



**energies**



an Open Access Journal by MDPI

## Advanced Li-Ion Battery: From Material to System

Guest Editors:

**Dr. Alain Mauger**

Sorbonne Université, Campus  
Pierre et Marie Curie, Institut de  
Minéralogie, de Physique des  
Matériaux et de Cosmochimie  
(IMPMC), CNRS-UMR 7590, 4  
place Jussieu, 75005 Paris,  
France

**Dr. Christian M. Julien**

Sorbonne Université, Campus  
Pierre et Marie Curie, Institut de  
Minéralogie, de Physique des  
Matériaux et de Cosmochimie  
(IMPMC), CNRS-UMR 7590, 4  
place Jussieu, 75005 Paris,  
France

Deadline for manuscript  
submissions:

**closed (30 June 2021)**

### Message from the Guest Editors

Dear Colleagues,

Many efforts are currently being made to improve the energy density of Li-ion batteries throughout the development of new battery components, i.e., cathodes, anodes, electrolytes, and separators. The way to reach this goal is to move to nanostructured material because the larger surface to volume ratio of particles and the reduction of the electron and Li path length implies a larger specific capacity. Additionally, because of various safety issues with liquid electrolytes, their replacement in all-solid-state batteries has drawn new technology. Both theoretical and experimental papers, communications, and reviews related to optimized materials for all types of Li-ion batteries are welcome.

Dr. Alain Mauger

Dr. Christian M. Julien

*Guest Editor*



[mdpi.com/si/32078](https://mdpi.com/si/32078)

# Special Issue



# energies



an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Enrico Sciubba**

Department of Mechanical and  
Aerospace Engineering,  
University of Roma Sapienza, Via  
Eudossiana 18, 00184 Roma, Italy

## Message from the Editor-in-Chief

*Energies* is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

## 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), Ei Compendex, RePEc, Inspec, CAPlus / SciFinder, and other databases.

**Journal Rank:** CiteScore - Q1 (*Engineering (miscellaneous)*)

## Contact Us

---

*Energies* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

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

[mdpi.com/journal/energies](http://mdpi.com/journal/energies)  
[energies@mdpi.com](mailto:energies@mdpi.com)  
[X@energies\\_mdpi](https://x.com/energies_mdpi)