



## Development, Characterization, and Biological Performance of Materials for Bone, Periodontal, and Dental Tissue Regeneration

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### Message from the Guest Editor

The purpose of this Special Issue is to gather the most recent and major scientific progresses on materials specifically dedicated to intra-oral tissues regeneration, including alveolar bone, cementum, periodontal ligament, enamel, dentin, and pulp, as well as mucosal and gingival tissues. Whether they are under the form of nanoparticles, membranes, hydrogels or scaffolds, new materials perform better and better thanks to the development of manufacturing processes (e.g., 3D printing), nanotechnologies, and recent advances in stem cells-based strategies for tissue engineering.

Moreover, this issue will focus on material development and investigations on materials biomechanical properties, surface topography and chemical composition that have to be meet for dental applications. Last but not least, the materials, as they aim to regenerate tissues, have to demonstrate biological performances *in vivo*, including clot stabilization, cell invasion or guidance as well as cell proliferation and differentiation to obtain a fully regenerated and functional tissue.





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## Message from the Editor-in-Chief

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