668-0416 Thoth Publishing House 78 DOI: 10.33727/JRISS.2019.2.11:86-91, pp 86-91.
86. SĂVESCU, D. Importance of intellectual property in technologic transfer. Journal of Research and Innovation for Sustainable Society (JRISS) Volume 2, Issue 1, 2020 ISSN: 2668-0416 Thoth Publishing House, DOI: 10.33727/JRISS.2020.1.4:26-31, pp.26-31.
87. Staretu, I., The most important source of inspiration for artificial gripping systems are natural gripping systems, Journal of Engineering Sciences and Innovation, Volume 8, Issue 2 / 2023, pp. 139–158.
88. Staretu, I., PREHENSIUNE ȘI MINIMANIPULARE ÎN ROBOTICĂ - NOI CONTRIBUȚII, NOEMA, Volumul XIX , 2020, Ed. Academiei Române, pp.307-328.
89. Staretu, I., Grasp and Micromanipulation with Human Hand – a New Experimentation and Systematization, 13th International Conference Interdisciplinarity in Engineering (INTER-ENG 2019), Procedia Manufacturing, 46, 2020, pp. 491–498.
90. Staretu, I. New experimental and minimum mathematical bases for human gripping and micromanipulation. Journal of Engineering Sciences and Innovation, Volume 4, Issue 3 / 2019, pp. 247-262.
91. Staretu. I. , Catalin M., Microsoft Kinect Sensor Used to Capture Data for Robotics Applications. International Journal of Modeling and Optimization(IJMO), Vol. 9, No. 1, February 2019, pp. 41-45.
92. Staretu, I., Moldovan, C., SpatialVISION – software module for objects identification before robotic gripping, Journal of Engineering Sciences and Innovation, Technical Sciences Academy of Romania, Volume 2, Issue 1 / 2017, pp. 22-34.
93. TORCĂTORU, C., SĂVESCU, D. Analysing the sustainability of an automotive component using SolidWorks CAD software. IOP Conference Series: Materials Science and Engineering, vol 568/2019, paper 012113, IOP Publishing, doi:10.1088/1757-899X/568/1/012113 (ORADEA)

