

Special Issue

Hierarchical Nanostructured Materials for Multifunctional Applications (Second Edition)

Message from the Guest Editor

It is well known that the performance of materials is highly dependent on their structures. Research on the subject of this relationship is always the focus of material scientists. Due to their special mechanical properties, large specific surface area, excellent electrical/thermal conductive 3D network, and special porous structure, versatile hierarchical nanostructured materials have been designed and applied for various material systems, including polymers, metals, inorganic materials, and their composites. The study of the mechanisms of unique nanostructures on promoting the mechanical, electrical, thermal, and electrochemical properties of materials is essential to acquire new knowledge and pave the way for the development of novel advanced materials. Therefore, investigations in this field are attracting increasing research interest. The aim of this Special Issue of *Nanomaterials* is to collate state-of-the-art contributions related to recent advancements in the field of designing and fabricating hierarchical nanostructured materials and their various applications.

Guest Editor

Prof. Dr. Xusheng Du

Institute of Advanced Wear & Corrosion Resistant and Functional Materials, Jinan University, Guangzhou 510632, China

Deadline for manuscript submissions

closed (20 April 2026)



Nanomaterials

an Open Access Journal
by MDPI

Impact Factor 4.3
CiteScore 10.3
Indexed in PubMed



mdpi.com/si/233346

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

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





Nanomaterials

an Open Access Journal
by MDPI

Impact Factor 4.3
CiteScore 10.3
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)