

## Special Issue

# Nanoparticles and Hydrogels for Drug Delivery Systems: Design and Synthesis

### Message from the Guest Editors

Delivery systems based on nanoparticles and hydrogels can leverage therapeutically beneficial outcomes in drug delivery and have found clinical use. These drug carriers can provide spatial and temporal control over the release of various therapeutic agents, including small-molecule drugs, macromolecular drugs, and cells. Owing to their tunable physical properties, controllable degradability, and capability to protect labile drugs from degradation, hydrogels serve as a platform for various physiochemical interactions with encapsulated drugs to control their release. The Special Issue on “Nanoparticles and Hydrogels for Drug Delivery Systems: Design and Synthesis” is dedicated to recent developments in the synthesis, characterization, materials properties, and applications of different kinds of nanoparticles and gels in the design and fabrication of smart delivery systems. We welcome papers from multiple research fields, including novel composite synthetic routes and their applications in the medical and health industry.

### Guest Editors

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### Deadline for manuscript submissions

31 October 2026



## Journal of Functional Biomaterials

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Impact Factor 5.2  
CiteScore 6.8  
Indexed in PubMed



[mdpi.com/si/254415](https://mdpi.com/si/254415)

*Journal of Functional Biomaterials*  
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## About the Journal

### 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.

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### Editor-in-Chief

Prof. Dr. Pankaj Vadgama

School of Engineering and Materials Science, Queen Mary University of London, London, UK

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