

Special Issue

Synthesis and Characterization of Nanostructured Materials Using Pulsed Laser Deposition

Message from the Guest Editors

This Special Issue aims to provide a comprehensive overview of recent developments in the synthesis and characterization of nanostructured materials using PLD. Topics of interest include, but are not limited to, the following: 1. Advances in PLD Techniques; 2. Growth Mechanisms and Film Morphology; 3. Novel and Non-Conventional Laser Ablation Techniques; 4. Surface and Interface Engineering; 5. Advanced Characterization Techniques; 6. Computational and Theoretical Modeling; 7. Performance Optimization for Targeted Applications. We invite fellow researchers in these areas to contribute original research and reviews to this Special Issue. By fostering collaboration and knowledge exchange, we aim to advance innovations in this field.

Guest Editors

Dr. Alessandro Maffini

Dr. Davide Orecchia

Dr. Cristina Mancarella

Deadline for manuscript submissions

31 October 2025



Nanomaterials

an Open Access Journal
by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed



mdpi.com/si/233225

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

[mdpi.com/journal/
nanomaterials](https://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](https://mdpi.com/journal/nanomaterials)



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, CAPIus / SciFinder, Inspec, and other databases.

Journal Rank:

JCR - Q2 (Physics, Applied) / CiteScore - Q1 (General
Chemical Engineering)