



an Open Access Journal by MDPI

Development of Innovative Devices Using New-Emerging Micro and Nano Technologies

Guest Editor:

Prof. Dr. Tongbiao Wang

School of Physics and Materials
Science, Nanchang University,
Nanchang, China

Deadline for manuscript
submissions:

closed (8 August 2025)

Message from the Guest Editor

Dear Colleagues,

The constant downscaling of nanoelectronic and optoelectronic technologies necessitates scientific research on novel micro- or nano-devices in order to create new devices, define generate the complex materials required, and ensure that they have good properties and are reliable.

This Special Issue focuses on, but is not limited to, interface effects, the charge transport process in these nano/micro electronic devices, and the electrical performance improvement of these devices via material and device design and fabrication.

It aims to present the development of state-of-the-art novel micro- or nano-devices. We invite authors from leading groups in the field to contribute original research articles and review articles that cover current micro/nano technologies.

See more information in: <https://www.mdpi.com/si/189582>

Prof. Dr. Tongbiao Wang

Guest Editor



[mdpi.com/si/189582](https://www.mdpi.com/si/189582)

Special Issue



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones

School of Geography, Earth and Environmental Science,
University of Birmingham,
Birmingham B15 2TT, UK

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.

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 (Physics, Applied) / 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

mdpi.com/journal/nanomaterials
nanomaterials@mdpi.com
[X@nano_mdpi](https://twitter.com/nano_mdpi)