

L I S T A

lucrărilor științifice

I. Teza de doctorat

“Contribuții la implementarea unor noi soluții de control al traficului auto” (noiembrie 2025)

III. Lucrări indexate ISI publicate

1	Florea, B.C.; Șerban, A.A. ; Țarălungă, D.D.; Frunzete, M.C. Blockchain Gamification Solution for Regulation of Road Traffic Emissions. <i>Technologies</i> 2025, 13, 536. https://doi.org/10.3390/technologies13110536 , WOS:001623591500001 , IF: 3.6, Q1 în 2025
2	Alin Alexandru Serban , Madalin Corneliu Frunzete, Corneliu Burileanu, Comparative analysis of macroscopic traffic flow models on highways, U.P.B. Sci. Bull., Series C, Vol. 87, Iss. 4, 2025, ISSN 2286 – 3540, WOS: 001644214500023 , IF: 0.3, Q4 in 2025
3	Zîrnă, BA., Mihailovschi, D., Mathis, E., Serban, AA. , Frunzete, MC. (2025). The Impact of External Factors on Cardiac Parameters. In: Gervasi, O., <i>et al.</i> Computational Science and Its Applications – ICCSA 2025. ICCSA 2025. Lecture Notes in Computer Science, vol 15648. Springer, Cham. https://doi.org/10.1007/978-3-031-97000-9_4 , ISSN: 0302-9743 ISBN: 978-3-031-96999-7, WOS:001554574400004 , IF: 0.302, Q4 în 2025
4	Serban, A. A. , & Frunzete, M. (2022, October). Analysis and comparison between urban traffic control systems. In 2022 IEEE 28th International Symposium for Design and Technology in Electronic Packaging (SIITME) (pp. 92-95). IEEE. WOS:000947243400022
5	Serban, AA ; Frunzete, M, "Electronic System for Monitoring Quality of Air and Atmospheric Conditions with Autonomous Power Supply System", International Symposium on Fundamentals of Electrical Engineering (ISFEE), NOV 05-07, 2020, Univ Politehnica Buchares, Bucharest, ROMANIA, pp: 1-4, ISBN: 978-1-7281-9038-9, DOI: 10.1109/ISFEE51261.2020.9756153, WOS:000812321500023
6	M. -D. Pătrașcu, B. -A. Zîrnă, D. Mihailovschi, A. -A. Serban , O. -A. Hociung and M. -C. Frunzete, "Wearable Device for Sleep Apnea Monitoring," <i>2025 14th International Symposium on Advanced Topics in Electrical Engineering (ATEE)</i> , Bucharest, Romania, 2025, pp. 1-5, doi: 10.1109/ATEE66006.2025.11299928., ISSN 1843-8571 WOS:001741236900062
7	Serban, A. A. , Marghescu, C. I., & Drumea, A. (2018, October). Sensor Module for Monitoring Atmospheric Pressure, Temperature and Humidity With Autonomus Power Supply System. In 2018 IEEE 24th International

	Symposium for Design and Technology in Electronic Packaging(SIITME) (pp. 361-364). IEEE. WOS:000466960400077
8	Serban, A. A. , Drumea, A., & Marghescu, C. (2019, October). Electronic module for carbon monoxide monitoring and warning. In 2019 IEEE 25th International Symposium for Design and Technology in Electronic Packaging (SIITME) (pp. 146-170). IEEE. WOS:000564733700030

C. Lucrări indexate BDI publicate

1	Serban, A. A. , & Frunzete, M. (2022, June). Statistical analysis using machine learning algorithms in traffic control. In 2022 14th International Conference on Electronics, Computers and Artificial Intelligence (ECAI) (pp. 1-4). IEEE.	IEEE Explore
2	SERBAN, A. A. , & FRUNZETE, M. (2021, July). Data obtained from vehicle to manage traffic control. In 2021 International Symposium on Signals, Circuits and Systems (ISSCS) (pp. 1-4). IEEE.	IEEE Explore
3	A. A. SERBAN and M. Frunzete, "Traffic flow models and statistical analysis using compressed data from acquisition module," <i>2024 Signal Processing: Algorithms, Architectures, Arrangements, and Applications (SPA)</i> , Poznan, Poland, 2024, pp. 183-187, IEEE, doi: 10.23919/SPA61993.2024.10715618	IEEE Explore
4	Bogdan Cristian Florea, Alin Alexandru Serban , and Dragos Daniel Taralunga. 2025. Blockchain-Driven Gamification Solution for Improving Road Traffic Safety. In Proceedings of the 2024 9th International Conference on Information Systems Engineering (ICISE '24). Association for Computing Machinery, New York, NY, USA, 89–96. Doi: 10.1145/3711954.3711963, ISBN: 979-8-4007-1736-9	ACM Digital Library
5	B. A. Zîrnă, D. Mihailovschi, A. A. Serban and M. C. Frunzete, "Design of a Portable EMG and ECG Signal-Based System for Upper Limb Recovery Using Data Compression," <i>2024 Signal Processing: Algorithms, Architectures, Arrangements, and Applications (SPA)</i> , Poznan, Poland, 2024, pp. 109-114, IEEE, doi: 10.23919/SPA61993.2024.10715623.	IEEE Explore