Special Issue

Additive Manufacturing towards the Design of 3D Advanced Scaffolds for Tissue Engineering (Second Volume)

Message from the Guest Editors

The design of 3D advanced scaffolds for tissue engineering is possible using innovative and creative engineering methods based on additive manufacturing (AM). This approach allows the generation of devices with complex architectural features and tailored functional properties, meeting design requirements and constraints. A variety of biocompatible materials can be processed through AM, such as degradable and non-degradable polymers, natural and synthetic materials, composites, metals and ceramics, etc.

The potential topics include, but are not limited to, the following:

- Design methods
- Conceptual design
- Creative design
- Design of experiments
- Design for additive manufacturing
- Topology optimization
- Generative design
- 3D/4D Printing
- Bioprinting
- Biomanufacturing and biofabrication
- Lattice structures
- Biomimetics and bioinspiration
- Computational design
- Artificial intelligence methods
- Computer-aided design
- Computer-aided engineering
- Reverse engineering
- Finite element analysis
- Modeling and simulation
- Cell–material interaction

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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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