



an Open Access Journal by MDPI

Microfluidic Devices for Biomedical Applications

Guest Editors:

Dr. Zhen Cheng

Department of Automation, Tsinghua University, Beijing 100084, China

Dr. Tao Yue

School of Mechatronic Engineering and Automation, Shanghai University, Shanghai 200444, China

Deadline for manuscript submissions: closed (20 September 2023)

Message from the Guest Editors

Dear Colleagues,

In recent decades, microfluidic devices have emerged as a promising technology with the potential to revolutionize biomedical applications and clinical diagnostics by providing more accurate, efficient, and cost-effective methods. Given the significant advantages over traditional systems, droplet-based microfluidic and organ-on-a-chip devices also enable high-throughput analysis of single cells for antibody discovery and screening of potential candidates for drug testing. The biomedical applications of microfluidic devices will surely achieve even brighter prospects with new concepts and commercial products continuing to be witnessed. This Special Issue seeks to showcase research articles and review articles that focus on the latest advancements in the design, fabrication, and biomedical applications of microfluidic devices, including but not limited to:

- lab-on-a-chip devices for medical and POCT diagnostics;
- droplet-based microfluidic for high-throughput analysis and screening;
- organ-on-a-chip devices and 3D structures for drug discovery and tissue engineering;
- microfluidics for drug delivery and flexible electronics.





mdpi.com/si/166886





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Ai-Qun Liu

 Department of Electrical and Electronic Engineering, The Hong Kong Polytechnic University, Hong Kong, China
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 i n *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. **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

Micromachines Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/micromachines micromachines@mdpi.com X@micromach_mdpi