



gels



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Advanced Hydrogels for Tissue Engineering and Drug Delivery

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Message from the Guest Editors

Hydrogel is a three-dimensional network structure with a polymer chain bonded through covalent and/or secondary bonds, which enables strong hydrogen bonding with water molecules. Hydrogel can contain drugs, cells, and a large amount of water which, when in contact with water, shows substantial swelling. Hydrogel can also be degraded by tissue engineering by using the crosslinking method.

This Special Issue on “Advanced Hydrogels for Tissue Engineering and Drug Delivery” covers the theory of biopolymers for hydrogel fabrication, an introduction to various methods for hydrogel fabrication, drug loading/release effects, and recent developments in tissue engineering applications. Research on tissue engineering and the drug delivery of hydrogels has attracted considerable interest in the past decades. Recently, research on controlling drug release and tissue engineering applications through various methods, such as electrical/physical stimulation, biofunctional modification for targeting/sustained release, and cell encapsulation, has been conducted.



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Special Issue



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Message from the Editorial Board

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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