

Indexed in: PubMed



an Open Access Journal by MDPI

Fluid Dynamics and Heat Transport in Microchannels

Guest Editors:

Dr. Masoud Afrand

Department of Mechanical Engineering, Najafabad Branch, Islamic Azad University, Najafabad, Iran

Prof. Dr. Mohsen Sharifpur

Department of Mechanical and Aeronautical Engineering, University of Pretoria, Pretoria 0002, South Africa

Prof. Dr. Josua P. Meyer

Department of Mechanical and Mechatronic Engineering, Stellenbosch University, Matieland 7602, South Africa

Deadline for manuscript submissions:

closed (25 March 2022)

Message from the Guest Editors

Dear Colleagues,

Microchannel applications are manifold, and include aerospace; automotive; bioengineering; the cooling of gas turbine blades; power and process industries; refrigeration and air conditioning; infrared detectors, powerful laser mirrors, and superconductors; microelectronics; and the thermal control of film deposition. One way to ensure energy sustainability is to increase system efficiency. One of the methods for achieving this successfully is to scale down systems. Micro- and nanodevices have the potential to provide efficient designs due to their high performance. For example, the dramatic increase in heat transfer in microchannels has led to their use as heat dissipation devices in microelectronic equipment. Additionally, different methods to increase the efficiency of these systems should be used. Physical understanding and research tools have already been significantly developed by various researchers, and it is expected that they could be developed in the future.













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.

 $\textbf{High Visibility:} \ \text{indexed within Scopus, SCIE (Web of Science), PubMed,} \\$

PMC, Ei Compendex, dblp, and other databases.

Journal Rank: JCR - Q2 (Physics, Applied) / CiteScore - Q2 (Mechanical Engineering)

Contact Us