

## Special Issue

# Lithium-Sulfur Batteries

### Message from the Guest Editor

Lithium-sulfur batteries store and discharge energy using a reversible conversion reaction that has no restrictions in maintaining the initial crystal chemistry of the materials during cells' electrochemical cycling. As a novel energy-storage technology, the true potential or the full challenges of lithium-sulfur batteries are not yet clear, and there is a lack of practical analysis and investigation. Therefore, this Special Issue, "Lithium-Sulfur Batteries", will focus on the materials, cell designs, and battery engineering in understanding the fundamental importance of these factors when designing practical lithium-sulfur batteries.

### Keywords

- lithium-sulfur batteries
- sulfur loading
- sulfur content
- electrode/sulfur ratio
- electrode design
- cycle life
- self-discharge
- lithium-anode stability
- cell-failure mechanism
- degradation

### Guest Editor

Dr. Sheng-Heng Chung

Department of Materials Science and Engineering, National Cheng Kung University, No.1, University Road, Tainan City, Taiwan

### Deadline for manuscript submissions

closed (31 January 2019)



## Batteries

an Open Access Journal  
by MDPI

Impact Factor 4.8  
CiteScore 6.6



[mdpi.com/si/13593](https://mdpi.com/si/13593)

*Batteries*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[batteries@mdpi.com](mailto: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)