

Special Issue

Biomaterials and Antimicrobial Materials for Orthopaedic Application

Message from the Guest Editors

Bone is a complex tissue that continuously undergoes dynamic biological remodelling to maintain homeostasis. However, healing in large and critical defect areas is often impaired, leading to inferior bone regeneration and extended hospitalization periods. To promote bone regeneration, many therapeutic strategies have been suggested, including scaffolds, stem cells and growth factors. Moreover, antimicrobial effect has been another important factor to consider after quality due to its protection against infection. Hence, the choice of appropriate biomaterials has become one of the key success paths for orthopaedic applications. This issue focuses on studies and applications of biomaterials and/or antimicrobial materials which are essential for orthopaedic applications. Research areas may include (but are not limited to) the following:

Biomaterials for orthopaedic application;

The role of antibacterial biomaterial in regenerative medicine;

Bone tissue engineering scaffolds with antibacterial activity;

Mechanisms of action of antimicrobial nanomaterials;

Future perspectives for antimicrobial nanomaterials.

Guest Editors

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Editor-in-Chief

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