

## Special Issue

# Preparation and Characterization of Polymer-Based Electrolyte Materials

### Message from the Guest Editor

Polymer-based electrolytes have emerged as key materials in energy storage and conversion technologies, playing an essential role in various electrochemical devices such as batteries, fuel cells, supercapacitors, dye-sensitized solar cells, and actuators. Furthermore, polymer-based electrolytes offer flexibility in design, allowing for the fabrication of thin and lightweight components and enabling the development of more compact and energy-dense devices. However, challenges remain in improving their conductivity, electrochemical stability, mechanical properties, and lifetime. Researchers are continually working to improve their performance by developing new polymer formulations, enhancing ion mobility, and increasing compatibility with various electrode materials. The study of polymer-based electrolytes therefore has considerable research value. We welcome contributions to our Special Issue from fields including (but not limited to) the synthesis and characterization of polymer electrolytes, their performance evaluation, and their applications in energy, health, electronics, and the environment.

### Guest Editor

Dr. Sébastien Maria

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### Deadline for manuscript submissions

closed (25 November 2024)



## Polymers

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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.

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### Editor-in-Chief

Prof. Dr. Alexander Böker

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