

LISTĂ DE LUCRĂRI

Mr. conf.univ. dr. ing. Daniela VOICU

A. Lucrări relevante pentru realizările proprii

1. Modeling Vehicle Fuel Consumption Using a Low-Cost OBD-II Interface, Rykala, M (Rykala, Magdalena); Grzelak, M (Grzelak, Malgorzata); Rykala, L (Rykala, Lukasz); **Voicu, D (Voicu, Daniela)**; Stoica, RM (Stoica, Ramona-Monica), ENERGIES (eISSN 1996-1073), nov. 2023, Factor impact 3.2
2. Application of Logistic Regression to Analyze The Economic Efficiency of Vehicle Operation in Terms of the Financial Security of Enterprises, Malgorzata Grzelak, Paulina Owczarek, Ramona-Monica Stoica, **Daniela Voicu** and Radu Vil?u, LOGISTICS (ISSN: 2305-6290), Factor impact 3.8
3. Radu Vilau, **Daniela Voicu**, Ramona-Monica Stoica*,Ticutor Ciobotaru, Magdalena Rykala, Lukasz Rykala, Investigating Vibration Transmission in Cargo ContainersDuring Heavy-Duty Off-Road Transport, Advances in Science and Technology Research Journal 2024, 18(4), 312-328<https://doi.org/10.12913/22998624/189613>ISSN 2299-8624, License CC-BY 4.0, Impact Factor 1.0
4. Investigation of bearing condition by means of robust linear regression and informative predictors, Ramona Monica Stoica, **Daniela Voicu**, Radu Vil?u, Vehicles, ISBN 2624-8921 on 31 October 2025, Impact factor 2.2, DOI 10.3390/vehicles7040127
5. Frequency analysis of vibrations in terms of human exposure while driving military armoured personnel carriers and logistic transportation vehicles, **Daniela Voicu**, Ramona Monica Stoica, Radu Vilău, Marin Marinescu, Angela Digulescu, Cristina Despina-Stoian, Florin Popescu, Electronics (ISSN 2079-9292), Special Issue "New Trends and Methods in Communication Systems" 2023, Factor de impact 2.9
https://www.mdpi.com/journal/electronics/special_issues/communication_system
6. Influence analysis of vibrations and shocks generated by road bumps on crew members during long distance transportation or on off-road terrain, **Daniela VOICU**, Stoica R. M., Laszlo BAROTHI, Radu VILĂU, Ingineria Automobilului, nr. 63, iun. 2022, pg. 15-18, ISSN 1842-4074, WOS:000565210700005
<https://siar.ro/wp-content/uploads/2022/06/rIA-63.pdf>
7. Bearings fault detection by means of frequency analysis, Stoica R. M., **D Voicu**, R Vilau, L Barothi and L Deleanu AITS 2021, IOP Conf. Series: Materials Science and Engineering, doi:10.1088/1757-899X/1220/1/012032
<https://iopscience.iop.org/article/10.1088/1757-899X/1220/1/012032/meta>

8. Study regarding the influence of geometrical characteristics of the distribution system on truck engines efficiency parameters, L Barothi, Stoica R. M., **D Voicu**, R Vilau, L Deleanu, AITS 2021, IOP Conf. Series: Materials Science and Engineering, doi:10.1088/1757-899X/1220/1/012006
https://www.researchgate.net/publication/358203595_Bearings_fault_detection_by_means_of_frequency_analysis

9. Simulation and comparative analysis of pollutant emissions before and after PID control of engine functioning, Barothi Laszlo, Stoica R. M., **Voicu Daniela**, Singureanu Marius, Ingineria Automobilului, nr. 56, sep. 2020, pg. 19-23, ISSN 1842-4074, WOS:000565210700005
<https://siar.ro/wp-content/uploads/2020/09/rIA56i.pdf>

10. Experimental research and simulation of vibration isolation elements mounted within transport boxes, **D. VOICU**, Stoica R. M., R VILAU, L BAROTHI, IOP Conf. Series: Materials Science and Engineering 997 (2020) 012033, doi:10.1088/1757-899X/997/1/012033
https://www.researchgate.net/publication/347968118_Experimental_research_and_simulation_of_vibration_isolation_elements_mounted_within_transport_boxes

