



membranes



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State of the Art of Polymeric Membranes for Energy Storage and Conversion

Guest Editor:

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Message from the Guest Editor

Polymeric membranes have emerged as promising separator material for most energy conversion and storage devices. The composition of polymeric membranes provides an excellent framework for tuning the properties of the separator for many desired applications. The capability of implementing functional groups empowers tuning selectivity along with conductivity. In addition, these membranes can be designed and manufactured using cost-effective and durable materials. Additionally, using continuous manufacturing techniques (e.g., roll-to-roll (R2R) atomic layer deposition (ALD)), the polymeric membranes can be prepared in a continuous manner for large-scale and industrial applications.

Given the key role of polymeric membranes in enabling high-performance energy storage and conversion devices, this Special Issue is collecting papers focused on the application of these membranes in such devices. Recent works dedicated to designing and synthesizing novel polymeric membranes as well as critical review papers from leading research groups are also welcome.



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Special *Issue*



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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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