Special Issue

Polymer-Based Nanomaterials for Pharmaceutical, Biomedical and Environmental Applications—New Trends, Benefits and Future Opportunities

Message from the Guest Editors

Natural or synthetic polymer-based nanomaterials offer a versatile platform with unique properties that make them promising candidates for various applications, especially in the fields of biomedicine and environmental science. The ability to tailor their properties, such as specific surface area, flexibility, high biological safety and, depending on the polymer, tailored (bio)degradation, allows for precise design and customization for specific functions, including drug delivery, imaging, and environmental remediation. These materials have opened up new possibilities for advanced technologies that can address complex challenges in healthcare and environmental sustainability. This Special Issue focuses to present the wide field and the utilization of polymer-based nanomaterials for pharmaceutical, biomedical and environmental applications. We encourage authors to contribute original research articles and review articles covering the recent progress on polymer-based nanomaterials to present the potential of these materials in the above-mentioned fields.

Guest Editors

Dr. Joanna Rydz

Dr. Marta Musioł

Dr. Barbara Zawidlak-Węgrzyńska

Deadline for manuscript submissions

29 August 2025

Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed

mdpi.com/si/203040

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

mdpi.com/journal/nanomaterials

MDPI

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 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.

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)