11. Recording of parameters characteristic to engine and vehicle in order to validate a simulation model for fuel consumption, Laszlo Barothi, **Daniela Voicu**, Stoica R. M., Marius Singureanu, 5th International Scientific Conference SEA-CONF 2019, 17–18 May 2019, Mircea cel Batran Naval Academy, Constanta, Romania, IOP Conf. Series: Journal of Physics: Conf. Series 1297 (2019) 012030 IOP Publishing, doi:10.1088/1742-6596/1297/1/012030
https://www.researchgate.net/publication/336165790_Recording_of_parameters_characteristic_to_engine_and_vehicle_in_order_to_validate_a_simulation_model_for_fuel_consumption

12. Modeling of a Standardized Testing Track With The Use of Specialized Software, **Daniela Voicu**, Stoica R. M., Laszlo Barothi, The 30th SIAR International Congress of Automotive and Transport Engineering, SMAT 2019, ISBN 978-3-030-32563-3, online ISBN 978-3-030-32564-0, pag. 451-457
https://link.springer.com/chapter/10.1007/978-3-030-32564-0_52

13. Considerations concerning the power loops within the all-wheel driven transmissions of the automobile, Truta Marian, Barothi Laszlo, **Voicu Daniela**, Stoica R. M., Valentin Vinturis, Ingineria Automobilului Issue 46, pages 14-16, martie 2018, ISBN 978-973-720-708-1
https://siar.ro/wp-content/uploads/2018/02/rIA_46-2018_1.pdf

14. Development of a measuring system for the analysis of vibrations sent from engine to passenger seat, **Daniela Voicu**, M. Truță, Laszlo Barothi, Stoica R. M., D.I. Dorobanțu, CAR 2017 International Congress of Automotive and Transport Engineering IOP Conference

series Materials Science and Engineering 252(1):012024, Thomson Reuters, Web of Science, DOI: 10.1088/1757-899x/252/1/012024

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B. Teza de doctorat

“Contribuții la calculul solicitărilor mecanice ale echipamentelor care fac obiectul transportului militar tactic”, Domeniul Inginerie mecanică.

Titlul de doctor a fost obținut în 2019, profesor coordonator: prof. univ. dr. ing. OLARU Gheorghe.

C. Cărți, capitole din cărți, manuale și îndrumare de laborator

1. Acționări electrohidraulice în industria de autovehicule, Radu Vilău, Ramona-Monica STOICA, **Daniela VOICU**, Editura Academiei Tehnice Militare “Ferdinand I”, București, 2022, ISBN 978-973-640-338-5

2. Acționări pneumatice. Îndrumar de laborator, Editura Academiei Tehnice Militare “Ferdinand I”, **Daniela VOICU**, Radu VILĂU, Ramona-Monica STOICA, București, 2021, ISBN 978-973-640-332-3

3. Aplicații practice în domeniul transmisiilor mecanice. Îndrumar de laborator, Ramona-Monica Stoica, **Daniela Voicu**, Radu Vilău, Laszlo Barothi, Editura Academiei Tehnice Militare “Ferdinand I”, București, 2021, ISBN 978-973-640-292-0

4. Desen tehnic în ingineria autovehiculelor, Editura Academiei Tehnice Militare “Ferdinand I”, Ramona-Monica Stoica, **Daniela Voicu**, Radu Vilău București, 2020, ISBN 978-973-640-310-1

5. Transmisii mecanice și organe de mașini - Noțiuni de bază, Editura Academiei Tehnice Militare “Ferdinand I”, **Daniela VOICU**, Radu VILĂU, Ramona-Monica STOICA, București, 2019, ISBN 978-973-640-300-2

6. Actionari hidraulice. Indrumar de laborator. Editura Academiei Tehnice Militare, Bucuresti, 2019 (142 pagini), ISBN>978-973-640-298-2, Radu Vilau, Daniela Voicu

