

Topical Collection

Feature Papers in Battery Mechanisms and Fundamental Electrochemistry Aspects

Message from the Collection Editor

For this Topical Collection, we are seeking contributions in the following topics related to the research, development, and application of batteries:

- Fundamentals of battery electrochemistry;
- Kinetics of the intercalation and conversion reaction;
- Reaction mechanism and dynamics of electrochemical processes;
- Electrochemical-based methods;
- Models and methods for the characterization of interfaces in batteries;
- Evolution of SEI and CEI;
- Computational methods;
- Methods for the identification of interphases;
- Analyses of electrode materials and analysis of interphases;
- Advanced in situ and ex situ characterization techniques;
- Post-mortem analysis of batteries;
- Timescale and length-scale methods;
- Analytical methods for the study of the electron and ion movement in batteries;
- Synchrotron-based methods;
- Structural and electronic reversibility in batteries;
- Chemometric methods for the study of the operando dataset in batteries.

Collection Editor

Prof. Dr. Marco Giorgetti

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



Batteries

an Open Access Journal
by MDPI

Impact Factor 4.8
CiteScore 6.6



mdpi.com/si/217053

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

[mdpi.com/journal/
batteries](https://mdpi.com/journal/batteries)





Batteries

an Open Access Journal
by MDPI

Impact Factor 4.8
CiteScore 6.6



[mdpi.com/journal/
batteries](https://mdpi.com/journal/batteries)



About the Journal

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.

Editor-in-Chief

Prof. Dr. Karim Zaghib
Department of Chemical and Materials Engineering, Concordia
University, Montréal, QC H3G 1M8, 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), Inspec, Ei Compendex, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Electrochemistry) / CiteScore - Q1 (Electrical and Electronic Engineering)