Special Issue

Membranes for Lithium Batteries

Message from the Guest Editor

It is with great pleasure that we open a Special Issue focused on ionically conducting membranes as electrolytes for rechargeable lithium battery systems. The latter represents an excellent choice as next generation electrochemical storage devices. However, safety drawbacks mainly due to the electrolyte have prevented their development and commercialization.

One of the most promising approaches to overcome these limitations is the adoption of Li+ ion conducting polymer membranes or polymer electrolytes (PEs). Additionally, the development of PEs is undoubtedly appealing from the engineering point of views. They can be easily and cheaply manufactured into low thicknesses and shapes not allowed for supported liquid electrolytes, offering a new concept of lithium polymer battery.

This Special Issue is open to manuscripts focused on various issues (ion transport, thermal and electrochemical properties, compatibility towards electrodes, tests in battery) regarding ionically conducting polymer membranes to be tailored as electrolyte separators for solid-state lithium battery systems.

Guest Editor

Dr. Giovanni Battista Appetecchi

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Deadline for manuscript submissions

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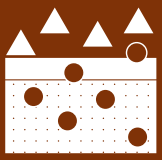

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About the Journal

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 accessjournal 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

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