





an Open Access Journal by MDPI

3D Printing and Nanotechnology in Biology and Medical Applications

Guest Editors:

Dr. Ignazio Roppolo

Departement of Applied Science and Technology, Politecnico di Torino, Turin, Italy

Dr. Annalisa Chiappone

Departement of Applied Science and Technology, Politecnico di Torino, Turin, Italy

Deadline for manuscript submissions:

closed (30 November 2020)

Message from the Guest Editors

This Special Issue will cover the synthesis, preparation, and characterization of both nanomaterials and new materials for 3D printing, focusing on their application in biology and medicine. New biocompatible, bioinert, and biodegradable materials to be used as 3D scaffold, antimicrobial nanomaterials, surface functionalization processes, and the development of devices for biomedical nanoreactions and medical applications will be of interest. Topics to be covered by this Special Issue include but are not limited to the following:

- 3D printable nanomaterials and nanocomposites preparation and characterization;
- Biocompatibility of 3D printable materials;
- Antimicrobial nanomaterials for 3D structures;
- Advances in bioplotting materials and 3D structures:
- SL-DLP printable materials and 3D structures for the biomedical field;
- FFF and SLS printable materials and 3D structures for the biomedical field;
- 2 photons resins and nanodevices;
- Electrospinnable materials for 3D scaffolds or porous substrates;
- Surface functionalization processes for molecules immobilization and detection in 3D devices:
- Microfluidic devices for nanoreactors.









citescore
8.5

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, 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