

gels



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Hydrogels as Controlled Drug Delivery Systems

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Message from the Guest Editors

Hydrogels, which are crosslinked polymer networks, recently gained immense popularity as drug delivery systems because their high water content provides them with an excellent biocompatibility and the capability of encapsulating hydrophilic drugs. Interestingly, the risk of drug aggregation and denaturation is drastically reduced because hydrogels are typically crosslinked in aqueous solutions without any exposure to organic solvents. In addition to delivering drugs, genes, growth factors, nanovesicles, and other bioactive molecules, hydrogels can also serve as supportive matrices that can guide and regulate the fate of embedded cells. For these reasons, hydrogels have been widely used for biomedical applications, i.e., drug delivery, tissue engineering, regenerative medicine, etc.

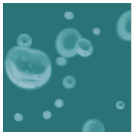
This Special Issue has the aim of highlighting current progress in the development of hydrogels as controlled drug delivery systems with a particular focus on new technologies and new materials. Investigations on hydrogels as biomimetic extracellular matrices will also be warmly welcomed.

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Special Issue



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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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