



*gels*



an Open Access Journal by MDPI

## Food Gels: Properties and Applications

Guest Editors:

**Prof. Dr. Honghai Hu**

Institute of Agricultural Products Processing, Chinese Academy of Agricultural Sciences, No. 2 Yuanmingyuan West Road, Haidian District, Beijing 100193, China

**Prof. Dr. Jianhui Xiao**

School of Food Science and Engineering, Jiangxi Agricultural University, Nanchang 330045, China

**Dr. Lianliang Liu**

Department of Food Science and Engineering, Ningbo University, Ningbo 315832, China

Deadline for manuscript submissions:

**closed (30 March 2024)**

### Message from the Guest Editors

Food gels are soft, flexible macromolecular polymeric materials that retain large amounts of water or biofluids in their three-dimensional network structure. Owing to the structural and viscoelastic characteristics of these gels, they play essential roles in modern food design; for example, they are used to replace fats, increase shelf life, and guard flavor compounds, and in the creation of complex product shapes via three-dimensional (3D) printing. An increasing trend has been observed in the use of hydrogels as stimuli-responsive delivery systems because of their sustainable, low-cost, nontoxic, and biocompatible nature. Researchers endeavor to understand the mechanisms of gelling processes under different gelation conditions and using different gelling agents, such as polysaccharides or starch, to achieve gels with specific attributes. Although many aspects of the formation mechanisms, functions, and applications of gels have been clarified thus far, many phenomena remain unsolved. We look forward to receiving submissions of new results on the interconnection between gel networks, the preparation of gels, and the novel application of gels with high functional properties.



[mdpi.com/si/164229](https://mdpi.com/si/164229)

**Special** Issue



*gels*



an Open Access Journal by MDPI

## 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

## 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.

## Author Benefits

**Open Access:** free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

**High visibility:** indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [PubMed](#), [PMC](#), [CAPlus / SciFinder](#), and [other databases](#).

**Journal Rank:** JCR - Q1 (Polymer Science) / CiteScore - Q2 (Polymers and Plastics)

## Contact Us

---

*Gels* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/gels](http://mdpi.com/journal/gels)  
[gels@mdpi.com](mailto:gels@mdpi.com)  
[X@Gels\\_MDPI](#)