Special Issue

Bioengineering and Biotechnology of Clinical Materials

Message from the Guest Editor

Clinical materials are widely used in medical and/or dental reconstructive procedures. The regenerative potential of these materials, including bone substitute materials, collagen matrices, polymers, composites, biological and biomimetics materials, as well as titanium alloys (such as implants), could be improved by bioengineering and biotechnology methods. This Special Issue will address the most recent advances in tissue engineering and biomaterials science, including prevascularization, biologization, and fabrication technologies; additive manufacturing; surface modifications; antimicrobial properties; and models for implant manufacturing at the macro-, micro-, and nanoscale. Special emphasis will be paid to the analysis of the underlying cell-cell interactions, physicochemical signals, and surface-host interactions. Potential topics include, but are not limited to: Bioactive modifications; Immune response of the host; 3D printing/additive manufacturing; Homeostasis/wound healing; Finite element/numerical analyses of physical surface modification.

Guest Editor

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Deadline for manuscript submissions

closed (20 March 2023)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/125001

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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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