Special Issue

Polymer-Based Nanomaterials for Next-Generation Electrochemical Energy Devices

Message from the Guest Editor

Polymer-based nanomaterials have emerged as key components in the development of next-generation electrochemical energy devices, including batteries, supercapacitors, and fuel cells. Their unique properties, such as a high surface area, tuneable conductivity, and mechanical flexibility, make them ideal candidates for improving energy storage and conversion efficiency. This Special Issue will discuss recent advancements in polymer-based nanocomposites, including conductive polymers, polymer electrolytes, and hybrid nanostructures. Key focus areas include enhancing charge transport, stability, and scalability for commercial applications. The integration of nanotechnology into polymer science offers promising pathways in addressing current limitations in energy density, cycle life, and cost, thus paving the way for more sustainable and efficient energy solutions.

Guest Editor

Dr. Joonho Bae

Physics Department, Gachon University, Seongnam-si, Gyeonggi-do, Republic of Korea

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Polymers
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
polymers@mdpi.com

mdpi.com/journal/polymers

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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
Lehrstuhl für Polymermaterialien und Polymertechnologie, University of Potsdam, 14476 Potsdam-Golm, Germany

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