

Special Issue

Functional Nanoparticles/Nanocomposites for Biomedical Applications

Message from the Guest Editors

These various forms of functional nanoparticle/nanocomposite systems will be explored in this Special Issue, which will include contributions from researchers in multidisciplinary fields with diverse backgrounds in chemistry, physics, biology, materials science and engineering. The research focus in this Special Issue includes, but is not limited to these areas:

- Nanoparticles for disease diagnosis;
- Theranostic nanoparticles for cancer detection and treatment;
- Implantable nanocomposite structures for disease treatment;
- Polymer nanocomposites for laser-induced heating in cancer treatment.

In each of the above research areas, the papers will focus on the new frontiers in the development of different novel, functional nanoparticle/nanocomposite structures for the targeting and treatment of diseases. Papers will critically explore the development of different functional nanoparticles/nanocomposites, and the characterization, functionalization and interactions with diseases and nondisease cells/tissues under in vitro and in vivo conditions, with implications for biomedical applications.

Guest Editors

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Deadline for manuscript submissions

closed (20 June 2025)



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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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