

Special Issue

Molecular Perspectives on the Synthesis and Application of Hydrogel Materials

Message from the Guest Editor

Hydrogels are a kind of three-dimensional and cross-linked polymeric networks with properties such as hydrophilicity, softness, porosity, tunability, and nonpareil mechanical properties, and often they are stimulus-responsive. In recent years, many different types of new hydrogels have been developed, and various techniques have been employed for hydrogel production, together with implications in the process design. With the progress of hydrogel development, they have been and are widely used in different fields, such as drug delivery systems, sealing, artificial snow, pharmaceuticals, and several other biomedical applications. Several hydrogels with special properties have been prepared, but the molecular basis of their formation and the deriving properties are still under study.

This Special Issue focuses on the molecular basis of the hydrogels formation and application, on the possible new methods to synthesize hydrogels, and on the development of additional new hydrogels with special properties or application performance. We will welcome original research articles, comprehensive reviews, and novel communications.

Guest Editor

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The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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