

Special Issue

Current Techniques for Bone Regeneration

Message from the Guest Editor

Bone regeneration is a dynamic and evolving field addressing the growing need to repair bone defects resulting from trauma, disease, or age-related degeneration. This Special Issue explores state-of-the-art strategies and technologies aimed at enhancing bone repair, with a particular focus on the convergence of biology, materials science, and bioengineering. In addition, 3D-printed constructs, nanoengineered surfaces, and controlled drug delivery platforms are being used to recapitulate the complex microenvironment of bone tissue. Immunomodulatory therapies, mechanical stimulation, and in silico modeling are also gaining traction for optimizing regeneration outcomes. We welcome contributions spanning basic science, translational studies, and clinical applications, particularly those addressing integration, vascularization, and regulatory challenges in bone regeneration.

Guest Editor

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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