

## Special Issue

# Cellulose- and Nanocellulose-Based Gels: Design and Applications

### Message from the Guest Editors

Cellulose and nanocellulose, derived from renewable plant sources and natural fibers, have attracted great scientific and industrial interest as versatile and sustainable biomaterials. Cellulose- and nanocellulose-based hydrogels, characterized by a three-dimensional hydrophilic polymer network, are renowned for their nontoxic, biocompatible, and biodegradable nature. These (nano)hydrogels exhibit unique properties, including swelling, softness, and responsiveness to external stimuli, enabling a wide range of applications in multidisciplinary areas including biomedical fields (drug delivery, tissue engineering, and wound healing), healthcare and hygienic products, agriculture (water resources and fertilizer supply), textiles and industrial applications as smart materials (sensors, energy storage devices...), among other applications. With this Special Issue, we would like to catch the attention of food/material scientists, engineers, and technologists, and invite them to contribute via original research papers, review articles, and short communications, which have the potential to make a substantial impact in the realm of cellulose-based gels.

---

### Guest Editors

Dr. Annachiara Pirozzi

Dr. Luis Serrano

Prof. Dr. Francesco Donsi

---

### Deadline for manuscript submissions

closed (30 January 2025)



## Gels

---

an Open Access Journal  
by MDPI

---

**Impact Factor 5.3**  
**CiteScore 7.6**  
**Indexed in PubMed**



[mdpi.com/si/188953](https://mdpi.com/si/188953)

*Gels*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[gels@mdpi.com](mailto: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).