



an Open Access Journal by MDPI

## Innovation in Nanoparticles for Biomedical Applications

Guest Editors:

**Dr. Shichao Ding**

Department of Nanoengineering,  
University of California San  
Diego, La Jolla, CA 92093, USA

**Dr. Zhaoyuan Lyu**

School of Mechanical and  
Materials Engineering,  
Washington State University,  
Pullman, WA 99164, USA

**Dr. Fangyu Zhang**

UT Southwestern Medical Center,  
Dallas, TX 75390, USA

Deadline for manuscript  
submissions:

**10 June 2024**

### Message from the Guest Editors

Dear Colleagues,

Nanoparticles have garnered significant attention in biomedical applications due to their unique properties at the nanoscale, enabling various biomedical advancements. Some key areas where nanoparticles are extensively used include biosensing, bioimaging, and drug delivery. In all these applications, the tunable properties of nanomaterials—such as size, shape, surface chemistry, and biocompatibility—allow for precise customization to meet specific biomedical needs.

This Special Issue of *Nanomaterials* may include, but is not limited to:

- Nanomaterials for biosensing (electrochemical sensors, optical sensors, colorimetric strips, bioassays, point-of-care testing, etc.);
- Advanced nanomaterials for enzyme mimicking;
- Functional nanomaterials for bioimaging;
- Nanomotors for drug delivery;
- Nanomedicine for disease treatment.

See more information at:  
<https://www.mdpi.com/si/191108>

Dr. Shichao Ding  
Dr. Zhaoyuan Lyu  
Dr. Fangyu Zhang  
*Guest Editors*



[mdpi.com/si/191108](https://www.mdpi.com/si/191108)

# Special Issue



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](http://www.mdpi.com)

[mdpi.com/journal/nanomaterials](http://mdpi.com/journal/nanomaterials)  
[nanomaterials@mdpi.com](mailto:nanomaterials@mdpi.com)  
[X@nano\\_mdpi](#)