Special Issue

Recent Advances in Biodegradable Zinc-Based Alloys

Message from the Guest Editor

Metallic biomaterials or biometals (BMs) are usually utilized as implanting biomaterials for the repairment, reconstruction and replacement of tissue engineering for the surgical applications in bone joints and other damaged organs. Zinc and zinc-based alloys are potential biometals with outstanding biodegradable and biocompatible performance, and have been paid accretive attention recently in medical implanting biodegradable materials. The Special Issue aims to capture the latest research in the fields of concentrating on the zinc-based allovs in the microstructural refinement of solidification, alloying strengthening and toughening, surface modification, 3D print, porous zinc and power, severe plastic deformation. Other biometals on microstructures and mechanical properties as well as their biodegradation are warmly encouraged and called for this issue. Collected articles may depict innovative technical developments, microstructural characterization, forming processing of biodegradable zinc-based alloys, and assess their in vitro or in vivo performance and applications on the future potential approaches and emerging techniques.

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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