Special Issue

New Challenges in Cell-Biomaterial Interface

Message from the Guest Editors

Through tissue engineering, which regenerates tissues damaged due to trauma, diseases and aging can be addressed. The interaction between cells and material is critical in this approach. The presence of a biomaterial of inorganic or organic origin in a biological environment affects the cellular functions. Surface topography. roughness, pattern dimensions, as well as molecular structure, surface charge and hydrophilicity are important for cell-biomaterial interactions. Cells' adhesion on biomaterials is critical for cell communication, migration, proliferation and differentiation and is dependent on the dynamic formation of an extracellular matrix (ECM) which is produced recognized and remodeled by cells. This Special Issue focuses on tissue engineering and aims to gather information regarding biomaterials and their medical application to provide a comprehensive view regarding the mechanisms involved in cell-biomaterial interaction

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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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