Special Issue

Electrochemistry of Nanomaterials and Their Applications for Energy Storage and Conversion

Message from the Guest Editors

The Special Issue on "Electrochemistry of Nanomaterials and Their Applications for Energy Storage and Conversion" aims to bring together cuttingedge research on the design, synthesis, and application of nanomaterials in the field of electrochemical energy storage and conversion. This Issue will cover a broad range of topics including the development of functional nanomaterials for electrocatalysis and their integration into various applications, such as water splitting, fuel cells, lithium/sodium-ion batteries, and lithium/sodium sulfur (selenide) batteries. Additionally, the Issue will explore advancements in electrolyte additives and anode surface modifications to enhance the performance and longevity of energy storage systems. We welcome contributions that provide new insights into the fundamental mechanisms, innovative synthesis techniques, and practical applications of nanomaterials in electrochemical processes.

Guest Editors

Prof. Dr. Yong Wang

Institute for Energy Research, School of Chemistry and Chemical Engineering, Jiangsu University, Zhenjiang 212013, China

Prof. Dr. Junfeng Liu

Institute for Energy Research, School of Chemistry and Chemical Engineering, Jiangsu University, Zhenjiang 212013, China

Deadline for manuscript submissions

9 January 2026



Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed



mdpi.com/si/219808

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



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 nanometerscale 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)

