Special Issue

Metamaterials and Metasurfaces for Advanced Electromagnetic Wave Manipulation and Applications

Message from the Guest Editors

Over the past decade, remarkable progress has been witnessed in the field of metamaterials and metasurfaces, offering a unique avenue for generating, guiding, modulating, and detecting light, thanks to their structural features that are significantly smaller than the operational wavelength. The development of metamaterials and metasurfaces has paved the way for intriguing applications, ranging from achieving a negative index of refraction, imaging with sub-wavelength resolution, beamforming, polarization control, wavefront shaping, data processing, and highly flexible sensing and modulation. This special issue aims to provide a comprehensive platform for researchers, scientists, and engineers to share their latest findings, innovative designs, and practical applications in this rapidly evolving domain. We welcome original research articles, review papers, and communications covering a wide range of topics, including theory, design optimization, characterization techniques and applications of metasurface and metamaterials. Submit your work and contribute to the advancement of this exciting field!

Guest Editors

Dr. Weiren Zhu

Dr. Linda Shao

Dr. Liming Si

Deadline for manuscript submissions

30 September 2025

Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed

mdpi.com/si/212845

Nanomaterials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
nanomaterials@mdpi.com

mdpi.com/journal/nanomaterials

Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed

mdpi.com/journal/nanomaterials

MDPI

About the Journal

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.

Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones
School of Geography, Earth and Environmental Science, University of Birmingham, Birmingham B15 2TT, UK

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)