Special Issue

Corrosion and Degradation Phenomena in Biomaterials

Message from the Guest Editors

Dear Colleague, Corrosion and tribocorrosion resistance properties are important characteristics of implanted biomaterials, strictly related to biocompatibility. In fact, high concentrations of metals ions and the formation of corrosion products and wear debris can cause adverse health effects, and may contribute to implant failures. In recent years, new materials (e.g., biocompatible high-entropy alloys, advanced ceramics, and composites) with potential applications in the biomedical field have been developed and innovative fabrication technologies (e.g., additive manufacturing techniques) favor the processing of both traditional and new alloys, producing materials with new microstructural characteristics. In association with the current strict European requirements in the biomedical field, these developments offer new relevant outlooks that need to be explored and studied. This Special Issue aims to collect relevant research papers or reviews reporting significant progresses in the assessment and comprehension of biomaterial corrosion and degradation phenomena, also in the presence of wear and constant and variable loads.

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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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