Special Issue

Recent Advances in Hydrogels: From Design to Wound Healing Application

Message from the Guest Editor

Wound repair is a core interdisciplinary area of biomedicine and materials science research. Clinical challenges include chronic refractory wounds and complex wounds, which have long troubled the patients and the medical community. Hydrogels, with 3D cross-linked structures, high water content, and good biocompatibility, can mimic skin ECM, load drugs/cells/bioactive factors, and respond to external stimuli. They have become key carriers for advancing wound repair technology but still face challenges like improving mechanical stability and promoting clinical translation. This Special Issue aims to provide an academic platform, showcasing the latest achievements. We invite submissions covering, but not limited to: design of functional hydrogels, hydrogel–cell/bioactive factor synergy, dressing optimization, preclinical/clinical studies, molecular mechanisms of microenvironment regulation, and material safety/scalable production.

Guest Editor

Dr. Hu Hao
College of Materials Science and Engineering, Ocean University of China, Qingdao 266100, China

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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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