94. TORCĂTORU, C., SĂVESCU, D. Aspects regarding the capitalization of remanufactured scrap in the automotive industry using a Paternoster system. *Journal of Research and Innovation for Sustainable Society (JRISS)* Volume 1, Issue 2, 2019 ISSN: 2668-0416 Thoth Publishing House 78 DOI: 10.33727/JRISS.2019.2.10: 78-85, pp 78-85.
95. TORCĂTORU, C., SĂVESCU, D. VALTER, N. Design for Manufacture and Assembly Analysis of the Tray for Vertical Lift Modules. *Journal of Research and Innovation for Sustainable Society (JRISS)* Volume 3, Issue 2, 2021 ISSN: 2668-0416 Thoth Publishing House, DOI: 10.33727/JRISS.2021.2.8:73-80, pp.73-80.
96. TORCĂTORU, C., SĂVESCU, D. Regarding on management's aspects of minimizing scrap in ball bearings. 11th International Conference on Information Science and Information Literacy, ICISIL 2021, Capitol in SCIENDO 2021, ISBN 978-839-581-5065, pp 360 – 376, DOI:<https://doi.org/10.2478/9788395815065-042>.
97. TORCĂTORU, C., SĂVESCU, D., REPANOVICI, A. Literature Review by Scientometric Methods on the Impact of the Circular Economy on Sustainable Industrial Products. *Sustainability* 2022
98. Thierheimer, A., Alexandru, C., Thierheimer, W. Aspects regarding the experimental research of the stressors of the human pregnancy in case of road events. *MATEC Web of Conferences*, vol. 184, 2018, Article Number 01006, ISSN 2261-236X, DOI 10.1051/matecconf/201818401006.
99. Thierheimer, A., Alexandru, C., Sifft, M., Crauciuc, D., Thierheimer, W.W. Studies on visibility embarrassment due to traffic from the opposite direction. *International Journal of Transportation Systems*, vol. 5, 2020, p. 11-18, ISSN 2534-8876.
100. Thierheimer, W.W., Alexandru, C., Thierheimer, A., Crauciuc, D. Performance of diaphragm elastic elements in ABS. *Applied Mechanics and Materials*, vol. 896, 2020, p. 241-248, ISSN 1662-7482, DOI 10.4028/www.scientific.net/AMM.896.241.
101. Țoțu, V., Alexandru, C. Multi-criteria optimization of an innovative suspension system for race cars. *Applied Sciences*, vol. 11, nr. 9, 2021, p. 4167(1-25), ISSN 2076-3417, DOI 10.3390/app11094167, Accession Number WOS:000649928700001.
102. Țoțu, V., Alexandru, C. Multi-objective dynamic optimization of a novel suspension system for race cars. *Acta Technica Napocensis, Series: Applied Mathematics, Mechanics, and Engineering*, vol. 65, nr. 25, 2022, p. 497-504, ISSN 1221-5872, Accession Number WOS:000911249300031.
103. Țoțu, V., Alexandru, C. Dynamic optimization of the controller for the active suspension system of a race car. *Atlantis Highlights in Engineering*, 2023, p. 18-26, ISSN 2589-4943, DOI 10.2991/978-94-6463-152-4_3.
104. Velicu, R. Papuc, R., Gavrilă, C. C., Popa, S. Experimental Study on Guide Friction Contribution in Global Power Loss of a Tooth Chain Transmission, The 13th International Conference on Tribology ROTRIB 2016, September 22-24, Galați, Romania, 2016.
105. Velicu R., Săulescu R., Gavrilă C .C. Kinematic Modelling of Contact Point between Chain Bush and Sprocket. The International Conference PRASIC 2018, November 8-9, Brașov, 2018.
106. Velicu R., Saulescu R., Lateş, M. T. The influence of the bush – bushes pocket geometry on the bush contact angle. *Applied Mechanics and Materials*, vol. 880, 2018, p. 15-20, ISSN 1662-7482.
107. Velicu, R. G., Lateş, M. T., Gavrilă, C. C. Frictional Losses of Polyamides Mounted on Tensioning Guides in Contact with Chains. *Materials*, Vol.15, Issue 4, Article Number: 1345, ISSN 1996-1944, 2022.

108. Velicu, R., Saulescu, R., Jurj, L. Influence of chain pitch increase on bush-sprocket contact for bush chain drives, *Mechanisms and Machine Science*, 57, pp. 515-522, 2018
109. Velicu, R., Saulescu, R., Jurj, L. Contact point of bush-sprocket tooth depending on pitch differences of bush chain transmissions. *7th International Conference on Advanced Concepts in Mechanical Engineering IOP Publishing IOP Conf. Series: Materials Science and Engineering* 147, 2016
110. Velicu, R., Bobancu, S., Popa, S. Geometry and kinematics of the plate on disk contact type influencing friction measurements on UMT tribometer. *7th International Conference on Advanced Concepts in Mechanical Engineering IOP Publishing IOP Conf. Series: Materials Science and Engineering* 147, 2016, DOI:10.1088/1757-899X/147/1/012042
111. Velicu, R., Lateş, M. Time depending friction in bearing mountings, *Revista: Applied Mechanics and Materials*, vol. 823, *Current Solutions in Mechanical Engineering (ICOME 2015)*, Trans Tech Publications Ltd. Switzerland, p. 79-84, ISSN:1662-7482, 2016
112. Velicu, R., Popa, S. Experimental study of bearing boxes friction depending on load speed and oil temperature, *Annals of the Oradea University, Fascicle of Management and Technological Engineering*, Volume XXV, (XV) Oradea, 2016, p. 5-8, ISSN 1583–0691(e) DOI: 10.15660/AUOFMTE.2016-1.3220
113. Velicu, R., Jurj, L. Short plane bearings lubrication applied on chain joints, *Annals of the Oradea University, Fascicle of Management and Technological Engineering*, Volume XXV, (XV) Oradea, 2016, p. 19-22, ISSN 1583–0691(e)
114. Velicu, R., Lateş, M. On the Measurement Procedure for Testing Friction in Bearing Mountings, *Annals of the Oradea University, Fascicle of Management and Technological Engineering*, Volume XXIV, (XIV) Oradea, 2015, p. 53-58, ISSN 1583–0691(e)
115. Velicu, R., Saulescu, R., Jurj, L. Contact point of bush-sprocket tooth depending on pitch differences of bush chain transmissions. *7th International Conference on Advanced Concepts in Mechanical Engineering IOP Publishing IOP Conf. Series: Materials Science and Engineering* 147, 2016

