

Published papers by Laser Spectroscopy and Optics Group on 2022

1. Nastasa, V.; Smarandache, A.; Pirvulescu, R.; Andrei, I.R.; Simion, G.; Popescu, G.; Pascu, M.L. Eye Tumor Tissues Imaging with White Light Diffraction Phase Microscopy. **Romanian Reports in Physics** 74, 604 (2022).
2. Mahmood, M.A.; Ur Rehman, A.; Ishfaq, K.; Popescu, A.C.; Bojan, M.; Mihailescu, I.N. Grain-Based Morphological Simulation via Fractal Theory with Experimental Verification and Corresponding Optical Properties in Laser Melting Deposition Additive Manufacturing: A Demystified Approach. **Applied Mathematical Modelling** 109, 304–317 (2022).
3. Negut, I.; Ristoscu, C.; Tozar, T.; Dinu, M.; Parau, A.C.; Grumezescu, V.; Hapenciuc, C.; Popa, M.; Stan, M.S.; Marutescu, L.; et al. Implant Surfaces Containing Bioglasses and Ciprofloxacin as Platforms for Bone Repair and Improved Resistance to Microbial Colonization. **Pharmaceutics** 14, 1175 (2022).
4. Prepelita, P.; Garoi, F.; Dumitru, M.; Craciun, V. Implementation of Ag/ SiO₂ Nanofilms for Metamaterial Engineering. **Results in Physics** 35, 105387 (2022).
5. Dumitrascu, F.; Udrea, A.-M.; Caira, M.R.; Nuta, D.C.; Limban, C.; Chifiriuc, M.C.; Popa, M.; Bleotu, C.; Hanganu, A.; Dumitrescu, D.; et al. In Silico and Experimental Investigation of the Biological Potential of Some Recently Developed Carprofen Derivatives. **Molecules** 27, 2722 (2022).
6. Sima, A.; Logofatu, P.C.; Pascu, M.L.; Nicolae, I. Monitoring Droplet Evaporation via Real-Time Digital Holographic Interferometry Using a Phase Only Spatial Light Modulator. **Romanian Reports in Physics** 74, 402 (2022).
7. Garoi, F.; Nicolae, I.; Prepelita, P. Monochromatic Light Measurement via Geometric Phase and Fourier-Transform Spectroscopy Method. **Sci Rep** 12, 12922 (2022).
8. Craciun, C.; Andrei, F.; Bonciu, A.; Brajnicov, S.; Tozar, T.; Filipescu, M.; Palla-Papavlu, A.; Dinescu, M. Nitrites Detection with Sensors Processed via Matrix-Assisted Pulsed Laser Evaporation. **Nanomaterials** 12, 1138 (2022).
9. Tozar, T.; Nistorescu, S.; Boni, M.; Gradisteanu Pircalabioru, G.; Negut, I.; Staicu, A. Pulsed Laser Photo-Crosslinking of Gelatin Methacryloyl Hydrogels for the Controlled Delivery of Chlorpromazine to Combat Antimicrobial Resistance. **Pharmaceutics** 14, 2121 (2022).
10. Sandu, I.; Fleaca, C.T.; Dumitrache, F.; Sava, B.A.; Urzica, I.; Antohe, I.; Brajnicov, S.; Dumitru, M. Shaping in the Third Direction; Fabrication of Hemispherical Micro-Concavity Array by Using Large Size Polystyrene Spheres as Template for Direct Self-Assembly of Small Size Silica Spheres. **Polymers** 14, 2158 (2022).
11. Dinache, A.; Nistorescu, S.; Tozar, T.; Smarandache, A.; Boni, M.; Prepelita, P.; Staicu, A. Spectroscopic Investigations of Porphyrin-TiO₂ Nanoparticles Complexes. **Molecules** 28, 318 (2022).
12. Simon, Á.; Tozar, T.; Smarandache, A.; Boni, M.; Stoicu, A.; Dowson, A.; van Loon, J.J.W.A.; Pascu, M.L. Stability Studies of UV Laser Irradiated Promethazine and Thioridazine after Exposure to Hypergravity Conditions. **Molecules** 27, 1728 (2022).
13. Leulescu, M.; Pălărie, I.; Rotaru, A.; Moanță, A.; Cioateră, N.; Popescu, M.; Iacobescu, G.; Morîntale, E.; Bojan, M.; Ciocîlteu, M.; et al. Sunset Yellow: Physical, Thermal and Bioactive Properties of the Widely Employed Food, Pharmaceutical and Cosmetic Orange Azo-Dye Material. **J Therm Anal Calorim** 148, 1265–1287 (2022).
14. Udrea, A.-M.; Dinache, A.; Staicu, A.; Avram, S. Target Prediction of 5,10,15,20-Tetrakis(4'-Sulfonatophenyl)-Porphyrin Using Molecular Docking. **Pharmaceutics** 14, 2390 (2022).
15. Sandu, I.; Fleaca, C.T.; Dumitrache, F.; Sava, B.A.; Urzica, I.; Antohe, I.; Brajnicov, S.; Dumitru, M. Shaping in the Third Direction; Synthesis of Patterned Colloidal Crystals by Polyester Fabric-Guided Self-Assembly. **Polymers** 2021, 13, 4081.