



an Open Access Journal by MDPI

Laser-Matter Interaction for Nanostructuration: From Fundamentals to Optical, Electrochemical, Magnetic and Electrical Quantum Sensing

Guest Editors:

Dr. Antonino Scandurra

Department of Physics and Astronomy “Ettore Majorana”, University of Catania, Via Santa Sofia 64, 95123 Catania, Italy

Dr. Francesco Ruffino

Department of Physics and Astronomy “Ettore Majorana”, University of Catania, Via Santa Sofia 64, 95123 Catania, Italy

Deadline for manuscript submissions:

20 October 2024

Message from the Guest Editors

Dear Colleagues,

Basing on the success of the first edition of the Special Issue “Laser-Matter Interaction for Nanostructuration and Characterization: From Fundamentals to Sensing and Energy Applications”, we are glad to announce this Special Issue of *Nanomaterials* “Laser-Matter Interaction for Nanostructuration: From Fundamentals to Optical, Electrochemical, Magnetic and Electrical Quantum Sensing”.

The use of lasers has opened up new possibilities for material nanoprocessing because of a wide variety of nanostructures which can be obtained due to laser-matter interaction phenomena and controlling the laser process parameters. Quantum sensing technology has become of enormous importance in recent years thanks to its particular versatility and unconventional responses, ranging from optical, electrochemical, magnetic and electrical sensing. For this Special Issue, we invite researchers to submit original research articles, letters, as well as review and prospective view articles on laser-matter interaction for nanostructuration applied to the production and characterization of quantum sensing materials.



mdpi.com/si/199682

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)