

LISTA DE LUCRĂRI

Șef de lucr. dr. ing. Roșca Cosmina-Mihaela

A. Lista celor 10 lucrări relevante pentru realizările profesionale proprii

- A.1. **Roșca, C.-M.**, Stancu, A., Ariciu, A.-V. Algorithm for child adoption process using artificial intelligence and monitoring system for children. *Internet of Things*, 2024, Vol. 26, 101170, WOS:001222347600001. <https://doi.org/10.1016/j.iot.2024.101170>. Indexată Q1.
- A.2. **Roșca, C.-M.**, Stancu, A., Popescu, C. Machine Learning Models for SQL Injection Detection. *Electronics*, 2025, Vol. 14, No. 17, 3420. WOS:001569648100001. <https://doi.org/10.3390/electronics14173420>. Indexată Q2.
- A.3. **Roșca, C.-M.**, Stancu, A. Quality assessment of GPT-3.5 and Gemini 1.0 Pro for SQL syntax. *Computer Standards & Interfaces*, 2026, Vol. 95, 104041. WOS:001522328900001. <https://doi.org/10.1016/j.csi.2025.104041>. Indexată Q2.
- A.4. Diniță, A., **Roșca, C.-M.**, Stancu, A., Popescu, C. Distributed IoT-Based Predictive Maintenance Framework for Solar Panels Using Cloud Machine Learning in Industry 4.0. *Sustainability*, 2025, Vol. 17, No. 21, 9412. WOS:001613081300001. <https://doi.org/10.3390/su17219412>. Indexată Q2.
- A.5. **Roșca, C.-M.**, Stancu, A. Innovative AIoT Solutions for PET Waste Collection in the Circular Economy Towards a Sustainable Future. *Applied Sciences*, 2025, Vol. 15, No. 13, 7353. WOS:001526163300001. <https://doi.org/10.3390/app15137353>. Indexată Q2.
- A.6. **Roșca, C.-M.**, Stancu, A., Popescu, M. The Impact of Cloud Versus Local Infrastructure on Automatic IoT-Driven Hydroponic Systems. *Applied Sciences*, 2025, Vol. 15, No. 7, 4016. WOS:001463673500001. <https://doi.org/10.3390/app15074016>. Indexată Q1.
- A.7. **Roșca, C.-M.**, Stancu, A., Tănase M.R. A Comparative Study of Azure Custom Vision Versus Google Vision API Integrated into AI Custom Models Using Object Classification for Residential Waste. *Applied Sciences*, 2025, Vol. 15, No. 7, 3869. WOS:001463719300001. <https://doi.org/10.3390/app15073869>. Indexată Q1.
- A.8. **Roșca, C.-M.**, Rădulescu, G., Stancu, A. Artificial Intelligence of Things Infrastructure for Quality Control in Cast Manufacturing Environments Shedding Light on Industry Changes, *Applied Sciences*, 2025, Vol. 15, No. 4, 2068. WOS:001429889600001. <https://doi.org/10.3390/app15042068>. Indexată Q1.
- A.9. **Roșca, C.-M.**, Stancu, A. Earthquake Prediction and Alert System Using IoT Infrastructure and Cloud-Based Environmental Data Analysis. *Applied Sciences*, 2024, Vol. 14, No. 22, 10169. WOS:001366831400001. <https://doi.org/10.3390/app142210169>. Indexată Q1.

- A.10. Diniță, A, **Roșca, C.-M.**, Tănase M., Stancu, A., Portoacă, A.I. Exploring the Synergy of Machine Learning Integration in 3D Printing and Additive Manufacturing. *IEEE Access*, 2025, Vol. 13, 198016-198033. WOS:001626857700017. <https://doi.org/10.1109/ACCESS.2025.3633943>. Indexată Q2.

B. Teza de doctorat

- B.1. Titlu: *Contribuții privind dezvoltarea unor algoritmi destinați achiziției și prelucrării parametrilor S cu aplicații în îmbunătățirea performanțelor analizoarelor vectoriale de rețea din domeniul microundelor*
Domeniul: Ingineria sistemelor
Distincția: *Magna Cum Laude*
Instituția: Universitatea Petrol-Gaze din Ploiești, Facultatea de Inginerie Mecanică și Electrică, Departamentul de Automatică, Calculatoare și Electronică
Conducător de doctorat: Prof. univ. dr. ing. Paraschiv Nicolae
Conferirea titlului științific de doctor: Ordinul Ministrului Educației Naționale nr.5474 din 14.11.2018

C. Brevete de invenție și alte titluri de proprietate intelectuală

N.A.

