Special Issue

Future of Advanced Lithium Batteries: Materials, Performances and Applications

Message from the Guest Editor

The aim of this Special Issue is to gather research presenting recent advances and trends in the field of advanced lithium batteries (including various lithium-based batteries, such as lithium-ion/metal batteries and lithium–sulfur/oxygen batteries), determine the correlation between materials and performance, and promote the applications of new lithium-based battery systems.

The topics of interest include but are not limited to the following:

1. Development of new materials (electrodes/electrolytes) for advanced lithium batteries.
2. New strategies for advanced lithium batteries with high energy and power densities.
3. Interfacial electrochemistry for electrodes/electrolytes in advanced lithium batteries.
4. Critical engineering issues in the practical application of advanced lithium batteries.
5. Advanced characterization of the electrochemical process in advanced lithium batteries.
6. Safety issues related to advanced lithium batteries.

Guest Editor

Prof. Dr. Wei Tang
School of Chemical Engineering and Technology, Xi'an Jiaotong University, Xi'an 710049, China

Deadline for manuscript submissions

closed (31 January 2022)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/72988

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

mdpi.com/journal/materials

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/journal/materials

MDPI

About the Journal

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian
1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Condensed Matter Physics)