Special Issue

Theranostic Nanocompounds: Synthesis and Applications in Personalized Medicine

Message from the Guest Editors

A growing research domain that paves the way towards personalized medicine for the benefit of patients has spawned through the recent emergence of nanotechnology. Theranostics, as its name suggests, is a combination of 'therapy' and 'diagnostics' to optimize the efficacy and safety of therapeutic regimes. Derived from this hybrid field, new opportunities have arisen for the development of novel drug delivery systems and nanoplatforms capable of simultaneously detecting, monitoring, and treating specific diseases at targeted sites. Research efforts have been made in the design of multifunctional theranostic compounds such as polymeric, carbon, lipid, and protein drug delivery vehicles and imaging contrast agents. Nanotheranostic systems based on metallic or magnetic nanoparticles can also be used for both imaging and thermal therapeutic applications. In this Special Issue, we intend to explore recent advances in the field of theranostics, from the presentation of the fundamental components of theranostic compounds to the necessary steps and imposed regulations for their implementation in clinics.

Guest Editors

Dr. Sanda Boca

1. Interdisciplinary Research Institute in Bio-Nano-Sciences, Babes-Bolyai University, 400271 Cluj-Napoca, Romania

2. National Institute for Research and Development of Isotopic and Molecular Technologies, 400293 Cluj-Napoca, Romania

Dr. Gianina Dodi

Faculty of Medical Bioengineering, Grigore T. Popa University of Medicine and Pharmacy of Iasi, 700115 Iasi, Romania

Deadline for manuscript submissions

closed (20 October 2023)



Journal of Functional Biomaterials

an Open Access Journal by MDPI

Impact Factor 5.2 CiteScore 6.8 Indexed in PubMed



mdpi.com/si/158929

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





Journal of Functional Biomaterials

an Open Access Journal by MDPI

Impact Factor 5.2 CiteScore 6.8 Indexed in PubMed





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

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Engineering, Biomedical) / CiteScore - Q2 (Biomedical Engineering)

