Special Issue

Polymer-Based 3D Printing for Drug Delivery and Diagnostic Applications

Message from the Guest Editor

This Special Issue highlights the development, characterization, and application of 3D-printed polymeric structures designed to enhance therapeutic efficacy, biosensing, and personalized medicine. The versatility of polymeric materials has enabled researchers to create innovative 3D-printed devices such as microneedle arrays, implantable systems, and scaffolds, facilitating controlled drug release, transdermal delivery, and real-time health monitoring. We welcome original research articles, reviews, and perspectives covering a broad spectrum of topics, including (but not limited to) the following: novel polymeric materials for 3D printing, biodegradable and bioresponsive polymers, functional coatings, advanced fabrication techniques, and computational modeling. Contributions exploring the integration of 3D-printed polymeric systems with biosensing platforms, microfluidics, and personalized medicine are particularly encouraged. By showcasing the latest advancements in polymer-based 3D printing for biomedical applications, this Special Issue aims to provide a comprehensive overview of the field, addressing key challenges, emerging innovations, and future directions.

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 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

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