Special Issue

Lithium-Ion Battery Recycling

Message from the Guest Editors

Lithium-ion batteries are widely used in a variety of consumer and industrial applications, including smartphones, laptops, electric vehicles, and renewable energy storage systems. As the demand for these batteries continues to grow, so does the need for effective recycling methods to manage the end-of-life batteries. Lithium-ion battery recycling involves the recovery and re-use of the valuable materials contained in the batteries, reducing the need for new resources and minimizing the environmental impact of discarded batteries. This Special Issue invites researchers to contribute original research/review/perspective articles on the development of advanced technologies for lithium-ion battery recycling. Topics of interest include, but are not limited to:

- Direct recycling (e.g., direct recycling and upcycling of cathodes, advanced separation methods, anode recycling, electrolyte recovery);
- Hydrometallurgy;
- Pvrometallurav:
- Life cycle assessment and environmental impacts of recycling:
- New designs and materials to facilitate recycling;
- Recycling manufacturing scraps.

Guest Editors

Dr. Yaocai Bai

Electrification and Energy Infrastructures Division, Oak Ridge National Laboratory, Oak Ridge, TN 37831, USA

Dr. Panpan Xu

Key Laboratory of Multifunctional Nanomaterials and Smart Systems, Advanced Materials Division, Suzhou Institute of Nano-Tech and Nano-Bionics, Chinese Academy of Sciences, Suzhou 215123, China

Deadline for manuscript submissions

closed (20 June 2025)



Batteries

an Open Access Journal by MDPI

Impact Factor 4.8 CiteScore 6.6



mdpi.com/si/175045

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



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)