Lucrări publicate în reviste și volume de conferințe cu referințe cu referențe (neindexate)

1. Gavrilă, C.C., Velicu, R., Virtual Modeling, Detail Design and FEM Analysis for a Testing Device, International Conference of Mechanical Engineering (ICOME 2015), October 8-9, 2015, Craiova, Romania; published in *Applied Mechanics and Materials* Vol. 823, *Current Solutions in Mechanical Engineering* page 3-6, Trans Tech Publications, Switzerland, 2016
2. Gavrilă, C. C., Lateş, M.T., Velicu, R. 3D Modeling and Fem Analysis for Solar Panel Mounting System on a House Roof. În: *Annals of the Oradea University, Fascicle of Management and Technological Engineering*, Volume XVI, (XXVI) 2017, Oradea 2017, pag. 1–4, ISSN 2457-8347, ISSN-L 2285-3278.
3. Gavrilă, C. C., Lateş, M.T. Snow Fence Load On A House Roof With Tiles În: *Annals of the Oradea University, Fascicle of Management and Technological Engineering*, Volume XVII, (XXVII) 2018, Oradea 2018, pag. 37–41, ISSN 2457-8347, ISSN-L 2285-3278, Matec Web conf., vol 184, 2018.
4. Gavrila, C. C., Săulescu, R., Determining the Optimal Operating Parameters of a Wind System. În: *Annals of the Oradea University, Fascicle of Management and Technological Engineering*, Volume XVII, (XXVII) 2018, Oradea 2018, pag. 53–60, ISSN 2457-8347, ISSN-L 2285-3278, Matec Web conf., vol 184, 2018.

5. Gavrilă, C. C., Lateş, M.T. Metal Coin Error Study, Using 3D Modeling and FEM Analysis 2019 IOP Conf. Ser.: Materials Science and Engineering 568(1),012002
6. Lateş, M.T., Gavrilă, C. C. Influence of the silent chain link geometry on the link / chain guide contact 2019 IOP Conference Series: Materials Science and Engineering 568(1),012036
7. Lateş, M. T., Velicu, R. CFD Analysis of a VAWT vertical axis wind turbine. *Conference of the International Journal of Arts and Sciences*, Academic journal of science, vol.4, nr.3, Freiburg, 01.12 – 04.12.2015, pp. 85-91, ISSN 2165-6282.
8. Lateş, M. T. Study on the friction in the tripod type couplings with external contacts. The 8th International Conference on advanced concepts in Mechanical Engineering (ACME) Jun 07-08 2018, Iasi. Book Series: IOP Conference Series-Materials Science and Engineering. Volume: 444 Article Number: 022021, 2018.
9. Lateş, M.T., Gavrilă, C. C. Study on the loading capacity of the tripod type couplings with external contacts. The 8th International Conference on advanced concepts in Mechanical Engineering (ACME) Jun 07-08 2018, Iasi. Book Series: IOP Conference Series-Materials Science and Engineering. Volume: 444 Article Number: 022020, 2018.
10. SĂVESCU, D. Some aspects regarding the relation between research and technological transfer. 11th Edition of International Conference of the Carpathian Euro Region Specialists in Industrial Systems, CEurSIS 2016, 2-4 June, 2016, Baia Mare, pag. 138-143, ISBN 978-606-737-166-6.
11. SĂVESCU, D. Grama, D.M. Some aspects regarding the competitive innovation management. Proceedings of IXth International Conference on Product Design, Robotics, Advanced mecanical & mechatronic Systems an Innovation – PRASIC, November 10-11, 2016, Bulletin of the Transilvania University of Brasov, Vol. 9, Series I, Nr.2/2016, Special Issue, Transilvania University Press, pag. 251-258, ISSN 2065-2119 (B+).
12. SĂVESCU, D. Aspects about building models in innovation. Fiability and Durability Rev. Nr 1/2017, Ed. "Academica Brancusi" Tg. Jiu, pag.142-148, ISSN 1844-640X (B+).
13. SĂVESCU, D. Aspects of Human Behavior in negociation Process. Proceedings of the Annual Session of Scientific Papers, Analele Universită ii din Oradea, vol. XVI I(XXVII), pag. 5-8, ISSN 2457-8347 (B+).
14. SĂVESCU, D. Some aspects regarding competitive companies. Fiability and Durability Rev. Nr 1/2018, Ed. "Academica Brancusi" Tg. Jiu, pag. 293-298, ISSN 1844-640X (B+).
15. Velicu R., Lateş, M.T., Gavrilă, C. C. Temperature, Pressure, and Velocity Influence on the Tribological Properties of PA66 and PA46 Polyamides Materials Vol.12, ISSUE 20, Article Nr. 3452, 2019.
16. Velicu, R. Papuc, R., Gavrilă, C. C., Popa, S. Experimental Study on Guide Friction Contribution in Global Power Loss of a Tooth Chain Transmission, The 13th International Conference on Tribology ROTRIB 2016, September 22-24, Galați, Romania, 2016.
17. Velicu R., Săulescu R., Gavrilă C .C. Kinematic Modelling of Contact Point between Chain Bush and Sprocket. The International Conference PRASIC 2018, November 8-9, Brașov, 2018.

