



*gels*



an Open Access Journal by MDPI

## Silica Aerogel Composite

Guest Editor:

### Dr. Hu Zhang

State Key Laboratory of Strength and Vibration of Mechanical Structures, School of Aerospace Engineering, Xi'an Jiaotong University, Xi'an 710049, Shaanxi, China

Deadline for manuscript submissions:

**closed (15 April 2022)**

### Message from the Guest Editor

Aerogels are the lightest solids on earth. Due to their low density, high porosity, extremely large specific area and random nano-porous structure, they have a wide range of applications in the fields of catalysts, absorbents, supercapacitors and thermal insulation, etc. Silica aerogel has many exceptional properties; in particular, its thermal conductivity can be lower than that of still air. Thus, silica aerogel is an ideal thermal insulation material. However, pure silica aerogel is too fragile. In order to improve the mechanical strength and thermal insulation performance at elevated temperatures, additives such as reinforced fibers and opacifiers are usually composited with silica aerogel.

This Special Issue focuses on recent research and advances in silica aerogel composite. The topics include but are not limited to synthesizing silica aerogel composite, numerical predicting and experiment studies of the properties of silica aerogel composite, and research relating to the corresponding applications is also welcomed.



[mdpi.com/si/99445](https://mdpi.com/si/99445)

# 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](#)