

Special Issue

Fluid Dynamics and Heat Transport in Microchannels

Message from the Guest Editors

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.

Guest Editors

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Deadline for manuscript submissions

closed (25 March 2022)



Micromachines

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Impact Factor 3.0
CiteScore 6.0
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mdpi.com/si/94881

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