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Advances in Synthetic and Bio-Based Aerogels: Mechanical Properties, Thermal Insulation, and Environmental Remediation

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Message from the Guest Editors

This Special Issue on “Advances in Synthetic and Bio-based Aerogels: Mechanical Properties, Thermal Insulation, and Environmental Remediation” is dedicated to recent innovative studies on the synthesis procedures and distinctive characteristics of aerogels for the referred applications.

This Special Issue is gathering research describing the production of aerogels through different methods and an exhaustive characterization in terms of textural properties, chemical composition, thermal insulation, mechanical properties, and uncommon adsorptive/catalytic performance, among others.

Aerogels usually present a unique combination of properties that can be tuned through changes in the production process that significantly alter their nanostructures. There are several procedures for tailoring the final properties of these materials by modifying the formulations, inducing changes in the structure through different processing steps, adding different fillers, etc.

We encourage authors to contribute to this Special Issue, which hopefully will provide valuable knowledge for the aerogel community.



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Special Issue



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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.

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