Special Issue

Application of Bioceramic in Dentistry

Message from the Guest Editor

Bioceramics interact with biological systems and are specifically designed for biomedical applications owing to their favorable biocompatibility and mechanical properties. In dentistry, bioceramics are used to replace, repair, or enhance biological functions, and the ability to integrate with the surrounding tissues has contributed to improved patient outcomes and enhanced dental care. Bulk, porous materials and scaffolds with specific geometries are frequently used for implantology and in powder form and hydrogels to fill defects, helping the natural bone growth, periodontal tissue attachment, and regeneration. Characterization of bioceramics can include chemical composition, homogeneity, phase distribution, morphology, particle size/shape, grain boundaries, crystallite size, crystallinity, pores, cracks, and surface area. This Special Issue focuses on new materials and technologies that can improve the properties of bioceramics used in all areas of dentistry and that can benefit clinical applications. For this purpose, we encourage the submission of original in vitro or in vivo research, and systematic reviews focused on any of these aspects.

Guest Editor

Dr. Maria João Calheiros-Lobo

UNIPRO-Oral Pathology and Rehabilitation Research Unit, University Institute of Health Sciences (IUCS), Cooperativa de Ensino Superior Politécnico e Universitário (CESPU), Rua Central de Gandra 1317, 4585-116 Gandra, Portugal

Deadline for manuscript submissions

closed (20 December 2023)



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/176347

Applied Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 applsci@mdpi.com

mdpi.com/journal/applsci





Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



About the Journal

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.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

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), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

