Special Issue

Smart Polymer Hydrogels: Synthesis, Properties and Applications - Volume I

Message from the Guest Editor

Stimulus-responsive polymer hydrogels have attracted considerable interest as promising smart materials due to their tremendous potential in biomedical and nanotechnological applications. They can respond to different chemical and physical external stimuli, including pH, temperature, light, enzyme activity, redox agents, the electric or magnetic field, and chemicals. Compared to single stimulus-responsive polymer hydrogels, multiple-responsive hydrogels exhibit higher flexibility and tunability to realize multiplefunctionality in a synergistic manner. The structural and phase transition of polymer hydrogels triggered by external stimuli offers enormous potential for drug delivery, tumor therapy, tissue engineering, and biodevices. Thus, in this Special Issue, we invite researchers working in the hydrogel-related fields to contribute their current new work to this Special Issue on smart polymer hydrogels.

Guest Editor

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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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