Special Issue

Development of Nanogels/Microgels for Regenerative Medicine

Message from the Guest Editors

In recent years, enormous growth in nano-material technology and science has been attained in the biomedical filed. For example, nanosized hydrogels, so-called nanogels, have been reported to provide a feasible drug-delivery system that enables the efficient transfer of chemotherapeutics and short interfering RNA, and slow-release anti-bacterial peptide, growth factors and cytokines on-site. Through the functions, nanogels can inhibit tumor growth, and enhance wound-healing and blood vessel regeneration. Moreover, nanogels are also used as a scaffold for tissue engineering, including bone, cardiac and urethra tissue regeneration. In general, nanogels are highly biocompatible and biodegradable. Nanogels are also considered to be excellent scaffolds for preparing composites as a novel class of advanced materials, which comprise both nanogels and other constituents, such as polymers or inorganic nanoparticles. Thus, the development of nanogels and their effective application will play an important role in the regenerative medicine field.

Guest Editors

Dr. Kenta Yamamoto

Department of Immunology, Kyoto Prefectural University of Medicine, Kyōto 602-8566, Japan

Dr. Yuanhui Song

Department of Biomedical and Chemical Engineering, Syracuse University, Syracuse, NY 13244, USA

Deadline for manuscript submissions

closed (31 December 2024)

Gels

an Open Access Journal by MDPI

Impact Factor 5.3
CiteScore 7.6
Indexed in PubMed

mdpi.com/si/149254

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

mdpi.com/journal/gels

Gels

an Open Access Journal by MDPI

Impact Factor 5.3
CiteScore 7.6
Indexed in PubMed

mdpi.com/journal/gels

About the Journal

Message from the Editorial Board

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.

Editors-in-Chief

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

Prof. Dr. Chuanliang Feng
State Key Lab of Metal Matrix Composites, School of Materials Science and Engineering, Shanghai Jiao Tong University, Shanghai 200240, China

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 - Q1 (Organic Chemistry)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 13.5 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the second half of 2025).

MDPI