

Special Issue

Polymer-Enabled Biomimetic Platforms for Cell Growth and Function

Message from the Guest Editors

Polymers represent a powerful class of materials for designing biomimetic platforms that support and regulate cell growth, organization, and function. With advances in polymer synthesis, functionalization, and processing, it is now possible to create dynamic environments that closely resemble the extracellular matrix, offering tunable biochemical, mechanical, and structural cues. Such polymer-enabled systems provide unique opportunities to investigate cell-material interactions, model complex tissues and disease states, and develop next-generation solutions in regenerative medicine, drug delivery, and in vitro testing. This Special Issue, "Polymer-Enabled Biomimetic Platforms for Cell Growth and Function", seeks original research articles, reviews, and communications that explore innovative polymer designs, fabrication approaches, and applications. Topics of interest include, but are not limited to, polymer-based scaffolds and hydrogels, 3D and 4D printing, biofunctionalization strategies, smart and stimuli-responsive polymers, organ-on-chip and in vitro tissue models, as well as translational applications in drug discovery, toxicology, and regenerative therapies.

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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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