D. Cărți și capitole în cărți

- D.1. **Roșca, C.-M.**, Stancu, A. *Impact of Industry 6.0 on Human Cognitive Behavior*. In Carolina Feliciano Machado, J. Paulo Davim (Editors), *From Industry 4.0 to Industry 6.0*, ISTE, Wiley, London, United Kingdom, 2025, pp. 47-80, ISBN 978-1-83669-029-0. <https://doi.org/10.1002/9781394372775.ch3>
- D.2. Stancu, A., **Roșca, C.-M.** *Understanding the Agribusiness Model and Agricultural Value Chain with AI-Driven Technologies*. In Lukman Raimi, Olawale Paul Olatidoye, Thuraya Farhana Hj Said (Editors) *Agripreneurship and the Dynamic Agribusiness Value Chain*. Springer, Singapore, 2024, pp.329-344, Hardcover ISBN 978-981-97-7428-9, Softcover ISBN 978-981-97-7431-9, eBook ISBN 978-981-97-7429-6. https://doi.org/10.1007/978-981-97-7429-6_19.
WordCat <https://search.worldcat.org/title/1474243621?oclcNum=1474243621>
- D.3. **Roșca, C.-M.** *Convergence Catalysts: Exploring the Fusion of Embedded Systems, IoT, and Artificial Intelligence*. In Yang X.S. (Editor) *Engineering Applications of AI and Swarm Intelligence*, Springer, Singapore, 2025, pp 69–87, ISBN 978-981-97-5978-1, Online ISBN 978-981-97-5979-8, https://doi.org/10.1007/978-981-97-5979-8_4
WordCat <https://search.worldcat.org/title/1457623839>
- D.4. **Roșca, C.-M.** *Baze de date Microsoft în T-SQL Lucrări practice*, Editura Universității Petrol-Gaze din Ploiești, 2023, ISBN 978-973-719-888-4, 213 pagini
- D.5. **Roșca, C.-M.** *Instrumente pentru dezvoltarea programelor*, Editura Universității Petrol-Gaze din Ploiești, 2022, ISBN 978-973-719-861-7, 224 pagini.
- D.6. **Roșca, C.-M.**, *Instrumente pentru dezvoltarea programelor folosind mediul Visual Studio*, Editura Universității Petrol-Gaze din Ploiești, 2022, ISBN 978-973-719-841-9, 237 pagini.

- D.7. **Roșca, C.-M.**, Rădulescu G. *Instrumente software pentru studiul sistemelor de operare avansate*, Editura Universității Petrol-Gaze din Ploiești, 2021, ISBN 978-973-719-835-8, 283 pagini.
- D.8. **Roșca, C.-M.** *Fundamentele bazelor de date cu aplicații în MySQL*, Editura Universității Petrol-Gaze din Ploiești, 2019, ISBN 978-973-719-760-3, 235 pagini.
- D.9. Rădulescu, G., Pricop, E., Nicolae, M., **Roșca, C.-M.** *Using Modeling and Dynamic Simulation Technique for Systems' Safety and Security*. In Pricop E., Stamatescu G. (Editors) *Recent Advances in Systems Safety and Security*. Studies in Systems, Decision and Control, vol 62, Springer, Cham, pp. 57-77, Print ISBN 978-3-319-32523-1, Online ISBN 978-3-319-32525-5, Switzerland, 2016. https://doi.org/10.1007/978-3-319-32525-5_4
WordCat <https://search.worldcat.org/title/950884527>
- D.10. **Roșca, C.-M.**, Rădulescu, G. *Sisteme de operare – Lucrări practice*, Editura Universității Petrol-Gaze din Ploiești, 2015, ISBN 978-973-719-590-6, 126 pagini.

