

## Special Issue

# Recent Advances in Electrochemistry: Analysis and Application

### Message from the Guest Editors

This Special Issue aims to collate high-quality research articles, reviews, and communications that reflect the dynamic and interdisciplinary nature of modern electrochemistry. We invite contributions that explore new theories, methodologies, materials, and applications, shedding light on both fundamental studies and practical implementations.

Potential topics include, but are not limited to, the following:

- Advanced electrode materials for energy storage and conversion;
- Innovations in battery technologies (e.g., Li-ion, Na-ion, solid-state batteries);
- Fuel cell development and novel electrocatalysts;
- Electrochemical water splitting and hydrogen production;
- Carbon dioxide reduction and electrochemical synthesis;
- Nanostructured materials and nano-electrochemistry;
- Bioelectrochemistry and biofuel cells.

---

### Guest Editors

Dr. Xiaolei Sun

School of Materials Science and Engineering, Nankai University, Tianjin 300350, China

Dr. Wenhe Xie

Key Laboratory of Microelectronics and Energy of Henan Province, Xinyang Normal University, Xinyang 464000, China

---

### Deadline for manuscript submissions

31 October 2025



## Molecules

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.6  
CiteScore 8.6  
Indexed in PubMed



[mdpi.com/si/220941](https://mdpi.com/si/220941)

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

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





# Molecules

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.6  
CiteScore 8.6  
Indexed in PubMed



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



## About the Journal

### Message from the Editor-in-Chief

As the premier open access journal dedicated to molecular chemistry, now in its 29th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts, and novel materials. Pushing the boundaries of the discipline, we invite papers on all major fields of molecular chemistry and multidisciplinary topics bridging chemistry with biology, physics, and materials science, as well as timely reviews and topical issues on cutting-edge fields in all of these areas.

---

### Editor-in-Chief

Prof. Dr. Thomas J. Schmidt

Institute of Pharmaceutical Biology and Phytochemistry, University of Münster, Corrensstrasse 48, D-48149 Münster, Germany

---

### Author Benefits

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Reaxys, CaPlus / SciFinder, MarInLit, AGRIS, and other databases.

#### Journal Rank:

JCR - Q2 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.1 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2025).