

CENTRALIZATOR

Activitatea științifică a Conducătorilor de doctorat
2021-2025

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

Cadru Didactic	MARIANA ARGHIR
Nr	Lucrari stiintifice
1	Documentary Study of the Free Vibrations over Muscular System of the Human Body. Part I: Mechanical Characteristics of the Left Deltoid, Acta Technica Napocensis, Series: Applied Mathematics, Mechanics, and Engineering, Vol. 64, Issue II pag. 123 – 128, ISSN 1221 – 5872L, Dan Marius Gherasim, Mariana Arghir, Editura U.T.Press, 2021. http://atna-mam.utcluj.ro
2	Experimental Study on the Free Vibrations of the Left Deltoid of the Human Body, Acta Technica Napocensis, Series: Applied Mathematics, Mechanics, and Engineering, Vol. 64, Issue II pag. 305 – 310, ISSN 1221 – 5872L, Dan Marius Gherasim, Mariana Arghir Editura U.T. Press, 2021. http://atna-mam.utcluj.ro
3	Free Vibrations of the Left Deltoid of the Human Body Using Electroencephalography, Acta Technica Napocensis, Series: Applied Mathematics, Mechanics, and Engineering, Vol. 64, Issue II pag. 305 – 310, ISSN 1221 – 5872L, Dan Marius Gherasim, Mariana Arghir, Editura U.T.Press, 2021 http://atna-mam.utcluj.ro
4	Photoelasticimetry method used to highlight deformations of the left deltoid of the human body. model creation, Acta Technica Napocensis Series: Applied Mathematics, Mechanics, and Engineering Vol. 66, Issue III, pag. 407-412, ISSN 1221 – 5872L, Dan Marius Gherasim, Ioan Adrian Botean, Mariana Arghir, 2023 http://atna-mam.utcluj.ro
5	Mechanical Vibrations Study Produced by Machine-Tools over human operator, who serves it. Part I: Operator mechanical characteristics and the system of differential equations, Acta Technica Napocensis, Series: Applied Mathematics, Mechanics and Engineering. Vol 68, Issue I, ISSN 1221-5872L, Adela Bianca CRACIUN (HOSU), Ovidiu Aurelian DETESAN, Mariana ARGHIR, Ed. UTPRESS, 2025 http://atna-mam.utcluj.ro
6	Mechanical Vibrations Study Produced by Machine-Tools over human operator, who serves it. Part IIa: Integrated solution of differential equations system for male operator, Acta Technica Napocensis, Series: Applied Mathematics, Mechanics and Engineering, Vol 68, Issue II, ISSN 1221-5872L, Ovidiu Aurelian DETESAN, Adela Bianca CRACIUN (HOSU), Mariana ARGHIR, Ed. UTPRESS, 2025 http://atna-mam.utcluj.ro
7	Mechanical Vibrations Study Produced by Machine-Tools over human operator, who serves it. Part IIb: Integrated solution of differential equations system for female operator, Acta Technica Napocensis, Series: Applied Mathematics, Mechanics and Engineering. Vol 68, Issue II, ISSN 1221-5872L, Ovidiu Aurelian DETESAN, Adela Bianca CRACIUN (HOSU), Mariana ARGHIR, Ed. UTPRESS, 2025 http://atna-mam.utcluj.ro
8	Highlighting by measurements of the mechanical vibrations produced by a Fanuc machine-tool on a “female” human operator, Acta Technica Napocensis, Series: Applied Mathematics, Mechanics and Engineering. Vol 68, Issue III, ISSN 1221-5872L, Aurora Felicia CRISTEA, Adela Bianca CRACIUN (HOSU), Mariana ARGHIR, Ed. UTPRESS, 2025 http://atna-mam.utcluj.ro
9	Biomechanical response of a left deltoid model to Bowen Technique Stimuli, Acta Technica Napocensis, Series: Applied Mathematics, Mechanics, and Engineering, vol, 68, Issue III, pag

	733-744, ISSN 1221 – 5872L, Ioan Adrian Botean, Dan Marius Gherasim, Mariana Arghir, 2025 http://atna-mam.utcluj.ro
10	Study by measurements of the action of mechanical vibrations produced by a Fanuc machine-tool on a human “male” operator, Acta Technica Napocensis, Series: Applied Mathematics, Mechanics and Engineering. Vol 68, Issue III, ISSN 1221-5872L, Adela Bianca CRACIUN (HOSU), Aurora Felicia CRISTEA, Mariana ARGHIR, Ed. UTPRESS, 2025 http://atna-mam.utcluj.ro
Total lucrari	10

Cadru Didactic	BALAN MUGUR CIPRIAN
Nr	Lucrari stiintifice
1	Hiris, D., Bode, F., Balan, M.C. - Cross-validation of numerical methods for investigating the heating process in large-volume thermal storage tanks, Energy (2025), 139121, ISSN: 1873-6785 (IF: 9.4 / 2025), (Q1) https://doi.org/10.1016/j.energy.2025.139121 Lucrare acceptată pentru publicare
2	Thalmaier,G., Cobirzan,N., Fecete-Tutunaru,L.V., Balan,M.C. - Recycled Aluminum Paraffin Composite for Passive Cooling Application in Buildings, Materials 18, 728 (2025), ISSN: 1996-1944 (IF: 3.4 / 2023), (Q2) https://doi.org/10.3390/ma18040728 WOS:001430696400001
3	Hiris, D.P., Balan, M.C., Bode, F.I. - A Comprehensive Review on Enhancing Seasonal Energy Storage Systems through Energy Efficiency Perspectives, Processes 12, 1623 (2024), ISSN: 2227-9717 (IF: 2.8 / 2023) (Q2) https://doi.org/10.3390/pr12081623 WOS:001305240800001
4	Talaba,O., Apostol,V., Grosu,L., Balan,M.C., Pop,H., Dobre,C., Dobrovicescu,A. - Exergoeconomic Analysis of a Mechanical Compression Refrigeration Unit Run by an ORC, Entropy (2023), 25, 1531, ISSN: 1099-4300 (IF: 2.7 / 2022), (Q2) https://doi.org/10.3390/e25111531 WOS:001119761000001
5	Hiris, D.P., Pop, O.G., Dobrovicescu, A, Dudescu, M.C., Balan, M.C. - Modelling of solar assisted district heating system with seasonal storage tank by two mathematical methods and with two climatic data as input, Energy, 284 (2023) 129234, ISSN: 1873-6785 (IF: 9.0 / 2022), (Q1) https://doi.org/10.1016/j.energy.2023.129234 WOS:001149470900001
6	Pop,O.G., Dobrovicescu, A., Serban, A., Ciocan, M., Zaaoumi, A., Hiris,P.D., Balan,M.C. - Analytical modelling of food storage cooling with solar ammonia-water absorption system, powered by parabolic trough collectors. Method, MethodsX 10C (2023) 102013, ISSN: 2215-0161 (IF: 1.9 / 2022), (Q4) https://doi.org/10.1016/j.mex.2023.102013 WOS:000978070200001
7	Hiris,P.D., Pop,O.G., Balan,M.C. - Analytical modeling and validation of the thermal behavior of seasonal storage tanks for solar district heating, Energy Reports 8 (2022) 741-755, ISSN: 2352-4847 (IF: 4.937 / 2021) https://doi.org/10.1016/j.egyr.2022.07.113 (Q2) WOS:000841651400028

8	Hiris,P.D., Pop,O.G., Balan,M.C. - Preliminary sizing of solar district heating systems with seasonal water thermal storage, Heliyon 8 (2022) e08932, ISSN: 2405-8440 (IF: 3.776 / 2021), (Q2) https://doi.org/10.1016/j.heliyon.2022.e08932 WOS:000767225100097
9	Bucsa,S., Serban,A., Balan,M.C., Ionita,C., Nastase,G., Dobre,C., Dobrovicescu,A. - Exergetic Analysis of a Cryogenic Air Separation Unit, Entropy (2022), 24, 272, ISSN: 1099-4300 (IF: 2.524 / 2021), (Q2) https://doi.org/10.3390/e24020272 WOS:000765291900001
10	Pop,O.G., Balan,M.C. - A numerical analysis on the performance of DHW storage tanks with immersed PCM cylinders, Applied Thermal Engineering, 197 (2021) 117386, ISSN: 1359-4311 (IF: 5.295 / 2020), (Q1) https://doi.org/10.1016/j.applthermaleng.2021.117386 WOS:000688401000009
11	Zaaoumi,A., Bah,A., Ciocan,M., Sebastian,P., Balan,M.C., Mechaqrane,A., Alaoui,A. - Estimation of the energy production of a parabolic trough solar thermal power plant using analytical and artificial neural networks models, Renewable Energies, 170 (2021), pp. 620-638, ISSN: 0960-1481 (IF: 8.001 / 2020), (Q1) https://doi.org/10.1016/j.renene.2021.01.129 WOS:000632046900005
Total lucrari	11

Cadru Didactic	BIRLEANU CORINA
Nr	Lucrari stiintifice
1	Bîrleanu, C., Pustan, M., Șerdean, F., & Merie, V. (2021). AFM nanotribomechanical characterization of thin films for MEMS applications. Micromachines, 13(1), 23. https://doi.org/10.3390/mi13010023 , WOS:000748847800001, Q2 - Galben
2	Crișan, O. A., Bîrleanu, C., Crișan, H. G., Pustan, M., Merie, V., & Șerdean, F. (2021). Eco-innovation analyses in the management of drinking water provided by the main suppliers in romania. International Journal of Environmental Research and Public Health, 18(12), 6232. https://doi.org/10.3390/ijerph18126232 , WOS:000666034900001, Q1 - Rosie
3	Birleanu, C., Pustan, M., Cioaza, M., Molea, A., Popa, F., & Contiu, G. (2022). Effect of TiO2 nanoparticles on the tribological properties of lubricating oil: an experimental investigation. Scientific reports, 12(1), 5201. Q1 – 3.8 (WOS:000773323400003) - Rosie
4	Birleanu, C., Pustan, M., Pop, G., Cioaza, M.*, Popa, F., Lazarescu, L., & Contiu, G. (2022). Experimental investigation of the tribological behaviors of carbon fiber reinforced polymer composites under boundary lubrication. Polymers, 14(18), 3716. Q1 – 4.7 – Rosie (WOS:000856786500001)
5	Birleanu, C., Pustan, M., Rusu, F. et al. (2022) Relative humidity influence on adhesion effect in MEMS flexible structures. Microsyst Technol 28, 1–11 (2022). https://doi.org/10.1007/s00542-018-3848-8 , WOS:000817993700001 – Q3 - Alba
6	Crișan, H. G., Șerdean, F., Bîrleanu, C., Pustan, M., & Crișan, O. A. (2022). An efficient method for testing the quality of drinking-water filters used for home Necessities. International Journal of Environmental Research and Public Health, 19(7), 4085. https://doi.org/10.3390/ijerph19074085 , WOS:000856786500001, Q1 - Rosie
7	Pustan, M., Birleanu, C., Voicu, R., & Muller, R. (2022). AFM characterization of temperature effect on the SU-8 mechanical and tribological properties. Polymers, 14(5), 1009. – Rosie https://doi.org/10.3390/polym14051009

8	Cristea, A., Pustan, M., Bîrleanu, C. et al. (2022) Mechanical Evaluation of Solvent Casted Poly(3-hydroxybutyrate) Films Derived from the Storage Polyesters Produced by Halomonas elongata DSM 2581T. J Polym Environ 30, 424–430 (2022). https://doi.org/10.1007/s10924-021-02204-4 , WOS:000659802300001, Q2 - Galben
9	Birleanu, C., Pustan, M., Cioaza, M*, Bere, P., Contiu, G., Dudescu, M. C., & Filip, D. (2023). Tribo-mechanical investigation of glass fiber reinforced polymer composites under dry conditions. Polymers, 15(12), 2733. Q1 – 4.7 (WOS:001015523100001) – Rosie
10	Birleanu, C., Cioaza, M*, Serdean, F., Pustan, M., Bere, P., & Contiu, G. (2023). Tribological investigation of glass fiber reinforced polymer composites against 52100 chrome alloy steel based on ELECTRE decision-making method. Polymers, 16(1), 62. Q1 – 4.7 – Rosie (WOS:001140528200001
11	Crișan, H. G., Crișan, O. A., Bîrleanu, C., Pustan, M., & Șerdean, F. (2023). Microscopic characterization of residual particles from filtered drinking water and determination of statistical indicators regarding identified deposits. Frontiers in Earth Science, 11, 1196513, https://doi.org/10.3389/feart.2023.1196513 , WOS:001012827200001, Q3 - Alba
12	Birleanu, C., Cioaza, M*, Udriou, R., Pustan, M., Bere, P., & Lazarescu, L. (2025). Enhanced Tribological and Mechanical Properties of Copper-Modified Basalt-Reinforced Epoxy Composites. Polymers, 17(1), 91., Q1 – 4.9 (WOS:001393422800001) – Rosie
13	Birleanu, C., Udriou, R., Cioaza, M*, Pustan, M., Bere, P., & Vilau, C. (2025). The Effect of Fiber Weight Fraction on Tribological Behavior for Glass Fiber Reinforced Polymer. Polymers, 17(1), 91., Q1 – 4.9 (WOS:001452144600001) – Rosie
14	Birleanu, C., Bere, P., Udriou, R., Cioaza, M., Pustan, M., (2025). Impact of CuSn powder on Mechanical Properties and Tribological Performance of Novel Basalt Fiber Reinforced Hybrid Composites, Polymers, Q1- 4.9 – (WOS:001486298000001) – Rosie
15	Birleanu, C., Udriou, R., Cioaza, M., Bere, P., & Pustan, M. (2025). Tribomechanical Analysis and Performance Optimization of Sustainable Basalt Fiber Polymer Composites for Engineering Applications. Technologies, Q1 –(WOS:001514643300001) – Rosie
16	Birleanu, C., Udriou, Cioaza, M*, M., Bere P., Pustan M., (2025). Basalt vs. Glass Fiber-Reinforced Polymers: A Statistical Comparison of Tribological Performance Under Dry Sliding Conditions, Journal of Composites Science Q2 – 3,6- (https://doi.org/10.3390/jcs9080444) - Galben
17	Birleanu, C., Cioaza, M., Suci, R. C., Molea, A., Pustan, M., Contiu, G., & Popa, F. (2025). Tribological Performance of SAE 10W-40 Engine Oil Enhanced with Thermally Treated TiO2 Nanoparticles. Lubricants, 13(11), 466. (https://doi.org/10.3390/lubricants13110466) - Galben
18	Birleanu, L. C., Lungu, F., & Birleanu, C. (2025). Leveraging Centralized Procurement for Digital Innovation in Higher Education: Institutional Capacity and Policy Gaps in Romania. Administrative Sciences, 15(8), 317. (https://doi.org/10.3390/admsci15080317). WOS:001557143900001, Q2 - Galben
19	Crișan, H. G., Crișan, O. A., Șerdean, F., Bîrleanu, C., & Pustan, M. (2025). Comparative Study on Consumers' Behavior Regarding Water Consumption Pattern. Water, 17(12), 1755. (https://doi.org/10.3390/w17121755). WOS:001514678500001, Q2 - Galben
Total lucrari	19

Cadru Didactic	BODE FLORIN IOAN
Nr	Lucrari stiintifice
1	Angel TERZIEV, Florin BODE*, Penka ZLATEVA, George PICHUROV, Martin IVANOV, Jordan DENEV and Borislav STANKOV, Numerical study on tree belt impact on wind shear on agricultural land, Applied Sciences, 2025, 15(13), 7450;

	https://doi.org/10.3390/app15137450 , ISSN: 2076-3417, IF2024:2.5 (Q2), 2025 (Zona galbena) Lucrare acceptată pentru publicare
2	Răzvan CALOTA, Octavian POP, Cristiana CROITORU, Florin BODE*, Charles BERVILLE, Emanuel OVADIUC, Performance analysis of solar collectors with nano-enhanced phase change materials during transitional periods between cold and warm seasons in the continental temperate climates, Journal of Energy Storage 114 (2025) 115659, 2025, https://doi.org/10.1016/j.est.2025.115659 (IF2024: 9.8, Q1) (Zona rosie)
3	Florin BODE, Titus JOLDOS, Gabriel Mihai SIRBU, Paul DANCA, Ilinca NASTASE, Costin COȘOIU, Impact of realistic boundary conditions on CFD simulations: A case study of vehicle ventilation, Building and Environment, Volume 267, Part A, 1 January 2025, 112264, https://doi.org/10.1016/j.buildenv.2024.112264 , 2025, (IF2024: 7.6, Q1), (Zona rosie)
4	Diana LEMIAN, Florin BODE* and Ciprian LAPUSAN*, Enhancing supercapacitor simulation accuracy through a novel hybrid modeling approach, Applied Sciences 15, no. 1, 226; https://doi.org/10.3390/app15010226 , ISSN: 2076-3417, IF2024:2.5 (Q2), 2025, (Zona galbena)
5	Răzvan CALOTĂ, Florin BODE, Manolis SOULIOTIS, Cristiana CROITORU, Paris A. FOKAIDES*, Bridging the gap: Discrepancies in energy efficiency and smart readiness of buildings, Energy Reports, https://doi.org/10.1016/j.egyr.2024.11.060 , Volume 12, December 2024, Pages 5886-5898, 2024, (IF2024:5.1, IF:Q2), (Zona galbena)
6	Claudiu STAN, Ilinca NĂSTASE, Florin BODE*, Răzvan CALOTĂ, Smoke and Hot Gas Removal in Underground Parking Through Computational Fluid Dynamics: A State of the Art and Future Challenges, Fire Journal, 7(11), 375; https://doi.org/10.3390/fire7110375 , 2024, (IF2024:2.7, IF:Q1, AIS:Q1), (Zona rosie)
7	Răzvan CALOTĂ,, Octavian POP, Florin BODE*, Cristiana CROITORU, Andrada SERAFIM, Alina BĂRBULESCU, Celina DAMIAN, Lucia TEFAS. A Novel Concept of Nano-Enhanced Phase Change Material, Materials, 2024, 17, no. 17: 4268. https://doi.org/10.3390/ma17174268 , 2024, (IF2023:3.2, IF:Q2), (Zona galbena)
8	Daniel HIRIS, Mugur Ciprian BALAN*, Florin BODE*, A Comprehensive Review on Enhancing Seasonal Energy Storage Systems through Energy Efficiency Perspectives, Processes 2024, 12(8), 1623; https://doi.org/10.3390/pr12081623 , 2024, (IF2024:2.8, IF:Q3), (Zona alba)
9	Emanuel-Petru OVADIUC, Răzvan CALOTĂ, Ilinca NĂSTASE, Florin BODE*, Integration of Phase-Change Materials in Ventilated Façades: A Review Regarding Fire Safety and Future Challenges, Fire Journal, 7(7), 244; https://doi.org/10.3390/fire7070244 , 2024, (IF2024:2.7, IF:Q1, AIS:Q1), (Zona rosie)
10	Florin BODE, Titus JOLDOS, Gabriel Mihai SIRBU, Paul DANCA*, Costin COSOIU and Ilinca NASTASE*, Innovative high induction air diffuser for enhanced air mixing in vehicles and personalized ventilation applications, Energies, 17(12), 2930; https://doi.org/10.3390/en17122930 , 2024, (IF2024:3.2, IF:Q3, AIS:Q3), (Zona alba)
11	Cristiana CROITORU, Florin BODE*, Răzvan CALOTĂ, Charles BERVILLE, Matei GEORGESCU, Harnessing Nanomaterials for Enhanced Energy Efficiency in Transpired Solar Collectors: A Review of Their Integration in Phase-Change Materials, Energies 2024, 17(5), 1239; https://doi.org/10.3390/en17051239 , 2024, (IF2024:3.2, IF:Q3, AIS:Q3), (Zona alba)
12	Charles BERVILLE, Florin BODE*, Cristiana CROITORU, Razvan CALOTA, Ilinca NASTASE. Enhancing solar façade thermal performance with PCM spheres: A CFD investigation. Journal of Building Physics. Volume 47, Issue 5, https://doi.org/10.1177/17442591231204360 , 2024 (IF2024: 1.4, IF:Q3), (Zona alba)
13	Florin BODE*, Adrian SIMION*, Ion ANGHEL*, Mihnea SANDU and Daniel BANYAI, Enhancing Fire Safety: Real-Scale Experimental Analysis of External Thermal Insulation Composite System Façades' Behavior in Fire, Fire Journal, 6(12), 451; https://doi.org/10.3390/fire6120451 , 2023, (IF2023:3, IF:Q1, AIS:Q1), (Zona rosie).
14	El Bachir LAHMER*, Mohammed Amine MOUSSAOUI, Florin BODE, Ahmed MEZRHA, Quality of heat transfer assessment of two microprocessors by double-layered mini channel heat sink cooling system for moderate Reynolds number, Thermal Science and Engineering

