Special Issue

Development of Advanced Hydrogels as Functional Biomaterials

Message from the Guest Editors

Hydrogels have been used as one of the most common tissue engineering scaffolds over the last two decades due to their ability to maintain a distinct 3D structure, provide mechanical support for the cells in engineered tissues, and simulate the native extracellular matrix. However, to enable their clinical translation, hydrogels need to be engineered to be able to respond to their native environment upon implantation. The constant impetus to develop functional and biomimetic hydrogels over the past decade has yielded hydrogels with innovative chemistries and spatio-temporal control.

The goal of this Special Issue is to highlight the recent research developments for engineering functional biomimetic scaffolds. All tissue engineering and biomedical hydrogel applications will be considered. Articles that discuss novel hydrogel chemistries and their translation potential compared to conventionally known hydrogels will be prioritized. The submission of both original research and review articles is welcome.

Guest Editors

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Deadline for manuscript submissions

closed (30 April 2024)

Gels

an Open Access Journal by MDPI

Impact Factor 5.3
CiteScore 7.6
Indexed in PubMed

mdpi.com/si/178946

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About the Journal

Message from the Editorial Board

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.

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