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

Guest Editors:

Dr. Anthi Ranella
Institute of Electronic Structure and Laser, FORTH, Heraklio, Greece

Dr. Phanee Manganas
Ultrafast Laser Micro- and Nano-Processing (ULMNP) Group, IESL-FORTH, Heraklion, Greece

Deadline for manuscript submissions:
closed (20 May 2022)

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.

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Editors-in-Chief

Prof. Dr. Maryam Tabrizian
1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Prof. Dr. Yuguang Ma
State Key Laboratory of Luminescent Materials and Devices, South China University of Technology, Guangzhou 510640, China

Message from the Editorial Board

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Contact Us

Materials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
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