

Special Issue

Utilizing Polymers for the Construction of Lithium-Ion Battery

Message from the Guest Editor

Because of their high energy density and environmentally friendly characteristics, lithium-ion batteries have good development prospects in electrochemical energy storage technology. The excellent performance of lithium-ion batteries can be largely attributed to their electrolytes. Recognizing the importance of PEs in lithium-ion batteries, this Special Issue invites the submission of articles on the advantages and disadvantages of polymer substrates in the construction of lithium-ion batteries, as well as the state of the art in polymer research and their development prospects. For example, we will highlight the development of the matrix of PEs, which comprises polyethylene oxide (PEO) or polyacrylonitrile (PAN) and lithium perchlorate (LiClO_4). We also hope to deepen the understanding of the similarities and difference of various electrolytes, proposing mechanisms to guide further in-depth experimental, computational and practical joint research. Original theoretical or simulation work and review articles on any other topics regarding entanglement in polymer electrolytes are welcome.

Guest Editor

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Deadline for manuscript submissions

closed (31 July 2024)



Polymers

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed



mdpi.com/si/191219

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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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