



an Open Access Journal by MDPI

Light-Matter Interaction in Nano Systems: Fundamentals and Applications

Guest Editors:

Dr. Zhengkun Fu

School of Physics and
Information Technology, Shaanxi
Normal University, Xi'an 710119,
China

Dr. Lianghui Huang

State Key Laboratory of Quantum
Optics and Quantum Optics
Devices, Institute of Opto-
electronics, Shanxi University,
Taiyuan 030006, China

Prof. Dr. Mengtao Sun

School of Mathematics and
Physics, University of Science and
Technology Beijing, Beijing
100083, China

Deadline for manuscript
submissions:

20 December 2024

Message from the Guest Editors

This Special Issue of *Nanomaterials* aims to bring together research on light-matter interactions with research on nanomaterials. We invite authors to contribute original research articles and review articles to give a fair appraisal of the current state of the art and perspectives on the future of nanophotonics research. Potential topics include, but are not limited to:

- Nanomaterials;
- Specially designed nano-structured materials;
- Light and laser sources;
- Light trapping and cooling;
- Optical phenomena in nano-photonic structures;
- Nanofabrication techniques;
- Nanoplasmonics;
- Quantum, nonlinear and nonlocal effects in nanostructures;
- Photonic crystals;
- Nanowaveguiding devices;
- Single-photon sources.



mdpi.com/si/168539

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

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