

Special Issue

Drug-Loaded Hydrogel Biomaterials

Message from the Guest Editors

Hydrogels have been widely explored as a biomaterial due to their biocompatibility, water content, and structural similarity with the extracellular matrix. Additionally, they can carry the active molecules to support tissue growth. Recently, injectable hydrogels have gained significant attention due to their minimal invasiveness, easy handling, and deep tissue penetration. This Special Issue is dedicated to recent developments in synthetic- and natural-material hydrogels as biomaterials with the ability to deliver the encapsulated drug. This Special Issue will cover all aspects of the subject area, including the preparation of novel hydrogels, solution of existing problems such as improvement in mechanical properties, biocompatibility study, in situ crosslinking strategies, and in-depth clinical study of existing systems for clinical translation. We warmly welcome researchers working on stimuli-responsive hydrogels as biomaterials with the ability to release the on-demand drug in response to external/internal stimuli to improve tissue regeneration. This Special Issue will comprise original research articles as well as comprehensive reviews, communications, and perspectives.

Guest Editors

Dr. Hua-Jie Wang

Dr. Ali Raza

Dr. Damien Dupin

Deadline for manuscript submissions

closed (28 February 2023)



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Gels
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
gels@mdpi.com

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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

Prof. Dr. Esmail Jabbari

Biomimetic Materials and Tissue Engineering Laboratory, Department of Chemical Engineering, University of South Carolina, Columbia, SC 29208, USA

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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).