

## Special Issue

# Advanced Materials and Devices for Energy Application

### Message from the Guest Editor

Global demand for portable electronics and electric vehicles stimulates the development of energy storage devices (batteries, capacitors, etc.) toward higher power and energy density that significantly rely on the advancement of materials used in these devices.

Additionally, energy storage materials significantly contribute to clean and renewable energy and have drawn intensive attention from research and development to industrialization. To realize the potential of energy technologies, radical advances in materials and devices are required. This Special Issue will focus on experimental advances and theoretical developments in the field of energy storage materials, devices, and systems. Topics of interest for publication include but are not limited to:

- Energy storage system (thermal, mechanical, electrochemical, and hydrogen);
- Advanced energy materials (semiconductors, superconductors, ceramics, etc.);
- Carrier transport and computational;
- Advanced characterization of energy materials;
- Data science integration for advancing materials for energy application.

### Guest Editor

Prof. Dr. Baishakhi Mazumder

Department of Materials Design and Innovation, School of Engineering and Applied Sciences, University at Buffalo, Buffalo, NY 14260, USA

### Deadline for manuscript submissions

closed (2 May 2022)



## Energies

an Open Access Journal  
by MDPI

Impact Factor 3.0  
CiteScore 6.2



[mdpi.com/si/97895](https://mdpi.com/si/97895)

*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 Industrial Engineering, University  
Niccolò Cusano, 00166 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)