E. Articole/studii in extenso publicate în reviste din fluxul științific internațional

- E1. Diniță, A., **Roșca, C.-M.**, Tănase M., Stancu, A., Portoacă, A.I. Exploring the Synergy of Machine Learning Integration in 3D Printing and Additive Manufacturing. *IEEE Access*, 2025, Vol. 13, 198016-198033. WOS:001626857700017. <https://doi.org/10.1109/ACCESS.2025.3633943>. Indexată Q2.
- E2. Diniță, A., **Roșca, C.-M.**, Stancu, A., Popescu, C. Distributed IoT-Based Predictive Maintenance Framework for Solar Panels Using Cloud Machine Learning in Industry 4.0. *Sustainability*, 2025, Vol. 17, No. 21, 9412. WOS:001613081300001. <https://doi.org/10.3390/su17219412>. Indexată Q2.
- E3. **Roșca, C.-M.**, Stancu, A. AI Anomaly-Based Deepfake Detection Using Customized Mahalanobis Distance and Head Pose with Facial Landmarks. *Applied Sciences*, 2025, Vol. 15, No. 17, 9574. WOS:001569539800001. <https://doi.org/10.3390/app15179574>. Indexată Q2.
- E4. **Roșca, C.-M.**, Stancu, A., Popescu, C. Machine Learning Models for SQL Injection Detection. *Electronics*, 2025, Vol. 14, No. 17, 3420. WOS:001569648100001. <https://doi.org/10.3390/electronics14173420>. Indexată Q2.
- E5. Stancu, A., **Roșca, C.-M.**, Iovanovici, E.M. Applications of Machine Learning Algorithms in Geriatrics. *Applied Sciences*, 2025, Vol. 15, No. 15, 8699. WOS:001549027200001. <https://doi.org/10.3390/app15158699>. Indexată Q2.
- E6. Diniță, A., **Roșca, C.-M.**, Tănase, M., Stancu, A. A Comprehensive Review on Bridging the Research Gap in AI-Driven Material Simulation for FRP Composites. *Computer Modeling in Engineering & Sciences*, 2025, Vol. 144, No. 1, pp. 147-199. WOS:001530810800001. <https://doi.org/10.32604/cmescs.2025.066276>. Indexată Q1.
- E7. **Roșca, C.-M.**, Stancu, A. Innovative AIoT Solutions for PET Waste Collection in the Circular Economy Towards a Sustainable Future. *Applied Sciences*, 2025, Vol. 15, No. 13, 7353. WOS:001526163300001. <https://doi.org/10.3390/app15137353>. Indexată Q2.
- E8. **Roșca, C.-M.**, Stancu, A. Anomaly Detection in Elderly Health Monitoring via IoT for Timely Interventions. *Applied Sciences*, 2025, Vol. 15, No. 13, 7272. WOS:001526163700001. <https://doi.org/10.3390/app15137272>. Indexată Q2.

