

Special Issue

Acoustic Micro/Nano Manipulation and Its Applications

Message from the Guest Editors

Acoustic micro/nano manipulation, on the basis of its various nonlinear acoustic effects (e.g., acoustic radiation force, acoustic streaming, and acoustic cavitation), leverages acoustic momentum to precisely control objects or fluids at the micro/nanoscale. It has the advantages of good biocompatibility, wide tunability, excellent transmission through biological tissues, and broad accessibility, and thus is preferred for many applications in fields such as biochemical analysis, medical therapy, and environmental science. In recent years, many interdisciplinary developments have been seen in this area (e.g., acoustic metamaterials, additive manufacturing, sonochemistry, ultrasound modulation, etc.), which continue to advance the performance and adaptability of acoustic micro/nano manipulation. This Special Issue seeks to present research articles, communications, and review articles focused on acoustic micro/nano manipulation from varied perspectives of fundamental principles, system designs, and applications. We look forward to receiving your submissions.

Guest Editors

Dr. Ye Ai

Dr. Xiaolong Lu

Dr. Zhichao Ma

Deadline for manuscript submissions

closed (30 August 2023)



Micromachines

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0
Indexed in PubMed



mdpi.com/si/165782

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

[mdpi.com/journal/
micromachines](https://mdpi.com/journal/micromachines)





Micromachines

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0
Indexed in PubMed



[mdpi.com/journal/
micromachines](https://mdpi.com/journal/micromachines)



About the Journal

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.

Editor-in-Chief

Prof. Dr. Ai-Qun Liu

Department of Electrical and Electronic Engineering, The Hong Kong Polytechnic University, Hong Kong, China

Author Benefits

High Visibility:

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

Journal Rank:

JCR - Q2 (Instruments and Instrumentation) / CiteScore - Q1 (Mechanical Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.2 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the first half of 2025).