Special Issue

Advances in Biomaterials for Cancer Therapy

Message from the Guest Editors

Cancer therapy continues to face critical challenges, including insufficient therapeutic efficiency, systemic toxicity, tumor heterogeneity, and the emergence of treatment resistance, which substantially limit clinical outcomes. Advanced biomaterials have provided powerful strategies to address these challenges by enabling precise drug delivery, stimulus-responsive release, tumor microenvironment adjustment, and synergistic integration of multiple therapeutic modalities. In recent years, a broad spectrum of advanced materials, including functional polymers and nanomaterials have been developed to improve therapeutic efficacy and safety in cancer treatment, thereby accelerating the paradigm shift toward personalized and precision oncology. This Special Issue aims to provide a platform for disseminating recent progress in the design, characterization, and biomedical application of advanced materials for cancer treatment. Topics of interest include, but are not limited to, multifunctional drug delivery systems, biomaterials for immunotherapy and gene therapy, tumor microenvironment–responsive materials, and translational studies bridging material innovation with clinical relevance.

Guest Editors

Dr. Tianjiao Zeng
Research Center for Macromolecules and Biomaterials, National Institute for Materials Science, Tsukuba, Japan

Dr. Huajian Chen
Research Center for Macromolecules and Biomaterials, National Institute for Materials Science, Tsukuba, Japan

Deadline for manuscript submissions

30 December 2026

Journal of Functional Biomaterials

an Open Access Journal by MDPI

Impact Factor 5.2
CiteScore 6.8
Indexed in PubMed

mdpi.com/si/264872

Journal of Functional Biomaterials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
jfb@mdpi.com

mdpi.com/journal/jfb

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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.

Editor-in-Chief

Prof. Dr. Pankaj Vadgama
School of Engineering and Materials Science, Queen Mary University of London, London, UK

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