

Special Issue

Recent Advancements and Functional Applications of Aerogels

Message from the Guest Editors

Aerogel is composed of colloidal particles or polymer molecules that aggregate to form a porous network structure in pores, among which a highly dispersed solid material is filled with a gaseous dispersing medium. Due to its distinctive advantages, such as ultra-low density, high porosity, low thermal conductivity, and high specific surface area, aerogel is widely used in thermal insulation, sound insulation, electromagnetic shielding, and other fields. This Special Issue aims to provide an opportunity for researchers to contribute their most recent research and development in functional aerogels. Topics of interest include, but are not limited to, the following

- Aerogels for flame retardant;
- Aerogels for thermal insulation;
- Stimuli-responsive aerogels;
- Additive manufacturing of aerogels;
- Aerogels for solar-thermal regulatory cooling;
- Aerogels for thermal energy storage;
- Aerogels fiber;
- Aerogels for catalysis.

Guest Editors

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About the Journal

Message from the Editorial Board

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.

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