	Progress, https://doi.org/10.1016/j.tsep.2023.101804 , 2451-9049, 2023 Elsevier, IF2023: 5.1 (IF:Q1, AIS:Q1), (Zona rosie).
15	DANCA, Paul Alexandru*; BUNEA, Florentina; BODE, Florin; NICOLAE, Sergiu. Evaluation of the flow induced by different shrouds geometries. Journal of Science and Arts; Targoviste Vol. 23, Iss. 1, (2023): 281-288. DOI:10.46939/J.Sci.Arts-23.1-c03, 2023. (IF2023:0.3), (Zona alba)
16	Florin BODE, Nicolae Vlad BURNETE*, Lucian FECHETE TUTUNARU, and Ilinca NASTASE*. Improving Electric Vehicle Range and Thermal Comfort through an Innovative Seat Heating System, Sustainability, 15, no. 6: 5534. https://doi.org/10.3390/su15065534 , 2023, IF2023: 3.3, Q2, (Zona galbena)
17	Florin BODE, Ilinca NASTASE*, Numerical investigation of very low Reynolds cross orifice jet for personalized ventilation applications in aircraft cabins, International Journal of Environmental Research and Public Health, ISSN: 1660-4601; Int. J. Environ. Res. Public Health 2023, 20(1), 740; https://doi.org/10.3390/ijerph20010740 IF2022: 0. (predator journal. A fost santinonat pt ca au publicat mai variat decat) IF2021:4.614 (Q1), (Zona rosie)
18	Catalin Ioan TEODOSIU*, Catalin SIMA, Cristiana CROITORU and Florin BODE, Experimental Investigation and Optimization of a Glazed Transpired Solar Collector, Applied Sciences 12, no. 12, 11392, https://doi.org/10.3390/app122211392 , ISSN: 2076-3417, IF2021:2.838 (Q2), 2022, (Zona galbena)
19	Ilinca NASTASE, Paul DANCA, Florin BODE*, Cristiana CROITORU, Lucian FECHETE, Mihnea SANDU, Costin Ioan COȘOIU, A regard on the thermal comfort theories from the standpoint of Electric Vehicle design — Review and perspectives, Energy Reports, Volume 8, November 2022, Pages 10501-10517, https://doi.org/10.1016/j.egy.2022.08.186 , ISSN 2352-4847, IF:2021:4.937 (Q2), 2022, (Zona galbena)
20	Diana LEMIAN, Florin BODE*, Battery-Supercapacitor Energy Storage Systems for Electrical Vehicles: A Review, ENERGIES, 2022, 15(15), 5863, https://doi.org/10.3390/en15155683 , IF2021: 3.252 (Q3), ISSN: 1996-1073, 2022 (Zona alba)
21	Andrei – Stelian BEJAN, Cristiana CROITORU, Florin BODE*, Cătălin TEODOSIU, Tiberiu CATALINA, Experimental investigation of an enhanced transpired air solar collector with embodied phase changing materials, Journal of Cleaner Production, Volume 336, 15 February 2022, 130398, https://doi.org/10.1016/j.jclepro.2022.130398 , WOS:000772936200007, ISSN0959-6526, eISSN1879-1786, IF2021:11.072 (Q1), 2022, (Zona rosie)
22	Paul DANCA, Costin Ioan COȘOIU*, Ilinca NASTASE, Florin BODE and Matei Razvan GEORGESCU, Personalized Ventilation as a Possible Strategy for Reducing Airborne Infectious Disease Transmission on Commercial Aircraft, Applied Sciences 12, no. 4, 2088; https://doi.org/10.3390/app12042088 , ISSN: 2076-3417, IF2021:2.838 (Q2), 2022, (Zona galbena)
23	Dragoș Daniel ION-GUȚĂ, Ioan URSU*, Adrian TOADER, Daniela ENCIU, Paul Alexandru DANCĂ, Ilinca NASTASE, Cristiana Verona CROITORU, Florin BODE, Mihnea SANDU, Advanced Thermal Manikin for Thermal Comfort Assessment in Vehicles and Buildings, Applied Sciences 12, no. 4, 1826; https://doi.org/10.3390/app12041826 , ISSN: 2076-3417, IF2021:2.838 (Q2), 2022, (Zona galbena)
24	Ionut Victor VOICU, Florin BODE*, Wassim ABOUD, Hasna LOUAHLIA, Hamid GUALOUS, Mihnea SANDU, Ilinca NASTASE, Experimental and Numerical Study for a Novel Arrangement of a SuperCapacitors Stack to Improve Heat Transfer, Applied Sciences 12, no. 2, 662; https://doi.org/10.3390/app12020662 , ISSN: 2076-3417, IF2021:2.838 (Q2), 2022, (Zona galbena)
25	Charles BERVILLE, Florin BODE, Cristiana CROITORU*. Numerical Simulation Investigation of a Double Skin Transpired Solar Air Collector, Applied Sciences 12, no. 1, 520; https://doi.org/10.3390/app12010520 , ISSN: 2076-3417, IF2021:2.838 (Q2), 2022, (Zona galbena)

26	Florin Ioan Bode, Angel Dogeanu, Laurențiu Tăcutu, Ilinca Nastase*, Paul Alexandru Danca, Alexandra Ene (Angelescu), Experimental study of an innovative perforated air diffuser at real scale conditions, Energy Reports, Volume 8, Supplement 9, https://doi.org/10.1016/j.egyr.2022.09.001 , ISSN 2352-4847, November 2022, (Zona galbena)
27	Pop Octavian, Berville Charles, Bode Florin, Croitoru Cristiana*, Numerical investigation of cascaded phase change materials use in transpired solar collectors, Energy Reports 8, 184-193, https://doi.org/10.1016/j.egyr.2022.06.114 , ISSN 2352-4847, (Zona galbena)
28	Matei Razvan GEORGESCU*, Amina MESLEM, Ilinca NASTASE, Florin BODE, Personalized ventilation solutions for reducing CO2 levels in the crew quarters of the International Space Station, Building and Environment, Volume 204, 15 October 2021, 108150, ISSN 0360-1323, eISSN 1873-684X, https://doi.org/10.1016/j.buildenv.2021.108150 , IF2021:7.093 (Q1), 2021, (Zona rosie)
29	Laurențiu TACUTU, Florin BODE*, Ilinca NĂSTASE, Cristiana CROITORU, Angel DOGEANU, Experimental and numerical study on the thermal plumes of a standing and lying human in an operating room, Science and Technology for the Built Environment, DOI:10.1080/23744731.2021.1963133, 28/1, pag2-20, ISSN: 2374-4731 print / 2374-474X online, Pag 1-19, IF2021:2.091 (Q3), 2021, (Zona alba)
30	Cristiana CROITORU, Ilinca NASTASE, Florin BODE*, Mihnea SANDU, Assessment of Virtual Thermal Manikins for Thermal Comfort Numerical Studies. Verification and Validation, Science and Technology for the Built Environment, DOI: 10.1080/23744731.2021.1916379, Vol21, Issue:1, pag:21-41, ISSN:2374-4731, IF2021:2.091 (Q3), 2021, (Zona alba)
31	Paul DANCA, Florin BODE, Amina MESLEM, Cristiana CROITORU, Mihnea SANDU, Ilinca NASTASE*, Catalin LUNGU, Loretta BATALI, Experimental investigation of thermal vehicular environment during the summer season, Science and Technology for the Built Environment, 28:1, pag42-54 DOI: 10.1080/23744731.2021.1911157, ISSN:2374-4731, IF2021:2.091 (Q3), 2021, (Zona alba)
32	Florin BODE, Claudiu PATRASCU, Ilinca NASTASE*, Heat and mass transfer enhancement strategies by impinging jets: A literature review, Thermal Science, 2021 Volume 25, Issue 4 Part A, Pages: 2637-2652, https://doi.org/10.2298/TSCI200713227B , ISSN 0354-9836, eISSN 2334-7163, IF2021:1.971 (Q3), 2021, (Zona alba)
Total lucrari	32

Cadru Didactic	BURNETE NICOLAE
Nr	Lucrari stiintifice
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Total lucrari	6

Cadru Didactic	COVACIU FLORIN-ALEXANDRU
Nr	Lucrari stiintifice
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Total lucrari	11

Cadru Didactic	DUDESCU MIRCEA CRISTIAN
Nr	Lucrari stiintifice
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Total lucrari	49

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Nr	Lucrari stiintifice
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Total lucrari	5

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Total lucrari	49

Cadru Didactic	PLITEA NICOLAE
Nr	Lucrari stiintifice
1	Pislă, D., Tarnita, D., Tucan, P., Tohanean, N., Vaida, C., Geonea, I. D., Bogdan, G., Abrudan, C., Carbone, G., & Plitea, N. (2021). A Parallel Robot with Torque Monitoring for Brachial Monoparesis Rehabilitation Tasks. Applied Sciences, 11(21), 9932. https://doi.org/10.3390/app11219932 - Galbena
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Total lucrari	4

Cadru Didactic	PUSTAN MARIUS SORIN
Nr	Lucrari stiintifice
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16	Birleanu, C., Udriou, R., Cioaza, M*, M., Bere P., Pustan M., (2025). Basalt vs. Glass Fiber-Reinforced Polymers: A Statistical Comparison of Tribological Performance Under Dry Sliding Conditions, <i>Journal of Composites Science</i> Q2 – 3,6- (https://doi.org/10.3390/jcs9080444) - Galben
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Total lucrari	18

Cadru Didactic	SUCIU VIORICA MIHAELA
Nr	Lucrari stiintifice
1	Co-autor: Daniel Opruța, Mihai-Sorin Tripa, Luminița Codrea, Cristian Boldor, Dan Dumea, Robert Gyorbiró, Cosmin Brisc, Iulia Bărbăian, Petre Oprițoiu, Aurel Chereches and Mihaela Suci, 2025, Calculus of Long Rectangular Plates Embedded in Long Borders with Uniform Vertical Load on a Line Parallel to the Long Borders, Mathematics 2025, 13(6), 993; https://doi.org/10.3390/math13060993 - 18 Mar 2025, IF=2,2; Q1 – ZONA ROSIE
2	Co-autor: Cosmin-Sergiu Brisc, Mihai-Sorin Tripa, Ilie-Cristian Boldor, Dan-Marius Dumea, Robert Gyorbiró, Petre-Corneliu Oprițoiu, Laurențiu Eusebiu Chifor, Ioan-Aurel Chereches, Vlad Mureșan and Mihaela Suci, 2025, Applications of the Calculus by the Transfer Matrix Method for Long Rectangular Plates Under Uniform Vertical Loads, Mathematics 2025, 13(13), 2181; https://doi.org/10.3390/math13132181 - 3 Jul 2025, IF=2,2; Q1 – ZONA ROSIE
3	Co-autor: Laurențiu-Eusebiu Chifor, Mihai-Sorin Tripa, Ilie-Cristian Boldor, Cosmin-Sergiu Brisc,
4	Nicolae Nedelcu, Andrei-Călin Szîrbe, Liviu Bolundut, Carmen-Gabriela Băcilă, Veronica Mîndrescu, Ioan-Aurel Chereches, Vlad Mureșan and Viorica-Mihaela Suci, 2025, Calculus Through Transfer-Matrix Method of Continuous Circular Plates for Applications to Chemical Reactors, Mathematics 2025, 13(17), 2708; https://doi.org/10.3390/math13172708 - 22 Aug 2025, IF=2,2; Q1 – ZONA ROSIE
5	Co-autor: Otilia Cojocariu-Oltean, Mihai-Sorin Tripa, Iulia Bărbăian, Doina-Iulia Rotaru and Mihaela Suci, 2024, About Calculus Through the Transfer Matrix Method of a Beam with Intermediate Support with Applications in Dental Restorations, Mathematics 2024, 12(23), 386; https://doi.org/10.3390/math12233861 , IF=2,3; Q1 – ZONA ROSIE
6	Co-autor: Otilia COJOCARIU-OLTEAN, Mihai-Sorin TRIPA, Iulia BARAIAN, Doina Iulia ROTARU, Mihaela SUCIU, CALCULUS OF A MONOBLOC DENTAL BRIDGE WITH TWO POLES AND TWO MISSING TEETH AS A BEAM, BY TRANSFER-MATRIX METHOD, Acta Technica Napocensis, Series: Applied Mathematics, Mechanics and Engineering, Vol 67, No 2, 2024: pp. 275-282, https://atna-mam.utcluj.ro/index.php/Acta/article/view/2485/1943 , IF=0,3
7	Co-autor: L. CODREA, M.-S. TRIPA, D. OPRUȚA, R. GYORBIRO, Mihaela SUCIU, 2023, Transfer-Matrix Method for Calculus of Long Cylinder Tube with Industrial Applications, Mathematics 2023, 11(17), 3756; https://doi.org/10.3390/math11173756 - 31 Aug 2023, ISSN: 2227-7390, IF=2,592; Q1 – ZONA ROSIE
8	Unic autor: Mihaela SUCIU, 2023, An Approach Using the Transfer Matrix Method (TMM) for Mandible Body Bone Calculus, Mathematics 2023, 11(2), 450; https://doi.org/10.3390/math11020450 - 14 Jan 2023, ISSN: 2227-7390, IF=2,592; Q1 – ZONA ROSIE
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Total lucrari	10

Cadru Didactic	TATAR MIHAI OLIMPIU
Nr	Lucrari stiintifice

1	Rusu, C., Tătar, M. O., - Adapting Mechanisms for In-Pipe Inspection Robots: A Review. <i>Applied Sciences</i> , 12, No.12, 2022, 6191, https://doi.org/10.3390/app12126191 , WOS: 000818264400001, EISSN 2076-3417, (IF 2.7), (Q2). [Zona galbena]
2	Kadar, F. Tătar, M. O., - Design and simulation of a spherical mobile robot, <i>ACTA TECHNICA NAPOCENSIS, Applied Mathematics, Mechanics, and Engineering</i> , Vol. 65, Issue I, March 2022, pp. 101- 106. https://atna-mam.utcluj.ro/index.php/Acta/article/view/1789/1432 , WOS:000832312500015, (IF 0.3), (Q4).
3	Gyarmati, M., Kadar, F., Guțu, H., Tătar, M. O., - Contributions to the search and rescue robots development with TRISTAR and WHEGS units, <i>ACTA TECHNICA NAPOCENSIS, Applied Mathematics, Mechanics, and Engineering</i> , Vol. 65, Issue 2, 2022, pp. 263- 272. WOS:000838236300017, (IF 0.3), (Q4).
4	Mărieș, M., Tătar, M. O., Research studies regarding mobile robots used for emergency situations, <i>ACTA TECHNICA NAPOCENSIS, Applied Mathematics, Mechanics, and Engineering</i> , Vol. 66, Issue I, June 2023, pp. 267- 274. https://atna-mam.utcluj.ro/index.php/Acta/article/view/2140 , WOS:001044548800013 (IF 0.1), (Q4).
5	Simerean, A.C, Tătar, M. O., Studies regarding tetrahedral robots with omnidirectional locomotion units, <i>ACTA TECHNICA NAPOCENSIS, Applied Mathematics, Mechanics, and Engineering</i> , Vol. 66, Issue II, June 2023, pp. 421- 428, https://atna-mam.utcluj.ro/index.php/Acta/article/view/2193/1711 , WOS:001106401600001 (IF 0.1), (Q4).
6	Simerean, A.C., Tătar, M.O., - Contributions to the Development of Tetrahedral Mobile Robots with Omnidirectional Locomotion Units. <i>Machines</i> , 2024, Vol. 12, No. 12, pp. 852. https://doi.org/10.3390/machines12120852 , WOS:001384646000001, EISSN 2075-1702, (IF 2.1), (Q2). [Zona galbena]
7	Mărieș, M., Tătar, M. O. (2025) - Design and Simulation of Mobile Robots Operating Within Networked Architectures Tailored for Emergency Situations. <i>Applied Sciences</i> , Vol. 15, No. 11, 6287, https://doi.org/10.3390/app15116287 , WOS: 001505727200001, EISSN 2076-3417, IF 2,5 (Q2). [Zona galbena]
8	Mărieș, M., Tatar, M. O., (2025) - OT Control and Integration of Mobile Robotic Networks, <i>Electronics</i> , Vol. 14, No. 13, 2531. https://doi.org/10.3390/electronics14132531 , WOS:001527569500001, EISSN 2079-9292, IF 2,6 (Q2). [Zona galbena]
9	Simerean, A.-C.; Tătar, M.O. (2025) -Tetrahedral Mobile Robots: A Systematic Literature Review. <i>Applied Sciences</i> , Vol. 15, No. 18, 9979, https://doi.org/10.3390/app15189979 , WOS:001579488600001, EISSN 2076-3417, IF 2,5 (Q2). [Zona galbena]
Total lucrari	9

Cadru Didactic	TODORUT ADRIAN
Nr	Lucrari stiintifice
1	Cordoș, N.; Duma, Irina; Moldovanu, D.; Todoruț, A.; Barabás, I., An Overview of Intelligent Transportation Systems in Europe. <i>World Electric Vehicle Journal (World Electr. Veh. J.)</i> , 2025, 16(7), 387, eISSN: 2032-6653, DOI: 10.3390/wevj16070387, https://doi.org/10.3390/wevj16070387 , https://www.mdpi.com/2032-6653/16/7/387 , http://apps.webofknowledge.com - Web of Science Core Collection, https://www-webofscience-com.am.e-nformation.ro/ , WOS:001535265100001 – zona galbenă.
2	Duma, Irina; Burnete, N.; Todoruț, A.; Cordoș, N.; Danci, C.-C.; Terec, A., <i>Assessment of Road Vehicle Accident Approaches—A Review</i> . <i>Vehicles</i> 2025, 7(1):10, ISSN: 2624-8921, DOI: 10.3390/vehicles7010010, https://doi.org/10.3390/vehicles7010010 , https://www.mdpi.com/2624-8921/7/1/10 , http://apps.webofknowledge.com - Web of Science Core Collection, https://www-webofscience-com.am.e-nformation.ro/ , WOS:001453114600001 – zona galbenă.

