

## Special Issue

# Advances in Electrochemistry and Energy Storage Technologies

### Message from the Guest Editors

This Special Issue aims to highlight the latest breakthroughs, innovative methodologies, and emerging trends in electrochemical science and energy storage technologies. We welcome contributions covering a wide range of topics, including, but not limited to:

- Novel electrochemical materials and their synthesis methods for energy storage applications.
- Advances in battery technologies, including lithium-ion batteries, sodium-ion batteries, etc.
- Development of supercapacitors and hybrid energy storage systems.
- Electrochemical processes for energy conversion, such as fuel cells and electrolyzers.
- Fundamental studies on electrode/electrolyte interfaces and their impact on device performance.
- Hydrogen storage and evolution solutions, and materials for thermal energy storage.
- Electrochemical modeling, simulation, and optimization techniques for energy storage systems.
- Integration of renewable energy sources with energy storage technologies for grid applications.
- Recycling of critical materials from various energy storage devices.
- Innovations in electrochemical diagnostics, sensing, and monitoring.

---

### Guest Editors

Dr. Jędrzej Piątek

Łukasiewicz Research Network – Krakow Institute of Technology, ul. Zakopianska 73, 30-418 Kraków, Poland

Dr. Christopher S. Johnson

Chemical Sciences and Engineering Division, Argonne National Laboratory, Lemont, IL 60439, USA

---

### Deadline for manuscript submissions

closed (20 August 2024)



## Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 6.1



[mdpi.com/si/198790](https://mdpi.com/si/198790)

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

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

[appls](https://appls.com)





# Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 6.1



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



## About the Journal

### Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

---

### Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo  
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,  
20133 Milano, 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, Inspec, Embase, CAPIus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (Fluid Flow and Transfer Processes)