Special Issue

3D/4D Printing of Biopolymers: Materials and Design for Healthcare Applications

Message from the Guest Editors

Biopolymers and their composites have garnered considerable attention due to their sustainability, biocompatibility, and the improved mechanical properties achieved through the incorporation of reinforcing agents such as fibers or fillers. In healthcare, their integration with advanced three-dimensional (3D) and four-dimensional (4D) printing technologies facilitates the fabrication of customized, functional structures for applications such as tissue scaffolds, prosthetics, and soft robotics. This Special Issue highlights recent advances in the (bio)printing of biopolymers and their composites, particularly those that are biodegradable or stimuli responsive. We welcome contributions focused on the design, processing, and characterization of these materials, as well as the implementation of computational tools—such as finite element analysis, constitutive modeling, and machine learning—to support material development and performance prediction. Submissions integrating experimental validation, including in vitro and/or in vivo testing, are especially encouraged to strengthen the link between material innovation and real-world application.

Guest Editors

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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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