3	Duma, Irina; Burnete, N.; Todoruț, A.; Cordoș, N.; Barabás, I.; Molea, Andreia; Dragoste, M.-D.; Efrim, R.-M.; Terec, A. (2024). <i>Evaluation of the Influence of Transverse Track Inclination on Vehicle Stability Parameters at the Limit of Side Rollover</i> . Cluj-Napoca, Acta Technica Napocensis, Series: <i>Applied Mathematics, Mechanics, and Engineering</i> , Vol. 67, Issue I, March, 2024, pg. 101-110, Editura U.T.PRESS, ISSN: 1221-5872, eISSN: 2393-2988, https://atna-mam.utcluj.ro/index.php/Acta/article/view/2288/1810 , http://apps.webofknowledge.com - Web of Science Core Collection, https://www-webofscience-com.am.e-nformation.ro/ , WOS:001250317300010 – zona albă.
4	Danci, C.-C.; Duma, Irina; Buidin, T.I.C.; Cordoș, N.; Todoruț, A. (2024). <i>Vertical Vibration Analysis of a Formula Student Vehicle Using Different Suspension System Configurations</i> . Cluj-Napoca, Acta Technica Napocensis, Series: <i>Applied Mathematics, Mechanics, and Engineering</i> , Vol. 67, Issue I, March, 2024, pg. 121-130, Editura U.T.PRESS, ISSN: 1221-5872, eISSN: 2393-2988, https://atna-mam.utcluj.ro/index.php/Acta/article/view/2290/1812 , http://apps.webofknowledge.com - Web of Science Core Collection, https://www-webofscience-com.am.e-nformation.ro/ , WOS:001250317300012 – zona albă.
5	Todoruț, A.; Cordoș, N.; Duma, Irina; Barabás, I.; Burnete, N.; Efrim, R.-M.; Dragoste, M.-D. (2023). <i>Possibilities of Assessing the Vehicle Stability Parameters in the Case of Rollover and Rolling Accidents</i> . Cluj-Napoca, Acta Technica Napocensis, Series: <i>Applied Mathematics, Mechanics, and Engineering</i> , Vol. 66, Issue I, March, 2023, pg. 35-50, Editura U.T.PRESS, ISSN: 1221-5872, eISSN: 2393-2988, https://atna-mam.utcluj.ro/index.php/Acta/article/view/2096/1665 , http://apps.webofknowledge.com - Web of Science Core Collection, https://www-webofscience-com.am.e-nformation.ro/ , WOS:000995805400004 – zona albă.
6	Danci, C.-C.; Duma, Irina; Buidin, T.I.C.; Cordoș, N.; Todoruț, A. (2023). <i>Comparative Evaluation of The Dynamic Behavior of Tires Equipping Formula Student Vehicles Using Mathematical Modelling</i> . Cluj-Napoca, Acta Technica Napocensis, Series: <i>Applied Mathematics, Mechanics, and Engineering</i> , Vol. 66, Issue I, March, 2023, pg. 159-166, Editura U.T.PRESS, ISSN: 1221-5872, eISSN: 2393-2988, https://atna-mam.utcluj.ro/index.php/Acta/article/view/2110/1679 , http://apps.webofknowledge.com - Web of Science Core Collection, https://www-webofscience-com.am.e-nformation.ro/ , WOS:000995805400018 – zona albă.
7	Dragoste, M.-D.; Duma, Irina, Cordoș, N.; Todoruț, A. (2022). <i>Comparative Analysys of the Possibilities to Evaluate the Dynamic Performances for Internal Combustion, Electric and Hybrid Vehicles by Mathematical Modeling</i> . Cluj-Napoca, Acta Technica Napocensis, Series: <i>Applied Mathematics, Mechanics, and Engineering</i> , Vol. 65, Issue II, June, 2022, pg. 251-262, Editura U.T.PRESS, ISSN 1221-5872, https://atna-mam.utcluj.ro/index.php/Acta/article/view/1813/1461 , http://apps.webofknowledge.com - Web of Science Core Collection, https://www-webofscience-com.am.e-nformation.ro/ , WOS:000838236300016 – zona albă.
Total lucrari	7

Cadru Didactic	VAIDA CALIN
Nr	Lucrari stiintifice
1	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. <i>Mechanism and Machine Theory</i> , 209, 105986. https://doi.org/10.1016/j.mechmachtheory.2025.105986 - Rosie
2	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. <i>Technologies</i> , 13(1), 37. https://doi.org/10.3390/technologies13010037 - Rosie

3	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. <i>Applied Sciences</i> , 15(7), 3532. https://doi.org/10.3390/app15073532 - Galbena
4	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. <i>Applied Sciences</i> , 15(8), 4383. https://doi.org/10.3390/app15084383 - Galbena
5	Vaida, C., Rus, G., & Pisla, D. (2025). A sensor-based classification for neuromotor robot-assisted rehabilitation. <i>Bioengineering</i> , 12(3), 287. https://doi.org/10.3390/bioengineering12030287 - Galbena
6	Pisla, D., Bulbucan, V., Hedeşiu, M., Vaida, C., Cailean, A., Mocan, R., Tucan, P., Dinu, C., Pisla, D., & TEAM Project Group. (2025). Real-Time Motion Compensation for Dynamic Dental Implant Surgery. <i>Journal of Clinical Medicine</i> , 14(18), 6429. https://doi.org/10.3390/jcm14186429 - Rosie
7	Tucan, P., Vanta, O.-M., Vaida, C., Ciupe, M., Sebeni, D., Pisla, A., Stiole, S., Lupu, D., Major, Z., Gherman, B., Bulbucan, V., Zima, I., Machado, J., & Pisla, D. (2025). Fuzzy Adaptive Control for a 4-DOF Hand Rehabilitation Robot. <i>Actuators</i> , 14(7), 351. https://doi.org/10.3390/act14070351 - Galbena
8	Horsia, A., Zima, I., Chablat, D., Vaida, C., Pusca, A., Antal, T., Gherman, B., & Pisla, D. (2025). The conceptual design of a parallel mechanism with 3 degrees of freedom for robotic assisted minimally invasive surgery. <i>Acta Technica Napocensis, Series: Applied Mathematics, Mechanics, and Engineering</i> , 68(1), https://atna-mam.utcluj.ro/index.php/Acta/article/view/2715 - Alba
9	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. <i>Technologies</i> , 13(6), 227. https://doi.org/10.3390/technologies13060227 - Rosie
10	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. <i>Journal of Functional Biomaterials</i> , 16(6), 207. https://doi.org/10.3390/jfb16060207 - Rosie
11	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. <i>Mathematics</i> , 13(8), 1241. https://doi.org/10.3390/math13081241 - Rosie
12	Vaida, C., Rus, G., Tucan, P., Machado, J., Pisla, A., Zima, I., Birlescu, I., & Pisla, D. (2024). Enhancing Robotic-Assisted Lower Limb Rehabilitation Using Augmented Reality and Serious Gaming. <i>Applied Sciences</i> , 14(24), 12029. https://doi.org/10.3390/app142412029 - Galbena
13	Birlescu, I., Tohanean, N., Vaida, C., Gherman, B., Neguran, D., Horsia, A., Tucan, P., Condurache, D., & Pisla, D. (2024). Modeling and analysis of a parallel robotic system for lower limb rehabilitation with predefined operational workspace. <i>Mechanism and Machine Theory</i> , 198, 105674. https://doi.org/10.1016/j.mechmachtheory.2024.105674 – Rosie
14	Pisla, D., Bulbucan, V., Hedeşiu, M., Vaida, C., Zima, I., Mocan, R., Tucan, P., Dinu, C., Pisla, D., & TEAM Project Group. (2024). A Vision-Guided Robotic System for Safe Dental Implant Surgery. <i>Journal of Clinical Medicine</i> , 13(21), 6326, https://doi.org/10.3390/jcm13216326 – Rosie
15	Elisei, R. C., Graur, F., Szold, A., Melzer, A., Moldovan, S. C., Motrescu, M., Moiş, E., Popa, C., Pisla, D., Vaida, C., Tudor, T., Coţe, A., & Al-Hajjar, N. (2024). Gelatin-Based Liver Phantoms for Training Purposes: A Cookbook Approach. <i>Journal of Clinical Medicine</i> , 13(12), 3440. https://doi.org/10.3390/jcm13123440 – Rosie
16	Elisei, R. C., Graur, F., Melzer, A., Moldovan, S. C., Tiu, C., Popa, C., Mois, E., Pisla, D., Vaida, C., Ştefănescu, H., Coţe, A., & Al-Hajjar, N. (2024). Liver Phantoms Cast in 3D-Printed Mold for Image-Guided Procedures. <i>Diagnostics</i> , 14(14), 1521. https://doi.org/10.3390/diagnostics14141521 - Rosie

17	Vaida, C., Pop, G., Tucan, P., Gherman, B., & Pislă, D. (2025). Multi-Parametric Optimization of 3D-Printed Components. <i>Polymers</i> , 17(1), 27. https://doi.org/10.3390/polym17010027 - Rosie
18	Pislă, D., Popa, C., Pusca, A., Ciocan, A., Gherman, B., Mois, E., Căilean, A.-D., Vaida, C., Radu, C., Chablat, D., & Hajjar, N. A. (2024). On the Control and Validation of the PARA-SILSROB Surgical Parallel Robot. <i>Applied Sciences</i> , 14(17), 7925. https://doi.org/10.3390/app14177925 - Galbena
19	Covăciu, F., Vaida, C., Gherman, B., Pislă, A., Tucan, P., & Pislă, D. (2024). Development of a Virtual Reality-Based Environment for Telerehabilitation. <i>Applied Sciences</i> , 14(24), 12022. https://doi.org/10.3390/app142412022 - Galbena
20	Elisei, R. C., Graur, F., Szold, A., Couți, R., Moldovan, S. C., Moiş, E., Popa, C., Pislă, D., Vaida, C., Tucan, P., & Al-Hajjar, N. (2024). A 3D-Printed, High-Fidelity Pelvis Training Model: Cookbook Instructions and First Experience. <i>Journal of Clinical Medicine</i> , 13(21), 6416. https://doi.org/10.3390/jcm13216416 - Rosie
21	Tohanean, N., Tucan, P., Vanta, O.-M., Abrudan, C., Pinteă, S., Gherman, B., Burz, A., Banica, A., Vaida, C., Neguran, D. A., Ordog, A., Tarnita, D., & Pislă, D. (2023). The Efficacy of the NeuroAssist Robotic System for Motor Rehabilitation of the Upper Limb—Promising Results from a Pilot Study. <i>Journal of Clinical Medicine</i> , 12(2), 425. https://doi.org/10.3390/jcm12020425 - Rosie
22	Rus, G., Andras, I., Vaida, C., Crisan, N., Gherman, B., Radu, C., Tucan, P., Iakab, S., Hajjar, N. A., & Pislă, D. (2023). Artificial Intelligence-Based Hazard Detection in Robotic-Assisted Single-Incision Oncologic Surgery. <i>Cancers</i> , 15(13), 3387. https://doi.org/10.3390/cancers15133387 - Galbena
23	Covăciu, F., Crisan, N., Vaida, C., Andras, I., Pusca, A., Gherman, B., Radu, C., Tucan, P., Al Hajjar, N., & Pislă, D. (2023). Integration of Virtual Reality in the Control System of an Innovative Medical Robot for Single-Incision Laparoscopic Surgery. <i>Sensors</i> , 23(12), 5400. https://doi.org/10.3390/s23125400 - Galbena
24	Pislă, D., Hajjar, N. A., Gherman, B., Radu, C., Antal, T., Tucan, P., Literat, R., & Vaida, C. (2023). Development of a 6-DOF Parallel Robot for Potential Single-Incision Laparoscopic Surgery Application. <i>Machines</i> , 11(10), 978. https://doi.org/10.3390/machines11100978 - Galbena
25	Pislă, D., Crisan, N., Gherman, B., Andras, I., Tucan, P., Radu, C., Pusca, A., Vaida, C., & Al Hajjar, N. (2023). Safety Issues in the Development of an Innovative Medical Parallel Robot Used in Renal Single-Incision Laparoscopic Surgery. <i>Journal of Clinical Medicine</i> , 12(14), 4617. https://doi.org/10.3390/jcm12144617 - Rosie
26	Rus, G., Vaida, C., Gherman, B., Pislă, A., Nae, L., Tucan, P., Ciupe, M., & Pislă, D. (2023). On the development and validation of a matchmaking mentoring platform. <i>Acta Technica Napocensis, Series: Applied Mathematics, Mechanics, and Engineering</i> , 66(Special I), https://atna-mam.utcluj.ro/index.php/Acta/article/view/2230 – Alba
27	Tucan, P., Vaida, C., Horvath, D., Caprariu, A., Burz, A., Gherman, B., Iakab, S., & Pislă, D. (2022). Design and Experimental Setup of a Robotic Medical Instrument for Brachytherapy in Non-Resectable Liver Tumors. <i>Cancers</i> , 14(23), 5841. https://doi.org/10.3390/cancers14235841 - Galbena
28	Gherman, B., Hajjar, N. A., Tucan, P., Radu, C., Vaida, C., Mois, E., Burz, A., & Pislă, D. (2022). Risk Assessment-Oriented Design of a Needle Insertion Robotic System for Non-Resectable Liver Tumors. <i>Healthcare</i> , 10(2), 389. https://doi.org/10.3390/healthcare10020389 - Galbena
29	Pislă, D., Birlescu, I., Crisan, N., Pusca, A., Andras, I., Tucan, P., Radu, C., Gherman, B., & Vaida, C. (2022). Singularity Analysis and Geometric Optimization of a 6-DOF Parallel Robot for SILS. <i>Machines</i> , 10(9), 764. https://doi.org/10.3390/machines10090764 - Galbena
30	Graur, F., Ciocan, R. A., Ciocan, A., Puia, I. C., Mois, E., Furcea, L., Zaharie, F., Popa, C., Schlanger, D., Vaida, C., Pislă, D., & Al Hajjar, N. (2022). Trends in Minimally Invasive

	Approaches for Liver Resections–A Systematic Review. Journal of Clinical Medicine, 11(22), 6721. https://doi.org/10.3390/jcm11226721 - Rosie
31	Pusca, A., Rus, G., Birlescu, I., Vaida, C., Pisla, A., Schonstein, C., Gherman, B., Tucan, P., & Pisla, D. (2022). Workspace analysis of two innovative parallel robots for single-incision laparoscopic surgery. Acta Technica Napocensis, Series: Applied Mathematics, Mechanics, and Engineering, 65(2S), https://atna-mam.utcluj.ro/index.php/Acta/article/view/1918 – Alba
32	Ulinici, I., Vaida, C., Gherman, B., Antal, T., Tucan, P., & Pisla, D. (2022). Kinematics and workspace simulation of a new parallel robot for SILS. Acta Technica Napocensis, Series: Applied Mathematics, Mechanics, and Engineering, 65(Special II), https://atna-mam.utcluj.ro/index.php/Acta/article/view/1931 – Alba
33	Burz, A., Tucan, P., Tohanean, N., Gherman, B., Vaida, C., Pisla, A., Antal, T., Carbone, G., Abrudan, C., & Pisla, D. (2022). Patient oriented control system of a modular parallel robot for elbow rehabilitation. Acta Technica Napocensis, Series: Applied Mathematics, Mechanics, and Engineering, 65(Special II), https://atna-mam.utcluj.ro/index.php/Acta/article/view/1900 – Alba
34	Pisla, D., Tarnita, D., Tucan, P., Tohanean, N., Vaida, C., Geonea, I. D., Bogdan, G., Abrudan, C., Carbone, G., & Plitea, N. (2021). A Parallel Robot with Torque Monitoring for Brachial Monoparesis Rehabilitation Tasks. Applied Sciences, 11(21), 9932. https://doi.org/10.3390/app11219932 - Galbena
35	Major, Z. Z., Vaida, C., Major, K. A., Tucan, P., Brusturean, E., Gherman, B., Birlescu, I., Craciunaș, R., Ulinici, I., Simori, G., Banica, A., Pop, N., Burz, A., Carbone, G., & Pisla, D. (2021). Comparative Assessment of Robotic versus Classical Physical Therapy Using Muscle Strength and Ranges of Motion Testing in Neurological Diseases. Journal of Personalized Medicine, 11(10), 953. https://doi.org/10.3390/jpm11100953 - Rosie
36	Tucan, P., Vaida, C., Ulinici, I., Banica, A., Burz, A., Pop, N., Birlescu, I., Gherman, B., Plitea, N., Antal, T., Carbone, G., & Pisla, D. (2021). Optimization of the ASPIRE Spherical Parallel Rehabilitation Robot Based on Its Clinical Evaluation. International Journal of Environmental Research and Public Health, 18(6), 3281. https://doi.org/10.3390/ijerph18063281 - Rosie
37	Pisla, D., Andras, I., Vaida, C., Crisan, N., Ulinici, I., Birlescu, I., & Plitea, N. (2021). New approach to hybrid robotic system application in single-incision laparoscopic surgery. Acta Technica Napocensis, Series: Applied Mathematics, Mechanics, and Engineering, 64(3), https://atna-mam.utcluj.ro/index.php/Acta/article/view/1640 – Alba
38	Pisla, D., Nae, L., Vaida, C., Oprea, E., Pisla, A., Gherman, B., Antal, T., Riessenberger, K., & Plitea, N. (2021). Development of a learning management system for knowledge transfer in engineering. Acta Technica Napocensis, Series: Applied Mathematics, Mechanics, and Engineering, 64(3), https://atna-mam.utcluj.ro/index.php/Acta/article/view/1639 - Alba
39	Pisla, D., Birlescu, I., Mois, E., Tucan, P., Radu, C., Burz, A., Gherman, B., Antal, T., Vaida, C., & Al Hajjar, N. (2021). Simulation and control of an innovative medical parallel robot used for HCC treatment procedure. Acta Technica Napocensis, Series: Applied Mathematics, Mechanics, and Engineering, 64(Special II), https://atna-mam.utcluj.ro/index.php/Acta/article/view/1539 - Alba
40	Vaida, C., Nae, L., Deriaz, M., Pisla, A., Oprea, E., Gherman, B., Mircea, A., Stulens, L., & Pisla, D. (2021). User needs and requirements analysis for a seniors dedicated AI-driven knowledge transfer platform. Acta Technica Napocensis, Series: Applied Mathematics, Mechanics, and Engineering, 64(Special IV), https://atna-mam.utcluj.ro/index.php/Acta/article/view/1713/1389 – Alba
41	Gherman, B., Puskas, F., Tucan, P., Roman, C., Pisla, A., Vaida, C., Birlescu, I., & Pisla, D. (2021). A robotic-assisted sputum collection booth. Acta Technica Napocensis, Series: Applied Mathematics, Mechanics, and Engineering, 64(4), https://atna-mam.utcluj.ro/index.php/Acta/article/view/1664 - Alba
Total lucrari	41

Cadru Didactic	VARGA BOGDAN
Nr	Lucrari stiintifice
1	Comparative Analysis of Energy Efficiency between Battery Electric Buses and Modular Autonomous Vehicles - https://www.webofscience.com/wos/woscc/full-record/WOS:001245235900001 (Zona roșie)
2	Energy Efficiency Analysis of a Fuel Cell Bus Model Using Real Scenarios Generated by Data Collection - https://www.webofscience.com/wos/woscc/full-record/WOS:001183090700001 (Zona galbenă)
3	Modular Autonomous Vehicles' Application in Public Transport Networks: Conceptual Analysis on Airport Connection - https://www.webofscience.com/wos/woscc/full-record/WOS:001172213900001 (Zona galbenă)
Total	3

2. Articole științifice publicate în volumele unor conferințe WOS/ISI/ERIH

Cadru Didactic	ARGHIR MARIANA
Nr	Lucrari stiintifice
-	-
Total	0

Cadru Didactic	BALAN MUGUR CIPRIAN
Nr	Lucrari stiintifice
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Total	7

Cadru Didactic	BIRLEANU CORINA
Nr	Lucrari stiintifice
1	Pustan, M., Birleanu, C., & Pop, S. M. (2021). Nanocharacterization of Dental Materials by Atomic Force Microscopy and Their Thermal Degradation Evaluation. Materials Proceedings, 6(1), 14. https://sciforum.net/manuscripts/9942/slides.pdf
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Total	9

Cadru Didactic	BODE FLORIN IOAN
Nr	Lucrari stiintifice
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Total	3

Cadru Didactic	BURNETE NICOLAE
Nr	Lucrari stiintifice
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Total	5

Cadru Didactic	COVACIU FLORIN-ALEXANDRU
Nr	Lucrari stiintifice
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Total	2
Cadru Didactic	DUDESCU MIRCEA CRISTIAN
Nr	Lucrari stiintifice
-	-
Total	0

Cadru Didactic	FILIP NICOLAE
Nr	Lucrari stiintifice
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Total	3

Cadru Didactic	GHERMAN BOGDAN GEORGE
Nr	Lucrari stiintifice
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5	Gherman, B., Zima, I., Vaida, C., Cremene, A., Antal, T., Machado, J., & Pisla, D. (2025). On the design and development of a wearable robotic device for fingers rehabilitation. In I. Doroftei & E.-C. Lovasz (Eds.), <i>New advances in mechanisms, mechanical transmissions and robotics (Mechanisms and Machine Science, Vol. 178, pp. 254–263)</i> . Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-87537-3_26
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	industrial robotics (pp. 383–391). Springer International Publishing. https://doi.org/10.1007/978-3-031-04870-8_45
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Total	27

Cadru Didactic	ICLODEAN CALIN DORU
Nr	Lucrari stiintifice
-	-
Total	0

Cadru Didactic	LUPEA IULIAN
Nr	Lucrari stiintifice
-	-
Total	0

Cadru Didactic	MANDRU SILVIU DAN
Nr	Lucrari stiintifice
1	A. Ianoși-Andreeva-Dimitrova, S. -D. Mândru, "Serious Game for Motor-Imagery based Brain-Computer Interface training," 2021 International Conference on e-Health and Bioengineering (EHB), Iasi, Romania, 2021, pp. 1-4, doi: 10.1109/EHB52898.2021.9657609. ISBN 978-1-6654-4000-4 / ISSN 2575-5137 / eISSN 2575-5145 / WOS:000802227900070

