



Exploring Nanomaterials through Electron Microscopy and Spectroscopy

Guest Editors:

Dr. Sangmoon Yoon

Department of Physics, Gachon
University, Seongnam 13120,
Republic of Korea

Dr. Janghyun Jo

Ernst Ruska-Centre for
Microscopy and Spectroscopy
with Electrons,
Forschungszentrum Jülich, 52425
Jülich, Germany

Deadline for manuscript
submissions:

24 October 2024

Message from the Guest Editors

Understanding the intricacies of nanoscience and nanotechnology relies heavily on scrutinizing atomic-scale structures, chemical compositions, and electronic states.

In this Special Issue, researchers are invited to share their insights and discoveries facilitated by advanced electron microscopy techniques. Contributions may encompass a range of approaches, including atomic-scale imaging and quantification, electron energy loss spectroscopy, cathodoluminescence spectroscopy, convergent electron beam diffraction, scanning electron nanodiffraction, electron holography, electron tomography, in situ or operando experiments, and machine learning-driven analyses.

Original research articles and reviews are especially welcome for this Special Issue. We eagerly anticipate your valuable contributions.





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

mdpi.com/journal/nanomaterials
nanomaterials@mdpi.com
[X@nano_mdpi](#)