

Special Issue

Hydrogel Surface/Coating for Smart Drug Delivery and Medical Devices

Message from the Guest Editors

In recent decades, the emerging medical platforms based on multifunctional hydrogels have become an alternative approach in targeting therapies and tissue regeneration, owing to the innovative biomaterials.

Hydrogels represent one of the most promising implantable materials for on-demand release and artificial surface modification. The unique soft, gentle, and responsive characteristics endow hydrogels with huge potential in medical application, such as artificial organs, biomedical sensors, drug/gene delivery, and surface modification of medical devices. This Special Issue will provide an overview of the potential strategies to synthesize smart and multifunctional hydrogels for controlled drug delivery, surface coating and further biomedical applications. Original research, review, and perspective articles related to the specified subject are welcome. These subject areas include, but are not limited to:

- Development of multifunctional hydrogels for drug, gene, RNA, and protein delivery for cancer diagnosis and treatment, tissue vascularization and regeneration, and genetic-disease treatment.
- Hydrogel surface and coating for medical devices.

Guest Editors

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Deadline for manuscript submissions

closed (20 July 2024)



Gels

an Open Access Journal
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Impact Factor 5.3
CiteScore 7.6
Indexed in PubMed



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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. Esmail Jabbari

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 12.5 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).