



Biomaterials for Dental Applications and Implants

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Message from the Guest Editors

Dear Colleagues,

In oral and maxillofacial surgery computer assisted surgery as well as planning and insertion of patient specific implants is not only an uprising field of research but is finding its way into clinical routines. Virtual surgical planning and computer-aided design and manufacturing have revolutionized work flows and therapies in dentistry and maxillofacial surgery. 3D and 4D printing of polymers has become popular in recent years. Printed absorbable plates for osteosynthesis of fractures or treatment of craniosynostosis are interesting new developments. Various 3D printing strategies have been developed to enable bioprinting of different biopolymers and hydrogels. Bioprinting offers new opportunities for bone and soft tissue regeneration.

This Special Issue welcomes in vitro, animal, pre-clinical studies and clinical studies on computer assisted surgery, computer-aided design (CAD) and manufacturing (CAM) and 3D-printing for dental and maxillofacial purposes. Moreover, studies on biomaterials applied in the oral and maxillofacial field are of interest.

Keywords:

- biomaterials, biopolymers, hydrogels
- bioprinting
- computer-aided design (CAD)





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Message from the Editor-in-Chief

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