Special Issue

Characterization Techniques for Hydrogels and Their Applications

Message from the Guest Editor

The development of novel functional materials is currently a major challenge to addressing specific problems not only in the environmental field but also in chemistry and biotechnology. In this sense, macromolecular chemistry is of great interest to produce processable materials with unique and valuable properties. In this sense, the use of spectroscopic and rheological techniques is necessary to achieve both the chemical structures and mechanical properties for the resulting materials as well as the success in their applications in different areas. Among them, nuclear magnetic resonance (NMR) is the goal characterization technique to resolve chemical structures from small molecules to macromolecules. The aim of this Special Issue is to receive articles, comprehensive reviews, short communications, and perspectives, with topics addressing—but not limited to—the key findings and contributions on advanced hydrogels or supramolecular materials, with particular emphasis on their structure at different levels, including advanced characterization techniques and their applications.

Guest Editor

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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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