Special Issue

Advances in Stimulus-Responsive Hydrogels: Theory, Modern Advances, and Applications

Message from the Guest Editors

Stimulus-responsive hydrogels are at the forefront of smart materials research, valued for their ability to react to environmental changes such as temperature, pH, and light. These hydrogels have significant potential in fields ranging from biomedical engineering to environmental monitoring, making them crucial for the development of innovative applications like drug delivery systems and soft robotics.

This Special Issue aims to showcase state-of-the-art advancements in the design, synthesis, and application of stimulus-responsive hydrogels. It invites contributions that offer new insights into understanding their mechanisms of action, innovative fabrication techniques, and the broadening scope of practical applications.

Researchers are encouraged to submit original research, reviews, and case studies that not only expand scientific knowledge but also demonstrate real-world applications. It aims to inspire ongoing research and innovation in the versatile field of stimulus-responsive hydrogels, providing a platform for both academic and practical advancements.

Guest Editors

Dr. Yevhenii M. Morozov

AIT-Austrian Institute of Technology, Center for Health & Bioresources, 1210 Vienna, Austria

Dr. Jakub Dostalek

Czech Academy of Sciences, FZU-Institute of Physics, 18221 Prague, Czech Republic

Deadline for manuscript submissions

31 August 2025

Gels

an Open Access Journal by MDPI

Impact Factor 5.3
CiteScore 7.6
Indexed in PubMed

mdpi.com/si/204085

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

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

MDPI

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. Esmaiel 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, 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).