

## Special Issue

# Recent Development in Battery Materials for Energy Storage Systems & Automotive Applications

### Message from the Guest Editors

Recently, renewable energy and electric vehicles have become more competitive with conventional energy technologies and vehicles that rely on fossil fuel. However, to enable these clean energy technologies, there is an urgent need to develop new-generation energy storage systems.

Among all currently available energy storage technologies, lithium-ion batteries possess the highest gravimetric and volumetric energy density. Hence, lithium-ion batteries have become the dominant energy storage technology, especially for powering portable electronics devices. LIBs have also been considered as energy storage sources for emerging applications in transportation systems, including electrified automobiles and smart grids. Major R&D activities are underway to tackle the above technological barriers for state-of-the-art lithium-ion technology to meet the demanding requirements for transportation and grid applications.

This Special Issue provides an opportunity to showcase your state-of-the-art research and original work that focus on the development of new materials to satisfy the increasing energy demand of new markets such as pure electric vehicles and grid storage.

---

### Guest Editors

Dr. Rachid Amine

Materials Science Division, Argonne National Laboratory, Lemont, IL 60439, USA

Prof. Dr. Mouad Dahbi

Materials Science, Energy and Nano-engineering Department, Mohammed VI Polytechnic University, Ben Guerir 43150, Morocco

---

### Deadline for manuscript submissions

closed (1 December 2021)



## Sustainability

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.3  
CiteScore 7.7



[mdpi.com/si/89027](https://mdpi.com/si/89027)

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

[mdpi.com/journal/  
sustainability](https://mdpi.com/journal/sustainability)





## Sustainability

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.3  
CiteScore 7.7



[mdpi.com/journal/  
sustainability](https://mdpi.com/journal/sustainability)



## About the Journal

### Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in *Sustainability*, an international Open Access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. *Sustainability* publishes original research articles, review articles and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

---

### Editor-in-Chief

Prof. Dr. Marc A. Rosen

Faculty of Engineering and Applied Science, University of Ontario  
Institute of Technology, Oshawa, ON L1G 0C5, 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 and SSCI (Web of Science), GEOBASE, GeoRef, Inspec, RePEc, CAPIus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Environmental Studies) / CiteScore - Q1  
(Geography, Planning and Development)