

Special Issue

Elastomers: From Theory to Applications

Message from the Guest Editors

This Special Issue focuses on the current state-of-the-art of elastomers, both in modern applications and from a theoretical perspective. The main characteristic of elastomer materials is the high elongation and (entropy) elasticity of these materials, and the ability to swell multiple times in a suitable solvent. The use of filled elastomers, especially of new kinds of elastomer nanocomposites, is of high interest for rubber technologies. The scope of the Special Issue encompasses frontier-of-science contributions in synthesis, characterization, modeling, and the theory of elastomers. Of particular interest are new structures and functionalities incorporated into elastomers, leading to enhanced properties of crosslinked elastomeric materials. Examples include conductive elastomers, mechanically adaptive elastomers, bioelastomers, photosensitive and light-controlled elastomers, elastomers with autonomous self-healing properties, and other novel elastomer-based materials.

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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 4.9.

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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