nanomaterials

IMPACT FACTOR 5.3

Indexed in: PubMed

CITESCORE 7.4

an Open Access Journal by MDPI

Nanomaterials for Advanced Optics and Photonics

Guest Editor:

Prof. Dr. Stefano Bellucci
INFN-Laboratori Nazionali di Frascati, 00044 Frascati, Italy

Deadline for manuscript submissions:
closed (31 December 2022)

Message from the Guest Editor

The recent advances in the field of novel optical spectral detection of biologically important molecules, particularly antibodies to corona-type viruses, requires developing high-sensitivity detection means along with fast spectral measurements, promising to yield results much more quickly than polymerase chain reactions. In addition, photonic crystals constitute a flourishing area of research and innovation for the detection of extremely small amounts of analytes thus promising to yield radical new sensing technologies that will dramatically expand the application range of advanced biosensors and diagnostic agents with diversified and specific characteristics in terms of composition and functionality. The scope of this Special Issue covers a very broad range of aspects, including fundamental concepts of biosensing using nanomaterials, their synthesis, engineering their sensing properties based on advanced optics and photonics, and exploring their emerging applications in medical diagnostics, industry, environmental control, and food analysis. Besides, laser-induced periodic surface structures can be used to produce sensors or gas storage applications.

nanomaterials

IMPACT FACTOR 5.3 | Indexed in: PubMed | CITESCORE 7.4

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 - 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