



## Advances in Wide-Bandgap Semiconductor Nanomaterials

Guest Editors:

**Dr. Yizhang Wu**

Department of Applied Physical  
Sciences, The University of North  
Carolina at Chapel Hill, Chapel  
Hill, NC, USA

**Dr. Yong Wang**

Academy of Advanced  
Interdisciplinary Research,  
School of Advanced Materials  
and Nanotechnology, Xidian  
University, Xi'an 710126, China

Deadline for manuscript  
submissions:

**31 October 2024**

### Message from the Guest Editors

We are excited to announce a forthcoming Special Issue in *Nanomaterials* focused on “Advances in Wide-Bandgap Semiconductor Nanomaterials”. This Special Issue aims to showcase and explore the latest breakthroughs in the synthesis, theoretical calculations, performance characterization, and applications of wide-bandgap semiconductor nanomaterials.

Wide-bandgap semiconductor nanomaterials represent a class of materials that have garnered substantial attention in recent years due to their unique electronic properties and versatile applications. These materials, characterized by their wide energy bandgap, hold great promise in fields ranging from electronics and photonics to energy conversion and biomedicine.

We encourage researchers, clinicians, and professionals from diverse disciplines to contribute their insights and expertise to this Special Issue. By sharing your findings, you will contribute to the advancement of our understanding of wide-bandgap semiconductor nanomaterials.

Please feel free to contact us at [yizhwu@unc.edu](mailto:yizhwu@unc.edu) for any inquiries or further information about this 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](#), [Inspec](#), 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](#)