Special Issue

Advantages of Li-Ion Batteries

Message from the Guest Editor

Lithium-ion batteries offer the highest energy density in the rechargeable-battery market. Charging a lithium-ion battery has become easier, faster and long-lasting making it a more powerful battery compared to other commercial batteries. They contain less toxic metals than other batteries and are therefore generally considered to be non-hazardous or human-friendly. Despite its overall advantages, lithium-ion still has some major drawbacks to be improved. LIBs mainly power electric vehicles and electronics, and their prevalence is set to increase, rigorous efforts are aimed towards improving the safety, performance and longevity of LIBs. This Special Issue is aimed at the “Advantages of Li-Ion Batteries” focused on the recent advances on anode, cathode, electrolyte, separator, mechanism and safety of Li-ion batteries. This will encourage the researchers working in a wide variety of scientific areas to contribute their findings and bring about some critical opinions on advanced materials for energy storage to contribute to this field.

Guest Editor

Dr. Maria Christy
Department of Energy Engineering, Hanyang University, Seoul 133-791, Korea

Deadline for manuscript submissions

closed (30 June 2023)

Metals

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.3

mdpi.com/si/138389

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

mdpi.com/journal/metals

Metals

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.3

mdpi.com/journal/metals

About the Journal

Message from the Editorial Board

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

Editors-in-Chief

Prof. Dr. Hugo F. Lopez
Department of Materials Science and Engineering, College of Engineering & Applied Science, University of Wisconsin-Milwaukee, 3200 N. Cramer Street, Milwaukee, WI 53211, USA

Prof. Dr. Yong Zhang
Beijing Advanced Innovation Center of Materials Genome Engineering, State Key Laboratory for Advanced Metals and Materials, University of Science and Technology Beijing, 30 Xueyuan Road, Beijing 100083, China

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, Ei Compendex, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Metals and Alloys)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.8 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the second half of 2024).

MDPI