

Special Issue

Self-Assembly, Synthetic and Biomimetic Nanostructures

Message from the Guest Editor

Bioinspired nanostructures comprising innovative one-, two-, or three-dimensional topologies are suitable for the design of advanced biomaterials and novel applications in nanomedicine, pharmaceuticals, and diagnostics. Among them, liquid crystalline nanostructures enable the generation of cubosomes, hexosomes, nanosponges, and other nanoporous and multifaceted architectures with a high surface-to-volume ratio. The methods for their fabrication and structural investigations present strong current interest. This Special Issue focuses on new concepts enabling the fabrication of biomimetic nanostructures and multiphase supramolecular assemblies and their structural characterization by high-resolution structural methods. Reports on the capacity of such nanostructures to enhance the bioavailability of encapsulated drugs (small-molecule compounds or therapeutic proteins, peptides, and nucleic acids) will be of special interest.

Guest Editor

Dr. Angelina Angelova

CNRS UMR 8612 "Institut Galien Paris-Saclay", Paris-Saclay University,
F-92296 Châtenay Malabry, France

Deadline for manuscript submissions

closed (21 January 2022)



Nanomaterials

an Open Access Journal
by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed



mdpi.com/si/51117

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 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.

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)