

## Special Issue

# Thermodynamic Approaches in Modern Engineering Systems

### Message from the Guest Editors

We look forward to submissions of critical overviews and original papers on thermodynamic approaches for describing modern systems of engineering relevance. Since its foundation, thermodynamics has provided indispensable tools for *drawing the boundaries* of possible energy transformations. Today, with the rapid development in nanoscience and nanotechnology, we are witnessing an explosion in our degree of freedoms in manufacturing components with unusual behavior, as well as in synthesizing new materials endowed with exceptional properties. This opens up a plethora of new opportunities for improving engineering systems, and clearly needs fundamental guidance to correctly identify limitations, possibilities, and challenges. The aim of this Special Issue is to invite scientists to share recent advancements in both foundations and applications of thermodynamics shedding light on the above opportunities. Examples include (although not limited to) technologies for renewable energy collection, storage, and use; (bio-)chemical reactions for energy applications; advanced energy materials.

### Guest Editors

Dr. Eliodoro Chiavazzo

Dr. Adriano Sciacovelli

Dr. Andrea Frazzica

### Deadline for manuscript submissions

closed (15 May 2020)



## Entropy

an Open Access Journal  
by MDPI

Impact Factor 2.0  
CiteScore 5.2  
Indexed in PubMed



[mdpi.com/si/20412](https://mdpi.com/si/20412)

Entropy  
Editorial Office  
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 2.0  
CiteScore 5.2  
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)