

## Special Issue

# Advanced Functional Nanomaterials Used as Potential Energy Production and Storage

### Message from the Guest Editors

Nowadays, significant efforts are devoted to developing innovative materials for pushing forward existing achievements for the production and storage of clean, sustainable, and renewable energy. The last decade's progress in the processing of nanomaterials paved the way for their integration in applications for energy conversion and storage, such as photovoltaic, lithium-ion batteries, supercapacitors, and electro-catalysts for fuel cells. We kindly invite you to submit your contribution to the Special Issue "Advanced Functional Nanomaterials Used as Potential Energy Production and Storage". This Special Issue aims to present the current state-of-the-art functional nanomaterials in the whole value chain, from new game-changing nanomaterial synthesis to energy conversion and storage solutions. Up-to-date original research and reviews related to functional nanomaterials and integrated devices are welcome, and we look forward to receiving your interesting work.

### Guest Editors

Dr. Bogdan Stefan Vasile

Department of Science and Engineering of Oxide Materials and Nanomaterials, Faculty of Applied Chemistry and Materials Science, University Politehnica of Bucharest, 060042 Bucharest, Romania

Dr. Iulian Boerasu

National Research Center for Micro and Nanomaterials, National University of Science and Technology Politehnica Bucharest, 060042 Bucharest, Romania

### Deadline for manuscript submissions

closed (18 July 2025)



## Nanomaterials

an Open Access Journal  
by MDPI

Impact Factor 4.3  
CiteScore 9.2  
Indexed in PubMed



[mdpi.com/si/223845](https://mdpi.com/si/223845)

*Nanomaterials*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[nanomaterials@mdpi.com](mailto: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)