



an Open Access Journal by MDPI

# **Nano-Engineering Solutions for Dental Implant Applications**

Guest Editor:

### Dr. Karan Gulati

School of Dentistry, The University of Queensland, Herston, QLD 4006, Australia

Deadline for manuscript submissions: closed (31 July 2021)

### Message from the Guest Editor

Dental implant failure due to lack of integration (between implant and tissue) and bacterial infection presents a major health and economic challenge, especially in patients with ongoing conditions. This Special Issue will shine light on recent nano-engineering advances that revolutionize dental implant technology, by creating the next generation of implants capable of providing maximum local therapy to drastically reduce implant failures. Various nano-engineering strategies have been applied in dentistry augmented osseo-integration, soft-tissue to enable integration, and antibacterial functions from the surface of dental implants. From enhanced surface bioactivity to local drug therapy, nano-scale surface modification of dental implants has attracted attention in alleviating challenges associated with long-term implant success especially in compromised conditions.

For further reading, please follow the link to the Special Issue Website at: http://www.mdpi.com/si/56574

**Special**sue

Dr. Karan Gulati *Guest Editor* 



mdpi.com/si/56574





an Open Access Journal by MDPI

## **Editor-in-Chief**

#### Prof. Dr. Shirley Chiang

Department of Physics, University of California Davis, One Shields Avenue, Davis, CA 95616-5270, USA

### Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call "nanomaterials". These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metalorganic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, Nanomaterials, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

# **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, CAPlus / SciFinder, Inspec, and other databases.

**Journal Rank:** JCR - Q2 (*Chemistry, Multidisciplinary*) / CiteScore - Q1 (General Chemical Engineering)

# Contact Us

*Nanomaterials* Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/nanomaterials nanomaterials@mdpi.com X@nano\_mdpi