7.SOFTWARE ÎN INGINERIA AUTOVEHICULELOR .ELEMENTE DE TEORIE ȘI APLICAȚII, **Daniela VOICU**, Ramona-Monica STOICA, Radu VILĂU, Olivian PĂDURE, Editura Tehnică-UTM 2025, ISBN 978-9975-64-595-9

D. Articole în reviste cotate ISI Thomson Reuters și în volume indexate ISI

1. **Daniela Voicu**, Ramona-Monica Stoica, Laszlo Barothi, “Modeling of a Standardized Testing Track With The Use of Specialized Software “,The 30th SIAR International Congress of Automotive and Transport Engineering, SMAT 2019, ISBN 978-3-030-32563-3, online ISBN 978-3-030-32564-0, pag. 451-457, WOS:000528526600052, <https://www.webofscience.com/wos/woscc/full-record/WOS:000528526600052>

2. **Daniela Voicu**, M. Truță, Laszlo Barothi, Ramona-Monica Stoica, D.I. Dorobanțu, Development of a measuring system for the analysis of vibrations sent from engine to passenger seat, CAR 2017 International Congress of Automotive and Transport Engineering IOP Conference series Materials Science and Engineering 252(1):012024, Thomson Reuters, Web of Science, DOI: 10.1088/1757-899x/252/1/012024, ISSN1757-8981, WOS:000419817200024,

<https://www.webofscience.com/wos/woscc/full-record/WOS:000419817200024>

3. Marinescu Marin, Ilie Constantin-Ovidiu, Vilau Radu, Alexa Octavian, **Voicu Daniela** - Malfunction Detection Using Spectral Analysis for Automotive Braking Systems - 2016 International Conference on Communications, June 9-11, 2016, Conference Proceedings, pp. 333-336, ISBN 978-1-4673-8196-3, Part no. CFP1641J-DVD, doi: 10.1109/ICComm.2016.7528334, WOS:000383221900069,

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4. Alexa, Octavian; Vilau, Radu; Ilie, Ovidiu-Constantin; **Voicu, Daniela**; Marinescu, Marin - Aspects Regarding the Kinematic Optimization of a Tracked Military Vehicle's Transmission - CONAT 2016: INTERNATIONAL CONGRESS OF AUTOMOTIVE AND TRANSPORT ENGINEERING Pages: 348-353 DOI: 10.1007/978-3-319-45447-4_3; Accession Number: WOS:000390821400039

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5. Truta Marian, Barothi Laszlo, **Voicu Daniela**, Stoica Ramona-Monica, Valentin Vinturis, Considerations concerning the power loops within the all-wheel driven transmissions of the automobile, Ingineria Automobilului Issue 46, pages 14-16, martie 2018, ISBN 978-973-720-708-1, WOS:000438361400004, ISSN1842-4074, <https://www.webofscience.com/wos/woscc/full-record/WOS:000438361400004>

6. Influence analysis of vibrations and shocks generated by road bumps on crew members during long distance transportation or on off-road terrain, **Daniela Voicu**, Ramona-Monica Stoica, Laszlo Baorthi, Radu Vilau, Ingineria Automobilului nr 63/2022, Bucuresti , ISSN 1842-4074, pag. 15-18, WOS:000880290800004

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7. Developing a pneumatic model for actuating a trap door while opening-closing a military personnel compartment, **Daniela Voicu**, Radu Vilau, Ramona-Monica Stoica, Ion Lespezeanu, Ingineria Automobilului, nr 61/decembrie 2021, ISSN 1842-4074, pag. 16-18, WOS:000750146200007

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8. Simulation and comparative analysis of pollutant emissions before and after pid control of engine functioning, Laszlo BAROTHI, Ramona-Monica STOICA, **Daniela VOICU**, Marius SINGUREANU, Ingineria Automobilului, Bucuresti 2020, ISBN 978-3-662-61757-1, pag. 20-23, WOS:000565210700005, ISSN1842-4074

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9. Considerations Regarding the Comparative Determination of Materials Hardness Submitted to Heat Treatments, Stoica Ramona-Monica, **Voicu Daniela**, Laszlo Barothi si Radu Vilau, RoJAE 26(1) 1 – 30 (2020), ISSN 2457 – 5275 (Online, English), page 15-21 ISSN 1842 – 4074 (Print, Online, Romanian), WOS:000518850400004, ISSN1842-4074, <https://www.webofscience.com/wos/woscc/full-record/WOS:000518850400004>

