Special Issue

Biocompatible Bioceramics: Synthesis, Characterization and Medical Applications

Message from the Guest Editors

Bioceramic materials have the potential to meet biomedical requirements in terms of mechanical strength, biological functionality, and biocompatibility. The growing demand for biocompatible materials, increasing aging population, and increasing use to replace diseased hard tissues in the body are among the key factors that have driven the growth of the bioceramic materials market. Tissue engineering, stem cell technology, nanotechnology, electrospinning, and 3D bioprinting play key roles in different bioceramic and composite materials.

This Special Issue aims to bring together works on the latest advances in bioceramic materials in terms of synthesis, characterization, and biomedical applications, whether pure or combined with other bioceramics and/or biopolymers, such as in the development of artificial bones and teeth, pulp-capping materials, skin for grafting, joint replacements, loadbearing parts, coating materials, drug delivery platforms, membranes, and biomimetic scaffolds.

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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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