Special Issue

Biomaterials, Implants and Scaffolds in Additive Manufacturing

Message from the Guest Editors

Additive manufacturing (AM) is revolutionizing the production of implants and scaffolds with complex or intricate geometries for advanced functionality. Nevertheless, the AM processing conditions for manufacturing implants and scaffolds that fulfill clinical, material, and mechanical requirements requires further investigation. This can lead to undesirable material and mechanical characteristics that result in lower functionality. It is, therefore, importance to focus research efforts on the inter/post-processing optimization of the production of implants and scaffolds specialized for AM.

It is important to assess aspects of advanced/optimized biomaterials (surface morphology, design, geometry, porosity, and mechanical properties, material properties and materials composition) in AM in biomedical applications, including implants and scaffolds for the further development of high biocompatibility and safety.

This Special Issue will focus on recent progress in the development of implants and scaffolds using AM. Submitted manuscripts may cover all aspects of AM for the development of implants and scaffolds.

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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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