

Special Issue

Advances in Polymer-Based Materials for Energy Applications

Message from the Guest Editor

Over the past few decades, the demands for energy production and storage have drastically increased, driving the advances in the development of high-performance and eco-friendly energy devices such as lithium-ion batteries, supercapacitors, fuel cells, solar cells, etc. Polymers with various functionalities have been applied in the components within the aforementioned devices to improve the efficiency of energy storage and conversion. The design and fabrication of polymer-based materials are crucial to enhance the performance and the durability of the energy devices. Thus, the combinations of modeling and experimental characterizations provide more comprehensive insights into the designs and optimizations of novel polymeric materials. The aim of this Special Issue is to demonstrate recent advances in the designs, fabrications, and characterizations of polymer-based materials for energy applications. The scope of interest includes but is not limited to solid/gel polymer electrolytes, binders, separators, ion-exchange membranes, conducting polymers, and polymer-based electrodes for energy conversion and storage devices.

Guest Editor

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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 4.7.

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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