Special Issue

Functional Polymer Materials for Cell-Based Tissue Regeneration

Message from the Guest Editor

Cell-based therapy is a promising approach for the treatment of various diseases and injuries. This Special Issue aims at presenting the main advances in the field of biomimetic polymers for cell-based therapies in tissue engineering and regeneration. Multiple cell types can be utilized in such therapies, including stem, progenitor or primary cells. Biomimetic polymers have been designed as the cell delivery vesicle to elicit specific cellular functions, to direct cell–cell interactions, to improve their biological functions, and accelerate tissue repair at the designated site. Additionally, the functions of delivered living cells can be regulated by stimuli-responsive multifunctional polymers which respond to changes in the surrounding microenvironment to speed up wound healing. This Special Issue covers but is not limited to such topics as smart biomimetic polymers, multifunctional polymers, bioactive polymers, biodegradable polymers, microfabrication of polymers, regenerative medicine, hard and soft tissue regeneration, in vitro studies, in vivo investigations, preclinical studies, and clinical applications.

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 4.7.

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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