

## Special Issue

# Polymer-Derived Ceramic Materials: Design, Synthesis, and Applications

### Message from the Guest Editors

Polymer-derived ceramics (PDCs) offer a new type of advanced structure–function integrated material with a unique structure and adjustable physicochemical properties, inspiring the development of various applications in thermal protection, environmental remediation, energy storage and conversion, microwave absorption/shielding, etc. Advanced fabrication strategies, such as electrospinning, freeze casting, and additive manufacturing, have facilitated the design of complex structures across multiple length scales. This Special Issue is to present the latest findings in PDC materials to highlight promising trends in their design, synthesis, manufacturing, characterization, and applications; our ultimate aim is to realize the coexistence of basic theories and engineering applications, the integration of chemical composition and multiscale structures, and the collaboration of interdisciplinary fields, including chemistry, materials science, mechanics, and mechanical engineering. The scope of this Special Issue covers advances in molecular chemistry, advanced processing and shaping methods, polymer-to-ceramic conversion and cutting-edge PDC applications.

### Guest Editors

Prof. Dr. Gaofeng Shao

School of Chemistry and Materials Science, Nanjing University of Information Science and Technology, Nanjing 210044, China

Dr. Maged F. Bekheet

Fachgebiet Keramische Werkstoffe/Chair of Advanced Ceramic Materials, Institut für Werkstoffwissenschaften und -technologien, Technische Universität Berlin, Hardenbergstraße 40, 10623 Berlin, Germany

### Deadline for manuscript submissions

closed (30 September 2022)



## Polymers

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Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[polymers@mdpi.com](mailto:polymers@mdpi.com)

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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.

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### Editor-in-Chief

Prof. Dr. Alexander Böker

Fraunhofer-Institut für Angewandte Polymerforschung, Lehrstuhl für Polymermaterialien und Polymertechnologie, Universität Potsdam, Geiselbergstraße 69, 14476 Potsdam-Golm, Germany

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