



Functionalized Biomimetic Calcium Phosphates 2.0

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Message from the Guest Editors

The inorganic phase of the hard tissues of vertebrates is deposited in an environment rich with organic molecules and macromolecules, as well as of foreign ions. This is the main reason behind the peculiar properties of these biomineralized tissues, which are extremely challenging to replicate in a synthetic environment (laboratory). Nonetheless, the use of synthetic calcium phosphates (CaPs) as bone substitutes in medicine is continuously increasing due to the remarkable biocompatibility and osteoconductivity of these compounds. The success of CaPs as biomaterials is undoubtedly related to their chemical composition, similar to that of the inorganic phase of bone, but it can be further improved through functionalization with bioactive substances.

Keywords

- Calcium phosphate
- Ionic substitution
- Biomaterials
- Controlled release
- Drug delivery





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Message from the Editor-in-Chief

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