Special Issue

Application of Nanomaterials for Medical Imaging and Cancer Research

Message from the Guest Editor

Nanomaterials, including nanoparticles, nanorods, nanospheres, nanoshells, and nanostars, have significantly impacted medical imaging and cancer research. Their unique physicochemical properties enable their use as drug carriers, contrast agents for various imaging techniques, photothermal and photoacoustic agents, and radiation dose enhancers. Recent advancements have expanded their application to multimodal imaging platforms, targeted therapies, and real-time monitoring of therapeutic effectiveness, improving cancer diagnosis and treatment outcomes. This Special Issue aims to highlight recent advances in the application of nanomaterials within medical imaging and cancer research. We invite original research and comprehensive review covering areas such as the development and synthesis of advanced nanomaterials, innovative imaging modalities, therapeutic techniques, theranostic approaches, multimodal imaging, and image-guided combination therapies. We also encourage articles discussing potential challenges, such as the biosafety and biocompatibility of nanomaterials, to ensure the safe and effective translation into clinical practice.
We eagerly anticipate your contributions.

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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