Special Issue

Recent Advances in Stimulus-Responsive Hydrogels for Cell Actuation and Sensing

Message from the Guest Editors

We invite you to submit your recent research results to be considered for publication in a Special Issue dedicated to stimulus-responsive hydrogels and their application for cell sensing and/or actuation. Significant research efforts are currently focusing on a variety of stimulus-responsive hydrogels, with multiple applications emerging, such as tissue engineering scaffolds, drug- and cell-releasing platforms, materials for soft robotics, etc., given the similarities between their mechanical and chemical properties and those of natural tissues and the additional possibility to dynamically change these properties. We hope that you will consider sharing your work on such dynamic hydrogel systems for cell-related applications in this Special Issue. Relevant contributions include (but are not limited to) the synthesis and characterization of stimulus-responsive hydrogels, their ability to support and guide cell functions, novel sensing and actuation principles, novel applications, etc.

Guest Editors

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Deadline for manuscript submissions

closed (15 February 2023)



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About the Journal

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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manuscripts are peer-reviewed and a first decision is provided to authors approximately 12.5 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).

