

## Special Issue

# Synthesis, Structures and Properties of Polymer Nanocomposites

### Message from the Guest Editors

Polymer nanocomposites (PNCs) have emerged as cost-efficient, lightweight, and highly versatile materials for numerous technological applications in fields such as aerospace, automotive, membranes, optoelectronics, batteries, catalysts, and biomedical devices. These materials, which can be tailor-made for specific target functionalities, structures, properties, and performance criteria, have enabled rapid advances in frontier technologies beyond what polymers in their virgin formulations would provide. The aim of the current Special Issue is to disseminate recent progress made in the design, synthesis, characterization, manufacturing, and testing of PNCs for different technological applications. Submission of original works in all aspects of PNCs, such as chemistry, physics, rheology, multifunctionality, manufacturing, recycling, and product design, is welcome.

---

### Guest Editors

Dr. Sasan Nouranian

Department of Chemical Engineering, University of Mississippi, University, MS, USA

Dr. Mohammed Majdoub

Center for Graphene Research and Innovation, University of Mississippi, Oxford, MS 38677, USA

---

### Deadline for manuscript submissions

closed (25 October 2024)



## Nanomaterials

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.3  
CiteScore 9.2  
Indexed in PubMed



[mdpi.com/si/199230](https://mdpi.com/si/199230)

*Nanomaterials*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[nanomaterials@mdpi.com](mailto:nanomaterials@mdpi.com)

[mdpi.com/journal/  
nanomaterials](https://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](https://mdpi.com/journal/nanomaterials)



## 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. We are proud of our increasing impact factor and ability to provide rapid decisions to authors.

---

### 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, CAPIus / SciFinder, Inspec, and other databases.

#### Journal Rank:

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