Special Issue

Novel Electrolytes for Batteries and Supercapacitors

Message from the Guest Editor

Batteries and supercapacitors are essential electrochemical energy storage systems (ESSs) in a wide range of fields, such as portable electronic devices, electric vehicles, smart grids, and aerospace. Electrolyte is a key part of batteries and supercapacitors, which has a significant impact on the electrochemical properties of the devices. Understanding the relationship of the electrochemical performance of devices and the electrolyte properties is of great significance due to its importance in creating higher-performance batteries and supercapacitors. In this Special issue, we are looking for contributions helping to introduce recent advances and breakthroughs in electrolyte design for batteries and supercapacitors, addressing the correlation between battery performance, solvation structure, and solid-electrolyte-interphase chemistry, as well as novel electrolytes for batteries and supercapacitors to enable the enlargement of the electrochemical window, increase the ion conductivities and safety, improve the environmental friendliness, and reduce the cost.

Guest Editor

Dr. Fang Zhang

Jiangsu Key Laboratory of Electrochemical Energy Storage Technologies, College of Materials Science and Technology, Nanjing University of Aeronautics and Astronautics, Nanjing 211100, China

Deadline for manuscript submissions

closed (10 September 2024)

Batteries

an Open Access Journal by MDPI

Impact Factor 4.8
CiteScore 6.6

mdpi.com/si/168237

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

mdpi.com/journal/batteries

Batteries

an Open Access Journal by MDPI

Impact Factor 4.8
CiteScore 6.6

mdpi.com/journal/batteries

MDPI

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)