

Special Issue

Advanced Nanoparticles for Drug Delivery and Cancer Therapy

Message from the Guest Editor

This Special Issue is dedicated to exploring advanced nanoparticles for drug delivery and cancer therapy, with an emphasis on the construction of functional nanomaterials, innovative drug delivery systems, gene delivery mechanisms, and cutting-edge cancer treatment strategies. It aims to bridge the gap between fundamental nanomaterial research and clinical application by highlighting breakthroughs in nanoparticle synthesis, surface modification, and multifunctional system integration. This Special Issue encourages studies on stimuli-responsive and targeted nanoparticles that can selectively deliver therapeutic agents or genetic material to tumor sites while minimizing systemic toxicity. By consolidating current advances and identifying existing challenges, this Special Issue not only provides a comprehensive overview of the state-of-the-art in nanomedicine but also outlines future research directions to foster interdisciplinary collaboration among chemists, materials scientists, biologists, and clinicians, ultimately advancing precision oncology and translational medicine.

Guest Editor

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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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