Special Issue

Non-Fluorinated Polymer-Based Electrolytes and Ionomers for Water Electrolyzers, Fuel Cells and Batteries

Message from the Guest Editors

This Special Issue focuses on the latest advancements in non-fluorinated polymer-based materials for energy conversion and storage systems. Topics of interest include the following:

- Design and development of non-fluorinated polymerbased electrolytes and ionomers with enhanced ionic conductivity and chemical stability.
- Applications in PEM, AEM, and bipolar electrolysers, as well as fuel cells.
- Non-fluorinated electrolytes for advanced battery systems, including lithium-ion and redox flow batteries.
- Mechanistic studies on ionic transport and degradation pathways in non-fluorinated materials.
- Scalable synthesis, processing methods, and lifecycle assessments of non-fluorinated polymers.

We welcome original research and review articles that explore these topics, aiming to showcase cutting-edge innovations in non-fluorinated polymer technologies. Your contributions will help shape the development of sustainable, high-performance energy systems. We look forward to your submissions!

Guest Editors

Dr. Vinothkannan Mohanraj

Dr. Sumit Roy

Dr. Ramakrishnan Shanmugam

Deadline for manuscript submissions

closed (31 July 2025)



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Message from the Editor-in-Chief

Since its foundation in 2009, *Polymers* has developed into an internationally renowned, extremely successful open access journal. The editorial team and the editorial board dedicatedly combine open-access publishing and high-quality rigorous peer reviewing. The performance of the journal has proven this strategy to be well-suited and highly successful. This is reflected in the increasing impact factor of *Polymers*, the most recent one being 4.9.

I would like to invite you to contribute to the success of the journal by sending us your high quality research papers. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Alexander Böker

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