

Special Issue

Ion Exchange Membrane Design for Energy Conversion and Storage

Message from the Guest Editor

Ion exchange membranes (IEMs) represent the key component of many electrochemical energy conversion and storage systems, including fuel cells, electrolyzers, reverse electrodialyzers, and batteries. As charged functional materials, these materials allow a selective passage of ions between separate compartments in electrochemical devices. In the past years, research on IEMs has focused on improving the performance of these materials mainly in terms of conductivity, selectivity, and stability, among others, followed by testing and analysis in the prospective technology of interest. Thus, this Special Issue aims at bringing together some new developments in ion exchange membrane material design as well as application in some of the rapidly growing areas of interest related to clean energy generation, hydrogen production, and electrochemical CO₂ reduction.

Guest Editor

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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.

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Prof. Dr. Spas D. Kolev
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