Special Issue

Recent Research on Medical Hydrogels

Message from the Guest Editors

This issue aims to display recent advances in hydrogel-related research, as well as its important contributions to healthcare applications. Hydrogels are medically regarded as a supportive matrix and, due to their distinctive properties, can be used under various forms. Further, research topics include the synthesis and characterization of the hydrogels, as well as their different medical uses. An important aspect when developing a new hydrogel material is to improve biocompatibility, biodegradability, and mechanical properties. On the other hand, hydrogels may be used as 3D scaffolds for cell culture and tissue regeneration. Another advantage of hydrogels is that they can be designed as drug delivery systems suitable for controlled and targeted release. Also, they may be chosen in formulation studies to improve drug absorption because of their mucoadhesive and bioadhesive properties. Moreover, recent research also focused on the role of hydrogels in personalized disease modelling which can be achieved by mimicking physiological conditions of specific diseases.

Guest Editors

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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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