

Special Issue

Synthesis and Application of Novel Dental Implant Materials

Message from the Guest Editor

Implantable materials have become the focus of recent intense research due to longer life expectancy and, thus, an increased need for replacing organs or tissues lost after injuries and/or trauma. Several types and models of novel implantable materials have been proposed, necessitating studies evaluating their behavior in vitro and in vivo and their characteristics, applicability and predictability. The properties of biomaterials and scaffolds, such as pore structures, mechanical properties and degradation, play an essential role in their successful implementation for tissue repair or regeneration. The surface characteristics of biomaterials, e.g., their topography, chemistry or surface energy, are also crucial for cell-material interaction and implant integration. We are interested in articles that explore novel dental implant materials. Potential topics include, but are not limited to, the following:

- The synthesis and characterization of novel dental implant materials;
- Implant material design;
- Synthesis and characterization of bone substitutes and membranes;
- Tissue engineering;
- Bone tissue-material interaction;
- In vitro and in vivo assays.

Guest Editor

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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