Special Issue

Polymers, Polymer Composite Membranes and Electrolyte

Message from the Guest Editors

Energy security has become a critical research area in the world due to the increasing population and advancements in technology. Most energy storage and conversion devices contain an electrolyte in their heart. This is why researchers around the electrolyte have been the subject of discussion in the energy storage field due to its role in the production/storage of energy/electricity. Electrolytes are used across the energy field, from fuel cells, batteries, supercapacitors, electrolyzers and so forth. Solid polymer electrolytes/solid conductive nanomaterials have been seen as a potential alternative to liquid electrolytes across all these devices due to their fast ion transfer and prolonged lifetime capability. This is still part of the discussion of whether solid electrolytes are to replace liquid electrolytes. This Special Issue aims to report the recent progress and continue the conversation regarding the development of polymer and other types of electrolytes which can be applied in (but not limited to) fuel cells, batteries, supercapacitors, electrolyzers. Furthermore, polymeric host materials and interphase layers are covered.

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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 4.9.

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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