Special Issue

Advanced Polymer Materials for Safe Ion Batteries

Message from the Guest Editors

Advanced polymer materials have been widely applied in state-of-the-art ion batteries. Benefiting from their unique features such as their chemical structure, functional groups, mechanical strength, thermal stability, electrochemical activity, and rheological properties, polymer materials are applied as functional components in safe batteries to achieve prolonged lifespan, increased energy density, and enhanced reliability. This Special Issue aims to develop a high-quality article collection (including review papers and original research papers) about the application of advanced polymer materials in safe ion batteries. Manuscripts focusing on the following topics are highly welcome: 1) The design of safe polymer electrolytes for high-energy-density batteries; 2) The design of ultra-high electrochemical interphases with well-designed polymer coating layers; 3) The development of smart polymer materials for battery safety; 4) The development of crucial polymer components in safe ion batteries; 5) The development of characteristic technologies for advanced polymers in safe ion batteries.

Guest Editors

Dr. Hangyu Zhou

Dr. Yongzheng Yao

Dr. Fengxiang Liu

Dr. Weili Zhang

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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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