



Self-Assembly, Synthetic and Biomimetic Nanostructures

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)

Message from the Guest Editor

Dear Colleagues,

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.

Dr. Angelina Angelova
Guest Editor





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Shirley Chiang

Department of Physics, University
of California Davis, One Shields
Avenue, Davis, CA 95616-5270,
USA

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.

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](#), [CAPus / SciFinder](#), [Inspecc](#), and [other databases](#).

Journal Rank: JCR - Q1 (*Physics, Applied*) / CiteScore - Q1 (*General Chemical Engineering*)

Contact Us

Nanomaterials Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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

mdpi.com/journal/nanomaterials
nanomaterials@mdpi.com
[X@nano_mdpi](#)