Special Issue

Advanced Hydrogel for Water Treatment

Message from the Guest Editors

In recent years, the shortage of freshwater resources as well as the contamination of aqueous environment are urgent problems worldwide. The development of effective technologies for freshwater harvesting and water decontamination have become urgent demand and research hotspot. Hydrogel, as a novel floatable, durable, anti-fouling, and suitable recycling materials with a porous 3D network structure, is an effective adsorbent to enhance photothermal solar efficiency conversion and removal of series of pollutants from water in desalination and decontaminants during water treatment, respectively. Hydrogel, which exhibits excellent pollutant adsorption capacity, water holding capacity, water adsorption capacity, and reversible swelling ability, has potential application value in water treatment at large scale. This Special Issue focuses on the preparation of physical and chemical hydrogel as well as the application of hydrogel for desalination and decontaminant in water purification process, for example, seawater desalination, atmospheric condensation, various pollutants adsorption, and oil-water separation.

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Deadline for manuscript submissions

closed (5 February 2024)

Gels

an Open Access Journal by MDPI

Impact Factor 5.3
CiteScore 7.6
Indexed in PubMed

mdpi.com/si/107616

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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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