Brevete

1. Alexandru, C., Macaveiu, M.D., Alexandru, P. Dispozitiv de direcție. Brevet de inventie nr. RO 127279 B1, 2016.

2. Macaveiu, M.D., Alexandru, P., Buta, A.C., Alexandru, C. Dispozitiv de direcție. Brevet de inventie nr. RO 127183 B1, 2016.
3. Popa, S., Velicu, R. G., Lateș, M. T. Cuplaj de siguranta cu bile. Nr. 131890/28.07.2023.
4. Popa, S., Velicu, R. G., Lateș, M. T. Cuplaj de siguranta cu role. Nr. 132324/28.06.2024.
5. Tatú, I.N., Alexandru, C. Mecanism de orientare pentru un șir de module fotovoltaice. Brevet de inventie nr. RO 128543 B1, 2019.
6. Toțu, V., Alexandru, C. Mecanism de suspensie pentru autovehicule ușoare și monoposturi. Brevet de inventie nr. RO 130228, 2022
7. Vișă, I., Diaconescu, D.V., Neagoe, M., Jaliu, C.I., Alexandru, C., Dobre, B., Boțoman, M.A., Săulescu, R., Moldovan, M., Porca (Vătășescu), M. Actuator de joasă viteză cu reductor articulat intermitent. Brevet de inventie nr. RO 128120, 2022.
8. Velicu, R. G., Talaba, D. Moldovean G., Popa, S. Cuplaj de sigurană cu boluri dispuse radial și locașuri active elastice RO 129665 B1, 2021.

Granturi și contracte de cercetare științifică

1. Modelarea și simularea comportamentului unui sistem electric de reducere a tensiunilor. Contract cu terți, beneficiar AUTOLIV Romania, contract nr. 16244/2016, 2016-2017 (director de contract Alexandru C.).
2. Cultural Heritage Outreach in RomAnce Languages (CHORAL). Proiect internațional nr. 101126643 în cadrul competiției HORIZON Europe, the Framework Programme for Research and Innovation – Marie Skłodowska-Curie Actions, 2024-2029 (responsabil partener UNITBV Alexandru C.).
3. Chain Drive System Dynamic Tribology, Contract de cercetare cu parteneri industriali internaționali – Schaeffler Group SRL, Herzogenaurach, Germania, 2012-2015 (director de contract Velicu R.).
4. Chain Drive System Dynamic Tribology II, Contract de cercetare cu parteneri industriali internaționali – Schaeffler Group SRL, Herzogenaurach, Germania, 2015-2018 (director de contract Velicu R.).

Coordonator centru,
Prof.dr.ing. Radu VELICU