



*biomimetics*

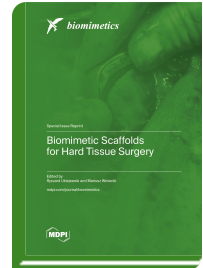


*Special Issue Reprint*

## **Biomimetic Scaffolds for Hard Tissue Surgery**

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The ultimate goal of bone and joint surgery, craniomaxillofacial surgery, oral/dental surgery, and, in general, hard tissue surgery is reconstruction via the implantation of a biomaterial or a device to replace bones and/or joints affected by various diseases, traumatic damages, or deformities.

This reprint aims to exhibit and discuss the latest advances in biomimetic scaffolds for hard tissue surgery. It presents the contributions submitted by scholars with renowned backgrounds in scaffolds design, fabrication, functionalization, or clinical applications; four are valuable review articles, and seven are original new research articles. According to the area of application, the contributions can be grouped into the following three themes:

- Biomimetic scaffolds for bone and joint surgery;
- Biomimetic scaffolds for maxillofacial surgery and oral surgery;
- Biomimetic scaffolds for general surgery (hard- and soft tissue surgeries).

Among the contributions are four valuable review articles that comprehensively summarize the latest achievements in the field, with a discussion of prospects and challenges for further research, and seven new research articles dealing with different proposed and developed novel biomaterials and 3D constructs of specific complementary properties that, through their biomechanical, biostructural, biochemical, biomimetic, and functional properties, possess great potential for assisting in local tissue regeneration.



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