

## Special Issue

# Entropy in Computational Fluid Dynamics III

### Message from the Guest Editors

In order to better understand the physics of these loss-producing mechanisms, fluid mechanic and heat transfer considerations might be complemented by some thermodynamic concepts with respect to the irreversible processes involved. The second law analysis (SLA) is often used in thermodynamics in order to assess an irreversible process. According to the SLA, the quality of a flow and heat transfer process, and how reversible it is can only be assessed by the entropy generation rate. In our special issue, "Entropy in Computational Fluid Dynamics", the SLA was applied to both engineering applications and fundamental studies with respect to flow and heat transfer problems. The current special issue will further enhance the knowledge about how to interpret CFD results with the SLA. Analysis of irreversibility in traditional flow or heat transfer processes, e.g., evaluating irreversibility in gas turbines, is still a main topic of this special issue. Besides the traditional problems, irreversible processes in emerging subjects, such as nano- and micro-fluid flows, biological and physiological flows, are also of interests. Dr. Habil. Yan Jin

---

### Guest Editors

Dr. Yan Jin

Institute of Multiphase Flows, Hamburg University of Technology, 21073 Hamburg, Germany

Dr. Haochun Zhang

School of Energy Science and Engineering, Harbin Institute of Technology, Harbin 150001, China

---

### Deadline for manuscript submissions

closed (20 June 2022)



## Entropy

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.1  
CiteScore 4.9  
Indexed in PubMed



[mdpi.com/si/78714](https://mdpi.com/si/78714)

*Entropy*

MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[entropy@mdpi.com](mailto:entropy@mdpi.com)

[mdpi.com/journal/  
entropy](https://mdpi.com/journal/entropy)





# Entropy

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.1  
CiteScore 4.9  
Indexed in PubMed



[mdpi.com/journal/  
entropy](https://mdpi.com/journal/entropy)



## About the Journal

### Message from the Editor-in-Chief

The concept of entropy is traditionally a quantity in physics that has to do with temperature. However, it is now clear that entropy is deeply related to information theory and the process of inference. As such, entropic techniques have found broad application in the sciences.

*Entropy* is an online open access journal providing an advanced forum for the development and/or application of entropic and information-theoretic studies in a wide variety of applications. *Entropy* is inviting innovative and insightful contributions. Please consider *Entropy* as an exceptional home for your manuscript.

---

### Editor-in-Chief

Prof. Dr. Kevin H. Knuth

Department of Physics, University at Albany, 1400 Washington Avenue,  
Albany, NY 12222, USA

---

### 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, PubMed, PMC, Astrophysics Data System, and other databases.

#### Journal Rank:

JCR - Q2 (Physics, Multidisciplinary) / CiteScore - Q1 (Mathematical Physics)