Special Issue

Gels for Energy Applications

Message from the Guest Editors

This Special Issue aims to provide a comprehensive collection of works on recent advances and developments in smart gels and biomaterials applied to the energy harvesting/storage fields. Its relevant research topics include all gels and bio-based materials, including polymer gels, supramolecular gels, organic/inorganic hybrid gels, aerogel, etc.

Energy, the lifeblood of industry, propels the wheels of progress in our society. Yet, this surge in energy consumption has sparked concerns over both an impending energy crisis and environmental degradation. Consequently, there has been a global surge in interest towards energy conversion and storage, with a particular focus on gels and biomaterials. These materials offer versatile avenues for storing energy in a myriad of forms: chemical, mechanical, electrical, or thermal.

Gels and bio-based materials have emerged as pivotal players in various energy storage technologies, notably in the realms of thermal regulation, batteries, and supercapacitors. Their significance lies in their ability to address safety concerns, enhance performance, and foster innovative designs within these technologies.

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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