

Special Issue

Advances in Gels for Wound Treatment

Message from the Guest Editors

Gel materials have gained significant attention in recent years due to their unique properties and versatile applications in the biomedical field. These materials, characterized by their ability to swell and retain large amounts of water within their network, offer numerous advantages for various bioengineering applications, including drug delivery, tissue engineering, regenerative medicine, and biosensing. This Special Issue highlights the use of gels as carriers for bioactive agents, including growth factors, antimicrobials, and extracellular matrix components, to promote tissue regeneration, wound healing, and antimicrobial activity. Furthermore, this Special Issue discusses the clinical applications of gel-based wound treatments, such as developing gel-based wound dressings and topical formulations. It evaluates their effectiveness in various wound types, including chronic wounds, burns, and surgical incisions.

This Special Issue provides an excellent platform to present and discuss the design, synthesis, characterization, and utilization of hydrogels and biopolymeric gels and formulation strategies to enhance their properties and effectiveness in wound healing.

Guest Editors

Dr. Md Shaifur Rahman

Institute of Tissue Banking and Biomaterial Research, Atomic Energy Research Establishment, Dhaka 1349, Bangladesh

Prof. Dr. Pasquale Del Gaudio

Department of Pharmacy, University of Salerno, 84084 Fisciano, Italy

Deadline for manuscript submissions

closed (28 February 2025)



Gels

an Open Access Journal
by MDPI

Impact Factor 5.3
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/185931

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).