



an Open Access Journal by MDPI

Advances in Polymer Nanocomposites: Fabrication, Characterization and Multifunctional Applications

Guest Editors:

Prof. Dr. Georgios C. Psarras

Department of Materials Science,
School of Natural Sciences,
University of Patras, 26504
Patras, Greece

Dr. Anastasios C. Patsidis

Department of Materials Science,
School of Natural Sciences,
University of Patras, 26504
Patras, Greece

Deadline for manuscript
submissions:

closed (10 March 2023)

Message from the Guest Editors

Dear Colleagues,

Polymer nanocomposites are an important novel class of engineering materials in both everyday life and high-tech applications. The versatility of the employed polymer matrices (thermoplastics, thermosets, elastomers, biopolymers, polymer blends, etc.) and the reinforcing phases (inorganic/organic nanofibers, nanotubes, nanoparticles, 2D nano-inclusions, etc.) provides an enormous number of possible nanocomposites with properties which can be tailored or adjusted according to the applications' specifications.

This Special Issue welcomes original research and review papers presenting experimental or theoretical/computational studies of all kinds of polymer-based nanocomposites. Design and fabrication, thermo-mechanical performance, fire retardants, biological systems, biomedical applications, electrical engineering devices, stimuli-responsive materials, smart materials, structure-properties relationships, polymer matrix nanocomposites and hybrids and all current and forthcoming applications comprise a short list of the possible subjects for this Special Issue.

Prof. Dr. Georgios C. Psarras

Dr. Anastasios C. Patsidis

Guest Editors



mdpi.com/si/99181

Special Issue



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank: JCR - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Materials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/materials
materials@mdpi.com
[X@Materials_Mdpi](https://twitter.com/Materials_Mdpi)