- E9. **Roșca, C.-M.**, Stancu, A. Quality assessment of GPT-3.5 and Gemini 1.0 Pro for SQL syntax. *Computer Standards & Interfaces*, 2026, Vol. 95, 104041. WOS:001522328900001. <https://doi.org/10.1016/j.csi.2025.104041>. Indexată Q2.
- E10. **Roșca, C.-M.**, Stancu, A. Integration of AI in Self-Powered IoT Sensor Systems. *Applied Sciences*, 2025, Vol. 15, No. 13, 7008. WOS:001528679000001. <https://doi.org/10.3390/app15137008>. Indexată Q2.
- E11. **Roșca, C.-M.**, Stancu, A. Emerging Trends in AI-Based Soil Contamination Monitoring and Prevention. *Agriculture*, 2025, Vol. 15, No. 12, 1280. WOS:001515155700001. <https://doi.org/10.3390/agriculture15121280>. Indexată Q1.
- E12. **Roșca, C.-M.**, Stancu, A. A Review of Neuro-ML Breakthroughs in Addressing Neurological Disorders. *Applied Sciences*, 2025, Vol. 15, No. 10, 5442. WOS:001495797100001. <https://doi.org/10.3390/app15105442>. Indexată Q1.
- E13. **Roșca, C.-M.**, Carbureanu, M., Stancu, A. Data-Driven Approaches for Predicting and Forecasting Air Quality in Urban Areas. *Applied Sciences*, 2025, Vol. 15, No. 8, 4390. WOS:001474680900001. <https://doi.org/10.3390/app15084390>. Indexată Q1.
- E14. **Roșca, C.-M.**, Stancu, A., Gortoescu, I.-A. Advanced Sensor Integration and AI Architectures for Next-Generation Traffic Navigation. *Applied Sciences*, 2025, Vol. 15, No. 8, 4301. WOS:001474712900001. <https://doi.org/10.3390/app15084301>. Indexată Q1.
- E15. **Roșca, C.-M.**, Stancu, A., Popescu, M. The Impact of Cloud Versus Local Infrastructure on Automatic IoT-Driven Hydroponic Systems. *Applied Sciences*, 2025, Vol. 15, No. 7, 4016. WOS:001463673500001. <https://doi.org/10.3390/app15074016>. Indexată Q1.
- E16. **Roșca, C.-M.**, Stancu, A., Tănase M.R. A Comparative Study of Azure Custom Vision Versus Google Vision API Integrated into AI Custom Models Using Object Classification for Residential Waste. *Applied Sciences*, 2025, Vol. 15, No. 7, 3869. WOS:001463719300001. <https://doi.org/10.3390/app15073869>. Indexată Q1.
- E17. **Roșca, C.-M.**, Stancu, A. A Comprehensive Review of Machine Learning Models for Optimizing Wind Power Processes. *Applied Sciences*, 2025, Vol. 15, No. 7, 3758. WOS:001463686800001. <https://doi.org/10.3390/app15073758>. Indexată Q1.
- E18. **Roșca, C.-M.**, Stancu, A., Iovanovici, E.M. The New Paradigm of Deepfake Detection at the Text Level. *Applied Sciences*, 2025, Vol. 15, No. 5, 2560. WOS:001442375000001. <https://doi.org/10.3390/app15052560>. Indexată Q1.
- E19. **Roșca, C.-M.**, Rădulescu, G., Stancu, A. Artificial Intelligence of Things Infrastructure for Quality Control in Cast Manufacturing Environments Shedding Light on Industry Changes, *Applied Sciences*, 2025, Vol. 15, No. 4, 2068. WOS:001429889600001. <https://doi.org/10.3390/app15042068>. Indexată Q1.
- E20. **Roșca, C.-M.**, Stancu, A. Fusing Machine Learning and AI to Create a Framework for Employee Well-Being in the Era of Industry 5.0. *Applied Sciences*, 2024, Vol. 14, No. 23, 10835. WOS:001376261600001. <https://doi.org/10.3390/app142310835>. Indexată Q1
- E21. **Roșca, C.-M.**, Stancu, A. Earthquake Prediction and Alert System Using IoT Infrastructure and Cloud-Based Environmental Data Analysis. *Applied Sciences*, 2024, Vol. 14, No. 22, 10169. WOS:001366831400001. <https://doi.org/10.3390/app142210169>. Indexată Q1.
- E22. Gortoescu, I.A., Tănase. M.R., **Roșca, C.-M.** Soluție inteligentă pentru reciclarea alimentară, *Buletinul AGIR*, 2024, Vol. XXIV, Nr. 3, iulie-septembrie, pp. 45-49,

<https://www.agir.ro/buletine/3357.pdf> ISSN 1224-7928, Online ISSN: 2247-3548, ISSN-L 1224-7928, Indexată BDI: EBSCO, Index Copernicus.

