Special Issue

Synthesis and Application of Aerogel

Message from the Guest Editor

Aerogels are highly porous networks of nanoparticles that have long been prized for their exceptionally high surface area; they are the smallest density solids in the world. Aerogels are usually developed by drying with supercritical fluids, most frequently CO2, freeze drying, or evaporative drying, from wet gels that were originally created using sol–gel methods. Aerogel has outstanding material properties because of its complex network of nanoparticles and fibers, which are created more by the microstructure of the material than by its physical characteristics. Although aerogel is light and has a low density, it can bear a lot of pressure. Due to their material properties, aerogels can be useful in a range of applications, such as thermal protection, catalysis, sorption media, sensors, electrodes in solid oxide fuel cells, and drug delivery. We welcome submissions of experimental and theoretical studies that explore the potential applications of aerogel materials.

Guest Editor

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Deadline for manuscript submissions

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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

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