Special Issue

Self-Assembled Nanocomposites and Nanostructures for Environmental and Energic Applications

Message from the Guest Editors

Self-assembled nanocomposites and nanostructures are currently attracting considerable interest from the fields of environment and energy due to their chemical structures and components/functional groups. The variety of self-assembled nanostructured materials and composites (particles, films, gels, composites, etc.) display significantly different relative chemical reactions and modifications, as well as application performance (e.g., new chemical reactions, organic semiconductors, photovoltaic technology, photocatalysts, biosensors, and energy materials for fuel cells and batteries). In this Special Issue, we cordially invite investigators to contribute original research and review articles that will improve our understanding of the key scientific and technological problems in new chemical reactions and modifications, as well as relative environmental/energic applications of self-assembled nanocomposites and nanostructures.

Guest Editors

Prof. Dr. Tifeng Jiao

Prof. Dr. Byoung-Suhk Kim

Prof. Dr. Peizhi Guo

Prof. Dr. Bingbing Li

Deadline for manuscript submissions

31 December 2025



Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3 CiteScore 9.2 Indexed in PubMed



mdpi.com/si/154581

Nanomaterials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
nanomaterials@mdpi.com

mdpi.com/journal/nanomaterials





Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3 CiteScore 9.2 Indexed in PubMed



About the Journal

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 nanometerscale 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.

Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones

School of Geography, Earth and Environmental Science, University of Birmingham, Birmingham B15 2TT, UK

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 - Q2 (Physics, Applied) / CiteScore - Q1 (General Chemical Engineering)

