

LIST OF SCIENTIFIC PUBLICATIONS

→ Articles in WoS-indexed, IF-journals

1. A. Ciorîță, M. Suciu, A. M. Rostas, A. Tarța., G. Popovici, M. Bocăneală, F. Nekvapil, S. G. Macavei, M. Potara, I. Marica, I. Kacso, C. S. Moldovan, R. I. Știuțuc, C. S. Tuta, S.C. Pînzaru, & L. Barbu-Tudoran. Interaction of Low-Density Polyethylene Nanofragments with Autotrophic and Chemotrophic Bacteria. *ACS Sustainable Chemistry and Engineering*. **2024**; 12 (29): 10831–10840.
2. I. Marica, S.C. Pînzaru. A Raman spectral database of naturally aged plastics: A proof-of-concept study for waste plastic sorting. *J. Raman Spectrosc.* **2023**; 54, 305–313.
3. I. Nesterovschi, I. Marica, E. Andrea Levei, S. Bogdan Angyus, M. Kenesz, O. Teodora Moldovan, S. C. Pînzaru. Subterranean transport of microplastics as evidenced in karst springs and their characterization using Raman spectroscopy. *Spectrochim. Acta Part A Mol. Biomol. Spectrosc.* **2023**; 298, 122811.
4. I. Marica., M. Stefan, S. Boca, A. Falamaș, C. Farcău. A simple approach for coffee-ring suppression yielding homogeneous drying patterns of ZnO and TiO₂ nanoparticles. *J. Colloid Interface Sci.* **2023**; 635, 117–127.
5. A. Falamas, I. Marica, F. Nekvapil, M. Stefan, G.S. Macavei, L. Barbu-Tudoran, C. Farcau. Surface enhanced fluorescence potential of ZnO nanoparticles and gold decorated ZnO nanostructures embedded in a polyvinyl alcohol matrix. *J. Photochem. Photobiol. A Chem.* **2023**; 438, 114516.
6. I. Marica, M. Aluaș, S. Cîntă Pînzaru. Raman technology application for plastic waste management aligned with FAIR principle to support the forthcoming plastic and environment initiatives. *Waste Manag.* **2022**; 144, 479–489.
7. I. Marica, F. Nekvapil, M. Ștefan, C. Farcău, A. Falamaș. Zinc oxide nanostructures for fluorescence and Raman signal enhancement: a review. *Beilstein J. Nanotechnol.* **2022**; 1340 13, 472–490.
8. A. Falamas, I. Marica, A. Popa, D. Toloman, S. Pruneanu, F. Pogacean, F. Nekvapil, T. D. Silipas, M. Stefan. Size-dependent spectroscopic insight into the steady-state and time-resolved optical properties of ZnO photocatalysts. *Mater. Sci. Semicond. Process.* **2022**; 145, 106644.
9. F. Nekvapil, M. Stefan, I. Marica, A. Falamaș. A novel observation upon the near-resonant Raman excitation of zinc oxide nanoparticles: Widening of the E2(high) band. *J. Raman Spectrosc.* **2022**; 53, 872–879.

→ Other articles indexed WoS

10. I. Marica, M. Aluas, S.C. Pinzaru. The management and stewardship of medical plastic waste using raman spectroscopy to sustain circular economy. 7th E-Health Bioeng. *Conf. EHB 2019*. **2019**. ISSN 2575-5137 (WoS, Proceedings Paper)