Special Issue

Bioceramics: Materials, Properties and Applications

Message from the Guest Editor

The field of bioceramics is constantly growing. The main applications of bioceramics address the topics of drug delivery and tissue regeneration, especially for hard tissues such as teeth and bones. Thanks to new engineering approaches, the reconstruction of human tissues is becoming a reality. Yet, many fundamental problems remain to be solved for hard tissues such as bone. One of them is the requirement of adequate scaffold able to support, promote, and stimulate tissue ingrowth. New synthesis routes and functionalization, as well as original manufacturing processes, may help to overcome these limitations. Many avenues have to be explored to develop new bioceramics with properties intended to favor biological tissue regeneration. More new materials may lead to original applications for bioceramics. Therefore, this Special Issue of Materials will collect original, high-quality research papers covering the most recent advances and comprehensive reviews addressing state-of-the-art topics in the field of bioceramics materials, their properties, and their application systems for current and futuristic biomedical applications.

Guest Editor

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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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