

Special Issue

Advances in the Preparation and Application of Biocompatible Materials

Message from the Guest Editors

In recent years, total joint arthroplasty (TJA) total joint arthroplasty is constantly evolving, besides premature failures, many patients are outliving their implants. Therefore, it is necessary to develop new surfaces that will increase the longevity of implants and reduce the number of revisions. One of the key challenges in the field of artificial joints is how to manufacture a customized artificial joint. In addition, osseointegration is a key factor in determining bone prosthesis clinical performance. Prosthesis surface properties such as morphology, microstructure, electrical charge, surface modification, and material cytotoxicity have huge impacts on osseointegration at the interface of biocompatible materials and biosystems. This Special Issue, “Advances in the Preparation and Application of Biocompatible Materials”, will focus on advances in the preparation and application of implant material design and development for laser additive manufacturing. Of particular interest are interfaces between biomaterials and biosystems. It is our pleasure to invite you to submit a manuscript to this Special Issue.

Guest Editors

Prof. Dr. Drago Dolinar

Prof. Dr. Monika Jenko

Prof. Dr. Veronika Kralj-Iglic

Deadline for manuscript submissions

closed (20 January 2024)



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About the Journal

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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