10. Frequency analysis of vibrations in terms of human exposure while driving military armoured personnel carriers and logistic transportation vehicles, **Daniela Voicu**, Ramona Monica Stoica, Radu Vilău, Marin Marinescu, Angela Digulescu, Cristina Despina-Stoian, Florin Popescu, Electronics (ISSN 2079-9292), 2023, Factor impact 2,9

11. Modeling Vehicle Fuel Consumption Using a Low-Cost OBD-II Interface, Rykala, M (Rykala, Magdalena); Grzelak, M (Grzelak, Malgorzata); Rykala, L (Rykala, Lukasz); **Voicu, D (Voicu, Daniela)**; Stoica, RM (Stoica, Ramona-Monica), ENERGIES (eISSN 1996-1073), nov. 2023, Factor impact 3.2

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13. Radu Vilau1, **Daniela Voicu1**, Ramona-Monica Stoica1*,Ticutor Ciobotaru1, Magdalena Rykala2, Lukasz Rykala3, Investigating Vibration Transmission in Cargo ContainersDuring Heavy-Duty Off-Road Transport, Advances in Science and Technology Research Journal 2024, 18(4), 312–328<https://doi.org/10.12913/22998624/189613>ISSN 2299-8624, License CC-BY 4.0

14. Development of Digital Competencies in Education Through Staff Training Events and International Schools, Marina Marchisio Conte, Fabio Roman, Matteo Sacchet, E. Spinello, **Daniela Voicu**, Magdalena Rykala, Linko Nikolov, Conference: 2024 IEEE 48th Annual Computers, Software, and Applications Conference (COMPSAC), DOI: 10.1109/COMPSAC61105.2024.00024, ISBN: 979-8-3503-7696-8

15. ANALYSIS OF PERFORMANCES FOR AN ELECTROHYDRAULIC SYSTEM FROM AUTO-TRUCKS, Radu, ST (Radu, Stefan-Tigran); Vilau, R (Vilau, Radu) ; **Voicu, D (Voicu, Daniela)**; Stoica, RM (Stoica, Ramona-Monica), Ingineria Automobilului, WOS:001460116200004, București, Nr. 74 / martie 2025, ISSN 1842 – 4074 , pag. 17-22

16. FUNCTIONAL ANALYSIS OF PNEUMATIC SYSTEMS FOR AUTOMATIC CONTROL, Vilau, R (Vilau, Radu); **Voicu, D (Voicu, Daniela)**; Stoica, RM (Stoica, Ramona Monica); Grzelak, M (Grzelak, Malgorzata); Rykala, M (Rykala, Magdalena); Rykala, L (Rykala, Lukasz), Ingineria Automobilului,

WOS:001379866400005, București, Nr. 73 / decembrie 2024 , ISSN 1842 – 4074, pag. 16-20

17. Investigation of bearing condition by means of robust linear regression and informative predictors, Ramona Monica Stoica, **Daniela Voicu**, Radu Vilău, Vehicles, ISBN 2624-8921 on 31 October 2025, **Impact factor 2.2**, DOI 10.3390/vehicles7040127
18. DEVELOPMENT OF A CONTROL AND ACTUATION TEST BENCH FOR THE ANALYSIS OF AUTOMOTIVE HYDRAULIC DAMPERS, Titu Ionela Crina, Radu VILĂU, Ramona-Monica STOICA, **Daniela VOICU**, Ingineria automobilului Nr. 77 / decembrie 2025, ISSN 1842 – 4074

