

## Special Issue

# Separator Membrane in Lithium Batteries

### Message from the Guest Editor

In the development of high-performance lithium batteries, it is essential to improve the individual performance of element materials in the battery. Through research on cathode and anode of batteries, battery capacity has been improved. Similarly, in order to improve the power performance of the battery, it is significant to enhance the mobility of the lithium cation that moves to proceed the charge transfer reaction in the battery system. In recent years, various types of separator membranes have been developed according to the purpose of the battery by improving the chemical composition and controlling the porous morphology of the membranes. In view of this situation, it is effective to collect research results related to the separators for lithium batteries and share new knowledge among related researchers to further advance the research and generate new ideas. Based on this concept, we aim to publish this Special Issue.

### Guest Editor

Dr. Yuria Saito

Ion Mobility Analysis Team of Separator Design Co., Ltd., 1-8-31, Midorigaoka, Ikeda, Osaka 563-8577, Japan

### Deadline for manuscript submissions

closed (30 September 2021)



## Membranes

an Open Access Journal  
by MDPI

Impact Factor 3.6  
CiteScore 7.9  
Indexed in PubMed



[mdpi.com/si/60326](https://mdpi.com/si/60326)

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

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





# Membranes

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.6  
CiteScore 7.9  
Indexed in PubMed



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



## About the Journal

### Message from the Editor-in-Chief

You are cordially invited to contribute a research article or a comprehensive review for consideration and publication in *Membranes* (ISSN 2077-0375). *Membranes* is an international, peer-reviewed open access journal of membrane technology published monthly online by MDPI. The journal covers the broad aspects of the science and technology of both biological and non-biological membranes, including membrane dynamics and the preparation and characterization of membranes and their applications in water, environment, energy, and food industries. Articles contributing to better understanding of transport processes in all types of membranes are also welcome. The scientific community and the general public have unlimited and free access to the content as soon as it is published. We would be pleased to welcome you as one of our authors.

---

### Editor-in-Chief

Prof. Dr. Spas D. Kolev  
School of Chemistry, The University of Melbourne, Melbourne, VIC  
3010, Australia

---

### 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, PubMed, PMC, CAPlus / SciFinder, Inspec, and other databases.

#### Journal Rank:

JCR - Q2 (Polymer Science) / CiteScore - Q1 (Chemical Engineering (miscellaneous))