



3D Printing in Bio-Medical Applications

Guest Editor:

Dr. Nima E. Gorji

School of Manufacturing, Tech.
University Dublin, D15YV78
Dublin, Ireland

Deadline for manuscript
submissions:

closed (20 August 2022)

Message from the Guest Editor

3D printing additive manufacturing has now attracted the attention of biomedical engineers. There are a variety of applications for additive manufacturing technology available to surgeons at this moment. This Special Issue aims to understand the basic concept of 3D bioprinting as a tool for producing a 3D structure combining living cells and biomaterials and controlling cell proliferation, attachment and migration within 3D structures. We also consider tissue engineering developed on a widespread basis in the fields of regeneration, restoration, replacement of defective or injured functional living organs and tissues. We accept manuscripts on 3D printing of scaled models for preoperative planning based prosthetics, custom implants and biocompatible scaffolds. We also consider manuscripts on 3D printing application to improve surgical and medical education, by using simulation models and using its potential to replicate complex anatomy by employing distinct materials that mimic the characteristics of the native tissue in an effort to increase patient safety through repetition of common procedures.

- 3D printing
- additive manufacturing
- biomedical devices





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento 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

Applied Sciences Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/applsci
applsci@mdpi.com
[X@Applsci](#)