



an Open Access Journal by MDPI

## Advanced Nanomaterials in Terahertz and Microwave Technology

Guest Editor:

### **Prof. Dr. Yongzhi Cheng**

School of Information Science  
and Engineering, Wuhan  
University of Science and  
Technology, Wuhan 430081,  
China

Deadline for manuscript  
submissions:

**closed (31 August 2023)**

### **Message from the Guest Editor**

Nanomaterials are materials with typical size features in the lower nanometer size range and characteristic mesoscopic properties. These properties make them attractive objects of fundamental research and potential new applications. The microwave (1–50 GHz) and terahertz (THz) wave ranges (0.1–10 THz), lie naturally at the boundaries between optics and electronics, are now increasingly considered to be under the same umbrella, and researchers in both areas borrow and adapt successful concepts from each other. The novel optical and electronic properties of nanomaterials offer much promise to the field of THz and microwave science and technology.

This Special Issue of *Nanomaterials* aims to provide an overview of and recent progress in advanced nanomaterials in THz and microwave technology. Potential topics include but are not limited to: (1) synthesis, fabrication, properties, and applications of advanced nanomaterials at the THz and microwave region; (2) control of THz and microwave in nanomaterials; (3) THz and microwave plasmonic nanomaterials, switching and bistability; (4) THz and microwave plasmonic metamaterials and metasurface.



[mdpi.com/si/139664](https://mdpi.com/si/139664)

# 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, Grosspeteranlage 5  
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](https://x.com/nano_mdpi)