

Listă lucrări științifice – Iulian VASILIEV

Teza de doctorat:

1. I. Vasiliev, „Optimal control of an integrating system consisting of a sewer network and a wastewater treatment plant”, conducători doctorat: prof. dr. ing. Sergiu Caraman (Universitatea Dunărea de Jos din Galați) și prof. dr. ing. Ramon Vilanova (Universitatea Autonomă din Barcelona), 2024

Articole în reviste cotate ISI

1. S. Caraman, L. Luca, **I. Vasiliev**, și M. Barbu, “Optimal-Setpoint-Based Control Strategy of a Wastewater Treatment Process,” *Processes*, vol. 8, no. 10, p. 1203, 2020, doi: 10.3390/pr8101203, **Indexat ISI, IF 2.8, Q2**
2. **I. Vasiliev**, L. Luca, M. Barbu, R. Vilanova, și S. Caraman, “Optimal Control Strategy of a Sewer Network,” *Water*, vol. 14, no. 7, p. 1062, Mar. 2022, doi: 10.3390/w14071062, **Indexat ISI, IF 3, Q2**
3. **I. Vasiliev**, L. Luca, M. Barbu, R. Vilanova, și S. Caraman, “Reducing the environmental impact of sewer network overflows using Model Predictive Control strategy,” *Water Resources Research*, vol. 60, no. 1, p. e2023WR035448, 2024, doi: 10.1029/2023WR035448, **Indexat ISI, IF 4.6, Q1**
4. **I. Vasiliev**, L. Luca, M. Barbu, R. Vilanova, și S. Caraman, “Integrated Urban Wastewater System operation: Performance evaluation and Sewer Network’s operation implications,” *Water Science and Technology*, vol 90, no. 7, p. 2054–2069, 2024, doi: 10.2166/wst.2024.309, **Indexat ISI, IF 2.5, Q2**

Articole în reviste cotate BDI:

1. **I. Vasiliev**, L. Luca, M. Barbu, R. Vilanova, și S. Caraman, “Sewer Network Multi-Objective Optimization using Genetic Algorithms,” *System Theory, Control and Computing Journal*, Jun. 2023, doi: 0.52846/stccj.2023.3.1.49

Articole prezentate în conferințe internaționale indexate:

1. L. Luca, A. Pricopie, **I. Vasiliev**, M. Barbu și S. Caraman, “Fuzzy-Optimal Control Strategies for a Wastewater Treatment Plant,” *International Conference on System Theory, Control and Computing (ICSTCC)*, Sinaia, 2020, doi: 10.1109/ICSTCC50638.2020.9259792, **IEEE, ISI Proceedings**
2. **I. Vasiliev**, L. Luca, M. Barbu, A. Pricopie, și S. Caraman, “Mathematical Model of a Collecting and Wastewater Treatment Integrated System,” *International Conference on System Theory, Control and Computing (ICSTCC)*, Iași, 2021, doi: 10.1109/ICSTCC52150.2021.9607086, **IEEE, ISI Proceedings**
3. **I. Vasiliev**, L. Luca, M. Barbu, R. Vilanova, și S. Caraman, “Sewer Network Model of a City with a Medium Sized Population,” *23rd International Carpathian Control Conference*, Sinaia, 2022, doi: 10.1109/ICCC54292.2022.9805864, **IEEE, ISI Proceedings**
4. **I. Vasiliev**, L. Luca, R. Vilanova, și S. Caraman, “Sewer Network Modelling and Control – A Literature Review,” in *2022 26th IEEE International Conference on System Theory, Control and Computing (ICSTCC)*, 2022, pp. 58–63. doi: 10.1109/ICSTCC55426.2022.9931870, **IEEE, ISI Proceedings**

5. **I. Vasiliev**, L. Luca, R. Vilanova, și S. Caraman, "Optimal Control of a Sewer Network," in *2022 26th IEEE International Conference on System Theory, Control and Computing (ICSTCC)*, 2022, pp. 58–63. doi: 10.1109/ICSTCC55426.2022.9931810, **IEEE, ISI Proceedings**
6. **I. Vasiliev**, L. Frangu, și M. L. Cristea, "Pump Fault Detection Using Autoencoding Neural Network," *23rd International Carpathian Control Conference*, Sinaia, 2022, doi: 10.1109/ICSTCC55426.2022.9931848, **IEEE, ISI Proceedings**
7. **I. Vasiliev**, L. Luca, M. Barbu, R. Vilanova, și S. Caraman, "Sliding Window-based Particle Swarm Optimization Algorithm for a Sewer Network," in *21st IFAC European Control Conference*, Jun. 2023, doi: 10.23919/ECC57647.2023.10178171, **IFAC, ISI Proceedings**
8. **I. Vasiliev**, L. Luca, M. Barbu, R. Vilanova, și S. Caraman, "An analysis towards integrated control of wastewater collecting and treatment systems," in *2023 27th International Conference on System Theory, Control and Computing (ICSTCC)*, 2023, pp. 233–238. doi: 10.1109/ICSTCC59206.2023.10308495, **IEEE**
9. A. E. Țîru, **I. Vasiliev**, L. Diaconu, R. Vilanova, D. Voipan, și H. Ratnaweera, "Integration of ANN for Accurate Estimation and Control in Wastewater Treatment," in *2023 IEEE 28th International Conference on Emerging Technologies and Factory Automation (ETFA)*, Sep. 2023, pp. 1–4. doi: 10.1109/ETFA54631.2023.10275569, **IEEE**
10. **I. Vasiliev**, I. Luca, L. Condrachi, L. Luca, M. Barbu, R. Vilanova, și S. Caraman, "Model Predictive Control of a wastewater treatment process using neural networks," in *2023 IEEE 28th International Conference on Emerging Technologies and Factory Automation (ETFA)*, Sep. 2023, pp. 1–7. doi: 10.1109/ETFA54631.2023.10275488, **IEEE**
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12. D. Voipan, **I. Vasiliev**, L. Condrachi, A.-E. Voipan, și M. Barbu, "Enhancing effluent quality predictions in wastewater treatment with LSTM neural network," in *2024 28th International Conference on System Theory, Control and Computing (ICSTCC)*, 2024

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