Special Issue

Designing Polymers for Emerging Applications

Message from the Guest Editors

This Special Issue explores the design and optimization of polymers for emerging applications, combining computational, experimental, and theoretical approaches. By integrating methods such as molecular dynamics (MD), quantum simulations like density functional theory (DFT), and experimental insights, this issue aims to showcase innovations in polymer design. Topics include the development of polymers for advanced applications in electronics, biomaterials, sustainability, and beyond. Contributions focusing on the prediction and validation of polymer properties, from mechanical and thermal to electronic and chemical behavior, are welcome. This issue seeks to highlight the collaborative role of simulation, theory, and experiment in advancing new materials for cutting-edge technologies. Topics to be covered:

- Polymer design for emerging applications;
- Integration of computational, experimental, and theoretical methods;
- Structure–property relationships in polymers;
- Functional and sustainable polymer development;
- Mechanical, thermal, and electronic properties of 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 4.9.

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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