Special Issue

Functional Hydrogels for Drug Delivery Applications

Message from the Guest Editors

Hydrogels (HGs) are versatile formulations holding immense promise as drug delivery and tissue engineering platforms. Various materials, such as natural and synthetic macromolecules, have been introduced, leading to the development of functional hydrogels which can encapsulate drug molecules within their structure. Moreover, functional hydrogels can control drug release and target specific issue and organs. Depending on the chosen materials, various physical and chemical crosslinking methods have been applied to convert hydrophilic polymeric chains to hydrogels. Nevertheless, significant progress has been achieved in developing functional HGs, and HGs with enhanced biochemical and biomechanical properties which can mimic the tissue matrix should be further studied.

In this Special Issue, original research and review articles are both welcome. Research areas may include, but are not limited to, multifunctional hydrogels and stimuli-responsive hydrogels for ocular, dermal, buccal and per os delivery, as well as other administration routes. Moreover, articles summarizing hydrogel applications for both drug delivery and diagnosis are also welcome.

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Deadline for manuscript submissions

30 November 2025

Journal of Functional Biomaterials

an Open Access Journal by MDPI

Impact Factor 5.2
CiteScore 6.8
Indexed in PubMed

mdpi.com/si/197458

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Message from the Editor-in-Chief

The biomaterials field is one of the largest and fastest growing research areas both in the scientific community and in the industrial one. Biomaterials are the result of collaborations between different disciplines: chemistry, medicine, pharmacology, engineering and biology. The objective of this collaboration is to lead to the implementation of new devices to restore form and human body functions. The mission of the *Journal of Functional Biomaterials* (*JFB*) is to focus attention on physico-chemical characteristics and their importance in the interactions between biomaterials and living tissues. *JFB* seeks to publish studies on the preparation, performance and use of biomaterials in biomedical devices, as well as regarding their behavior in physiological environments. We are pleased to welcome you as our authors.

Editor-in-Chief

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