



an Open Access Journal by MDPI

## Functional Graphene-Based Nanodevices: 2nd Edition

Guest Editors:

### **Dr. Qijin Cheng**

School of Electronic Science and Engineering, Xiamen University, Xiamen 361005, China

### **Dr. Jian Zhou**

College of Mechanical and Vehicle Engineering, Hunan University, Changsha 410082, China

Deadline for manuscript submissions:

**20 August 2024**

### **Message from the Guest Editors**

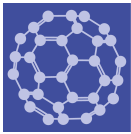
Graphene is composed of single-layer sp<sup>2</sup>-bonded carbon atoms that are densely packed in a honeycomb crystal lattice. It has the characteristics of high carrier mobility, ultra-high specific surface area, high optical transparency, and good conductivity and thermal conductivity. Its unique physical and chemical properties make it possible to prepare various functional nanodevices. Therefore, graphene is widely studied and applied, such as in electronics, photonics and optoelectronic circuits, energy storage and conversion, biomedicine, sensors, and other fields.

We invite researchers to contribute original and review articles on functional graphene-based nanodevices. Potential topics include, but are not limited to, the synthesis, modification, and functionalization of ultra-thin two-dimensional graphene and characterization, characterization methods, and applications of graphene-based nanodevices (including transistors, energy storage devices, sensors, photovoltaics, transparent electrodes, etc.).



[mdpi.com/si/195588](https://mdpi.com/si/195588)

# 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, CAPlus / SciFinder, Inspec, and other databases.

**Journal Rank:** JCR - Q2 (*Chemistry, Multidisciplinary*) / 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