Special Issue

Modification of Hydrogels and Their Applications in Biomedical Engineering

Message from the Guest Editors

It is widely known that hydrogels are hydrophilic polymer networks that represent an important class of biomaterials in biotechnology and medicine due to their excellent biocompatibility with minimal inflammatory responses and tissue damage. Currently, different hydrogels have been widely used as bioscaffolds to mimic the structure and properties of tissues. However, single-component hydrogels usually do not meet the basic requirements of tissue engineering. The synthetic polymer hydrogels have excellent mechanical properties, but their biological properties are often poor, which is not conducive to the adhesion and growth of cells. The natural polymers have unique biological properties, but their mechanical properties are often unsatisfactory. To promote the application of hydrogels in the biomedical field, improving the properties of hydrogels is necessary. This Special Issue focuses on the modification of hydrogels and their properties for different biomedical applications. For more information, please visit: mdpi.com/si/96603.

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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.

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