

Special Issue

Hydrogel-Based Scaffolds with a Focus on Medical Use

Message from the Guest Editors

The development of scaffolds with optimal characteristics is more readily achievable in polymeric scaffolds. In particular, there is currently a great research interest in hydrogel-based scaffolds. Hydrogel-based scaffolds have recently emerged as the most promising substrates for cell cultures to generate well-defined 3D biofabricated tissue, attracting significant research attention for their potential in medical applications. These scaffolds act as bioactive substrate and structural supports, providing topographical and chemical stimuli for cell spreading, proliferation and differentiation in vivo. Among the specific scaffold characteristics, a high porosity and interconnectivity to facilitate scaffold/cell interactions, nutrient and oxygen infiltration and vascularization aim to obtain specific cellular responses. Scaffolds have sufficient mechanical properties to temporarily substitute the missing tissue and to permit essential physiological functions. This Special Issue is dedicated to the design and development of advanced polymeric scaffolds and their applications for bone/cartilage/skin regeneration in vitro and in vivo.

Guest Editors

Dr. Federica Re

Department of Clinical and Experimental Sciences, University of Brescia, 25123 Brescia, Italy

Dr. Elisa Borsani

Department of Clinical and Experimental Sciences, University of Brescia, 25123 Brescia, Italy

Deadline for manuscript submissions

closed (10 September 2023)



Gels

an Open Access Journal
by MDPI

Impact Factor 5.0
CiteScore 4.7
Indexed in PubMed

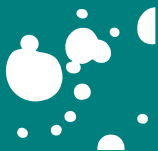


mdpi.com/si/124216

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

[mdpi.com/journal/
gels](https://mdpi.com/journal/gels)





Gels

an Open Access Journal
by MDPI

Impact Factor 5.0
CiteScore 4.7
Indexed in PubMed



[mdpi.com/journal/
gels](https://mdpi.com/journal/gels)



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. Esmail Jabbari

Biomimetic Materials and Tissue Engineering Laboratory, Department of Chemical Engineering, University of South Carolina, Columbia, SC 29208, USA

Author Benefits

High visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Polymer Science) / CiteScore - Q2 (Polymers and Plastics)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 10.9 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2024).