Special Issue

Materials for Hard Tissue Repair and Regeneration

Message from the Guest Editor

During tissue repair and regenerative process, stem cells, growth factors, and the extracellular matrix (ECM) constitute the elements needed for cell growth and differentiation. Regarding hard tissue repair and regeneration in a clinical setting, highly biocompatible materials such as hydroxyapatite, tricalcium phosphate (TCP), and titanium as a metal material have been developed and are already used widely. Recently, it has been suggested that not only the composition of the artificial biomaterial but also the optimal geometrical structure is important for inducing cell differentiation and tissue formation. This Special Issue focuses on several aspects of biological response induced by biomaterials in the tissue repair and regeneration process, such as cell differentiation, tissue development, and tissue regeneration ability, and we invite contributions of reviews and original papers reporting on recent efforts in the field of hard tissue regeneration. **Keywords**

- Hard tissue
- regeneration
- biomaterials
- biocompatibility
- implant
- remodeling
- medical
- dental

Guest Editor

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Deadline for manuscript submissions

closed (31 October 2021)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/30735

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Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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