

## Special Issue

# Advanced Application Technology of Lithium-Ion Batteries

### Message from the Guest Editors

Join us in exploring the latest advancements in lithium-ion battery application technologies. Since their introduction in the late 1980s, lithium-ion batteries have revolutionized various industries, powering electronic devices, vehicles, and renewable energy systems. As the demand for lithium-ion batteries continues to grow, the need for advanced application technologies becomes increasingly crucial. These technologies must address challenges such as energy density, cost, cycling life, safety, and environmental sustainability. This special issue focuses on addressing the increasing requirements for high energy density, low cost, long cycling life, safety, and environmental friendliness.

[Topics of Interest]

- Advanced battery modeling
- State of charge, health, and cycling life estimation methods
- Fast charging and safety strategies
- Battery failure diagnosis and identification
- AI-assisted battery simulation
- Low-temperature heating and heat dissipation
- Advanced sensors and smart batteries
- Design and synthesis of battery materials
- Advanced characterization techniques

---

### Guest Editors

Dr. Linjing Zhang

Prof. Dr. Ning Li

Dr. Zhaoxia Peng

---

### Deadline for manuscript submissions

closed (31 December 2023)



## Energies

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.0  
CiteScore 6.2



[mdpi.com/si/121076](https://mdpi.com/si/121076)

*Energies*

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

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





# Energies

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.0  
CiteScore 6.2



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



## About the Journal

### 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.

---

### Editor-in-Chief

Prof. Dr. Enrico Sciubba

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

---

### 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 (Control and Optimization)