

Special Issue

Surface Topography and Design of Scaffolds and Implant Biomaterials for Tissue Engineering Applications

Message from the Guest Editors

This Special Issue on “Surface Topography and Design of Scaffolds and Implant Biomaterials for Tissue Engineering Applications” will address advances in tissue engineering and biomaterials science, including fabrication technologies, modeling of the fabricated constructs, and hypothesis-driven design of biomaterials and models for implant manufacturing. The emphasis of this issue is on the relationship between biomaterials structure and function, the effect of surface topography on cell responses, as well as the interaction of implant/scaffold surface energy with cell/tissue functionality and regeneration. Original manuscripts are also solicited on biomaterial surface structure in relation to biocompatibility, protein adsorption, and/or antimicrobial properties. Articles and reviews dealing with the topography-, chemistry- and surface energy-related mechanobiological mechanisms, the design and fabrication of implants/scaffolds with defined chemistry and topographical patterns at the micro- and nanoscale, and the study of the underlying effects of physicochemical cues on cell survival, adhesion, proliferation, migration, and differentiation are also very welcome.

Guest Editors

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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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