

Special Issue

Hydrogel Delivery Systems for Biomedical Applications

Message from the Guest Editors

This Special Issue on “Hydrogel Delivery Systems for Biomedical Applications” is dedicated to recent developments from material design aspects to the synthesis, characterization, and biomedical applications of synthetic or naturally derived polymer-based hydrogel delivery systems. Hydrogel delivery systems can exert therapeutic effects of delivered agents and have been used clinically, providing a spatially and temporally controlled release of a variety of therapeutic agents, including drugs, cells, and other bioactive substances (e.g., growth factors, cytokines, miRNA, and exosomes). Due to their tunable physiochemical properties and interactions with encapsulated agents, hydrogels with designed degradability can serve as a platform for the programmable release of therapeutic agents. In this Special Issue, the design of hydrogel delivery systems, especially focusing on chemical and physical properties of the hydrogel material and the encapsulated agent–hydrogel interaction, is involved. Meanwhile, different delivery mechanisms that can be integrated to play their roles in enhancing therapeutic effects are also discussed.

Guest Editors

Dr. Yufei Ma

Prof. Dr. Bo Lei

Prof. Dr. Murugan Ramalingam

Deadline for manuscript submissions

closed (28 April 2022)



Gels

an Open Access Journal
by MDPI

Impact Factor 5.3
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/93735

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

[mdpi.com/journal/
gels](https://mdpi.com/journal/gels)





Gels

an Open Access Journal
by MDPI

Impact Factor 5.3
CiteScore 7.6
Indexed in PubMed



[mdpi.com/journal/
gels](https://mdpi.com/journal/gels)



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

Author Benefits

High visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPus / 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).