# **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 cuttingedge PDC applications.

### **Guest Editors**

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### Deadline for manuscript submissions

closed (30 September 2022)



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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.

### Editor-in-Chief

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