



an Open Access Journal by MDPI

## Advances in Implantable Biomaterials: Design, Mechanical Properties and Applications

Guest Editor:

**Dr. Paolo Capparè**

Department of Medicine and  
Surgery, University of Vita-Salute  
San Raffaele, Via Olgettina, 58,  
20132 Milan, Italy

Deadline for manuscript  
submissions:

**closed (20 September 2023)**

### Message from the Guest Editor

Dear Colleagues,

The aim of the present Special Issue is to represent the state-of-the-art of implantable biomaterials with particular regards to the oral ones.

In recent years, dental implants have seen a significant improvement in both their micromorphology and micromorphology.

In terms of micromorphology, innovative bone-to-implant surfaces with different roughness and biomechanical properties have been proposed.

In the same way, for macromorphology, a number of studies have reported different results according to many implant–abutment connections (conical, inner and external hexagon) and the different shapes of fixture and abutments.

The current research is focused on developing simpler solutions to treat a wider population of patients, including systemic ones (cardiopathic, diabetes, etc.)

Another fundamental point is the maintenance of implantable devices, which, in the oral cavity, demonstrate a decreased rate of peri-implantitis and mucositis, through professional hygiene protocols, as well as with innovative techniques (e.g., laser).



[mdpi.com/si/158552](https://mdpi.com/si/158552)

# 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 - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (*Condensed Matter Physics*)

## Contact Us

---

Materials Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/materials](http://mdpi.com/journal/materials)  
[materials@mdpi.com](mailto:materials@mdpi.com)  
[X@Materials\\_Mdpi](https://twitter.com/Materials_Mdpi)