



Ceramic Dental Implants: Concept, Fabrication, Mechanical and Biological Properties

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Message from the Guest Editors

The global dental implants market is expected to reach \$5.9 billion by 2028. Currently, zirconia materials are a particular focus of the most influential dental implant companies around the world, which are producing zirconia dental implants.

In comparison with titanium alloy implants, zirconia dental implants are better at avoiding bacterial biofilm accumulation and do not have the drawbacks of corrosion and allergic reactions, and further provide aesthetic value. However, the mechanical properties mismatch between zirconia and jawbone can highlight the typical problems of bone-implant contact and jaw osteonecrosis. Promising solutions to minimize these effects could improve antibacterial self-defense conditions and avoid future peri-implantitis.

Moreover, 3D-printing techniques are gaining interest in association with ceramic dental implants designed as tailored surfaces and structural solutions.

According to the potential of ceramics in dental applications, the present Special Issue serves to analyze comprehensive solutions in dental ceramics, mainly focused on zirconia dental implants or ceramic composites solutions.





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Message from the Editor-in-Chief

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