Special Issue

Design and Development of Metal-Based Biomaterials

Message from the Guest Editor

The design and development of metal-based biomaterials is a critical area of research in the fields of materials science and biomedical engineering. Metallic biomaterials are used in a wide range of medical applications, including orthopedic implants, dental implants, and cardiovascular devices. Researchers in this field focus on creating biomaterials that are biocompatible, corrosion-resistant, and possess mechanical properties similar to those of human tissues. The development of metallic biomaterials involves the design of new alloys, surface modifications to enhance biocompatibility, and testing for durability and performance in biological environments. By advancing the design and development of metal-based biomaterials, researchers aim to improve the effectiveness and longevity of medical implants, ultimately enhancing the quality of life for patients.

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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