







an Open Access Journal by MDPI

3D In Vitro Tissue and Organ Models

Guest Editors:

Dr. Nur Mustafaoglu

Prof. Vasif Hasirci

Dr. Ken Takahashi

Dr. Menekse Ermis

Deadline for manuscript submissions:

closed (31 October 2021)

Message from the Guest Editors

Dear Colleagues,

Worldwide, the scientific community is focusing on advancing new technologies for tissue engineering, cell biology, 3D printing, and microfluidics to overcome the problems associated with existing in vitro models. Undeniably, creative design concepts and the inclusion of the developmental and cellular biology of the target tissues or organs are moving us closer to this ultimate goal. In addition, developments in material science for the manufacture of scaffolds or microfluidic systems using specific techniques are contributing significantly to the reconstitution of cellular microenvironments for whole organs or functional human tissue units. Many in vitro human models, however, require further improvement, refinement, and/or validation to be considered functional substitutes of tissues for drug testing that will replace preclinical animal studies or of organs for transplantation.

This Special Issue welcomes your submission of research manuscripts and review articles that are related to advancements in the fields of tissue engineering, cell biology, material sciences and nanoscience.

We look forward to receiving your submissions!













an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Ai-Qun Liu

1. Department of Electrical and Electronic Engineering, The Hong Kong Polytechnic University, Hong Kong, China 2. School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore 639798, Singapore

Message from the Editor-in-Chief

You are invited to contribute research articles or comprehensive reviews for consideration and publication in *Micromachines* (ISSN 2072-666X). *Micromachines* is published in the open access format. Research articles, reviews and other contents are released on the internet immediately after acceptance. The scientific community and the general public have unlimited free access to the content as soon as it is published. As an open access journal, *Micromachines* is supported by the authors or their institutes by payment of article processing charges (APC) for accepted papers. We are pleased to welcome you as our authors.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

 $\textbf{High Visibility:} \ indexed \ within \ Scopus, \ SCIE \ (Web \ of \ Science), \ PubMed,$

PMC, Ei Compendex, dblp, and other databases.

Journal Rank: JCR - Q2 (Physics, Applied) / CiteScore - Q2 (Mechanical Engineering)

Contact Us