

*gels*



an Open Access Journal by MDPI

## Preparation and Application of Aerogel and its Composite Materials

Guest Editors:

**Dr. Zhi Li**

School of Resource and Safety Engineering, Central South University, Changsha 410083, China

**Dr. Xudong Cheng**

State Key Laboratory of Fire Science, University of Science and Technology of China, Hefei 230026, China

**Dr. Song He**

School of Safety Science and Emergency Management, Wuhan University of Technology, Wuhan 430070, China

Deadline for manuscript submissions:

**closed (28 May 2022)**

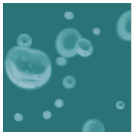
### Message from the Guest Editors

Aerogel has a three-dimensional nano/micro-porous structure, usually composed of nanoparticles or polymer molecular chains. It is mainly prepared by the classic sol-gel method. Since firstly prepared by Kistler in 1931, aerogels have been employed in a wide range of application fields, such as thermal insulation, adsorption, catalysis, drug delivery systems, and aerospace. Due to their poor mechanical properties, high cost, and complicated preparation process, there are still huge challenges in realizing their large-scale industrial preparation and applications. Optimizing the preparation process, improving their diverse performances, and expanding the application domains of aerogels are current important issues. For this aim, more attention has been drawn to the preparation and application of aerogel composites. We look forward to new research on aerogels and aerogel composites, including, but not limited to, their preparation and application of, and we also welcome submissions of relevant theoretical and experimental research reports.



[mdpi.com/si/96237](https://mdpi.com/si/96237)

**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](#), [CAPus / 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](#)