Special Issue

Osteoarthritis: Recent Advances in Biomaterials for Diagnosis and Treatment

Message from the Guest Editors

Osteoarthritis (OA) is a major health problem with increasing prevalence and incidence. Improving the diagnosis and treatment of OA is crucial to alleviate the burden of this debilitating condition. Recent research in this field has focused on developing new diagnostic tools, including imaging techniques and biomarkers. Significant advances have been made in developing novel biomaterials and therapeutic approaches, such as injectable therapies such as hyaluronic acid, or other polymers with platelet-rich plasma, and regenerative medicine methodologies like stem cell therapy and tissue engineering. These biomaterials have shown promising results in reducing pain and inflammation, improving joint function, and promoting cartilage repair in OA patients. Biologics, small molecules, and gene therapy also hold promise for the future.

This Special Issue is a valuable resource for healthcare professionals and students interested in advancing their understanding of OA and developing new research methods and biomaterials-based solutions to enhance patient outcomes.

Guest Editors

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Deadline for manuscript submissions

closed (20 August 2024)



Journal of Functional Biomaterials

an Open Access Journal by MDPI

Impact Factor 5.2 CiteScore 6.8 Indexed in PubMed



mdpi.com/si/172893

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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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