E. Articole în reviste și volumele unor manifestări științifice indexate în baze de date internaționale (BDI)

1. **Daniela Voicu**, Radu Vilău, Ramona-Monica Stoica, 2021, Experimental plotting of static characteristics of rotary hydraulic pumps, The 16th edition of the international conference European Integration realities and perspectives, ISSN: 2067-9211, EBSCO
2. Development of a device for displaying on an additional screen the parameters read from the vehicle's on board computer, Barothi Laszlo, **Voicu Daniela**, Stoica Ramona-Monica , Deleanu Lorena , DAIE 2021 (BDI) Vol.11, no.1/2021, ISSN: 2284 – 5224, DOAJ
3. **Daniela Voicu**, Radu Vilău, Ramona-Monica Stoica, 2021, Analyzing surface roughness of an auto-track cylinder after several running hours, The 16th edition of the international conference European Integration realities and perspectives, ISSN: 2067-9211, DOAJ
4. **Daniela VOICU**, Laszlo BAROTHI, and Ramona-Monica STOICA: “Testing platform for analysing 3 axles small platforms skid steering behavior”, Journal of military technology, Military Technical Academy Publishing House, Vol.1, No.2, December 2018, pg. 61-64, ISSN 2601-6613, ISSN-L 2601-6613 (BDI), EBSCO, Ulrich's Periodicals, Google Scholar
5. Developing a Pneumatic Actuating System to Illustrate the Functioning of an AND Logic Valve, **Daniela Voicu**, Radu Vilau, R M Stoica, Acta Universitatis Danubius, vol. 17, no. 6, 2021, pp. 270-277, ISSN: 2065-0175, EBSCO
6. Graphical Methods Used to Solve Misalignment Problems of Mechanical Transmissions, R M STOICA, **Daniela Voicu**, Radu Vilau, Acta Universitatis Danubius, vol. 17, no. 6, 2021, pp. 231-238, ISSN: 2065-0175, EBSCO
7. Laszlo Barothi, **Daniela Voicu**, Ramona-Monica Stoica, Marius Singureanu: “Recording of parameters characteristic to engine and vehicle in order to validate a simulation model for fuel consumption”, 5th International Scientific Conference SEA-CONF 2019, 17–18 May 2019, Mircea cel Batran Naval Academy, Constanta, Romania, IOP Conf. Series: Journal of Physics: Conf. Series 1297 (2019) 012030 IOP Publishing, doi:10.1088/1742-6596/1297/1/012030.

8. Experimental research and simulation of vibration isolation elements mounted within transport boxes, **D. VOICU**, R M STOICA, R VILAU, L BAROTHI, IOP Conf. Series: Materials Science and Engineering 997 (2020) 012033, doi:10.1088/1757-899X/997/1/012033, SCOPUS

F. Articole publicate în reviste naționale și volumele unor manifestări științifice naționale și internaționale, neindexate

1. Laszlo Barothi, Radu Vilau, **Daniela Voicu**, Stoica R. M.: The study of a vehicle's suspended mass oscillation with an Arduino UNO based data acquisition system, Universitatea Agrara de stat din Moldova, Chisinau, Vol. 51, pg. 224-229, ISBN 978-9975-64-300-9
2. Bearings fault detection by means of frequency analysis, R M Stoica, **D Voicu**, R Vilau¹, L Barothi¹ and L Deleanu² AITS 2021, IOP Conf. Series: Materials Science and Engineering, doi:10.1088/1757-899X/1220/1/012032

G. Conferinte naționale și internaționale

1. Diagnosis of mechanical parts by analyzing vibrations measured during operation, Udrea M, **Voicu D**, Stoica R, Barothi L, AITS 2021, IOP Conf. Series: Materials Science and Engineering, doi:10.1088/1757-899X/1220/1/012042
2. Study regarding the influence of geometrical characteristics of the distribution system on truck engines efficiency parameters, L Barothi, R M Stoica¹ **D Voicu**, R Vilau¹ L Deleanu, AITS 2021, IOP Conf. Series: Materials Science and Engineering, doi:10.1088/1757-899X/1220/1/012006
3. **Daniela Voicu**, Laszlo Barothi, Stoica R. M., Andrei Mandache Dodoiu: "The development of a recording system able to read vehicle parameters from on-board computer without the use of a dedicated/universal tester", AMMA 2018, The IVth International Congress of Automotive and Transport Engineering, Editura U.T. Press, octombrie 2018, Cluj-Napoca, Romania, pg. 175-180, ISBN 978-606-737-314-1

Mr. conf.univ. dr. ing.

Daniela VOICU