



an Open Access Journal by MDPI

Frontiers of Light Science: Novel Concepts, Nanomaterials, Nanostructures, and Applications

Guest Editors:

Dr. Gianluigi Zito

Institute of Applied Sciences and Intelligent Systems, Italian National Research Council, Naples, Italy

Dr. Silvia Romano

Institute of Applied Sciences and Intelligent Systems, Italian National Research Council, Naples, Italy

Deadline for manuscript submissions:

closed (30 September 2021)

Message from the Guest Editors

Confinement of electromagnetic waves by subwavelength dielectric and metallic structures enables intriguing applications. The substantial frontier expansion witnessed today is pushed, by new insight into the fundamental physics of light, and on the other by cutting-edge technologies for nanomaterial engineering and targeted interdisciplinary applications.

In this Special Issue, we invite researchers to contribute Articles or topic Reviews that will stimulate the continuing efforts on the understanding and exploring light science from novel concepts in photonics and nano-optics to nanomaterials and nanostructures and their applications. Potential topics include but are not limited to:

- Novel designs for metamaterials, metasurfaces, nanomaterials;
- Metamaterials, metasurfaces, nanomaterials for imaging, spectroscopy and nano-optics;
- Two-dimensional materials and devices;
- Active and tunable metamaterials, metasurfaces, nanomaterials;
- Nonlinear nanophotonics;
- Topological photonics;
- Lasing, filtering and sensing;
- Inverse design in photonics: algorithms and applications;
- Photonic devices and systems for machine learning.



mdpi.com/si/54959

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

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