

Special Issue

Design, Characterization and Applications of Smart Hydrogels

Message from the Guest Editors

Smart hydrogels represent a versatile category of materials capable of altering their structure and characteristics in response to external stimuli, such as temperature, pH, light, and electric fields. These materials consist of hydrophilic polymer networks that have a remarkable capacity to soak up and hold substantial amounts of water. A distinctive feature of smart hydrogels is their reversible volumetric and shape changes when exposed to variations in their surrounding environment. This adaptability renders them highly suitable for numerous applications, including drug delivery, tissue engineering, sensors, and actuators. In summary, smart hydrogels offer significant promise across diverse fields due to their unique properties and adaptability. This Special Issue, entitled Design, Characterization and Applications of Smart Hydrogels, aims to highlight recent advances in research on functional gels materials. We welcome submissions including fundamental studies and application-focused research.

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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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