Special Issue

Recent Advances in Multi-Material Hydrogel Bioinks for 3D Bioprinting

Message from the Guest Editors

The special issue aims to delve into the cutting-edge innovations shaping the field of tissue engineering and regenerative medicine. Hydrogels, with their biocompatible properties and ability to mimic the extracellular matrix, serve as ideal bioinks for 3D bioprinting, enabling the precise fabrication of complex tissue structures.

The field has been exploring novel formulations that enhance the mechanical strength, printability, and biofunctionality of hydrogel bioinks. By incorporating multiple materials, such as natural polymers, synthetic polymers, and bioactive molecules, scientists aim to create bioinks with tailored properties to mimic diverse tissue environments. Furthermore, advances in bioink development are facilitating the fabrication of intricate vascular networks and organoids, crucial for mimicking the complex architecture of native tissues.

We are pleased to invite you to submit papers, to hopefully contribute to this special issue and the development of scientific study for tissue engineering and bioprinting.

Guest Editors

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About the Journal

Message from the Editor-in-Chief

Gels (ISSN 2310-2861) is recently established international, open access journal on physical and chemical gel-based materials. The journal aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. General topics include but not limited to synthesis, characterization and applications of new organogels, hydrogels and ionic gels made either from low molecular weight compounds or polymers, composite and hybrid materials where a metal is by some means incorporated into the gel network, and computational studies of these materials in order to provide a better understanding of gelation mechanism. We cordially invite you to consider publishing with us and contribute with your own grain of sand to the advance in this fascinating field.

Editor-in-Chief

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