



Functionalized Biomimetic Calcium Phosphates

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Message from the Guest Editors

The continuously increasing number of age-related musculoskeletal disorders requires the development of suitable materials for the substitution and repair of impaired tissues. One of the most relevant requirements of a biomaterial is the ability to bond to the surrounding biological tissue, which is favored by the similarity between the synthetic and the biological materials in terms of composition, structure and morphology. This is the reason for the key role played by calcium phosphates (CaPs) in this field. The interest towards these compounds includes not only hydroxyapatite, which is the CaP most similar to the inorganic phase of bone, but also a variety of different calcium orthophosphates, such as octacalcium phosphate, tricalcium phosphate, dicalcium phosphate in the dihydrate and anhydrous forms, and tetracalcium phosphate.

This Special Issue is focused on the recent developments of research into the synthesis and characterization of functionalized and multi-functionalized biomimetic CaPs, as well as on their applications as biomaterials for the substitution/repair of the musculoskeletal system.





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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.

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