Special Issue

Stimuli-Responsive Materials and Their Biomedical Applications

Message from the Guest Editor

Stimuli-responsive materials have been widely studied in biomedical applications. They are able to sense one or more environmental "triggers" (e.g., pH, redox, temperature, light, reactive oxygen species, enzyme, glucose, ionic strength, and electric and magnetic fields) to subsequently change their intrinsic physical or chemical properties. Therefore, these stimuliresponsive materials have attracted major attention as smart materials in drug delivery, tissue engineering, biosensing, bioseparation, immobilized biocatalysis, diagnostics, and many other systems. This Special Issue will host papers related to recent developments in the field of biomedical applications of stimuli-responsive materials. Topics will include but not be limited to microenvironment-responsive materials, fieldresponsive materials, biologically responsive materials, organic materials, inorganic materials, drug delivery systems, tissue engineering, imaging, and diagnostics. In this regard, I would like to invite authors to contribute research articles and review papers on these topics.

Guest Editor

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Deadline for manuscript submissions

closed (30 September 2023)



Journal of Functional Biomaterials

an Open Access Journal by MDPI

Impact Factor 5.2 CiteScore 6.8 Indexed in PubMed



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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

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