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3	Feneșan, A.C., Ianoși-Andreeva-Dimitrova, A., Mândru, D.S. (2024). Low-Cost Functional Infrared Spectroscopy Based System as a Brain-Computer Interface. 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_17 , Print ISBN 978-3-031-59256-0 Online ISBN 978-3-031-59257-7 / ISSN 2211-0984 / eISSN 2211-0992 / IDS Number BX4XE, WOS:001295610100016
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6	Ver, AE., Ver, I., Mandru, SD. (2025). Rehabilitation Sensory Device. In: Vlad, S., Roman, N.M. (eds) 9th International Conference on Advancements of Medicine and Health Care Through Technology. MEDITECH 2024. IFMBE Proceedings, vol 130, pp. 50 - 56, DOI: 10.1007/978-3-031-95671-3_6 Springer, Cham. (SCOPUS)
7	Ver, I., Ver, AE., Mandru, SD. (2025). Adaptable Mechanism for Walking Aids. In: Vlad, S., Roman, N.M. (eds) 9th International Conference on Advancements of Medicine and Health Care Through Technology. MEDITECH 2024. IFMBE Proceedings, vol 130, pp. 23 - 30, DOI: 10.1007/978-3-031-95671-3_3 Springer, Cham. (Scopus)
8	Feneșan, A.C., Ianoși-Andreeva-Dimitrova, A., Mandru, SD. (2025). A Photoplethysmography—Based Affordable Demonstrator for Monitoring Muscle Oxygenation Using Infrared Light. In: Vlad, S., Roman, N.M. (eds) 9th International Conference on Advancements of Medicine and Health Care Through Technology. MEDITECH 2024. IFMBE Proceedings, vol 130. pp. 84 – 89, Springer, Cham. https://doi.org/10.1007/978-3-031-95671-3_10 (Scopus)
Total	8

Cadru Didactic	MARIASIU FLORIN EMIL
Nr	Lucrari stiintifice
1	I.C. SECHEL, A. CSATO, F. MARIASIU. AI Applications in Predictive Maintenance and Reliability of Batteries: Challenges and Future Directions. Proceedings of FES 2025 Conference (indexare WoS and IEEE) – acceptată pentru publicare.
2	H. Căraușan, B.O. Varga, D. Moldovanu., F. Mariasiu, G. Prunean, I-T. Oarga (2023) "Energy Efficiency Assessment of Sustainable Public Transport Solutions: a Comparative Analysis Fuel Cell vs Battery in Real Life Scenarios," In Proceedings of 58th International Universities Power Engineering Conference (UPEC), Dublin, Ireland, 2023, pp. 1-6, doi: 10.1109/UPEC57427.2023.10294682. (indexare WoS)

3	D. Moldovanu, F. Mariașiu, B. O. Varga, A. I. Borzan, H. Cărăușan and D. D. Micu, (2023) Analysis of the modes of operation of an electric vehicle on energy consumption, 10th International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 2023, pp. 1-5, doi: 10.1109/MPS58874.2023.10187463. (indexare WoS)
Total	3

Cadru Didactic	NASUI VASILE
Nr	Lucrari stiintifice
1	Oșan. A., Bănică. M, Butnar. L. and Năsui V. Comparison of the roughness of concave cylindrical surfaces machined with spherical milling cutters and toroidal milling cutters.The 5th International Conference On Computing And Solutions In Manufacturing Engineering - CoSME'20. 7-10 Oct. 2020 Brașov, Romania, IOP Conference Series: Materials Science and Engineering (MSE) https://iopscience.iop.org/article/10.1088/1757-899X/1009/1/012042 . ISI Web of Science. DOI: 10.1088/1757-899X/1009/1/012042, IOP Conf. Ser.: Mater. Sci. Eng. 1009 012042, indexed IOPSCIENCE. http://www.cosme.ro/en/cosme2020_docs/CoSME2020%20Conference%20program%20v2.pdf (Thomson Reuters), ISI Proceedings
2	Oșan. A., Bănică. M, and Năsui. V. 2021 "Prediction of roughness of planar surfaces processed with toroidal milling through an artificial neural network", Innovative Manufacturing Engineering and Energy (IManEE 2020) "1st Virtual Edition in Manufacturing and Energy" -The 24rd edition of IManEE 2020 International Conference, 14-15 December 2020. IOP Conference Series: Materials Science and Engineering, 1037(1), 012028 IOP Publishing. doi: 10.1088/1757-899X/1037/1/012028. ISSN 17578981, Indexed by Elsevier: SCOPUS www.scopus.com , https://iopscience.iop.org/article/10.1088/1757-899X/1037/1/012028
3	Moldovan, Ș.A., Banica, M., Nasui, V. Establishing the machining process for complex aluminum alloy part made from plate raw material. MATEC Web Conf. Vol. 178, 2018, 01003. 25nd International Conference on Innovative Manufacturing Engineering and Energy - IManE&E 2021. Section Advanced Machining and Surface Engineering. ISSN: 2261-236X. Indexing: Elsevier: SCOPUS, Ei Compendex (CPX), Cambridge Scientific Abstracts (CSA), Chemical Abstracts (CA), Google Scholar, ISI (ISTP, CPCI, Web of Science, Institution of Electrical Engineers (IEE). Thomson Reuters Conference Proceedings Citation Index (ISI Web of Science data base), http://www.scientific.net
4	Alexander Baron von Hohenhau, Vasile Năsui. Review of Turning Vanes, Curved Diffusers and Their Role in Compact Wind and Water Tunnels. ACTA TECHNICA NAPOCENSIS, Series: Applied Mathematics, Mechanics, and Engineering, ISSN 1221-5872. Vol 65, No. 4S (2022) , pg. 1013-1018, Index: ISI Web of Science, Copernicus, WorldCat.org. https://atna-mam.utcluj.ro/index.php/Acta
5	N Pasca, M Banica, L Butnar and V Nasui. Considerations regarding the use of DLC coated tools used in the machining of aluminum alloys used in the aeronautical industry. 12th International Conference on Applied Sciences (ICAS2024) Journal of Physics: Conference Series 2927 (2024) 012006. IOP Publishing doi:10.1088/1742-6596/2927/1/012006. To cite this article: N Pasca et al 2024 J. Phys.: Conf. Ser. 2927 012006
6	Nicolae Ioan PAȘCA, Mihai BANICA, Lucian BUTNAR, Vasile NASUI. Experimental research on machining with dlc diamond coated milling tools of aluminum alloy parts used in the aeronautical industry. Acta Technica Napocensis, Series: Applied Mathematics, Mechanics, and Engineering, ISSN 1221-5872. Vol xx, (2025), pg....- Index: ISI Web of Science, Copernicus, WorldCat.org. https://atna-mam.utcluj.ro/index.php/Acta https://atna-mam.utcluj.ro/index.php/Acta/article/view/2546
Total	6

Cadru Didactic	PISLA DOINA
Nr	Lucrari stiintifice
1	Vaida, C., Gherman, B., Birlescu, I., Tucan, P., Pusca, A., Rus, G., Chablat, D., & Pisla, D. (2024). Kinematic analysis of a parallel robot for minimally invasive surgery. In J. Lenarcic & M. Husty (Eds.), <i>Advances in Robot Kinematics 2024</i> (pp. 188–195). Springer. https://doi.org/10.1007/978-3-031-64057-5_22
2	Tucan, P., Birlescu, I., Pusca, A., Gherman, B., Jucan, D., Antal, T., Vaida, C., Pisla, A., Chablat, D., & Pisla, D. (2024). A flexible instrument for robotic assisted minimally invasive esophagectomy. In G. Rosati, A. Gasparetto, & M. Ceccarelli (Eds.), <i>New Trends in Mechanism and Machine Science (Mechanisms and Machine Science, Vol. 165, pp. 63–71)</i> . Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-67295-8_8
3	Rus, G., Al Hajjar, N., Tucan, P., Zima, I., Vaida, C., Radu, C., Jucan, D., Chablat, D., Antal, T., & Pisla, D. (2024). The control architecture of a spherical robot for minimally invasive surgery. In E.-C. Lovasz, A. Ceccarelli, & V. Ciupe (Eds.), <i>Mechanism Design for Robotics</i> (pp. 433–441). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-67383-2_45
4	Mihaly, V., Șuşcă, M., Birlescu, I., Sim, S., Pisla, D., & Dobra, P. (2024). Robust feedback linearization for serial robots. In <i>Proceedings of the 2024 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR)</i> (pp. 1–6). IEEE. https://doi.org/10.1109/AQTR61889.2024.10554120
5	Covaciu, F., Gherman, B., Rus, G., Vaida, C., Zima, I., & Pisla, D. (2024). Development of a virtual reality simulator for robotic-assisted laparoscopic surgery. In <i>Proceedings of the 2024 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR)</i> (pp. 1–6). IEEE. https://doi.org/10.1109/AQTR61889.2024.10554158
6	Moreira, P., Machado, J., Vaida, C., Pisla, D., Miranda, D., Martins, N., Carvalho, V., & Matos, D. (2024). Design of wearable prostheses: A new approach. In D. Pisla, G. Carbone, D. Condurache, & C. Vaida (Eds.), <i>Advances in service and industrial robotics: RAAD 2024 (Mechanisms and Machine Science, Vol. 157, pp. 129–138)</i> . Springer. https://doi.org/10.1007/978-3-031-59257-7_14
7	Pisla, D., Tucan, P., Chablat, D., Al Hajjar, N., Ciocan, A., Pusca, A., Pisla, A., Radu, C., Pop, G., & Gherman, B. (2024). Accuracy and repeatability of a parallel robot for personalised minimally invasive surgery. In D. Pisla, G. Carbone, D. Condurache, & C. Vaida (Eds.), <i>Advances in service and industrial robotics: RAAD 2024 (Mechanisms and Machine Science, Vol. 157, pp. 185–195)</i> . Springer. https://doi.org/10.1007/978-3-031-59257-7_20
8	Gherman, B., Zima, I., Vaida, C., Cremene, A., Antal, T., Machado, J., & Pisla, D. (2025). On the design and development of a wearable robotic device for fingers rehabilitation. In I. Doroftei & E.-C. Lovasz (Eds.), <i>New advances in mechanisms, mechanical transmissions and robotics (Mechanisms and Machine Science, Vol. 178, pp. 254–263)</i> . Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-87537-3_26
9	Pusca, A., Andras, I., Cailean, A., Crisan, N., Vaida, C., Radu, C., Gherman, B., Al Hajjar, N., Chablat, D., & Pisla, D. (2024). On the development of an innovative surgical parallel robotic system. In H.-N. Costin, R. Magjarević, & G. G. Petroiu (Eds.), <i>Advances in digital health and medical bioengineering</i> (pp. 173–183). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-62502-2_20
10	Moreira, P., Machado, J., Vaida, C., Pisla, D., Miranda, D., Martins, N., Carvalho, V., & Matos, D. (2024). Design of wearable prostheses: A new approach. In D. Pisla, G. Carbone, D. Condurache, & C. Vaida (Eds.), <i>Advances in service and industrial robotics (Mechanisms and Machine Science, Vol. 157, pp. 129–138)</i> . Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-59257-7_14

11	Rus, G., Al Hajjar, N., Tucan, P., Ciocan, A., Vaida, C., Radu, C., Chablat, D., & Pisla, D. (2024). Mixed-reality-guided teleoperation of a collaborative robot for surgical procedures. In D. Pisla, G. Carbone, D. Condurache, & C. Vaida (Eds.), <i>Advances in service and industrial robotics (Mechanisms and Machine Science, Vol. 157, pp. 233–241)</i> . Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-59257-7_24
12	Pisla, D., Tucan, P., Tohanean, N., Birlescu, I., Abrudan, C., Horsia, A., Gherman, B., Pisla, A., Machado, J., & Vaida, C. (2024). Design improvement of a parallel robot for lower limb rehabilitation. In L. Romdhane, A. Mlika, S. Zeghloul, A. Chaker, & M. A. Laribi (Eds.), <i>Robotics and mechatronics (pp. 227–237)</i> . Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-59888-3_21
13	Pisla, D., Andras, I., Pusca, A., Radu, C., Gherman, B., Tucan, P., Crisan, N., Vaida, C., & Al Hajjar, N. (2023). Design and functional analysis of a new parallel modular robotic system for single incision laparoscopic surgery. In D. Tarnita, N. Dumitru, D. Pisla, G. Carbone, & I. Geonea (Eds.), <i>New trends in medical and service robotics (pp. 32–41)</i> . Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-32446-8_4
14	Pusca, A., Andras, I., Cailean, A., Crisan, N., Vaida, C., Radu, C., Gherman, B., Al Hajjar, N., Chablat, D., & Pisla, D. (2024). On the development of an innovative surgical parallel robotic system. In H.-N. Costin, R. Magjarević, & G. G. Petroiu (Eds.), <i>Advances in digital health and medical bioengineering (pp. 173–183)</i> . Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-62502-2_20
15	Pisla, D., Crisan, N., Ulinici, I., Gherman, B., Radu, C., Tucan, P., & Vaida, C. (2023). Structural study of a robotic system for SILS surgery. In D. Tarnita, N. Dumitru, D. Pisla, G. Carbone, & I. Geonea (Eds.), <i>New trends in medical and service robotics (pp. 20–31)</i> . Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-32446-8_3
16	Gherman, B., Radu, C., Caprariu, A., Al Hajjar, N., Vaida, C., Ciocan, A., Tucan, P., Mois, E., & Pisla, D. (2023). On the stiffness modelling of the ProHep-LCT robotic needle insertion instrument. In T. Petrič, A. Ude, & L. Žlajpah (Eds.), <i>Advances in service and industrial robotics (pp. 245–252)</i> . Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-32606-6_29
17	Covaciu, F., Pop, I., Gherman, B., Pisla, A., Vaida, C., Al Hajjar, N., & Pisla, D. (2023). Development of a virtual reality simulator for robotic assisted surgery. In M. A. Laribi, C. A. Nelson, M. Ceccarelli, & S. Zeghloul (Eds.), <i>New advances in mechanisms, transmissions and applications (pp. 52–61)</i> . Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-29815-8_6
18	Tucan, P., Gherman, B., Pisla, A., Horsia, A., Vaida, C., & Pisla, D. (2023). A singularity-free approach for safe operation of a parallel robot for lower limb rehabilitation. In T. Petric, A. Ude, & L. Zlajpah (Eds.), <i>Advances in Service and Industrial Robotics: RAAD 2023 (Mechanisms and Machine Science, Vol. 135)</i> . Springer. https://doi.org/10.1007/978-3-031-32606-6_17
19	Rus, G., Gherman, B., Nae, L., Vaida, C., Pisla, A., Oprea, E., Schonstein, C., Antal, T., & Pisla, D. (2023). Fuzzy logic systems: From WisdomofAge mentoring platform to medical robots. In D. Tarnita, N. Dumitru, D. Pisla, G. Carbone, & I. Geonea (Eds.), <i>New trends in medical and service robotics (pp. 50–59)</i> . Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-32446-8_6
20	Pislă, A., Nae, L., Vaida, C., Oprea, E., Gherman, B., Deriaz, M., & Pisla, D. (2023). Modern project approaches in shortening the lead time in innovation for young emerging companies based on the experienced seniors' knowledge. In K. von Leipzig, N. Sacks, & M. Mc Clelland (Eds.), <i>Smart, sustainable manufacturing in an ever-changing world (pp. 229–242)</i> . Springer International Publishing. https://doi.org/10.1007/978-3-031-15602-1_18
21	Pisla, D., Gherman, B., Tucan, P., Birlescu, I., Pusca, A., Rus, G., Pisla, A., & Vaida, C. (2022). Application oriented modelling and simulation of an innovative parallel robot for single incision laparoscopic surgery. In

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22	Banica, A., Gherman, B., Tohanean, N., Antal, T., Pisla, A., Abrudan, C., Carbone, G., & Pisla, D. (2022). Inverse dynamic modeling of a parallel elbow rehabilitation robot for spasticity treatment. In A. Müller & M. Brandstötter (Eds.), <i>Advances in service and industrial robotics</i> (pp. 392–400). Springer International Publishing. https://doi.org/10.1007/978-3-031-04870-8_46
23	Vaida, C., Birlescu, I., Pusca, A., Gherman, B., Tucan, P., Antal, T. A., & Pisla, D. (2022). Geometric modeling of a new modular spherical robotic system for single incision laparoscopic surgery. In A. Müller & M. Brandstötter (Eds.), <i>Advances in service and industrial robotics</i> (pp. 367–374). Springer International Publishing. https://doi.org/10.1007/978-3-031-04870-8_43
24	Burz, A., Tucan, P., Tohanean, N., Gherman, B., Vaida, C., & Abrudan, C., Carbone, G., Pisla, D., (2022). HRI based command system of a modular parallel robot for brachial monoparesis. In <i>Proceedings of the 2022 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR)</i> (pp. 1–6). IEEE. https://doi.org/10.1109/AQTR55203.2022.9802034
25	Rus, G., Nae, L., Gherman, B., Vaida, C., Deriaz, M., Oprea, E., & Pisla, D. (2023). An innovative recommendation system for a knowledge transfer matchmaking platform. In G. A. Papadopoulos, A. Achilleos, E. Pissaloux, & R. Velázquez (Eds.), <i>ICT for health, accessibility and wellbeing</i> (pp. 162–176). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-29548-5_11
26	Burz, A., Tucan, P., Gherman, B., Vaida, C., Pisla, D., & Abrudan, C. (2022). On the control system for the robotic assisted instruments used in percutaneous cancer treatment. In <i>Proceedings of the 2022 26th International Conference on System Theory, Control and Computing (ICSTCC)</i> (pp. 283–288). IEEE. https://doi.org/10.1109/ICSTCC55426.2022.9931813
27	Ulinici, I.-M., Crisan, N., Vaida, C., Andras, I., & Pisla, D. (2022). Analysis and preliminary design of a new parallel robot for SILS. In <i>Proceedings of the 2022 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR)</i> (pp. 1–6). IEEE. https://doi.org/10.1109/AQTR55203.2022.9801936
28	Gherman, B., Tucan, P., Vaida, C., Crisan, N., Rus, G., Birlescu, I., & Pisla, D. (2022). On the kinematics and dimensional optimization of a robotic system for single incision laparoscopic surgery. In A. Müller & M. Brandstötter (Eds.), <i>Advances in service and industrial robotics</i> (pp. 383–391). Springer International Publishing. https://doi.org/10.1007/978-3-031-04870-8_45
29	Vaida, C., Andras, I., Birlescu, I., Crisan, N., Plitea, N., & Pisla, D. (2021). Preliminary control design of a single-incision laparoscopic surgery robotic system. In <i>Proceedings of the 2021 25th International Conference on System Theory, Control and Computing (ICSTCC)</i> (pp. 384–389). IEEE. https://doi.org/10.1109/ICSTCC52150.2021.9607128
30	Gherman, B., Nae, L., Pisla, A., Oprea, E., Vaida, C., & Pisla, D. (2021). <i>WisdomOfAge: Designing a platform for active and healthy ageing of senior experts in engineering</i> . In E. Pissaloux, G. A. Papadopoulos, A. Achilleos, & R. Velázquez (Eds.), <i>ICT for health, accessibility and wellbeing</i> (pp. 18–30). Springer International Publishing. https://doi.org/10.1007/978-3-030-94209-0_2
31	Vaida, C., Crisan, N., Birlescu, I., Andras, I., & Pisla, D. (2021). Preliminary assessment of artificial intelligence agents for a SILS robotic system. In <i>Proceedings of the 2021 International Conference on e-Health and Bioengineering (EHB)</i> (pp. 1–6). IEEE. https://doi.org/10.1109/EHB52898.2021.9657717
32	Birlescu, I., Graur, F., Vaida, C., Radu, C., Tucan, P., Gherman, B., Pisla, A., Al Hajjar, N., Pisla, D., (2021). Experimental testing and implementation of a force–torque sensor in

	automated percutaneous needle insertion instruments. In Proceedings of the 2021 International Conference on e-Health and Bioengineering (EHB) (pp. 1–6). IEEE. https://doi.org/10.1109/EHB52898.2021.9657712
33	Gherman, B., Caprariu, A., Puskas, F., Pislă, A., Antal, T., & Pislă, D. (2021). Evaluation and selection of a collaborative robot for a tuberculosis sample collection isolated booth. In Proceedings of the 2021 25th International Conference on System Theory, Control and Computing (ICSTCC) (pp. 553–558). IEEE. https://doi.org/10.1109/ICSTCC52150.2021.9607252
34	Denarda, A., Manuello Bertetto, A., Pislă, D., & Carbone, G. (2021). Design and preliminary testing of a novel semi-automatic saffron harvesting device. In S. Zeghloul, M. A. Laribi, & J. Sandoval (Eds.), Advances in service and industrial robotics (pp. 13–22). Springer International Publishing. https://doi.org/10.1007/978-3-030-75259-0_2
35	Gherman, B., Banica, A., Tucan, P., Vaida, C., Antal, T., & Pislă, D. (2021). Inverse dynamic modeling of a parallel wrist rehabilitation robot towards an assistive control modality. In Proceedings of the 2021 25th International Conference on System Theory, Control and Computing (ICSTCC) (pp. 284–289). IEEE. https://doi.org/10.1109/ICSTCC52150.2021.9607164
36	Pislă, D., Birlescu, I., Pusca, A., Tucan, P., Gherman, B., Pislă, A., Antal, T., & Vaida, C. (2022). Kinematics and workspace analysis of an innovative 6-DOF parallel robot for SILS. Proceedings of the Romanian Academy, Series A, 23(3), 279-288, https://acad.ro/sectii2002/proceedings/doc2022-3/07-Pislă_Birlescu.pdf
Total	36

