Special Issue

New Trends in the Development of Bioactive Glasses

Message from the Guest Editor

The purpose of this Special Issue is to provide essential readings to researchers interested in new trends in the development of a new system based on bioactive glasses, with particular attention to the various strategies for the development of bioactive melting glasses, sol–gel-derived mesoporous bioactive glasses, and new hybrid glass-based biomaterials that have tunable properties. The published papers will share the common goal of building the bases for the development of future bioactive glasses. 50 years ago, Prof. Larry Hench discovered the first bioactive glasses (45S5 Bioglass), which were able to bond to living bone. 45S5-based glass products have been successfully implanted in millions of patients worldwide. In recent years, many other bioactive glass compositions have been proposed for innovative biomedical applications, such as soft tissue repair, tissue engineering, and drug delivery. This present Special Issue welcomes contributions in the form of articles, communications, or reviews related to the design, synthesis, experimental and computational characterization, surface modification, and processing of bioactive glasses

Guest Editor

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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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