

Special Issue

Preparation and Application of Aerogel and its Composite Materials

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.

Guest Editors

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Deadline for manuscript submissions

closed (28 May 2022)



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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

Prof. Dr. Esmail Jabbari

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