



Development, Application, and Characterization of New Electrode Materials for Advanced Batteries

Guest Editors:

Prof. Dr. Marco Giorgetti

Department of Industrial
Chemistry, University of Bologna,
Bologna, Italy

Dr. Giuliana Aquilanti

Elettra-Sincrotrone Trieste,
Strada Statale 14 km, km 163.5 in
AREA Science Park, 34149 Trieste,
Italy

Deadline for manuscript
submissions:

10 June 2024

Message from the Guest Editors

The purpose of this Special Issue is to provide an overview of new electrode materials for advanced batteries, by taking into account both developments and applications. Synthesis strategies and applications for different chemistries including sodium ion and multivalent technologies are welcome. It also provides responses to scientific questions by adopting the most suitable technique for battery characterization using the peculiar characteristics of X-rays. Researchers working in these fields are strongly encouraged to submit a contribution.

- LIBs, SIBs, multivalent chemistries;
- Synthesis and characterization;
- Electrode/electrolyte interface;
- Electrode intercalation mechanism and secondary reactions;
- X-ray diffraction, SAXS, WAXS;
- EXAFS, XANES, X-Ray Microscopy;
- Operando and ex situ experiments;
- Photoelectron Spectroscopy.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Andreas Jossen

Institute for Electrical Energy
Storage Technology (EES),
Technical University München
(TUM), Arcisstrasse 21, 80333
Munich, Germany

Message from the Editor-in-Chief

Take the opportunity to publish your original scientific work or a review paper concerning battery materials, battery technology or battery application within this new open access journal. Along with material science, the journal also addresses engineering and multidisciplinary research topics, such as cell and system design or storage system integration. Publishing proffers visibility for the benefit of other experts and facilitates discussion of the research results within the field. You are invited to publish your work, read published papers and to participate in topical discussions.

Author Benefits

Open Access:— free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

High Visibility: indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [Inspec](#), [Ei Compendex](#), [CAPus / SciFinder](#), and [other databases](#).

Journal Rank: JCR - Q2 (*Electrochemistry*) / CiteScore - Q2 (*Electrochemistry*)

Contact Us

Batteries Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/batteries
batteries@mdpi.com
[X@batteriesmdpi](#)