Special Issue

Nanoparticle-Based Materials for Cancer Treatment

Message from the Guest Editors

This Special Issue aims to explore the transformative role of advanced nanoparticle-based materials in cancer therapies. It will highlight interdisciplinary research at the nexus of nanotechnology, immunology, oncology, and biomedical imaging. Suitable topics include, but are not limited to, the following:

- Smart nanomaterials for stimuli-responsive immunotherapy and imaging.
- Biomimetic or hybrid nanosystems targeting immune–tumor interactions.
- Nanovaccines and immune cell engineering.
- Multimodal imaging-guided immunotherapy monitoring.
- Toxicity, immune compatibility, and regulatory landscapes.

This Special Issue will extend prior work on single-function nanomaterials by curating studies on multifunctional systems, addressing gaps in clinical translation and mechanistic understanding. It will serve as a comprehensive resource for researchers and clinicians, bridging nanotechnology and oncology to inspire next-generation solutions.

Guest Editors

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Deadline for manuscript submissions

31 August 2025

Journal of Functional Biomaterials

an Open Access Journal by MDPI

Impact Factor 5.2
CiteScore 6.8
Indexed in PubMed

mdpi.com/si/232878

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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
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