Cadru Didactic	PLITEA NICOLAE
Nr	Lucrari stiintifice
1	Vaida, C., Andras, I., Birlescu, I., Crisan, N., Plitea, N., & Pislă, D. (2021). Preliminary control design of a single-incision laparoscopic surgery robotic system. In Proceedings of the 2021 25th International Conference on System Theory, Control and Computing (ICSTCC) (pp. 384–389). IEEE. https://doi.org/10.1109/ICSTCC52150.2021.9607128
Total	1

Cadru Didactic	TATAR MIHAI OLIMPIU
Nr	Lucrari stiintifice
1	Kadar, F., Tătar, M.O. (2024). Studies and research on mobile robots with whegs-wheel reconfigurable locomotion units, MTM&ROBOTICS_2024 - The Joint International Conference of the XIV International Conference on Mechanisms and Mechanical Transmissions (MTM) and the XXVI International Conference on Robotics (ROBOTICS), Iasi, November 14-15, 2024, In: Doroftei, I., Lovasz, EC. (eds) New Advances in Mechanisms, Mechanical Transmissions and Robotics. MTM&Robotics 2024. Mechanisms and Machine Science, vol 178. Springer, Cham. https://doi.org/10.1007/978-3-031-87537-3_3 , WOS:001512809900003 [SpringerLink], [Web of Science].
2	Banabic, A.I., Tătar, M.O. (2024). Mobile Exploration Robot with Hybrid Locomotion System. In: Pislă, D., Carbone, G., Condurache, D., Vaida, C. (eds) Advances in Service and Industrial Robotics. RAAD 2024. Mechanisms and Machine Science, vol 157, pp. 587-595, Springer, Cham. https://doi.org/10.1007/978-3-031-59257-7_58 , WOS:001295610100057, ISBN: 978-3-031-59256-0, [SpringerLink], [SCOPUS], [Web of Science].
3	Mărieș, M., Tătar, M.O. (2024). Contributions to the Development of Network Integration of Mobile Robots for Emergency Situations. In: Lovasz, EC., Ceccarelli, M., Ciupe, V. (eds) Mechanism Design for Robotics. MEDER 2024. Mechanisms and Machine

	Science, vol 166, pp. 21–30, Springer, Cham. https://doi.org/10.1007/978-3-031-67383-2_3 , WOS:001329880600003, ISBN: 978-3-031-67382-5 [SpringerLink], [Web of Science].
4	Băneasa, A., Buleandra, D., Tătar, M. O., Donca, R. (2024). Unveiling the Potential of Modular Mobile Robotic Systems. A Review. In: Lovasz, EC., Ceccarelli, M., Ciupe, V. (eds) Mechanism Design for Robotics. MEDER 2024. Mechanisms and Machine Science, vol 166, pp. 43–52, Springer, Cham. https://doi.org/10.1007/978-3-031-67383-2_5 , WOS:001329880600005, ISBN: 978-3-031-67382-5 [SpringerLink], [Web of Science].
Total	5

Cadru Didactic	TODORUT ADRIAN
Nr	Lucrari stiintifice
1	Terec, A.; Todoruț, A.; Barabás, I.; Cordoș, N.; Duma, Irina, (2025), <i>Transdisciplinary Possibilities for Approaching Road Traffic Accidents: A Review</i> . In: Chiru, A., Covaciu, D. (eds) CONAT 2024 International Congress of Automotive and Transport Engineering, Part Three: Road Traffic and Safety, pp. 189-200, CONAT 2024, Proceedings in Automotive Engineering, Springer, Cham, Print ISBN: 978-3-031-77634-2, Online ISBN: 978-3-031-77635-9, Series ISSN: 2524-7778, Series e-ISSN: 2524-7786, DOI:10.1007/978-3-031-77635-9_17, https://doi.org/10.1007/978-3-031-77635-9_17 , https://link.springer.com/chapter/10.1007/978-3-031-77635-9_17 , http://apps.webofknowledge.com - Web of Science Core Collection, WOS: 001462621100017.
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Total	4

Cadru Didactic	VAIDA CALIN
Nr	Lucrari stiintifice
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Cadru Didactic	VARGA BOGDAN
Nr	Lucrari stiintifice
1	Connected and Autonomous Vehicles in Urban Mobility: Technologies, Challenges and Opportunities - https://www.webofscience.com/wos/woscc/full-record/WOS:001462621100010
Total	1

3. Articole științifice publicate în ale Baze de Date Internaționale*

Cadru Didactic	ARGHIR MARIANA
Nr	Lucrari stiintifice in Bazele de Date Internationale
-	-
Total	0

Cadru Didactic	BALAN MUGUR CIPRIAN
Nr	Lucrari stiintifice in Bazele de Date Internationale
1	El Hassani,S., Kouksou,T., Balan,M., Derfoufi,S., Moussaoui,M.A., Mezrhab,A. - Simulation of a Solar Lithium Bromide-Water Absorption Cooling System in Oujda City of Northeast Morocco, Applied Solar Energy, 2023, Vol. 59, No. 3, pp. 329–342, ISSN: N 0003-701X (Springer) DOI: 10.3103/S0003701X22601594
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Total	2

Cadru Didactic	BIRLEANU CORINA
Nr	Lucrari stiintifice in Bazele de Date Internationale
-	-
Total	0

Cadru Didactic	BODE FLORIN IOAN
Nr	Lucrari stiintifice in Bazele de Date Internationale
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Total	27

Cadru Didactic	BURNETE NICOLAE
Nr	Lucrari stiintifice in Bazele de Date Internationale
1	Duma, Irina, Burnete, N., Todoruț, A., Trușcă, D., Determination of pre-collision travel speed in the event of a frontal collision between a vehicle and a fixed obstacle, using video recordings, în: XXIX International Scientific Conference on Transport, Road-Building, Agricultural, Hoisting & Hauling and Military Techniques and Technologies 'trans&MOTAUTO2021', print ISSN: 1313-5031, online ISSN: 2535-0307, Year IV, Issue 1 (8), Sofia, Bulgaria, 2021, http://www.trans-motauto.com/sbornik/2021.pdf .
2	Duma, Irina, Trușcă, D-D., Burnete, N., Todoruț, A., Research on the study of frontal collision between a vehicle and a fixed rigid barrier, in: Journal of Engineering Sciences and Innovation, Vol. 8, Issue 3, pp. 287-298, ISSN 2601-6699, 2023, DOI: 10.56958/jesi.2023.8.3.287, https://jesi.astr.ro/wp-content/uploads/2023/11/6_Duma-Irina.pdf .
3	Duma, Irina, Molea, A., Cordoș, N., Căraușan, H., Burnete, N., Barabás, I., Todoruț, A., Jurchiș, B-M., Possibilities to evaluate the vehicle's accelerations through MATLAB Simulink simulations, in: IOP Conference Series: Materials Science and Engineering, Vol. 1303, Economicity, Safety and Reliability for Motor Vehicles Congress – ESFA 2023 (and SIAR International Automotive and Transport Engineering Congress), 2024, https://iopscience.iop.org/article/10.1088/1757-899X/1303/1/012040 , DOI: 10.1088/1757-899X/1303/1/012040
4	Teodorașcu, V., Burnete, N., Kocsis, L.B., Duma, Irina, Burnete, N.V., Molea, A., Sechel, I.C., Filimon, D.M., Design and validation of an electrically assisted modular attachment demonstrator for lightweight cycles, in: Journal of Engineering Sciences and Innovation, Vol. 9, Issue 4, pg. 431-448, ISSN 2601-6699, 2024, https://jesi.astr.ro/wp-content/uploads/2024/12/6_Vlad-Teodorascu.pdf
5	Teodorașcu, V., Burnete, N.V., Burnete, N., Review of PEDELECS as an alternative to conventional means of urban transportation, IOP Conference Series: Materials Science and Engineering, Vol. 1303, Economicity, Safety and Reliability for Motor Vehicles Congress ESFA 2023, DOI: 10.1088/1757-899X/1303/1/012005, 2024.
6	Danci, C.C., Burnete, N., Todoruț, A., Cordoș, N., Duma, Irina, Analysis of the tire vertical stiffness influence on the vehicle safety, in: Journal of Engineering Sciences and Innovation, Vol. 10, Issue 1, pg. 93-102, ISSN 2601-6699, 2025, https://jesi.astr.ro/wp-content/uploads/2025/04/7_Constantin-Cosmin-Danci.pdf .
Total	6

Cadru Didactic	COVACIU FLORIN-ALEXANDRU
Nr	Lucrari stiintifice in Bazele de Date Internationale

1	F. Covaciu, B. Gherman, A. Pisla, C. Vaida, P. Tucan, G. Rus, I. Nadas, D. Pisla, The Use of Virtual Reality in Lower-Limb Robotic Rehabilitation, Innovations in Mechatronics Engineering III, pp. 204–215 (Scopus).
2	HG. Crişan, F. Şerdean, F. Covaciu, C. Bîrleanu, M. Pustan, OA. Crişan, Testing the Quality of Filtered Drinking Water and Developing Technical Solutions to Improve It, Lecture Notes in Networks and Systems, 2024, ISBN: 978-303154670-9 (Sopus).
3	F. Covaciu, I. Pop, B. Gherman, A. Pisla, C. Vaida, N. Al Hajjar, D. Pisla, Development of a Virtual Reality Simulator for Robotic Assisted Surgery, Mechanisms and Machine Science, 2023, ISBN: 978-303129814-1 (Scopus).
4	A. Pusca, F. Covaciu, A. Burz, A. Horsia, P. Mougenot, A. Pisla, J. Nagy, N. Pop, I. Zima, D. Chablat, R. Jha, TA. Antal, D. Pisla, Development of an innovative parallel robot used in laparoscopic pancreatic surgery, The 14th IFToMM International Symposium on Science of Mechanisms and Machines, 2025, pp. 1-12 (Springer)
Total	4

Cadru Didactic	DUDESCU MIRCEA CRISTIAN
Nr	Lucrari stiintifice in Bazele de Date Internationale
-	-
Total	0

Cadru Didactic	GHERMAN BOGDAN GEORGE
Nr	Lucrari stiintifice
1	Pisla, D., Pusca, A., Gherman, B., Pisla, A., Birlescu, I., Vaida, C., Antal, T., & Chablat, D. (2025). Modeling and simulation of an innovative parallel robot for pancreatic surgery. In Proceedings of the International Design Engineering Technical Conferences and Computers and Information in Engineering Conference (IDETC/CIE 2025). ASME. HAL Open Science. https://hal.science/hal-05167681
2	Pisla, D., Pusca, A., Caprariu, A., Pisla, A., Gherman, B., Vaida, C., & Chablat, D. (2025). Design analysis of an innovative parallel robot for minimally invasive pancreatic surgery. In M. A. Laribi, G. Carbone, D. Pisla, & S. Zeghloul (Eds.), New trends in medical and service robotics (pp. 466–476). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-96081-9_47
3	Mougenot, P., Gherman, B., Vaida, C., Pisla, D., & Chablat, D. (2025). Review on retractor design to enhance minimally invasive pancreatectomy: Addressing challenges in deep tissue access. In M. A. Laribi, G. Carbone, D. Pisla, & S. Zeghloul (Eds.), New trends in medical and service robotics: MESROB 2025 (Mechanisms and Machine Science, Vol. 186, pp. 25–34). Springer, Cham. https://doi.org/10.1007/978-3-031-96081-9_3
4	Gherman, B., Al Hajjar, N., Zima, I., Bulbucan, V., Radu, C., Sebeni, D., Vaida, C., Caprariu, A., & Pisla, D. (2025). Conceptual design of a flexible instrument for robot-assisted laparoscopic pancreatic surgery. In M.
5	Vaida, C., Tucan, P., Sebeni, D., Vanta, O., Birlescu, I., Gherman, B., Antal, T., & Pisla, D. (2025). Inverse dynamics analysis and simulation of an innovative 3 DOF wrist rehabilitation robot. In J. Machado, J. Trojanowska, E. Ottaviano, M. A. Xavier, P. Valášek, & Y. Basova (Eds.), Innovations in mechanical engineering IV (pp. 21–30). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-93554-1_3
6	Gherman, B., Cailean, A., Eles, D., Tucan, P., Jucan, D., Pusca, A., Vaida, C., & Pisla, D. (2025). Design of a novel robotic instrument used for minimally invasive esophagectomy. In G. Carbone & G. Quaglia (Eds.), Proceedings of I4SDG Workshop

	2025 – IFToMM for Sustainable Development Goals (pp. 189–198). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-91179-8_20
7	Zima, I., Sebeni, D., Bulbucan, V., Vaida, C., Gherman, B., Machado, J., Tucan, P., Antal, T., & Pisla, D. (2025). Conceptual design of an innovative robotic device for hand rehabilitation. In G. Carbone & G. Quaglia (Eds.), Proceedings of I4SDG Workshop 2025 – IFToMM for Sustainable Development Goals (pp. 71–82). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-91179-8_8
8	Covaciu, F., Gherman, B., Pisla, A., Vaida, C., Tucan, P., Rus, G., Nadas, I., & Pisla, D. (2024). The use of virtual reality in lower-limb robotic rehabilitation. In J. Machado, F. Soares, tšek, P. Rea, B. Gramescu, & O. O. Hrybiuk (Eds.), Innovations in mechatronics engineering III (pp. 204–215). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-61575-7_19
9	Caprariu, A., Tucan, P., Vaida, C., Pisla, A., Gherman, B., & Pisla, D. (2023). Design optimization of RAISE parallel robot for lower limb rehabilitation. In M. Okada (Ed.), Advances in mechanism and machine science (pp. 23–33). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-45705-0_3
10	Tucan, P., Sofan, M., Gherman, B., Giurgioiu, O., Pisla, A., Molnar, T., Vaida, C., Carbone, G., & Pisla, D. (2023). Design optimization of a medical robot for shoulder rehabilitation. In M. Okada (Ed.), Advances in mechanism and machine science (pp. 476–485). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-45770-8_48
11	Gherman, B., Ciocan, A., Caprariu, A., Tucan, P., Radu, C., Vaida, C., Pisla, A., Horsia, A., Al Hajjar, N., & Pisla, D. (2023). On the design optimization of a parallel robotic system for liver cancer treatment. In M. Okada (Ed.), Advances in mechanism and machine science (pp. 518–528). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-45770-8_52
12	Vaida, C., Sofan, M., Tucan, P., Giurgioiu, O., Pisla, A., Molnar, T., Gherman, B., Carbone, G., & Pisla, D. (2023). New concept design of a modular robotic system for upper limb rehabilitation. In M. Okada (Ed.), Advances in Mechanism and Machine Science (pp. 216–225). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-45770-8_22
13	Tucan, P., Gherman, B., Tohanean, N., Pisla, A., Antal, T., Vanta, O., Vaida, C., & Pisla, D. (2024). On the control architecture and functional validation of the control system for a lower limb rehabilitation robot. In I. Doroftei, B. Kiss, Y. Baudoin, Z. Taqvi, & S. Keller Fuchter (Eds.), 25th International Symposium on Measurements and Control in Robotics (pp. 119–130). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-51085-4_11
14	Gherman, B., Horvath, D., Mois, E., Vaida, C., Graur, F., Burz, A., Popa, C., Tucan, P., Al Hajjar, N., Pusca, A., & Pisla, D. (2023). Development of a force feedback control for robotic assisted liver cancer treatment. In I. Doroftei et al. (Eds.), Proceedings of SYROM 2022 & ROBOTICS 2022, Mechanisms and Machine Science (Vol. 127, p. 241). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-25655-4_25
15	Nadas, I., Gherman, B., Tucan, P., Carbone, G., Pisla, A., Antal, T., & Pisla, D. (2023). Inverse dynamic modeling of a parallel robot for lower limb rehabilitation. In I. Doroftei et al. (Eds.), Proceedings of SYROM 2022 & ROBOTICS 2022, Mechanisms and Machine Science (Vol. 127, pp. 177). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-25655-4_19
16	Tucan, P., Gherman, B., Andras, I., Vaida, C., & Pisla, D. (2022). Kinematic modelling of a parallel robot used in single incision laparoscopic surgery. In A. Kecskeméthy & V. Parenti-Castelli (Eds.), ROMANSY 24 - Robot design, dynamics and control. ROMANSY 2022. CISM International Centre for Mechanical Sciences (Vol. 606). Springer. https://doi.org/10.1007/978-3-031-06409-8_12
17	Nadas, I., Gherman, B., Tucan, P., Carbone, G., Pisla, A., Antal, T., & Pisla, D. (2023). Inverse dynamic modeling of a parallel robot for lower limb rehabilitation. In I. Doroftei,

	M. Nitulescu, D. Pislă, & E.-C. Lovasz (Eds.), Proceedings of SYROM 2022 & ROBOTICS 2022 (pp. 177-186). Springer International Publishing. https://doi.org/10.1007/978-3-031-25655-4_19
18	Rus, G., Deriaz, M., Vaida, C., Nae, L., Gherman, B., Oprea, E., Pislă, A., Stulens, L., & Pislă, D. (2023). An experimental evaluation of the performance and key factors of intelligent recommendation system. In I. Doroftei, M. Nitulescu, D. Pislă, & E.-C. Lovasz (Eds.), Proceedings of SYROM 2022 & ROBOTICS 2022 (pp. 407-415). Springer International Publishing. https://doi.org/10.1007/978-3-031-25655-4_41
19	Gherman, B., Horvath, D., Mois, E., Vaida, C., Graur, F., Burz, A., Popa, C., Tucan, P., Al Hajjar, N., Pusca, A., & Pislă, D. (2023). Development of a force feedback control for robotic assisted liver cancer treatment. In I. Doroftei, M. Nitulescu, D. Pislă, & E.-C. Lovasz (Eds.), Proceedings of SYROM 2022 & ROBOTICS 2022 (pp. 241-249). Springer International Publishing. https://doi.org/10.1007/978-3-031-25655-4_25
20	Gherman, B., Tucan, P., Vaida, C., Carbone, G., & Pislă, D. (2022). Novel design of the ParReEx-elbow parallel robot for the rehabilitation of brachial monoparesis. In G. Rauter, G. Carbone, P. C. Cattin, A. Zam, D. Pislă, & R. Riener (Eds.), New trends in medical and service robotics. MESROB 2021. Mechanisms and Machine Science (Vol. 106). Springer. https://doi.org/10.1007/978-3-030-76147-9_5
21	Vaida, C., Tucan, P., Sebeni, D., Vanta, O., Birlescu, I., Gherman, B., Antal, T., & Pislă, D. (2025). Inverse dynamics analysis and simulation of an innovative 3 DOF wrist rehabilitation robot. In J. Machado et al. (Eds.), LNME (pp. 21-30). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-93554-1_3
22	Pislă, D., Gherman, B., Tucan, P., Pislă, A., Al Hajjar, N., Cailean, A., & Vaida, C. (2024). On the accuracy assessment of a parallel robot for the minimally invasive cancer treatment. Journal of Engineering Sciences and Innovation, 9(3), 253-264. https://doi.org/10.56958/jesi.2024.9.3.253 - Copernicus
23	Vaida, C., Rus, G., Gherman, B., Pusca, A., Tucan, P., Ulinici, I., & Pislă, D. (2023). Development of an augmented reality simulator for a robotic system used in single incision laparoscopic surgery. Romanian Journal of Technical Sciences - Applied Mechanics, 68(1), 3-18. https://doi.org/10.59277/RJTS-AM.2023.1.01
24	Nadas, I., Tucan, P., Gherman, B., Banica, A., Rednic, V., Carbone, G., & Pislă, D. (2022). On the design and validation of a parallel robot for lower limb rehabilitation. Romanian Journal of Technical Sciences - Applied Mechanics, 67(2), 177-195, https://rjts-applied-mechanics.ro/index.php/rjts/article/view/346
25	Pislă, D., Caramia, D., Gherman, B., Soleti, G., Ulinici, I., & Vaida, C. (2021). A novel control architecture for robotic-assisted single incision laparoscopic surgery. Romanian Journal of Technical Sciences - Applied Mechanics, 66(2), 141-162, https://rjts-applied-mechanics.ro/index.php/rjts/article/view/324
Total	25

Cadru Didactic	ICLODEAN CALIN-DORU
Nr	Lucrari stiintifice in Bazele de Date Internationale
-	-
Total	0

Cadru Didactic	LUPEA IULIAN
Nr	Lucrari stiintifice in Bazele de Date Internationale

