

## Topical Collection

# Encyclopedia of Electrochemical Energy Storage and Conversion

### Message from the Collection Editors

Energy storage, in particular storage of electric energy, is of tremendous importance beyond the omnipresent interest in powering mobile devices and cars. Large-scale affordable storage will be the key issue in the use of renewable energy sources. This storage is intimately connected with electrochemical energy conversion. Because research and development in this area is extremely interdisciplinary, researchers, as well as students, entering this field from different backgrounds may frequently be looking for basic information. In the currently available textbooks of electrochemistry, energy conversion and storage are just one topic among many; specialized monographs frequently require extensive knowledge on the reader's part. The present entry collection will provide an open access collection to close the gaps. It will contain basic-level contributions describing the fundamentals with an eye to their application in the field; it will also have sections on practical aspects. Most entries will deal with specific systems and devices covering general and basic aspects as well as details of advanced developments and applications. Look forward to your high-quality contributions.

---

### Collection Editors

Prof. Dr. Rudolf Holze

Prof. Dr. Xuecheng Chen

Prof. Dr. Lijun Fu

Dr. Michael Schneider

Dr. Deepak Dubal

---



## Encyclopedia

---

an Open Access Journal  
by MDPI

---

Indexed in Scopus



[mdpi.com/si/121261](https://mdpi.com/si/121261)

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

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





# Encyclopedia

---

an Open Access Journal  
by MDPI

---

Indexed in Scopus



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



## About the Journal

### Message from the Editor-in-Chief

Many international journals have proliferated over the last 20 years regarding very specific themes of research. Thus, I am pleased to announce the new open-access MDPI journal *Encyclopedia* to provide a wide audience platform for the presentation of outcomes and methodological approaches of current interest for the scientific community. Social sciences, humanities, physical sciences, engineering, and life sciences are the principal macro-areas of relevance for the journal. On behalf of the Editorial Board, I welcome all to *Encyclopedia* and invite contributions of entry papers to our editorial project.

---

### Editor-in-Chief

Prof. Dr. Raffaele Barretta

Department of Structures for Engineering and Architecture, University of Naples Federico II, 80125 Naples, Italy

---

### Author Benefits

#### Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

#### High Visibility:

indexed within Scopus and other databases.

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 26.9 days after submission; acceptance to publication is undertaken in 4.5 days (median values for papers published in this journal in the first half of 2025).