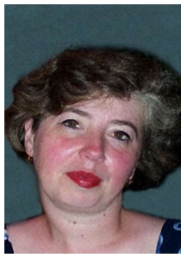

Dr. Mioara Drobotă

Scientific researcher
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Research topics

Surface functionalization with different methods (UV, plasma and chemical) of polyesters, to obtain materials (films, polymeric membranes, and in combination with different nanoparticles) with increased biocompatibility (immobilized with different protein) for biomedical applications with various design. Characterization of different polymeric substrates using Microscope – FTIR Lumos.

Scientific research

Author and co-author of 45 ISI articles, 3 book chapters, 9 articles in proceedings, 25 posters and member of the research teams in 8 research grants; Responsible for service contract (structural analysis of materials, interpretation of spectra using FTIR spectroscopy)

Important publications:

1. M. Drobota, M. Butnaru, N. Vornicu, O. Plopa and M. Aflori; Advances in Polymer Technology Vol. 2020, Article ID 4504062

Facile Method for Obtaining Gold-Coated Polyester Surfaces with Antimicrobial Properties;

https://doi.org/10.1155/2020/4504062

2. M. Drobota, S. Vlad, L. Gradinaru, M. Butnaru and G. Pircalabioru; Cellulose Chem. Technol., 53 (3-4), 211-218 (2019)

Investigation of properties of nanofibers from collagen and polyethylene terephthalate using a natural cross-linker;

3. M. Drobota, L.M. Gradinaru, C. Ciobanu, I. Stoica; Journal of Adhesion Science and Technology, Vol. 29, No. 20, 2208–2219, (2015)

Collagen immobilization on poly(ethylene terephthalate) and polyurethane films after UV functionalization; https//DOI: 10.1080/01694243.2015.1060062

4. M. Aflori, M. Drobota; Romanian Reports in Physics 69, 603 (2017)

Antimicrobial effect on pet films obtained by plasma and silver nitrate/collagen treatment