

## Special Issue

# Innovative Semiconducting Materials Technology toward New-Generation Hardware Applications

### Message from the Guest Editors

This Special Issue mainly focuses on two fields: (i) devices based on novel semiconductor materials and their depositing methods; (ii) the related techniques of tuning devices for specific applications like logic circuits, hardware neural network arrays, biosensors, etc. Its main purpose is to provide a platform for the presentation of research results and the exchange of ideas between researchers in both the academic and industrial fields. Taking advantage of this opportunity, we hope to promote the development of innovative semiconductor-related technologies and provide new ideas for research on next-generation electronic devices. For further reading, please follow the link to the Special Issue website at: <https://www.mdpi.com/si/109620>.

---

### Guest Editors

Prof. Dr. Xuefeng Zheng

School of Microelectronics, Xidian University, Xi'an 710071, China

Dr. Chun Zhao

School of Advanced Technology, Xi'an Jiaotong-Liverpool University, Suzhou 21500, China

---

### Deadline for manuscript submissions

closed (15 March 2023)



## Nanomaterials

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.3  
CiteScore 9.2  
Indexed in PubMed



[mdpi.com/si/109620](https://www.mdpi.com/si/109620)

*Nanomaterials*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[nanomaterials@mdpi.com](mailto:nanomaterials@mdpi.com)

[mdpi.com/journal/  
nanomaterials](https://www.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. We are proud of our increasing impact factor and ability to provide rapid decisions to authors.

---

### 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)