Special Issue

Hydrogels: Synthesis, Characterization and Applications

Message from the Guest Editors

Hydrogels, due to their biomimetic nature, have been widely explored for application in regenerative medicine. With the advancements in chemistry, biology and material sciences, diverse new methods for the synthesis and characterization of hydrogels have been proposed; the chemical compositions, topological structures and functionalities of hydrogels can be manipulated more effectively; and the physiological properties and biological functions of hydrogels can be further tailor-made and greatly enhanced. In this Special Issue, we aim to highlight the most recent progress in the synthesis, characterization and application of hydrogels in regenerative medicine, with the expectation to provide new insights into the development of clinical applicable hydrogels. We invite original research articles and review papers that cover the emerging methods for synthesizing and characterizing hydrogels, new strategies in tailoring the chemical compositions, functionalities, and properties of hydrogels, the in vitro and in vivo performance of hydrogels in tissue engineering, drug delivery and diagnosis, etc., and potential challenges in translating hydrogels to clinical settings.

Guest Editors

Prof. Dr. Dezhong Zhou

School of Chemical Engineering and Technology (SCET), Xi'an Jiaotong University, Xi'an 710049, China

Dr. Shuai Liu

College of Pharmaceutical Sciences, Zhejiang University, Hangzhou 310058, China

Deadline for manuscript submissions

closed (31 August 2023)

Gels

an Open Access Journal by MDPI

Impact Factor 5.3
CiteScore 7.6
Indexed in PubMed

mdpi.com/si/108158

Gels
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
gels@mdpi.com

mdpi.com/journal/gels

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About the Journal

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.

Editor-in-Chief

Prof. Dr. Esmaiel Jabbari
Biomimetic Materials and Tissue Engineering Laboratory, Department of Chemical Engineering, University of South Carolina, Columbia, SC 29208, USA

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