



an Open Access Journal by MDPI

Improving Bone Tissue Engineering and Regeneration at the Biological and Biomaterials Level

Guest Editors:

Dr. Stéphane Durual

Biomaterials Laboratory,
University Clinics of Dental
Medicine, The University of
Geneva, Geneva, Switzerland

Dr. Laurine Marger

Biomaterials Laboratory,
University Clinics of Dental
Medicine, The University of
Geneva, Geneva, Switzerland

Deadline for manuscript
submissions:

closed (20 October 2023)

Message from the Guest Editors

Dear Colleagues,

Bone regeneration, with the rapid advances in tissue engineering, is at the dawn of a new era. Technical progress, particularly with 3D printing adapted or not to the patients' bone defects, now makes it possible to consider not only manufacturing purely bone grafts but also and above all combinations with adjacent tissues, without forgetting the vascularization. An all-in-one graft, with perfect architecture, osteo-conductive, -inductive and -genic, pre-vascularized and multi-tissue... and why not! We should not forget either the pharmacological-, restorative-, bone cementing and fixation-, endosseous implantology- approaches, etc. In this Special Issue, we will propose an overview of the progress made in this field, both in terms of the biology of bone regeneration and the biomaterials used to achieve it.

Dr. Stéphane Durual

Guest Editor

Dr. Laurine Marger

Guest Editor Assistant



mdpi.com/si/123127

Special Issue



an Open Access Journal by MDPI

Editor-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

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank: JCR - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Condensed Matter Physics)

Contact Us

Materials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/materials
materials@mdpi.com
[X@Materials_Mdpi](https://twitter.com/Materials_Mdpi)