Special Issue

Micro/Nano-Scale Heat Transfer

Message from the Guest Editors

The fast-paced progress in micromachining technology enables the fabrication of micron-sized mechanical devices. The miniaturization and increased functionality of modern devices induce an appreciable hike in the operating temperature, motivating research on microscale heat transfer to improve thermal management in confined space. Microscale heat transfer, in view of its efficiency and robustness in the thermal regulation of microscale cooling devices, micro-electromechanical systems, energy conversion devices, and other MEMS and biomedical applications, is of great value. Microscale cooling devices such as microchannel heat sinks, micro heat pipes and micro heat exchangers are increasingly important in current and future heat removal applications. The incorporation of nanostructured materials such as nanoparticles, nanofluids and nanostructured surfaces into the micro-scale devices are important for the performance enhancement. The objective of this Special Issue is to present recent findings in micro/nano-scale heat transfer, with an emphasis on the basic understanding of the heat transfer processes and their applications to practical problems.

Guest Editors

Prof. Dr. Gian Luca Morini
Dipartimento di Ingegneria Industriale (DIN), Alma Mater Studiorum Università di Bologna, 40136 Bologna, Italy

Dr. Yew Mun Hung
Mechanical Engineering Discipline, School of Engineering, Monash University, Bandar Sunway 47500, Malaysia

Deadline for manuscript submissions

closed (15 April 2021)

Micromachines

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0
Indexed in PubMed

mdpi.com/si/48224

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

mdpi.com/journal/
micromachines

MDPI

Micromachines

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0
Indexed in PubMed

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
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

---

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).

MDPI