



Acoustofluidics: Applications, Phenomena and Fabrication Technique

Guest Editor:

Dr. Amgad Rezk

Chemical and Environmental
Engineering, RMIT University,
Melbourne, VIC 3000, Australia

Deadline for manuscript
submissions:

closed (1 December 2022)

Message from the Guest Editor

Dear Colleagues,

Surface and bulk acoustic wave coupling to fluids at a milli-, micro-, and the nano-scale has uncovered a myriad of intriguing phenomena and has inspired many applications with a high impact commercialization potential. Acoustic-to-fluid (acoustofluidic) interactions have demonstrated a wide range of applications ranging from sensing to chemical analysis and micro-/nano-particle actuation to fluid interface manipulation, such as jetting and nebulization. In addition, the emerging fabrication techniques of the acoustic transducers and reservoirs (made out of 3D printing materials or elastomers, such as PDMS) have propelled the field to demonstrate many practical applications relevant to the lab-on-a-Chip vision. The aim of this Special Issue is to showcase and solicit recent research papers, short communications, and perspective review articles related to acoustofluidic discoveries, novel fabrication techniques, and relevant applications, for example, in particle sorting, fluid mixing, jetting, atomization, micro-/nano-particle synthesis.





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.

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, 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://twitter.com/micromach_mdpi)