

Special Issue

Mechanical Properties and Behaviors of Polymer Materials

Message from the Guest Editor

This Special Issue, entitled *Mechanical Properties and Behaviors of Polymer Materials*, will be focused on advances in the mechanical response and deformation mechanisms of polymer materials under different loading and environmental conditions. Particular attention will be devoted to the relationship between microstructure evolution and macroscopic mechanical behavior in semicrystalline polymers, polymer blends, and polymer composites. Topics of interest include yielding and strain localization behavior, deformation-induced structural evolution, thermo-mechanical coupling, viscoelastic and viscoplastic behavior, fatigue and creep performance, constitutive modeling, and advanced experimental characterization techniques. Studies involving crystallization behavior, phase structure regulation, and processing-induced mechanical properties are also encouraged. This Special Issue aims to provide a platform for researchers to present innovative experimental, theoretical, and simulation studies that improve the understanding of polymer deformation and failure mechanisms, thereby promoting the design and development of high-performance polymer materials with enhanced mechanical reliability.

Guest Editor

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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 5.8.

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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