nanomaterials

IMPACT FACTOR 5.3

Indexed in: PubMed

CITESCORE 7.4

an Open Access Journal by MDPI

Polymer Based Nanocomposites: Experiment, Theory and Simulations

Guest Editor:

Prof. Dr. Kostas Karatasos
Physical Chemistry Laboratory, Chemical Engineering Department, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece

Deadline for manuscript submissions:
closed (10 December 2023)

Message from the Guest Editor

Dear Colleagues,

Polymer-based nanocomposites have emerged as particularly promising materials for a wide range of applications in industry, environmental processes, biomedicine, energy production and storage, and electronics. The possibility of combining polymer and nanofiller properties in order to produce new materials with desirable physicochemical behavior, as well as controllable thermal, mechanical, and electrical responses, in a cost-effective manner is based on our ability to understand the structure-property relation stemming from the fundamental interactions at the nanoscale. It is necessary that analytical theory, simulations, and experimental studies are utilized in a synergistic manner towards the establishment of well-defined protocols to predict static, dynamic, and thermodynamic properties under different physicochemical environments and external stimuli. This Special Issue encourages the submission of manuscripts which present new developments on the fabrication procedures, analytical descriptions, and computational models of such materials. Efforts which follow complementary experimental and/or theoretical/simulational approaches are particularly welcome.

nanomaterials

IMPACT FACTOR 5.3 | Indexed in: PubMed | CITESCORE 7.4

an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Shirley Chiang
Department of Physics, University of California Davis, One Shields Avenue, Davis, CA 95616-5270, USA

Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call "nanomaterials". These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal–organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

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, CAPlus / SciFinder, Inspec, and other databases.
Journal Rank: JCR - Q1 (*Physics, Applied*) / CiteScore - Q1 (*General Chemical Engineering*)

Contact Us

Nanomaterials Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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

mdpi.com/journal/nanomaterials
nanomaterials@mdpi.com
𝕏@nano_mdpi