Special Issue

Corrosion and Degradation for Biomedical Materials

Message from the Guest Editor

Biodegradable implants are considered to be of great interest for biomedical applications because they can avoid the needs for implant removal surgery and the long-term harmful effects of permanent implants. The materials currently used for these implants may trigger various problems, especially concerning the removal surgery. Bio-resorbable materials are therefore investigated.

Another interesting field, corrosion for biomedical applications, concerns surgery tools. Surgical tools are designed for specific actions in specific types of surgery, and can have long lifespans. High corrosion resistance under application-relevant conditions is a decisive criterion for the commercialization of new materials. The development of materials that are free of toxic elements with adequate corrosion resistance for medical tool applications is needed.

It is my pleasure to invite you to submit a manuscript to this Special Issue. Full papers, communications, and reviews are all welcome on the different alloys that are classically used as implants, Zr-based alloys for example for surgery tools, and more unusual alloys, investigating both bioactivity and corrosion properties.

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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