- E23. **Roșca, C.-M.**, Stancu, A., Neculaiu, C.-F., Gortoescu, I.A. Designing and Implementing a Public Urban Transport Scheduling System Based on Artificial Intelligence for Smart Cities, *Applied Sciences*, 2024, Vol. 14, No. 19, 8861. WOS:001333804900001. <https://doi.org/10.3390/app14198861>. Indexată Q1.
- E24. **Roșca, C.-M.**, Gortoescu, I.A., Tănase. M.R. Artificial Intelligence – Powered Video Content Generation Tools. *Romanian Journal of Petroleum & Gas Technology*, 2024, Vol. V (LXXVI), No. 1, pp. 131-144. <https://doi.org/10.51865/JPGT.2024.01.10>. Indexată BDI: EBSCO, Index Copernicus, DOAJ.
- E25. **Roșca, C.-M.**, Stancu, A., Ariciu, A.-V. Algorithm for child adoption process using artificial intelligence and monitoring system for children. *Internet of Things*, 2024, Vol. 26, 101170, WOS:001222347600001. <https://doi.org/10.1016/j.iot.2024.101170>. Indexată Q1.
- E26. **Roșca, C.-M.** Gereă, A.E., Bold, R.A. Innovative Project Management Tool with Azure Services. *Journal of Electrical Engineering, Electronics, Control and Computer Science*, 2023, Vol 9, No 34, pp. 25-30. <https://jeeccs.net/index.php/journal/article/view/353/256>. Indexată BDI: Index Copernicus, CiteFactor.
- E27. **Roșca, C.-M.** Comparative Analysis of Object Classification Algorithms: Traditional Image Processing Versus Artificial Intelligence – Based Approach. *Romanian Journal of Petroleum & Gas Technology*, 2023, Vol. IV (LXXV), No. 2, pp. 169-180. <https://doi.org/10.51865/JPGT.2023.02.17>. Indexată BDI: EBSCO, Index Copernicus, DOAJ.
- E28. **Roșca, C.-M.**, Ariciu, A.V. Unlocking Customer Sentiment Insights with Azure Sentiment Analysis: A Comprehensive Review and Analysis. *Romanian Journal of Petroleum & Gas Technology*, 2023, Vol. IV (LXXV), No. 1, pp. 173-182. <https://doi.org/10.51865/JPGT.2023.01.15>. Indexată BDI: EBSCO, Index Copernicus, DOAJ.
- E29. **Roșca, C.-M.**, Popescu, M., Patrascioiu, C., Stancu, A. Comparative Analysis of pH Level Between Pasteurized and UTH Milk Using Dedicated Developed Application. *Revista de Chimie*, 2019, Vol. 70, No. 11, pp. 3917-3920. WOS:000503185300029. <https://revistadechimie.ro/pdf/29%20ROSCA%20C%2011%2019.pdf>. Indexată Q3.
- E30. **Roșca, C.-M.**, Nedelcu, A.S. Automated Assessment Systems for Database Programming Skills. *Petroleum-Gas University of Ploiesti Bulletin, Technical Series*, 2019, Vol. LXXI, No.1, pp.11-18. Indexată BDI: EBSCO, Index, DOAJ.
- E31. **Roșca, C.-M.** Vector Network Analyzer Monitoring System Using Raspberry Pi. *Petroleum-Gas University of Ploiesti Bulletin, Technical Series*, 2018, Vol. LXX, No. 1, pp.29-38. Indexată BDI: EBSCO, Index, DOAJ.
- E32. **Roșca, C.-M.** Improved Rational Interpolation Model for Microwave Measurements. *Petroleum-Gas University of Ploiesti Bulletin, Technical Series*, 2017, Vol. LXIX, No. 4, pp.79-90. Indexată BDI: EBSCO, Index, DOAJ.
- E33. **Roșca, C.-M.**, Voicilă, E.B. 3D Algorithm for Real Time Human Body Tracking with Kinect Device. *Petroleum-Gas University of Ploiesti Bulletin, Technical Series*, 2017, Vol. LXIX, No. 3, pp.85-92. Indexată BDI: EBSCO, Index, DOAJ.
- E34. **Roșca, C.-M.**, Voicu, A. Speech Recognition for Task Control of an Embedded System on Raspberry Pi. *Petroleum-Gas University of Ploiesti Bulletin, Technical Series*, 2017, Vol. LXIX, No. 3, pp.77-84. Indexată BDI: EBSCO, Index, DOAJ.

- E35. **Roșca, C.-M.**, Voicilă, E. Real Time Algorithm for Human Body Tracking with Kinect Device. *Petroleum-Gas University of Ploiesti Bulletin, Technical Series*, 2016, Vol. LXVIII, No. 3, pp.62-69. Indexată BDI: EBSCO, Index, DOAJ.
- E36. **Roșca, C.-M.**, Rădulescu, G. Basic Problems Involved by Generating Tridimensional Multimedia Content. *Petroleum-Gas University of Ploiesti Bulletin, Technical Series*, 2015, Vol. LXVII, No. 3, pp.79-84. Indexată BDI: EBSCO, Index, DOAJ.

