Special Issue

Trends in 3D Printing Processes for Biomedical Field: Opportunities and Challenges (2nd Edition)

Message from the Guest Editor

The field of three-dimensional bioprinting has evolved impressively in the past few years. In fact, this field is considered the latest technology that creates breakthrough innovations and addresses complex medical problems. In this Special Issue, we will highlight the most recent advances in the 3D bioprinting and advanced fabrication of biomaterials for medical and biological applications. Topics will include, but are not limited to, the following:

- Development and optimization of 3D bioprinting techniques;
- Latest improvements in functional biomaterials for 3D bioprinting processes;
- Novel fabrication techniques based on mechanical, acoustic, light, magnetic, electrical and other driving mechanisms:
- Bio-inks and hydrogels for the engineering of 3D cellular microenvironment;
- Biomaterial inks for the fabrication of bio-functional scaffolds and substrates:
- Novel 3D/4D bioprinting techniques and technologies for the fabrication of high-quality bio-based products
- Three-dimensional bioprinting and fabrication for tissue engineering, disease modeling, drug delivery, drug testing and other biological applications.

Guest Editor

Prof. Dr. M. R. Mozafari

Australasian Nanoscience and Nanotechnology Initiative (ANNI), Monash University LPO, Clayton 3800, Australia

Deadline for manuscript submissions

closed (31 October 2025)



an Open Access Journal by MDPI

Impact Factor 3.9
CiteScore 6.8
Indexed in PubMed



mdpi.com/si/218844

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

mdpi.com/journal/biomedicines





an Open Access Journal by MDPI

Impact Factor 3.9 CiteScore 6.8 Indexed in PubMed





About the Journal

Message from the Editor-in-Chief

Biomedicines (ISSN 2227-9059) is an open access iournal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to Biomedicines, be it original research, review articles, or developing Special Issues of current key topics.

Editor-in-Chief

Prof. Dr. Felipe Fregni

- Neuromodulation Center and Center for Clinical Research Learning, Spaulding Rehabilitation Hospital and Massachusetts General Hospital, Harvard Medical School, Boston, MA 02114, USA
- 2. Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, MA 02115, USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q1 (Medicine (miscellaneous))

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).