Special Issue

Heat and Mass Transfer in Intense Liquid Evaporation

Message from the Guest Editor

In recent decades, textured walls and nanofluids have been effectively used to intensify transfer processes. The combined effects of wall textures, nanopowders, and convection are extremely difficult to simulate. Experimental studies of hydrodynamics and heat transfer of complex flows in the presence of many key factors help to develop modern physical models. The integral methods used to determine the coefficients of friction and heat transfer do not allow unraveling mechanisms associated with surface phenomena. Therefore, much attention is currently being given to defining local, instantaneous parameters for the fields of velocity, temperature, and concentration. The combination of integral and local methods serves to more deeply understand the physics of transfer processes and to develop simple computational methods for technical application. We are pleased to invite researchers to contribute to creation of the Special Issue dedicated to various aspects of heat and mass transfer in high-temperature multiphase flows.

Guest Editor

Dr. Sergey Ya. Misyura

Kutateladze Institute of Thermophysics Siberian Branch, Russian Academy of Sciences, 1 Acad. Lavrentiev Ave., Novosibirsk 630090, Russia

Deadline for manuscript submissions

closed (31 July 2020)



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/33269

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

mdpi.com/journal/applsci





Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



About the Journal

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 multidimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

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

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

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

