



## Beyond the Lithium-Ion Battery Storage Technology

Guest Editors:

**Prof. Dr. Daniel-Ioan Stroe**

Department of Energy  
Technology, Aalborg University,  
Pontoppidanstræde 111, 9220  
Aalborg, Denmark

**Dr. Václav Knap**

GomSpace A/S, 9220 Aalborg  
East, Denmark;  
Department of Energy  
Technology, Aalborg University,  
9220 Aalborg, Denmark

Deadline for manuscript  
submissions:

**closed (15 July 2021)**

### Message from the Guest Editors

Lithium-ion (Li-ion) batteries are currently the most widespread battery technology on the market. However, their capital cost is still significant, possibilities of their energy density improvement is limited, and they create a certain environmental impact. These challenges can be addressed by looking into second life use, which shall improve the cost and their footprint per stored kWh. Alternatively, different materials and technologies can be used to enhance the energy storage characteristics. Battery chemistries such as Lithium-Sulfur or Sodium-Sulfur seem very promising in terms of improving energy density and of reducing the environmental impact. For very high power applications, new technologies such as Lithium-ion capacitors can significantly improve the performance of traditional Lithium-ion batteries. Thus, we would like to encourage you to submit to this Special Issue, entitled “Beyond the Lithium-Ion Battery Storage Technology,” manuscripts focusing on the following topics:

- Second life battery use
- Lithium-Sulfur batteries
- Sodium-Sulfur batteries
- Lithium-ion capacitors
- Novel energy storage technologies, beyond Li-ion batteries





an Open Access Journal by MDPI

## 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

## 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.

## 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, AGRIS, RePEc, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q2 (*Environmental Studies*) / CiteScore - Q1 (Geography, Planning and Development)

## Contact Us

---

*Sustainability* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/sustainability](http://mdpi.com/journal/sustainability)  
[sustainability@mdpi.com](mailto:sustainability@mdpi.com)  
[X@Sus\\_MDPI](https://twitter.com/Sus_MDPI)