Special Issue

Functional Biomaterials for Photodynamic Therapy Applications

Message from the Guest Editor

Functional biomaterials for photodynamic therapy applications is a research area that focuses on developing and utilizing biomaterials to enhance the efficacy and safety of photodynamic therapy (PDT). Key aspects of functional biomaterials' significance include enhanced photosensitizer delivery, a controlled release of photosensitizers, targeted therapy, and combination therapies. These materials can be designed to encapsulate or deliver photosensitizers to the target site, ensuring an efficient uptake by diseased cells.

Functional biomaterials offer opportunities for combination therapies by integrating multiple therapeutic agents or modalities, enabling synergistic effects and multimodal treatment strategies.

Researchers aim to develop novel biomaterials, characterize their physicochemical properties, evaluate their biocompatibility, and study their performance in preclinical and clinical settings. Additionally, the scope extends to investigating the underlying mechanisms of biomaterial-mediated PDT enhancement and optimizing biomaterial formulations for specific applications, such as cancer treatment, wound healing, antimicrobial therapy, and bioimaging.

Guest Editor

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Deadline for manuscript submissions

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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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