Special Issue

Bioprinting Hydrogels

Message from the Guest Editors

Three-dimensional (3D) printing technologies have empowered hydrogel and scaffold fabrication, supporting research in tissue engineering, regenerative medicine, drug delivery, and more. Bioprinting, a subset of 3D printing, utilizes biomaterials, cells, and/or physiologically relevant factors to produce user-defined biological constructs. Compared to traditional hydrogel fabrication techniques, bioprinting offers exceptionally greater control over physical structure and spatial patterning of hydrogel components. The of this Special Issue welcome submissions that encompass the breadth and depth of research on hydrogel bioprinting. Original research articles, methods articles, and review papers will be considered for publication. The areas of interest include, but are not limited to:

- Bioprinting of complex structures;
- Bioprinting of multiple materials and composites;
- Spatial patterning of ligands;
- Controlled release from 3D printed gels;
- Stimuli-responsive hydrogels;
- Computational modeling of 3D printed gels;
- In vitro and in vivo characterization of 3D printed gels.

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Deadline for manuscript submissions

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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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Author Benefits

High visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Polymer Science) / CiteScore - Q1 (Organic Chemistry)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 12.5 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).

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