



materials



an Open Access Journal by MDPI

Dental Implant Biomaterials: In Vitro and In Vivo Simulations and Applications

Guest Editors:

Dr. Gianmario Schierano

Surgical Sciences Department,
University of Turin, Torino, Italy

Dr. Giuliana Muzio

Department of Clinical and
Biological Sciences, Università
degli Studi di Torino, 10124
Torino, Italy

Deadline for manuscript
submissions:

closed (20 April 2023)

Message from the Guest Editors

In all fields of regenerative medicine, and in particular in dental implantology, the success rate depends on several parameters, including the chemical, physical, mechanical and biological properties of the materials. For the optimization of these characteristics, both in vitro and in vivo simulations represent the gold-standard protocols to characterize the biocompatibility, biomechanics, and bioactivity of new biomaterials.

To this end, the Special Issue “Dental Implant Biomaterials: In Vitro and In Vivo Simulations and Applications” aims to collect the latest knowledge on dental implant biomaterials obtained through in vitro and in vivo studies.

- Dental implant materials
- In vitro and in vivo models
- Biological osseointegration process
- Cellular interaction in bone remodeling
- Histological and histomorphometrical aspects
- Biomechanical aspects



mdpi.com/si/72339

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 & Metallurgical Engineering*) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Materials Editorial Office
MDPI, St. Alban-Anlage 66
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)