Special Issue

Structure, Characterization, Performance, Applications of Polymer-Based Functional Hydrogels

Message from the Guest Editors

Polymer-based functional hydrogels, which are usually composed of colloidal particles or gel factors, are a kind of condensed matter with three-dimensional network space structure and filled with a dispersion medium. Polymer-based functional hydrogels not only have porous structure and high specific surface area, but also have active functional groups such as hydroxyl, carboxyl and amino groups on the surface of the hydrogel network, which is conducive to the coordination (or loading) of functional groups, ions and nanoparticles. It has great application value in the fields of photocatalysis, antibacterial, wound dressing, 3D printing, biological effect electrocatalysis, etc. Therefore, it is particularly important to study the synthesis method, performance and structure of hydrogels, which provide a reference for the design, synthesis and further development and utilization of hydrogels.

The aim of this Special Issue is to understand the relationship between the structure and performance of polymer-based functional hydrogels. In addition, we invite contributions concerning property characterizations and applications of structure-modified polymers.

Guest Editors

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Since its foundation in 2009, *Polymers* has developed into an internationally renowned, extremely successful open access journal. The editorial team and the editorial board dedicatedly combine open-access publishing and high-quality rigorous peer reviewing. The performance of the journal has proven this strategy to be well-suited and highly successful. This is reflected in the increasing impact factor of *Polymers*, the most recent one being 4.9.

I would like to invite you to contribute to the success of the journal by sending us your high quality research papers. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

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