1	Lupea, I., Considerations on Order Analysis of a Rotating Machinery Test Rig, Acta Technica Napocensis, Series: Applied Mathematics, Mechanics and Engineering, Vol. 64, Issue 3, 2021.
2	Pintea, M., Coroian, A., Lupea, I., Considerations on the Manufacturing of Sound Absorbing MPP Samples for the Impedance Tube, Acta Technica Napocensis, Series: Applied Mathematics, Mechanics and Engineering, Vol. 64, Issue 4, 2021.
Total	2

Cadru Didactic	MANDRU SILVIU DAN
Nr	Lucrari stiintifice in Bazele de Date Internationale
1	Șerdean M., Șerdean F., Mândru D. (2021) An Overview of Grippers in Agriculture Robotic Systems. In: Lovasz EC., Maniu I., Doroftei I., Ivanescu M., Gruescu CM. (eds) New Advances in Mechanisms, Mechanical Transmissions and Robotics. MTM&Robotics 2020. Mechanisms and Machine Science, vol 88. Pages 212 – 225, Springer, Cham. https://doi.org/10.1007/978-3-030-60076-1_19 , ISSN 22110984 / Publisher Springer Science and Business Media, Indexata Scopus
2	Ianoși-Andreeva-Dimitrova, A., Maier, A.-M., Mândru, D.-S., Design of a Pet-Like Assistive Robot for Elderly People, IFMBE Proceedings Volume 88, Pages 301 – 307 2022, 7th International Conference on Advancements of Medicine and Health Care through Technology, MEDITECH 2020, Virtual, Online 13 October 2020 through 15 October 2020, DOI 10.1007/978-3-030-93564-1_34, ISSN 16800737 / ISBN 978-303093563-4, Publisher Springer Science and Business Media, Indexata Scopus
3	Cotia, C., Mandru S-D, An original approach using VR/AR for upper limb rehabilitation, Congresul National de Medicina Fizica, de Recuperare si Balneologie, Timisoara 2023, Balneo and PRM Research Journal, vol. 14, nr. 3, sept 2023, Congress Abstracts, pp. 63-64, DOI 10.12680/balneo.2023.595 ISSN-L: 2734-844X / p ISSN: 2734-844X / e ISSN: 2734-8458 https://srmfrb.ro/congrese/congres-2023/ . https://bioclima.ro/C2023rec.php EBSCOhost, CrossRef, DOAJ, Electronic Journals Library (GIGA), National Library of Medicine - NLM,
4	Alexandru Ianosi-Andreeva-Dimitrova; Dan Mandru; Ana C Fenesan , Computer vision feeding robot for disabled people, The 13th IEEE International Conference and Exposition on Electrical and Power Engineering (EPEi 2024), Iași, Romania, on October 17-19, 2024. EPEi 2024 - Proceedings of the 2024 13th IEEE International Conference and Expositions on Electric and Power Engineering, Pages 85 – 88, 2024 13th IEEE International Conference and Expositions on Electric and Power Engineering, EPEi 2024, Iasi 17 October 2024 through 19 October 2024, Code 204352, ISBN 979-835035619-9, DOI 10.1109/EPEi63510.2024.10758135, Indexata SCOPUS
Total	4

Cadru Didactic	MARIASIU FLORIN EMIL
Nr	Lucrari stiintifice in Bazele de Date Internationale
1	CSATO Aron, MARIASIU Florin. Current Approaches in Traffic Lane Detection: a minireview, The Archives of Automotive Engineering – Archiwum Motoryzacji 2024;104(2):19-47. DOI: https://doi.org/10.14669/AM/190157 (indexare SCOPUS).
Total	1
Cadru	NASUI VASILE

Didactic	
Nr	Lucrari stiintifice in Bazele de Date Internationale
1	Ardelean M., Năsui V. Reverse engineering in the automotive industry. Scientific Bulletin, Issues (2021-2030), Scientific Bulletin Series C, Volume XXXV (2021), Series C: Fascicle Mechanics, Tribology, Machine Manufacturing Technology, ISSN: 1224-3264, CNCSIS Code: 610. Index Copernicium, Ulrich, DOAJ. https://nordtech.ubm.ro/index.php/issues-2021-2030/scientific-bulletin-series-c-volume-xxxv-2021/
2	Nasui V., Banica M., Butnar L. Analysis of dynamic parameters for electromechanical actuators used in agricultural machinery. Annals of the University of Craiova. Vol. XXII(LXIII)-2022, ISSN1453-1275, pp.259-264. https://horticultura.ucv.ro/horticultura/ro/vol27-2022 https://horticultura.ucv.ro/horticultura/sites/default/files/horticultura/Reviste/Analele/2022/D_Nasui_Vasile.pdf Index: CAB Abstracts and Global Health (by CAB International), Zoological Record (by Thomson Reuters), Index Copernicus, BDI (by CNCSIS)
3	Alex Marius Cerapon, Radu-Iacob Cotetiu, Vasile Nasui Considerations on the Current State of Research on Vibration Testing of Rubber-Metal Products. SCIENTIFIC BULLETIN, Serie C, Fascicle: Mechanics, Tribology, Machine Manufacturing Technology, ISSN 1224 -3264, Vol. 2023 No.XXXVII, pp. 10- 13. Code: 610, Indexed by: ProQuest, EBSCO Publishing, www.proquest.com , www.ebsco.com www.csa.com http://www.nordtech.ubm.ro/list.php https://nordtech.ubm.ro/index.php/issues-2021-2030/scientific-bulletin-series-c-volume-xxxvii-2023/
4	Vasile Nasui, Andrei Catalin Filip, Dinu Daraba, Adriana-Gabriela Cotetiu, Mihai Bănica. Considerations Regarding the Current State of Research in the Field of the Processing of Titanium Alloys Used in the Aeronautical Industry. SCIENTIFIC BULLETIN, Serie C, Fascicle: Mechanics, Tribology, Machine Manufacturing Technology, ISSN 1224-3264, Vol. 2023 No.XXXVII, pp 38-43. Code: 610, Indexed by: ProQuest, EBSCO Publishing, www.proquest.com , www.ebsco.com www.csa.com http://www.nordtech.ubm.ro/list.php https://nordtech.ubm.ro/index.php/issues-2021-2030/scientific-bulletin-series-c-volume-xxxvii-2023/
5	Oșan. A., Cosma. M. and Năsui V., "Milling convex surfaces with toroidal cutting edge," IOP Conference Series: Materials Science and Engineering, Volume 749 (2020) 012021, The International Conference of the Carpathian Euro-Region Specialists in Industrial Systems 11–12 April 2019, Baia Mare, Romania. IOP Publishing doi:10.1088/1757-899X/749/1/012021. Indexed by Elsevier: SCOPUS www.scopus.com https://iopscience.iop.org/article/10.1088/1757-899X/749/1/012021
6	Nicolae Ioan Pasca, Mihai Banica, Lucian Butnar, Marius Cosma. Considerations Related to the Past, Present and Future of use of Aluminum Alloys in the Aeronautical Industry. Scientific Bulletin, Serie C, Fascicle: Mechanics, Tribology, Machine Manufacturing Technology, ISSN 1224-3264, Volume 2023, No. XXXVII, pp. 44-46, 2023. Part: 1, Code: 610, Indexed by: ProQuest, Ebsco Publishing, www.proquest.com , www.ebsco.com , www.csa.com https://nordtech.ubm.ro/index.php/issues-2021-2030/scientific-bulletin-series-c-volume-xxxvii-2023/
7	N Pasca, M Banica, L Butnar și V Nasui, Considerations regarding the use of DLC coated tools used in the machining of aluminum alloys used in the aeronautical industry, 12th International Conference on Applied Sciences (ICAS2024), Journal of Physics: Conference Series 2927 (2024) 012006, doi:10.1088/1742-6596/2927/1/012006, https://iopscience.iop.org/article/10.1088/1742-6596/2927/1/012006
Total	7

Cadru Didactic	PISLA DOINA
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Nr	Lucrari științifice in Bazele de Date Internationale
1	Pisla, D., Pusca, A., Gherman, B., Pisla, A., Birlescu, I., Vaida, C., Antal, T., & Chablat, D. (2025). Modeling and simulation of an innovative parallel robot for pancreatic surgery. In Proceedings of the International Design Engineering Technical Conferences and Computers and Information in Engineering Conference (IDETC/CIE 2025). ASME. HAL Open Science. https://hal.science/hal-05167681
2	Pisla, D., Pusca, A., Caprariu, A., Pisla, A., Gherman, B., Vaida, C., & Chablat, D. (2025). Design analysis of an innovative parallel robot for minimally invasive pancreatic surgery. In M. A. Laribi, G. Carbone, D. Pisla, & S. Zeghloul (Eds.), New trends in medical and service robotics (pp. 466–476). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-96081-9_47
3	Mougenot, P., Gherman, B., Vaida, C., Pisla, D., & Chablat, D. (2025). Review on retractor design to enhance minimally invasive pancreatectomy: Addressing challenges in deep tissue access. In M. A. Laribi, G. Carbone, D. Pisla, & S. Zeghloul (Eds.), New trends in medical and service robotics: MESROB 2025 (Mechanisms and Machine Science, Vol. 186, pp. 25–34). Springer, Cham. https://doi.org/10.1007/978-3-031-96081-9_3
4	Gherman, B., Al Hajjar, N., Zima, I., Bulbucan, V., Radu, C., Sebeni, D., Vaida, C., Caprariu, A., & Pisla, D. (2025). Conceptual design of a flexible instrument for robot-assisted laparoscopic pancreatic surgery. In M. A. Laribi, G. Carbone, D. Pisla, & S. Zeghloul (Eds.), New trends in medical and service robotics (pp. 109–118). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-96081-9_12
5	Tucan, P., Horsia, A., Vaida, C., Birlescu, I., Pisla, A., Machado, J., & Pisla, D. (2025). Kinematic modelling and design of a parallel robot for wrist rehabilitation. In K. Jovanović, A. Rodić, & M. Raković (Eds.), Advances in service and industrial robotics (pp. 250–259). Springer Nature Switzerland. https://doi.org/10.1007/978-3-032-02106-9_28
6	Vaida, C., Tucan, P., Sebeni, D., Vanta, O., Birlescu, I., Gherman, B., Antal, T., & Pisla, D. (2025). Inverse dynamics analysis and simulation of an innovative 3 DOF wrist rehabilitation robot. In J. Machado, J. Trojanowska, E. Ottaviano, M. A. Xavier, P. Valášek, & Y. Basova (Eds.), Innovations in mechanical engineering IV (pp. 21–30). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-93554-1_3
7	Tucan, P., Al Hajjar, N., Vaida, C., Pusca, A., Radu, C., Jucan, D., Antal, T., Pisla, A., Chablat, D., & Pisla, D. (2025). Design of an innovative robotic surgical instrument for circular stapling. In G. Carbone & G. Quaglia (Eds.), Proceedings of I4SDG Workshop 2025 – IFToMM for Sustainable Development Goals (pp. 61–70). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-91179-8_7
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Cadru Didactic	VAIDA CALIN
Nr	Lucrari stiintifice
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6	Vaida, C., Tucan, P., Sebeni, D., Vanta, O., Birlescu, I., Gherman, B., Antal, T., & Pisla, D. (2025). Inverse dynamics analysis and simulation of an innovative 3 DOF wrist rehabilitation

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7	Tucan, P., Al Hajjar, N., Vaida, C., Pusca, A., Radu, C., Jucan, D., Antal, T., Pislă, A., Chablat, D., & Pislă, D. (2025). Design of an innovative robotic surgical instrument for circular stapling. In G. Carbone & G. Quaglia (Eds.), <i>Proceedings of I4SDG Workshop 2025 – IFToMM for Sustainable Development Goals</i> (pp. 61–70). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-91179-8_7
8	Gherman, B., Căilean, A., Eles, D., Tucan, P., Jucan, D., Pusca, A., Vaida, C., & Pislă, D. (2025). Design of a novel robotic instrument used for minimally invasive esophagectomy. In G. Carbone & G. Quaglia (Eds.), <i>Proceedings of I4SDG Workshop 2025 – IFToMM for Sustainable Development Goals</i> (pp. 189–198). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-91179-8_20
9	Zima, I., Sebeni, D., Bulbucan, V., Vaida, C., Gherman, B., Machado, J., Tucan, P., Antal, T., & Pislă, D. (2025). Conceptual design of an innovative robotic device for hand rehabilitation. In G. Carbone & G. Quaglia (Eds.), <i>Proceedings of I4SDG Workshop 2025 – IFToMM for Sustainable Development Goals</i> (pp. 71–82). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-91179-8_8
10	Covaciu, F., Gherman, B., Pislă, A., Vaida, C., Tucan, P., Rus, G., Nadas, I., & Pislă, D. (2024). The use of virtual reality in lower-limb robotic rehabilitation. In J. Machado, F. Soares, J. Trojanowska, S. Yildirim, J. Vojtěšek, P. Rea, B. Gramescu, & O. O. Hrybiuk (Eds.), <i>Innovations in mechatronics engineering III</i> (pp. 204–215). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-61575-7_19
11	Caprariu, A., Tucan, P., Vaida, C., Pislă, A., Gherman, B., & Pislă, D. (2023). Design optimization of RAISE parallel robot for lower limb rehabilitation. In M. Okada (Ed.), <i>Advances in mechanism and machine science</i> (pp. 23–33). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-45705-0_3
12	Tucan, P., Sofan, M., Gherman, B., Giurgioiu, O., Pislă, A., Molnar, T., Vaida, C., Carbone, G., & Pislă, D. (2023). Design optimization of a medical robot for shoulder rehabilitation. In M. Okada (Ed.), <i>Advances in mechanism and machine science</i> (pp. 476–485). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-45770-8_48
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14	Vaida, C., Sofan, M., Tucan, P., Giurgioiu, O., Pislă, A., Molnar, T., Gherman, B., Carbone, G., & Pislă, D. (2023). New concept design of a modular robotic system for upper limb rehabilitation. In M. Okada (Ed.), <i>Advances in Mechanism and Machine Science</i> (pp. 216–225). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-45770-8_22
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17	Tucan, P., Gherman, B., Andras, I., Vaida, C., & Pislă, D. (2022). Kinematic modelling of a parallel robot used in single incision laparoscopic surgery. In A. Kecskeméthy & V. Parenti-Castelli (Eds.), <i>ROMANSY 24 - Robot design, dynamics and control. ROMANSY 2022. CISM</i>

	International Centre for Mechanical Sciences (Vol. 606). Springer. https://doi.org/10.1007/978-3-031-06409-8_12
19	Birlescu, I., Vaida, C., Pusca, A., Rus, G., & Pisla, D. (2022). A new approach to forward kinematics for a SILS robotic orientation platform based on perturbation theory. In O. Altuzarra & A. Kecskeméthy (Eds.), <i>Advances in Robot Kinematics 2022</i> (pp. 171-178). Springer International Publishing. https://doi.org/10.1007/978-3-031-08140-8_19
20	Pisla, D., Andras, I., Rus, G., Moldovan, C., Crisan, N., Antal, T., Ulinici, I., & Vaida, C. (2024). U-net network optimization for 3D reconstruction in robotic SILS pre-planning phase. In S. Vlad & N. M. Roman (Eds.), <i>8th International Conference on Advancements of Medicine and Health Care Through Technology</i> (pp. 21-29). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-51120-2_3
21	Rus, G., Deriaz, M., Vaida, C., Nae, L., Gherman, B., Oprea, E., Pisla, A., Stulens, L., & Pisla, D. (2023). An experimental evaluation of the performance and key factors of intelligent recommendation system. In I. Doroftei, M. Nitulescu, D. Pisla, & E.-C. Lovasz (Eds.), <i>Proceedings of SYROM 2022 & ROBOTICS 2022</i> (pp. 407-415). Springer International Publishing. https://doi.org/10.1007/978-3-031-25655-4_41
22	Gherman, B., Horvath, D., Mois, E., Vaida, C., Graur, F., Burz, A., Popa, C., Tucan, P., Al Hajjar, N., Pusca, A., & Pisla, D. (2023). Development of a force feedback control for robotic assisted liver cancer treatment. In I. Doroftei, M. Nitulescu, D. Pisla, & E.-C. Lovasz (Eds.), <i>Proceedings of SYROM 2022 & ROBOTICS 2022</i> (pp. 241-249). Springer International Publishing. https://doi.org/10.1007/978-3-031-25655-4_25
23	Tucan, P., Graur, F., Caprariu, A., Radu, C., Burz, A., Vaida, C., Al Hajjar, N., Antal, T., & Pisla, D. (2022). A functional design analysis of a robotic-guided brachytherapy instrument. <i>IOP Conference Series: Materials Science and Engineering</i> , 1268, 012016. https://doi.org/10.1088/1757-899X/1268/1/012016 - INSPEC (The Institution of Engineering and Technology)
24	Gherman, B., Tucan, P., Vaida, C., Carbone, G., & Pisla, D. (2022). Novel design of the ParReEx-elbow parallel robot for the rehabilitation of brachial monoparesis. In G. Rauter, G. Carbone, P. C. Cattin, A. Zam, D. Pisla, & R. Riener (Eds.), <i>New trends in medical and service robotics. MESROB 2021. Mechanisms and Machine Science</i> (Vol. 106). Springer. https://doi.org/10.1007/978-3-030-76147-9_5
25	Vaida, C., Tucan, P., Sebeni, D., Vanta, O., Birlescu, I., Gherman, B., Antal, T., & Pisla, D. (2025). Inverse dynamics analysis and simulation of an innovative 3 DOF wrist rehabilitation robot. In J. Machado et al. (Eds.), <i>LNME</i> (pp. 21-30). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-93554-1_3
26	Pisla, D., Gherman, B., Tucan, P., Pisla, A., Al Hajjar, N., Cailean, A., & Vaida, C. (2024). On the accuracy assessment of a parallel robot for the minimally invasive cancer treatment. <i>Journal of Engineering Sciences and Innovation</i> , 9(3), 253-264. https://doi.org/10.56958/jesi.2024.9.3.253 - Copernicus
27	Vaida, C., Rus, G., Gherman, B., Pusca, A., Tucan, P., Ulinici, I., & Pisla, D. (2023). Development of an augmented reality simulator for a robotic system used in single incision laparoscopic surgery. <i>Romanian Journal of Technical Sciences - Applied Mechanics</i> , 68(1), 3-18. https://doi.org/10.59277/RJTS-AM.2023.1.01
Total	27

Cadru Didactic	VARGA BOGDAN
Nr	Lucrari stiintifice in Bazele de Date Internationale
1	Connected and Autonomous Vehicles in Urban Mobility: Technologies, Challenges and Opportunities, INSPEC
2	Autonomous shuttle bus for public transportation: A review , INSPEC, Scopus

3	Energy consumption prediction of electric vehicle air conditioning system using artificial intelligence, IEEE Xplore
4	Review of Connected Autonomous Vehicles Platooning: Technologies, Challenges, and Future Directions, SJR
5	Comparative Analysis of Energy Efficiency between Battery Electric Buses and Modular Autonomous Vehicles, Scopus, INSPEC
6	Energy efficiency analysis of a Fuel Cell Bus model using real scenarios generated by data collection. WOS
7	Modular Autonomous Vehicles' Application in Public Transport Networks: Conceptual Analysis on Airport Connection, WOS
8	Review of Connected Autonomous Vehicles Platooning: Technologies, Challenges, and Future Directions, SJR
9	Energy Efficiency Assessment of Sustainable Public Transport Solutions: a Comparative Analysis Fuel Cell vs Battery in Real Life Scenarios, IEEE Xplore
10	Analysis of the modes of operation of an electric vehicle on energy consumption, IEEE Xplore
11	Autonomous Vehicles Technological Trends, Scopus, INSPEC
12	The influence of the suspension system on the energy efficiency of an autonomous public transport vehicle., INSPEC
13	Comparative analysis of fuel cell and electric public for transport busses, IOP
Total	13

4. Numărul de Cărți și capitole în lucrări de specialitate

Cadru Didactic	ARGHIR MARIANA
Nr	Carti si capitole in lucrari de specialitate
-	-
Total	0

Cadru Didactic	BALAN Mugur Ciprian
Nr	Carti si capitole in lucrari de specialitate
1	Hiris,D., Badea,L,... Balan,M.C. – “Aplicatii de termotehnica”, Editura UT Press, 2024.
2	Pop O.G., Magurean A.M., Pocola A.G., Ciocan M., Zaaoumi A., Balan M.C. –Performances of Solar Thermal Collectors in Different Climatic Conditions (2021), in: Moga L., Șoimoșan T.M. (eds) Environmental and Human Impact of Buildings. Springer Tracts in Civil Engineering. Springer, Cham. https://doi.org/10.1007/978-3-030-57418-5_9
Total	2

