



Multi-Phase Flow and Heat Transfer

Guest Editor:

Prof. Dr. Shiwei Zhang

Intelligent Manufacturing
Engineering Laboratory of
Functional Structure and Device
in Guangdong, School of
Mechanical and Automotive
Engineering, South China
University of Technology,
Guangzhou 510640, China

Deadline for manuscript
submissions:

closed (31 December 2022)

Message from the Guest Editor

Thermal management plays critical role in a wide variety of electronical applications as their performance has increased and their physical space has decreased. As an efficient cooling method, two-phase heat transfer looks to be highly promising in the efficient thermal management of electronics to ensure their performance and reliability. However, many interdisciplinary scientific problems regarding two phase heat transfer still remain, including efficiency, reliability, durability, and the threshold of heat flux. Great efforts about two phase heat transfer enhancement have been made, such as rational designs for manipulating the liquid and vapor flow, wettability control for strengthening liquid supply, strategies for promoting the phase-change process, and so on. With the development of advanced theories and manufacturing techniques, novel two-phase heat transfer methods and their applications are continuously increasing. In this Special Issue, we welcome the contributions on two-phase heat transfer and their applications in the electronic field. We invite articles on theoretical and experimental studies on topics related to two-phase heat transfer.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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), Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

Contact Us

Applied Sciences Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/applsci
applsci@mdpi.com
[X@Applsci](https://twitter.com/Applsci)