





an Open Access Journal by MDPI

3D Printing for Orthopaedics

Guest Editors:

Dr. Saber AminYavari

Department of Orthopedics, University Medical Center Utrecht, Utrecht, The Netherlands

Dr. Miguel Dias Castilho

Department of Orthopedics, University Medical Center Utrecht, Utrecht, The Netherlands and Orthopaedic Biomechanics, Department of Biomedical Engineering, Eindhoven University of Technology, Eindhoven, The Netherlands

Deadline for manuscript submissions:

closed (30 June 2021)

Message from the Guest Editors

3D printing technologies have recently evolved to treat different musculoskeletal diseases and tissue damages for orthopedic patients worldwide. Unlike in conventional processing routes, varying the design from one 3D-printed specimen to the next does not result in substantial cost increase, rendering tailor-made designs feasible. Typically, state-of-the-art permanent implants provide mechanical support but lack biological adaptive properties, while resorbable implants have improved biological properties but typically lack mechanical stability. To extend our current knowledge, important issues such as advances and challenges in 3D printing techniques, emerging biofabrication technologies, porous and biodegradable implants, and applications of 3D printing in in vitro predictive models still need to be deeply investigated.

This Special Issue aims to highlight recent strategies in 3D printing for orthopedic biomaterials, and we cordially invite researchers to contribute with original research article, communication or review papers accordingly.











an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giulio Nicola CerulloDipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

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

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

Journal Rank: JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

Contact Us