

IMPACT FACTOR 4.0



an Open Access Journal by MDPI

Battery Safety: Recent Advances and Perspective

Guest Editors:

Dr. Xiang Gao

Department of Mechanical Engineering and Engineering Science, The University of North Carolina at Charlotte, Charlotte, NC 28223, USA

Dr. Jun Xu

Mechanical Engineering and Engineering Mechanics, University of North Carolina at Charlotte, Charlotte, NC 28223, USA

Deadline for manuscript submissions:

closed (20 March 2024)

Message from the Guest Editors

Dear Colleagues,

Lithium-ion batteries have been subject to indispensable momentum in light of the current mobile society with an increasingly stringent sustainability requirement for energy and the environment. Moreover, many other advanced secondary batteries are under rapid development for future industrial applications. All these new chemistries have made battery safety a major obstacle for further application and commercialization. This Special Issue will cover the key topics in the research studies on battery safety behavior.

Potential topics include, but are not limited to, the following:

- Advanced experimental characterization of the battery safety behaviors;
- Battery safety evaluation and testing protocols;
- Battery internal short circuit mechanisms;
- Novel modeling of battery safety behaviors
- Innovative design and optimization of battery cell/module/pack for safety purpose;
- Safety issues of next-generation battery chemistries.

This Special Issue also serves as a platform for researchers to report and share the state-of-the-art research results disseminated during the 2023 Battery Safety Workshop held in Charlotte, North Carolina, USA in early May 2023.



Specialsue







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, CAPlus / SciFinder, and other databases.

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

Contact Us