



Hierarchical Nanostructured Materials for Multifunctional 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 (31 May 2024)

Message from the Guest Editor

It is well known that the performance of materials is highly dependent on their structures. Research on revealing their 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. The aim of this Special Issue is to collect state-of-the-art contributions related to advancements in the field of designing and fabricating hierarchical nanostructured materials and their various applications, including (but not limited to) structure engineering materials, surface protective materials, functional materials for thermal management, electromagnetic shielding, supercapacitors, rechargeable batteries, sensors, etc.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones

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

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.

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)

Contact Us

Nanomaterials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/nanomaterials
nanomaterials@mdpi.com
[X@nano_mdpi](https://twitter.com/nano_mdpi)