Cadru Didactic	BIRLEANU CORINA
Nr	Carti si capitole in lucrari de specialitate
1	Hiris,D., Badea,L,... Balan,M.C. – “Aplicatii de termotehăBirleanu, C., Pustan, M., Cosma, C., Cioaza, M., & Popa, F. (2022). Wear Behavior of Different Seal Materials under Dry-Lubricated Conditions. Industrial Tribology: Sustainable Machinery and Industry 4.0, 305. DOI: 10.1201/9781003243205.nica”, Editura UT Press, 2024.
Total	1

Cadru Didactic	BODE FLORIN IOAN
Nr	Carti si capitole in lucrari de specialitate
1	Florin BODE, Ilinca NĂSTASE, Răzvan CALOTĂ, Mihnea SANDU, Ion ANGHEL, Modelarea și simularea incendiilor în construcții, ISBN 978-606-25-0766-4, 267pag, https://www.matrixrom.ro/produs/modelarea-si-simularea-incendiilor-in-construcții/ , Editura MatrixRom, 2022
2	Catalin TEODOSIU, Vlad IORDACHE, Mihnea SANDU, Cristiana CROITORU, Florin BODE, Ilinca NASTASE, Metodologia cercetarii stiintifice pentru doctorat, Conspress 2021, ISBN: 978-973-100-521-8, 163pag, 2021
3	Cristiana CROITORU, Ilinca NASTASE, Florin BODE, Calitatea ambientală în mediul interior construit - Confort, metode de evaluare, principii de distribuție a aerului – Editie revizuita (Ambient quality in the built indoor environment - Comfort, assessment methods, principles of air distribution), MatrixRom, 2023, ISBN: 978-606-25-0859-3, 504pag, monografie, 2023
Total	3

Cadru Didactic	BURNETE NICOLAE
Nr	Carti si capitole in lucrari de specialitate
-	-
Total	0

Cadru Didactic	COVACIU FLORIN-ALEXANDRU
Nr	Carti si capitole in lucrari de specialitate
-	-
Total	0

Cadru Didactic	DUDESCU MIRCEA CRISTIAN
Nr	Carti si capitole in lucrari de specialitate
-	-
Total	0

Cadru Didactic	GHERMAN BOGDAN GEORGE
Nr	Carti si capitole in lucrari de specialitate
1	Vaida, C., Gherman, B., Birlescu, I., Tucan, P., Pusca, A., Rus, G., Chablat, D., & Pisla, D. (2024). Kinematic analysis of a parallel robot for minimally invasive surgery. In J. Lenarcic & M. Husty (Eds.), Advances in Robot Kinematics 2024 (pp. 188–195). Springer. https://doi.org/10.1007/978-3-031-64057-5_22
2	Tucan, P., Birlescu, I., Pusca, A., Gherman, B., Jucan, D., Antal, T., Vaida, C., Pisla, A., Chablat, D., & Pisla, D. (2024). A flexible instrument for robotic assisted minimally invasive esophagectomy. In G. Rosati, A. Gasparetto, & M. Ceccarelli (Eds.), New Trends in Mechanism and Machine Science (Mechanisms and Machine Science, Vol. 165, pp. 63–71). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-67295-8_8
3	Pisla, D., Tucan, P., Chablat, D., Al Hajjar, N., Ciocan, A., Pusca, A., Pisla, A., Radu, C., Pop, G., & Gherman, B. (2024). Accuracy and repeatability of a parallel robot for personalised minimally invasive surgery. In D. Pisla, G. Carbone, D. Condurache, & C. Vaida (Eds.),

	Advances in service and industrial robotics: RAAD 2024 (Mechanisms and Machine Science, Vol. 157, pp. 185–195). Springer. https://doi.org/10.1007/978-3-031-59257-7_20
4	Gherman, B., Zima, I., Vaida, C., Cremene, A., Antal, T., Machado, J., & Pisla, D. (2025). On the design and development of a wearable robotic device for fingers rehabilitation. In I. Doroftei & E.-C. Lovasz (Eds.), <i>New advances in mechanisms, mechanical transmissions and robotics</i> (Mechanisms and Machine Science, Vol. 178, pp. 254–263). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-87537-3_26
5	Pusca, A., Andras, I., Cailean, A., Crisan, N., Vaida, C., Radu, C., Gherman, B., Al Hajjar, N., Chablat, D., & Pisla, D. (2024). On the development of an innovative surgical parallel robotic system. In H.-N. Costin, R. Magjarević, & G. G. Petroiu (Eds.), <i>Advances in digital health and medical bioengineering</i> (pp. 173–183). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-62502-2_20
6	Pisla, D., Tucan, P., Tohanean, N., Birlescu, I., Abrudan, C., Horsia, A., Gherman, B., Pisla, A., Machado, J., & Vaida, C. (2024). Design improvement of a parallel robot for lower limb rehabilitation. In L. Romdhane, A. Mlika, S. Zegloul, A. Chaker, & M. A. Laribi (Eds.), <i>Robotics and mechatronics</i> (pp. 227–237). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-59888-3_21
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9	Pisla, D., Crisan, N., Ulinici, I., Gherman, B., Radu, C., Tucan, P., & Vaida, C. (2023). Structural study of a robotic system for SILS surgery. In D. Tarnita, N. Dumitru, D. Pisla, G. Carbone, & I. Geonea (Eds.), <i>New trends in medical and service robotics</i> (pp. 20–31). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-32446-8_3
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13	Rus, G., Gherman, B., Nae, L., Vaida, C., Pisla, A., Oprea, E., Schonstein, C., Antal, T., & Pisla, D. (2023). Fuzzy logic systems: From WisdomofAge mentoring platform to medical robots. In D. Tarnita, N. Dumitru, D. Pisla, G. Carbone, & I. Geonea (Eds.), <i>New trends in medical and service robotics</i> (pp. 50–59). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-32446-8_6
14	18. Pîslă, A., Nae, L., Vaida, C., Oprea, E., Gherman, B., Deriaz, M., & Pisla, D. (2023). Modern project approaches in shortening the lead time in innovation for young emerging

	companies based on the experienced seniors' knowledge. In K. von Leipzig, N. Sacks, & M. Mc Clelland (Eds.), <i>Smart, sustainable manufacturing in an ever-changing world</i> (pp. 229–242). Springer International Publishing. https://doi.org/10.1007/978-3-031-15602-1_18
15	Banica, A., Gherman, B., Tohanean, N., Antal, T., Pisla, A., Abrudan, C., Carbone, G., & Pisla, D. (2022). Inverse dynamic modeling of a parallel elbow rehabilitation robot for spasticity treatment. In A. Müller & M. Brandstötter (Eds.), <i>Advances in service and industrial robotics</i> (pp. 392–400). Springer International Publishing. https://doi.org/10.1007/978-3-031-04870-8_46
16	Vaida, C., Birlescu, I., Pusca, A., Gherman, B., Tucan, P., Antal, T. A., & Pisla, D. (2022). Geometric modeling of a new modular spherical robotic system for single incision laparoscopic surgery. In A. Müller & M. Brandstötter (Eds.), <i>Advances in service and industrial robotics</i> (pp. 367–374). Springer International Publishing. https://doi.org/10.1007/978-3-031-04870-8_43
17	Rus, G., Nae, L., Gherman, B., Vaida, C., Deriaz, M., Oprea, E., & Pisla, D. (2023). An innovative recommendation system for a knowledge transfer matchmaking platform. In G. A. Papadopoulos, A. Achilleos, E. Pissaloux, & R. Velázquez (Eds.), <i>ICT for health, accessibility and wellbeing</i> (pp. 162–176). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-29548-5_11
18	Gherman, B., Tucan, P., Vaida, C., Crisan, N., Rus, G., Birlescu, I., & Pisla, D. (2022). On the kinematics and dimensional optimization of a robotic system for single incision laparoscopic surgery. In A. Müller & M. Brandstötter (Eds.), <i>Advances in service and industrial robotics</i> (pp. 383–391). Springer International Publishing. https://doi.org/10.1007/978-3-031-04870-8_45
19	Gherman, B., Nae, L., Pisla, A., Oprea, E., Vaida, C., & Pisla, D. (2021). <i>WisdomOfAge: Designing a platform for active and healthy ageing of senior experts in engineering</i> . In E. Pissaloux, G. A. Papadopoulos, A. Achilleos, & R. Velázquez (Eds.), <i>ICT for health, accessibility and wellbeing</i> (pp. 18–30). Springer International Publishing. https://doi.org/10.1007/978-3-030-94209-0_2
20	Pisla, D., Pusca, A., Caprariu, A., Pisla, A., Gherman, B., Vaida, C., & Chablat, D. (2025). Design analysis of an innovative parallel robot for minimally invasive pancreatic surgery. In M. A. Laribi, G. Carbone, D. Pisla, & S. Zeghloul (Eds.), <i>New trends in medical and service robotics</i> (pp. 466–476). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-96081-9_47
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23	Vaida, C., Tucan, P., Sebeni, D., Vanta, O., Birlescu, I., Gherman, B., Antal, T., & Pisla, D. (2025). Inverse dynamics analysis and simulation of an innovative 3 DOF wrist rehabilitation robot. In J. Machado, J. Trojanowska, E. Ottaviano, M. A. Xavier, P. Valášek, & Y. Basova (Eds.), <i>Innovations in mechanical engineering IV</i> (pp. 21–30). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-93554-1_3
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41	Gherman, B., Vaida, C., Pislă, D., & Tucan, P. (2023). Medical robotics: Vol. 1. Innovative medical parallel robots for oncology. Casa Cartii de Stiinta
42	Gherman, B., Vaida, C., Pislă, D., & Tucan, P. (2023). Medical robotics: Vol. 2. Innovative Parallel Robots for Medical Rehabilitation. Casa Cartii de Stiinta.
Total	42

Cadru Didactic	ICLODEAN CALIN-DORU
Nr	Carti si capitole in lucrari de specialitate
1	(Carte autor) Iclodean, C., Introducere în sistemele autovehiculelor, ISBN 978-973-53-2991-4, Editura Risoprint, Colecția Scientia, Cluj-Napoca 2023 (https://drive.google.com/file/d/1nG-Uzo9ucF-jD8l_mOXl0qRxoqWB1Oso/view)
2	(Carte editor) Iclodean, C., Varga, B.O., Pfister, F., (Editori) Autonomous Vehicles Technological Trends, ISBN 978-3-0365-7037-2, Electronics MDPI, Basel, 2023 (https://mdpi-res.com/bookfiles/book/7045/Autonomous_Vehicles_Technological_Trends.pdf?v=1759540048)
3	(Carte autor) Iclodean, C., Varga, B.O., Cordoș, N., Autonomous Vehicles for Public Transportation, ISBN 978-3-031-14678-7, Springer Nature Switzerland AG, Green Energy and Technology Series, 2022 (https://link.springer.com/book/10.1007/978-3-031-14678-7)
4	(Carte capitol) Burnete, N.V., (Editor) Tendințe tehnologice în domeniul autovehiculelor, Iclodean, C., Capitolul 11 Tendințe în evoluția sistemului de conducere autonom, ISBN 978-606-737-641-8, Editura UTPRESS (online), Cluj-Napoca, 2023 (https://biblioteca.utcluj.ro/files/carti-online-cu-coperta/641-8.pdf)
Total	4

Cadru Didactic	LUPEA IULIAN
Nr	Carti si capitole in lucrari de specialitate
1	Lupea, I., LabVIEW – Aplicații, 2022, pagini: 149, (autor unic) UTPress, Cluj - Napoca, 2022, ISBN 978-606-737-598-5; https://biblioteca.utcluj.ro/files/carti-online-cu-coperta/598-5.pdf

Total	1
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Cadru Didactic	MANDRU SILVIU DAN
Nr	Carti si capitole in lucrari de specialitate
-	-
Total	0

Cadru Didactic	MARIASIU FLIRN EMIL
Nr	Carti si capitole in lucrari de specialitate
1	F. Mariasiu, N. Burnete, L. Scurtu, A. Jurco – “Elemente de analiză numerică a structurilor portante și a caroseriilor autovehiculelor rutiere”, UTPress, Cluj-Napoca, 2022, 154 pg., ISBN: 978-606-737-607-4
2	BUIDIN Thomas Imre Cyrille, BURNETE Nicolae Vlad, MARIAȘIU Florin – Capitol „Tendințe de dezvoltare în domeniul managementului termic al bateriilor de autovehicule” in „TENDINȚE TEHNOLOGICE ÎN DOMENIUL AUTOVEHICULELOR” editor Nicolae Vlad BURNETE, pp. 72-84, UTPRESS Cluj - Napoca, 2023, ISBN 978-606-737-641-8.
3	SZABO Ioan, SCURTU Iacob-Liviu, MARIAȘIU Florin – Capitol „Tendințe de dezvoltare a surselor energetice utilizate în construcția vehiculelor electrice” in „TENDINȚE TEHNOLOGICE ÎN DOMENIUL AUTOVEHICULELOR” editor Nicolae Vlad BURNETE, pp. 55-71, UTPRESS Cluj - Napoca, 2023, ISBN 978-606-737-641-8.
4	MARIAȘIU Florin, VARGA Bogdan Ovidiu, MOLDOVANU Dan - Capitol „Inteligența artificială în industria auto” in „TENDINȚE TEHNOLOGICE ÎN DOMENIUL AUTOVEHICULELOR” editor Nicolae Vlad BURNETE, pp. 150-163, UTPRESS Cluj - Napoca, 2023, ISBN 978-606-737-641-8.
Total	4

Cadru Didactic	MATIES VISTRIAN
Nr	Carti si capitole in lucrari de specialitate
1	Mătieș,V.,Noveanu,S.,Dache,L.,(coord.)-Platforma Națională de Mecatronică-Motorul dezvoltării societății sustenabile.Ed.UTPress, Cluj-Napoca, 2025,ISBN 978-606-737-765-1(510 pag.)
Total	1

Cadru Didactic	NASUI VASILE
Nr	Carti si capitole in lucrari de specialitate
-	-
Total	0

Cadru Didactic	PISLA DOINA
Nr	Carti si capitole in lucrari de specialitate
1	Med Amine Laribi, Giuseppe Carbone, Pisla, D., Zeghloul, S. (2025). New Trends in Medical and Service Robotics: MESROB 2025, Springer Nature, https://content.e-bookshelf.de/media/reading/L-26928898-c039de2c43.pdf

2	Pisla, D., Carbone, G., Condurache, D., & Vaida, C. (Eds.). (2024). <i>Advances in Service and Industrial Robotics: RAAD 2024</i> (Vol. 157). Springer Nature, https://link.springer.com/book/10.1007/978-3-031-59257-7
3	Tarnita, D., Dumitru, N., Pisla, D., Carbone, G., Geonea, I., (Eds.), <i>New Trends in Medical and Service Robotics, MESROB 2023</i> , Springer , 2023, https://files.core.ac.uk/download/553706945.pdf 4. Doroftei, I., Nitulescu, M., Pisla, D., Lovasz, E. (Eds.), <i>Proceedings of SYROM 2022 & ROBOTICS 2022, 13th IFToMM International Symposium on Science of Mechanisms and Machines & XXV International Conference on Robotics</i> , Springer, 2023, https://link.springer.com/book/10.1007/978-3-031-25655-4 5. Rauter, G., Cattin, P., Zam, A., Riener, R., Carbone, G., Pisla, D. (Eds.), <i>New Trends in Medical and Service Robotics, MESROB 2020</i> , Springer , 2021, https://link.springer.com/book/10.1007/978-3-030-58104-6 6. Rauter, G., Carbone, G., Cattin, P., Zam, A., Pisla, D., Riener, R. (Eds.), <i>New Trends in Medical and Service Robotics, MESROB 2021</i> , Springer , 2022, https://files.core.ac.uk/download/553706945.pdf
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16	Moreira, P., Machado, J., Vaida, C., Pisla, D., Miranda, D., Martins, N., Carvalho, V., & Matos, D. (2024). Design of wearable prostheses: A new approach. In D. Pisla, G. Carbone, D. Condurache, & C. Vaida (Eds.), <i>Advances in service and industrial robotics: RAAD 2024 (Mechanisms and Machine Science, Vol. 157, pp. 129–138)</i> . Springer. https://doi.org/10.1007/978-3-031-59257-7_14
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Total	65

Cadru Didactic	POP DUMITRU
Nr	Carti si capitole in lucrari de specialitate
1	Dumitru Pop, Simion Haragăș, Ovidiu Buiga (2025): ORGANE DE MAȘINI. Volumul 3, Editura Risoprint, Cluj-Napoca, ISBN 978-973-53-1294-7, ISBN 978-973-53-3410-9, 600 pagini.
2	Simion Haragăș, Dumitru Pop, Corina Bîrleanu, Marius Pustan, Ovidiu Buiga, Claudiu Popa, Horea Crișan, Ștefan Crăciun (2024): SCREW-NUT MECHANISMS, Editura UTPRESS, Cluj-Napoca, ISBN 978-606-737-729-3, 206 pagini.
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4	Simion Haragâș, Dumitru Pop, Corina Bîrleanu, Marius Pustan, Ovidiu Buiga, Horea Crișan, Claudiu Popa (2023): ONE-STAGE GEAR REDUCERS, Editura UTPRESS, Cluj-Napoca, ISBN 978-606-737-670-8, 186 pagini.
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Total	6

Cadru Didactic	PUSTAN MARIUS SORIN
Nr	Carti si capitole in lucrari de specialitate
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Cadru Didactic	SUCIU VIORICA MIHAELA
Nr	Carti si capitole in lucrari de specialitate
1	SUCIU Mihaela, TRIPA, M.-S., 2021, Rezistența Materialelor, ediția a IV-a, Editura U.T. PRESS Cluj-Napoca, ISBN 978-606-737-547-3, http://biblioteca.utcluj.ro/editura , 589 p.
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Total	2

Cadru Didactic	TODORUT ADRIAN
Nr	Carti si capitole in lucrari de specialitate
1	Duma, Irina; Burnete, N.; Todoruț, A. (2023). Tendințe tehnologice în domeniul siguranței autovehiculelor. În: Tendințe tehnologice în domeniul autovehiculelor, Burnete, V.N. - Editor, 189 pg., Cap. 10, pp. 125-136, Cluj-Napoca, Editura U.T.PRESS, ISBN 978-606-737-641-8. https://biblioteca.utcluj.ro/files/carti-online-cu-coperta/641-8.pdf .
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Total	2

Cadru Didactic	VAIDA CALIN
Nr	Carti si capitole in lucrari de specialitate
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19	Tucan, P., Gherman, B., Pisla, A., Horsia, A., Vaida, C., & Pisla, D. (2023). A singularity-free approach for safe operation of a parallel robot for lower limb rehabilitation. In T. Petric, A. Ude, & L. Zlajpah (Eds.), <i>Advances in Service and Industrial Robotics: RAAD 2023 (Mechanisms and Machine Science, Vol. 135)</i> . Springer. https://doi.org/10.1007/978-3-031-32606-6_17
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21	18. Pîslă, A., Nae, L., Vaida, C., Oprea, E., Gherman, B., Deriaz, M., & Pisla, D. (2023). Modern project approaches in shortening the lead time in innovation for young emerging companies based on the experienced seniors' knowledge. In K. von Leipzig, N. Sacks, & M. Mc Clelland (Eds.), <i>Smart, sustainable</i>
22	Vaida, C., Birlescu, I., Pusca, A., Gherman, B., Tucan, P., Antal, T. A., & Pisla, D. (2022). Geometric modeling of a new modular spherical robotic system for single incision laparoscopic surgery. In A. Müller & M. Brandstötter (Eds.), <i>Advances in service and industrial robotics</i> (pp. 367–374). Springer International Publishing. https://doi.org/10.1007/978-3-031-04870-8_43
23	Rus, G., Nae, L., Gherman, B., Vaida, C., Deriaz, M., Oprea, E., & Pisla, D. (2023). An innovative recommendation system for a knowledge transfer matchmaking platform. In G. A. Papadopoulos, A. Achilleos, E. Pissaloux, & R. Velázquez (Eds.), <i>ICT for health, accessibility and wellbeing</i> (pp. 162–176). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-29548-5_11
24	Gherman, B., Tucan, P., Vaida, C., Crisan, N., Rus, G., Birlescu, I., & Pisla, D. (2022). On the kinematics and dimensional optimization of a robotic system for single incision laparoscopic surgery. In A. Müller & M. Brandstötter (Eds.), <i>Advances in service and industrial robotics</i> (pp. 383–391). Springer International Publishing. https://doi.org/10.1007/978-3-031-04870-8_45

