Special Issue

Strong Adhesion, High Toughness Hydrophobic Hydrogels

Message from the Guest Editor

This Special Issue on "Strong Adhesion, High Toughness Hydrophobic Hydrogels" is dedicated to recent developments from theoretical and experimental studies for the synthesis, characterization, and applications of hydrophobic interactions and hydrophobic hydrogels. Within this context, a broad range of subjects, including structures and dynamics, mechanics, adhesion, self-healing, sensoring, drug delivering, etc., will be covered. The hydrophobic hydrogel could bear a large deformation and good resistance to a high concentration of saltwater. For these characteristics, hydrophobic hydrogels are used to design sensors and devices, and even for a more diverse range of applications. Examples include soft robots, biomedical devices, artificial skin, tissue adherence, 3D printing, and wearable sensors, and drug delivery. Although many aspects of the hydrophobic hydrogels have been clarified, there are still many phenomena, structural interactions, and performance characteristics of hydrophobic hydrogels that that are yet to be discovered. We look forward to submissions of new results in the field of hydrophobic hydrogels.

Guest Editor

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Deadline for manuscript submissions

closed (25 May 2022)



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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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