



an Open Access Journal by MDPI

Advances in Nanomaterials for Lithium-Ion/Post-Lithium-Ion Batteries and Supercapacitors

Guest Editors:

Dr. Sonia Dsoke

Helmholtz Institute Ulm &
Institute for Applied Materials -
Energy Storage Systems,
Karlsruhe Institute of
Technology, Karlsruhe, Germany

Dr. Mario Marinaro

ZSW, Zentrum für Sonnenenergie
und Wasserstoff-Forschung
Baden-Württemberg,
Helmholtzstraße 8, 89081 Ulm,
Germany

Deadline for manuscript
submissions:

closed (30 November 2021)

Message from the Guest Editors

Environmentally friendly power generation technologies play an essential role in future energy supply due to the increased need for less dependence on fossil fuels for primary energy harvesting. The intermittent nature of many renewable energy sources, such as solar or wind power, makes the development and deployment of energy storage systems paramount. In this respect, Lithium-ion batteries dominate the market since their launch by Sony in 1991. However, the rareness and cost of Lithium quests for sustainable and abundant alternatives, like Sodium, Potassium, Magnesium etc. These new “post-lithium” technologies require the discovery and study of new electrode materials, electrolytes and cell components as well as a fundamental understanding of the phenomena occurring during the cell operation.

We invite authors to contribute with original research articles or comprehensive review articles covering the most recent progress and new developments in the design, synthesis, study of materials for lithium and post-lithium systems, such as Sodium, Potassium, Magnesium, Zinc, Calcium, Aluminium etc. as well as those used for high power devices (e.g. in M-ion capacitors).



mdpi.com/si/55381

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://twitter.com/nano_mdpi)