



Micro/Nanofluidic and Lab-on-a-Chip Devices for Biomedical Applications

Guest Editors:

Violeta Carvalho

Department of Mechanical
Engineering, University of Minho,
4800-058 Guimarães, Portugal

Dr. Senhorinha de Fátima

Capela Fortunas Teixeira
Department of Production
Systems, University of Minho,
4800-058 Guimarães, Portugal

Dr. João Ribeiro

Department of Mechanical
Technology, School of
Technology and Management,
Polytechnic Institute of
Bragança, Santa Apolónia
Campus, 5300-253 Bragança,
Portugal

Deadline for manuscript
submissions:

closed (30 June 2022)

Message from the Guest Editors

Dear Colleagues,

Recently, microfluidic, nanofluidic and lab-on-a-chip devices have gained particular attention in biomedical applications. Due to their advantages, such as miniaturization, versatility, ease of use, cost-effectiveness, and the potential to replace animal models for drug development and testing, these devices hold tremendous potential to revolutionize the research of more effective treatments for several diseases that threaten human life. This Special Issue seeks to gather research papers, and review articles focusing on novel microfluidic, nanofluidic and lab-on-a-chip devices for biomedical applications, addressing all steps related to fabrication, biosensor integration and development, characterization, numerical simulations and validation of the devices, optimization and, if possible, the translation of these devices from research labs to industry settings.

We look forward to receiving your submissions.

Dr. Violeta Carvalho

Prof. Dr. Senhorinha Teixeira

Prof. Dr. João Eduardo P. Castro Ribeiro

Guest Editors





Editor-in-Chief

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.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, dblp, and other databases.

Journal Rank: JCR - Q2 (*Chemistry, Analytical*) / CiteScore - Q2 (*Mechanical Engineering*)

Contact Us

Micromachines Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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

mdpi.com/journal/micromachines
micromachines@mdpi.com
[X@micromach_mdpi](https://x.com/micromach_mdpi)