Special Issue

Nanomaterials for Electrolytes in Electrochemical Devices

Message from the Guest Editors

In recent years, the rapid development of all-solid-state electrochemical devices has attracted the emergence of new nanostructured electrolytes that are commonly used in solid-state Li batteries, supercapacitors, sensors, fuel cells, Li-air, and Li–S batteries. The specific challenge of this Special Issue is to outline the progress made on the nanostructured electrolytes in electrochemical devices with various chemical compositions (inorganic oxides and sulfides, polymers, and composites). Indeed, it is essential to pay attention to the manufacturing technology and the experimental conditions, such as the effects of pressure and operating parameters, on the electrochemical storage performance and mechanical properties. The electrolyte/electrode interfacial mechanisms and the detailed degradation mechanism of the electrolyte membrane under electrochemical conditions can be also covered. For this reason, it is with great pleasure that we invite authors to submit original research papers or reviews to this Special Issue. See more information at https://mdpi.com/si/116328. We look forward to receiving your contributions.

Guest Editors

Prof. Dr. Christian M. Julien

Institut de Minéralogie, de Physique des Matériaux et de Cosmochimie (IMPMC), Sorbonne Université, CNRS-UMR 7590, 4 Place Jussieu, 75252 Paris, France

Prof. Dr. Alain Mauger

Inst Mineral Phys Mat & Cosmochim IMPMC, CNRS, Sorbonne University, UMR 7590, 4 Pl Jussieu, F-75252 Paris, France

Deadline for manuscript submissions

closed (15 June 2023)

Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed

mdpi.com/si/116328

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

mdpi.com/journal/nanomaterials

MDPI

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, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank:

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