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31	Tucan, P., Al Hajjar, N., Vaida, C., Pusca, A., Radu, C., Jucan, D., Antal, T., Pislă, A., Chablat, D., & Pislă, D. (2025). Design of an innovative robotic surgical instrument for circular stapling. In G. Carbone & G. Quaglia (Eds.), <i>Proceedings of I4SDG Workshop 2025 – IFToMM for Sustainable Development Goals</i> (pp. 61–70). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-91179-8_7
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33	Zima, I., Sebeni, D., Bulbucan, V., Vaida, C., Gherman, B., Machado, J., Tucan, P., Antal, T., & Pislă, D. (2025). Conceptual design of an innovative robotic device for hand rehabilitation. In G. Carbone & G. Quaglia (Eds.), <i>Proceedings of I4SDG Workshop 2025 – IFToMM for Sustainable Development Goals</i> (pp. 71–82). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-91179-8_8
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41	Tucan, P., Gherman, B., Andras, I., Vaida, C., & Pisla, D. (2022). Kinematic modelling of a parallel robot used in single incision laparoscopic surgery. In A. Kecskeméthy & V. Parenti-Castelli (Eds.), <i>ROMANSY 24 - Robot design, dynamics and control. ROMANSY 2022. CISM International Centre for Mechanical Sciences</i> (Vol. 606). Springer. https://doi.org/10.1007/978-3-031-06409-8_12
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43	Pisla, D., Andras, I., Rus, G., Moldovan, C., Crisan, N., Antal, T., Ulinici, I., & Vaida, C. (2024). U-net network optimization for 3D reconstruction in robotic SILS pre-planning phase. In S. Vlad & N. M. Roman (Eds.), <i>8th International Conference on Advancements of Medicine and Health Care Through Technology</i> (pp. 21–29). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-51120-2_3
44	Rus, G., Deriaz, M., Vaida, C., Nae, L., Gherman, B., Oprea, E., Pisla, A., Stulens, L., & Pisla, D. (2023). An experimental evaluation of the performance and key factors of intelligent recommendation system. In I. Doroftei, M. Nitulescu, D. Pisla, & E.-C. Lovasz (Eds.), <i>Proceedings of SYROM 2022 & ROBOTICS 2022</i> (pp. 407–415). Springer International Publishing. https://doi.org/10.1007/978-3-031-25655-4_41
45	Gherman, B., Horvath, D., Mois, E., Vaida, C., Graur, F., Burz, A., Popa, C., Tucan, P., Al Hajjar, N., Pusca, A., & Pisla, D. (2023). Development of a force feedback control for robotic assisted liver cancer treatment. In I. Doroftei, M. Nitulescu, D. Pisla, & E.-C. Lovasz (Eds.), <i>Proceedings of SYROM 2022 & ROBOTICS 2022</i> (pp. 241–249). Springer International Publishing. https://doi.org/10.1007/978-3-031-25655-4_25
46	Gherman, B., Tucan, P., Vaida, C., Carbone, G., & Pisla, D. (2022). Novel design of the ParReEx-elbow parallel robot for the rehabilitation of brachial monoparesis. In G. Rauter, G. Carbone, P. C. Cattin, A. Zam, D. Pisla, & R. Riener (Eds.), <i>New trends in medical and service robotics. MESROB 2021. Mechanisms and Machine Science</i> (Vol. 106). Springer. https://doi.org/10.1007/978-3-030-76147-9_5

47	Vaida, C., Tucan, P., Sebeni, D., Vanta, O., Birlescu, I., Gherman, B., Antal, T., & Pislă, D. (2025). Inverse dynamics analysis and simulation of an innovative 3 DOF wrist rehabilitation robot. In J. Machado et al. (Eds.), LNME (pp. 21-30). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-93554-1_3
Total	47

Cadru Didactic	VARGA BOGDAN
Nr	Carti si capitole in lucrari de specialitate
1	Autonomous Vehicles for Public Transportation, Springer 2022
2	Autonomous Vehicles for Public Transportation, Springer 2022
3	Autonomous Vehicles for Public Transportation, Springer 2022
4	Autonomous Vehicles for Public Transportation, Springer 2022
5	Autonomous Vehicles for Public Transportation, Springer 2022
6	Autonomous Vehicles for Public Transportation, Springer 2022
7	Autonomous Vehicles for Public Transportation, Springer 2022
8	Autonomous Vehicles for Public Transportation, Springer 2022
9	Autonomous Vehicles for Public Transportation, Springer 2022
Total	9

5 Brevete, produse, tehnologii, granturi de cercetare

Brevete obținute în ultimii 5 ani

Cadru Didactic	ARGHIR MARIANA
Nr	Bravete in ultimii 5 ani
-	-
Total	0

Cadru Didactic	BALAN MUGUR CIPRIAN
Nr	Bravete in ultimii 5 ani
-	-
Total	0

Cadru Didactic	BIRLEANU CORINA
Nr	Bravete in ultimii 5 ani
-	-
Total	0

Cadru Didactic	BODE FLORIN IOAN
Nr	Bravete in ultimii 5 ani
-	-
Total	0

Cadru Didactic	BURNETE NICOLAE
Nr	Bravete in ultimii 5 ani
1	RO 127032-B1 Dispozitiv de pornire la rece a motoarelor cu ardere interna alimentate cu biodiesel, 2018
Total	1

Cadru Didactic	COVACIU FLORIN-ALEXANDRU
Nr	Bravete in ultimii 5 ani
-	-
Total	0

Cadru Didactic	DUDESCU MIRCEA CRISTIAN
Nr	Bravete in ultimii 5 ani
-	-
Total	0

Cadru Didactic	GHERMAN BOGDAN GEORGE
Nr	Bravete in ultimii 5 ani
1	Vaida, C., Plitea, N., Pislă, D., Gherman, B., Ulinici, I., Pislă, A., Carbone, G. : Robot Sferic pentru Recuperarea Medicală a Zonei Proximale la Nivelul Membrului superior, RO-13233/30.03.2020.
2	Gherman, B., Pislă, D., Plitea, N., Vaida, C., Pislă, A., Banica, A., Carbone, G.: Sistem Robotic Paralel pentru recuperarea medicală a membrului superior, RO-132234/30.03.2020
3	Plitea, N., Pislă, D., Vaida, C., Gherman, B., Ulinici, I., Carbone, G., Robot sferico per il recupero riabilitativo della spalla, International Patent, classification A61H1, No. 102018000006216, Italian Office of Patents and Trademarks, 13.07.2020.
4	Pislă, D., Birlescu, I., Vaida, C., Gherman, B., Tucan P., Plitea, N., Robot paralel pentru recuperarea mobilității membrului inferior, RO-133814/29.10.2021.
5	Pislă, D., Gherman, B., Nadas, I., Pop, N., Craciun, F., Tucan, P., Vaida, C., Carbone, G., Birlescu, I., Plitea, N., Robot paralel inovativ pentru recuperarea medicala a membrelor inferioare, RO-133815/29.10.2021.
6	Gherman, B., Birlescu, I., Burz, A., Pislă, D., Instrument medical automatizat pentru insertia mai multor ace pe traiectorii liniare si paralele in tratamentul cancerului prin brahiterapie interstitiala, RO 134941 B1/30.10.2024.
7	Pislă, D., Vaida, C., Gherman, B., Tucan, P., Robot paralel pentru tratamentul laparoscopic al cancerului de ficat, RO 134189 B1/30.10.2024.
Total	7

Cadru Didactic	ICLODEAN CALIN-GEORGE
Nr	Bravete in ultimii 5 ani

-	-
Total	0

Cadru Didactic	LUPEA IULIAN
Nr	Bravete in ultimii 5 ani
-	-
Total	0

Cadru Didactic	MANDRU SILVIU DAN
Nr	Bravete in ultimii 5 ani
-	-
Total	0

Cadru Didactic	MARIASIU FLORIN EMIL
Nr	Bravete in ultimii 5 ani
1	OSIM RO 134724/30.07.2025, Dispozitiv pasiv de ventilare a unei baterii ce echipeaza un vehicul electric, autori: Mariasiu Florin Emil, Varga Bogdan Ovidiu
2	OSIM RO 135013/30.09.2025, Dispozitiv de control activ al managementului termic al unei baterii ce echipeaza un vehicul electric, autori: Varga Bogdan Ovidiu, Mariasiu Florin Emil, Buidin Thomas Imre Cyrille.
Total	0

Cadru Didactic	NASUI VASILE
Nr	Bravete in ultimii 5 ani
1	Actuator cu glisiera telescopic. Năsui, V. Brevet de invenție RO 130517 A2. 2021. Int. Cl.6: E05 F11/00. OSIM - BOPI 7/2021/30.07.2021 pg. 67 https://osim.ro/wp-content/uploads/Publicatii-OSIM/BOPI-Inventii/2021/bopi_inv_07_2021.pdf
Total	0

Cadru Didactic	PISLA DOINA
Nr	Bravete in ultimii 5 ani
1	Vaida, C., Plitea, N., Pisla, D., Gherman, B., Ulinici, I., Pisla, A., Carbone, G. : Robot Sferic pentru Recuperarea Medicală a Zonei Proximale la Nivelul Membrului superior, RO-13233/30.03.2020.
2	Gherman, B., Pisla, D., Plitea, N., Vaida, C., Pislă, A., Banica, A., Carbone, G.: Sistem Robotic Paralel pentru recuperarea medicală a membrului superior, RO-132234/30.03.2020.

3	Plitea, N., Pislă, D., Vaida, C., Gherman, B., Ulinici, I., Carbone, G., Robot sferico per il recupero riabilitativo della spalla, International Patent, classification A61H1, No. 102018000006216, Italian Office of Patents and Trademarks, 13.07.2020.
4	Pislă, D., Birlescu, I., Vaida, C., Gherman, B., Tucan P., Plitea, N., Robot paralel pentru recuperarea mobilității membrului inferior, RO-133814/29.10.2021.
5	Pislă, D., Gherman, B., Nadas, I., Pop, N., Craciun, F., Tucan, P., Vaida, C., Carbone, G., Birlescu, I., Plitea, N., Robot paralel inovativ pentru recuperarea medicala a membrelor inferioare, RO-133815/29.10.2021.
6	Gherman, B., Birlescu, I., Burz, A., Pislă, D., Instrument medical automatizat pentru insertia mai multor ace pe traiectorii liniare si paralele in tratamentul cancerului prin brahiterapie interstitiala, RO 134941 B1/30.10.2024.
7	Pislă, D., Vaida, C., Gherman, B., Tucan, P., Robot paralel pentru tratamentul laparoscopic al cancerului de ficat, RO 134189 B1/30.10.2024.
Total	7

Cadru Didactic	PLITEA NICOLAE
Nr	Bravete in ultimii 5 ani
1	Vaida, C., Plitea, N., Pislă, D., Gherman, B., Ulinici, I., Pislă, A., Carbone, G. : Robot Sferic pentru Recuperarea Medicală a Zonei Proximale la Nivelul Membrului superior, RO-13233/30.03.2020.
2	Gherman, B., Pislă, D., Plitea, N., Vaida, C., Pislă, A., Banica, A., Carbone, G.: Sistem Robotic Paralel pentru recuperarea medicală a membrului superior, RO-132234/30.03.2020
3	Plitea, N., Pislă, D., Vaida, C., Gherman, B., Ulinici, I., Carbone, G., Robot sferico per il recupero riabilitativo della spalla, International Patent, classification A61H1, No. 102018000006216, Italian Office of Patents and Trademarks, 13.07.2020.
4	Pislă, D., Birlescu, I., Vaida, C., Gherman, B., Tucan P., Plitea, N., Robot paralel pentru recuperarea mobilității membrului inferior, RO-133814/29.10.2021.
5	Pislă, D., Gherman, B., Nadas, I., Pop, N., Craciun, F., Tucan, P., Vaida, C., Carbone, G., Birlescu, I., Plitea, N., Robot paralel inovativ pentru recuperarea medicala a membrelor inferioare, RO-133815/29.10.2021.
Total	5

Cadru Didactic	VAIDA CALIN
Nr	Bravete in ultimii 5 ani
1	Vaida, C., Plitea, N., Pislă, D., Gherman, B., Ulinici, I., Pislă, A., Carbone, G. : Robot Sferic pentru Recuperarea Medicală a Zonei Proximale la Nivelul Membrului superior, RO-13233/30.03.2020.
2	Gherman, B., Pislă, D., Plitea, N., Vaida, C., Pislă, A., Banica, A., Carbone, G.: Sistem Robotic Paralel pentru recuperarea medicală a membrului superior, RO-132234/30.03.2020.
3	Plitea, N., Pislă, D., Vaida, C., Gherman, B., Ulinici, I., Carbone, G., Robot sferico per il recupero riabilitativo della spalla, International Patent, classification A61H1, No. 102018000006216, Italian Office of Patents and Trademarks, 13.07.2020.
4	Pislă, D., Birlescu, I., Vaida, C., Gherman, B., Tucan P., Plitea, N., Robot paralel pentru recuperarea mobilității membrului inferior, RO-133814/29.10.2021.

5	Pisla, D, Gherman, B., Nadas, I., Pop, N., Craciun, F., Tucan, P., Vaida, C., Carbone, G, Birlescu, I., Plitea, N., Robot paralel inovativ pentru recuperarea medicala a membrelor inferioare, RO-133815/29.10.2021.
6	Pisla, D., Vaida, C., Gherman, B., Tucan, P., Robot paralel pentru tratamentul laparoscopic al cancerului de ficat, RO 134189 B1/30.10.2024.
Total	6

6. Produse, tehnologii, servicii

Cadru Didactic	ARGHIR MARIANA
Nr	Produse, tehnologii, servicii
-	-
Total	0

Cadru Didactic	BALAN MUGUR CIPRIAN
Nr	Produse, tehnologii, servicii
-	-
Total	0

Cadru Didactic	BIRLEANU CORINA
Nr	Produse, tehnologii, servicii
-	-
Total	0

Cadru Didactic	BODE FLORIN IOAN
Nr	Produse, tehnologii, servicii
-	-
Total	0

Cadru Didactic	BURNETE NICOLAE
Nr	Produse, tehnologii, servicii
1	Centru de cercetare in Ingineria autovehiculelor
Total	1

Cadru Didactic	COVACIU FLORIN-ALEXANDRU
Nr	Produse, tehnologii, servicii
-	-
Total	0

Cadru	DUDESCU MIRCEA CRISTIAN
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Didactic	
Nr	Produse, tehnologii, servicii
-	-
Total	0

Cadru Didactic	GHERMAN BOGDAN GEORGE
Nr	Produse, tehnologii, servicii
1	Robotul paralel dezvoltat pentru cancerul pancreasului – ATHENA, 2025.
2	Instrument activ automat dezvoltat pentru cancerul pancreatic – ATHENA, 2025.
3	Robot paralel pentru recuperarea membrului inferior- Leg-UP, 2024.
4	Sistem robotic PARA-SILSROB pentru chirurgia uniport - CHALLENGE, 2023.
5	Sistem robotic paralel pentru recuperarea membrului superior Apollo W, 2023.
6	Sistem robotic paralel pentru recuperarea membrului superior Apollo-E, 2023.
7	Sistem robotic paralel pentru recuperarea membrului superior Apollo-SH, 2023.
8	Robot sferic pentru manipularea instrumentelor utilizate în chirurgia asistată robotic - CHALLENGE, 2023.
9	Sistem robotic pentru recuperarea membrului inferior RECOVER, 2022.
Total	9

Cadru Didactic	ICLODEAN CALIN-GEORGE
Nr	Produse, tehnologii, servicii
-	-
Total	0

Cadru Didactic	LUPEA IULIAN
Nr	Produse, tehnologii, servicii
-	-
Total	0

Cadru Didactic	MANDRU SILVIU DAN
Nr	Produse, tehnologii, servicii
1	Cerere brevet de invenție nr: A/00287/2025, - Șerdean M., Șerdean F., Mândru D., Dispozitiv modular pentru distrugerea termică a buruienilor
Total	1

Cadru Didactic	MARIASIU FLORIN EMIL
Nr	Produse, tehnologii, servicii
-	-
Total	0

Cadru Didactic	NASUI VASILE
Nr	Produse, tehnologii, servicii
1	Stand cu robot liniar monoax T5-400 Yamaha, echipat cu braț robotic articulată didactic, pentru măsurare multiparametrică, controller ERCD, soft POPCOM , riglă optică GR1-350, afișaj de cote VM1-ELBO. Laborator Elemente de roboți CUNBM.
2	Robot industrial în coordonate carteziane, acționat cu motoare MPP și variatoare Microstep
3	Instalație de comanda a actuatorilor electromecanici cu convertizor de frecvență DF5-322
4	Modul de translație (actuator liniar electromecanic)
5	Mecanism translație reglabil (actuator liniar cu variator de turație mecanic)
6	Reductor liniar de rotație cu elemente de rostogolire
7	Actuator cu capacitate portantă ridicată programabil
8	Gamă tipizată de module de translație (Electrocilindri)
9	Stand reglabil pentru încercat și rodat reductoare planetare. Des. nr: D23.740
10	Stand reglabil pentru încercat și rodat reductoare planetare. Des. nr: D23.740
11	Stand universal de încercat trolii cu angrenaje planetare. Des. nr: D23.943
12	Stand reglabil pentru încercat și rodat reductoare planetare. Des. nr: D23.740
Total	12

Cadru Didactic	PISLA DOINA
Nr	Produse, tehnologii, servicii
1	Robotul paralel dezvoltat pentru cancerul pancreasului – ATHENA, 2025.
2	Instrument activ automat dezvoltat pentru cancerul pancreatic – ATHENA, 2025.
3	Sistem robotic pentru recuperarea încheieturii mâinii, Wrist – X – 1, ATHENA – 2025.
4	Sistem robotic pentru recuperarea încheieturii mâinii, Wrist – X – 2, ATHENA – 2025.
5	Robot paralel pentru recuperarea membrului inferior- Leg-UP, 2024.
6	Sistem robotic PARA-SILSROB pentru chirurgia uniport - CHALLENGE, 2023.
7	Sistem robotic paralel pentru recuperarea membrului superior Apollo W, 2023.
8	Sistem robotic paralel pentru recuperarea membrului superior Apollo-E, 2023.
9	Sistem robotic paralel pentru recuperarea membrului superior Apollo-SH, 2023.
10	Robot sferic pentru manipularea instrumentelor utilizate în chirurgia asistată robotic - CHALLENGE, 2023.
11	Sistem robotic pentru recuperarea membrului inferior RECOVER, 2022.
Total	11

Cadru Didactic	PLITEA NICOLAE
Nr	Produse, tehnologii, servicii
1	Sistem robotic PARA-SILSROB pentru chirurgia uniport - CHALLENGE, 2023.
2	Sistem robotic paralel pentru recuperarea membrului superior Apollo W, 2023.
3	Sistem robotic paralel pentru recuperarea membrului superior Apollo-E, 2023.
4	Sistem robotic paralel pentru recuperarea membrului superior Apollo-SH, 2023.

5	Robot sferic pentru manipularea instrumentelor utilizate în chirurgia asistată robotic - CHALLENGE, 2023.
6	Sistem robotic pentru recuperarea membrului inferior RECOVER, 2022
Total	6

Cadru Didactic	GHERMAN BOGDAN GEORGE
Nr	Robotul paralel dezvoltat pentru cancerul pancreasului – ATHENA, 2025.
1	Instrument activ automat dezvoltat pentru cancerul pancreatic – ATHENA, 2025.
2	Sistem robotic pentru recuperarea încheieturii mâinii, Wrist – X – 1, ATHENA – 2025.
3	Sistem robotic pentru recuperarea încheieturii mâinii, Wrist – X – 2, ATHENA – 2025.
4	Robot paralel pentru recuperarea membrului inferior- Leg-UP, 2024.
5	Sistem robotic PARA-SILSROB pentru chirurgia uniport - CHALLENGE, 2023.
6	Sistem robotic paralel pentru recuperarea membrului superior Apollo W, 2023.
7	Sistem robotic paralel pentru recuperarea membrului superior Apollo-E, 2023.
8	Sistem robotic paralel pentru recuperarea membrului superior Apollo-SH, 2023.
9	Robot sferic pentru manipularea instrumentelor utilizate în chirurgia asistată robotic - CHALLENGE, 2023.
10	Robotul paralel dezvoltat pentru cancerul pancreasului – ATHENA, 2025.
11	Sistem robotic pentru recuperarea membrului inferior RECOVER, 2022.
Total	10

Coordonator consiliu programe doctorale Inginerie mecanică și mecatronică,
Prof.dr.ing. Tătar Mihai Olimpiu