F. Publicații in extenso apărute în lucrări ale principalelor conferințe internaționale de specialitate

- F.1. **Roșca C.-M.**, Cărbureanu, M. *A Comparative Analysis of Sorting Algorithms for Large-Scale Data: Performance Metrics and Language Efficiency*. In: Noor, A., Saroha, K., Pricop, E., Sen, A., Trivedi, G. (eds) Proceedings of 4th International Conference Emerging Trends and Technologies on Intelligent Systems, March 27-28, 2024, New Delhi, India. ETTIS 2024. Lecture Notes in Networks and Systems, vol. 1073, Springer, Singapore, 2025, pp 99–113. https://doi.org/10.1007/978-981-97-5703-9_8. Indexată Scopus.
- F.2. **Roșca C.M.**, Bold, R-A., Gerea, A-E. *A Comprehensive Patient Triage Algorithm Incorporating ChatGPT API for Symptom-Based Healthcare Decision-Making*. In: Noor, A., Saroha, K., Pricop, E., Sen, A., Trivedi, G. (eds) Proceedings of 4th International Conference Emerging Trends and Technologies on Intelligent Systems, March 27-28, 2024, New Delhi, India. ETTIS 2024. Lecture Notes in Networks and Systems, vol. 1073, Springer, Singapore, 2025, pp. 167–178. https://doi.org/10.1007/978-981-97-5703-9_13. Indexată Scopus.
- F.3. **Roșca C.-M.** *New Algorithm to Prevent Online Test Fraud Based on Cognitive Services and Input Devices Events*. In: Noor, A., Saroha, K., Pricop, E., Sen, A., Trivedi, G. (eds) Proceedings of Third Emerging Trends and Technologies on Intelligent Systems, Feb 23-24, 2023, New Delhi, India. ETTIS 2023. Lecture Notes in Networks and Systems, vol. 730. Springer, Singapore, pp 207–219. https://doi.org/10.1007/978-981-99-3963-3_17. Indexată Scopus.
- F.4. **Roșca C.M.**, Stancu A. *Real-time betting algorithm for tennis matches*. In 14th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), 30 June - 01 July 2022, Ploiesti, Romania, Electronic ISBN: 978-1-6654-9535-6, USB ISBN:978-1-6654-9534-9, Print on Demand(PoD) ISBN: 978-1-6654-9536-3, pp. 1-4 <https://doi.org/10.1109/ECAI54874.2022.9847483>. Indexată IEEE Proceedings.
- F.5. **Roșca C.-M.**, Paraschiv N. *Comparative analysis among frequency sampling algorithm applied in microwave measurements*. In 22nd International Conference on System Theory, Control and Computing (ICSTCC), October 10 - 12, 2018, Sinaia, România, ICSTCC Proceedings, pp. 816-821, Electronic ISBN: 978-1-5386-4444-7, USB ISBN: 978-1-5386-4443-0, Print on Demand(PoD) ISBN: 978-1-5386-4445-4. WOS:000465109800134. <https://doi.org/10.1109/ICSTCC.2018.8540696>. Indexată WOS.
- F.6. **Roșca C.-M.**, Paraschiv N. *Frequency sampling algorithm applied in microwave measurements based on extreme points*. In 10th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), 28-30 June 2018, Iasi, Romania, ECAI Proceedings, pp. 1-6, Electronic ISBN: 978-1-5386-4901-5, USB ISBN: 978-1-5386-4900-8, Print on Demand(PoD) ISBN: 978-1-5386-4902-2. WOS:000467734100095. <https://doi.org/10.1109/ECAI.2018.8679025>. Indexată WOS.

- F.7. **Roșca, C.-M**, Paraschiv, N. *Frequency Sampling Algorithm Applied in Microwave Measurements*. In 21st International Conference on System Theory, Control and Computing (ICSTCC), October 19 - 21, 2017, Sinaia, România, ICSTCC Proceedings, pp. 328-333, Electronic ISBN: 978-1-5386-3842-2, USB ISBN: 978-1-5386-3841-5, Print on Demand(PoD) ISBN: 978-1-5386-3843-9. WOS:000427419900053. <https://doi.org/10.1109/ICSTCC.2017.8107055>. Indexată WOS.
- F.8. **Roșca, C.-M**, Paraschiv, N. *Frequency sampling algorithm applied in microwave measurements based on step – size control method*. In 8th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), 30 June-2 July, 2016, Ploiești, Romania, ECAI Proceedings, pp. 1-4, Electronic ISBN: 978-1-5090-2047-8, DVD ISBN: 978-1-5090-2044-7, Print on Demand(PoD) ISBN: 978-1-5090-2048-5. WOS:000402541200040. <https://doi.org/10.1109/ECAI.2016.7861104>. Indexată WOS.
- F.9. **Roșca, C.-M**, Paraschiv, N. *Increased speed in microwave measurements based on spline interpolation model*. In 13th International Conference on Development and Application Systems (DAS), 19-21 May 2016, Suceava, Romania, DAS Proceedings, pp.166-171, Electronic ISBN: 978-1-5090-1993-9, DVD ISBN: 978-1-5090-1992-2. WOS:000383222200028. <https://doi.org/10.1109/DAAS.2016.7492567>. Indexată WOS.
- F.10. **Roșca, C.-M**, Rădulescu, G. *Reduced time microwave filter tuning*. In 7th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), 25-27 June, 2015, Bucharest, Romania, ECAI Proceedings, pp.9-12, Electronic ISBN: 978-1-4673-6647-2, Print ISBN: 978-1-4673-6646-5, DVD ISBN: 978-1-4673-6645-8. WOS:000370971100062. <https://doi.org/10.1109/ECAI.2015.7301197>. Indexată WOS.

G. Premii

- G.1. *Tânăr cercetător (sub 45 de ani)*, Gala Cercetării 2025, Ediția a III-a, Universitatea Petrol-Gaze din Ploiești
- G.2. *Impact Factor Cumulat*, Gala Cercetării 2025, Ediția a III-a, Universitatea Petrol-Gaze din Ploiești
- G.3. *Exceptional Reviewer 2025*, Symmetry, MDPI;
- G.4. *Diploma Student Innovation Award* la Festival of Innovation and Technological Transfer, FITT-Muntenia 2025, 17-20 Noiembrie 2025, Târgoviște, Romania. Lucrarea: Evaluating Speech-to-Text Accuracy in AI-Based Audio Processing Systems. Autori: Ardeleanu V.-G., Boștiog I.-A., Roșca C.-M.
- G.5. *Silver Medal Diploma* la Festival of Innovation and Technological Transfer, FITT-Muntenia 2025, 17-20 Noiembrie 2025, Târgoviște, Romania. Lucrarea: Rosca C.M., Stancu, A. Quality assessment of GPT-3.5 and Gemini 1.0 Pro for SQL syntax. Computer Standards & Interfaces, 2026, Vol. 95, 104041. WOS:001522328900001. <https://doi.org/10.1016/j.csi.2025.104041>
- G.6. *Gold Medal Diploma* la Festival of Innovation and Technological Transfer, FITT-Muntenia 2025, 17-20 Noiembrie 2025, Târgoviște, Romania. Lucrarea: Evaluating Speech-to-Text Accuracy in AI-Based Audio Processing Systems. Autori: V.-G., Boștiog I.-A., Roșca C.-M
- G.7. *Best Paper* la International Conference on Emerging Trends and Technologies on Intelligent Systems (ETTIS-2025), 19-21 martie, 2025, New Delhi, India pentru lucrarea Cărbureanu, M., Rosca C.-M. *Evaluating Wastewater pH Prediction Solutions in Custom Python and C# Models*.

- G.8. *Femeia cercetător*, Gala Cercetării 2024, Ediția a II-a, Universitatea Petrol-Gaze din Ploiești
- G.9. *Best Paper* la International Conference on Emerging Trends and Technologies on Intelligent Systems (ETTIS-2024), 27-28 martie, 2024, New Delhi, India pentru lucrarea Roșca, C.-M., Cărbureanu, M. *A Comparative Analysis of Sorting Algorithms for Large-Scale Data: Performance Metrics and Language Efficiency*. In: Noor, A., Saroha, K., Pricop, E., Sen, A., Trivedi, G. (eds) Proceedings of 4th International Conference Emerging Trends and Technologies on Intelligent Systems, March 27-28, 2024, New Delhi, India. ETTIS 2024. Lecture Notes in Networks and Systems, vol. 1073, Springer, Singapore, 2025, pp 99–113. https://doi.org/10.1007/978-981-97-5703-9_8, indexată Scopus,
- G.10. *Best Paper* la International Conference on Emerging Trends and Technologies on Intelligent Systems (ETTIS-2023), 23-24 februarie, 2023, New Delhi, India, pentru lucrarea Roșca, C.-M. *New Algorithm to Prevent Online Test Fraud Based on Cognitive Services and Input Devices Events*. In: Noor, A., Saroha, K., Pricop, E., Sen, A., Trivedi, G. (eds) Proceedings of Third Emerging Trends and Technologies on Intelligent Systems, Feb 23-24, 2023, New Delhi, India. ETTIS 2023. Lecture Notes in Networks and Systems, vol. 730. Springer, Singapore, pp 207–219. https://doi.org/10.1007/978-981-99-3963-3_17, indexată Scopus.

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