

Special Issue

Small-System (Nanoscale-Mesoscale) Thermodynamics

Message from the Guest Editor

The study, however, did not attract much attention until near the turn of the last century, when experimental investigations begin to probe small systems because of the advent of modern tools available to manipulate micron-size systems. These systems also exchange heat and work so there is appropriate thermodynamics. There are complications due to quantum effects that may become important (quantum thermodynamics). The concepts of additivity and homogeneity also create hurdles as the size, shape, crystallinity, amorphousness, etc. begin to dominate. The current experimental studies including cluster formation, depression of the melting point and the latent heat, transport, micromachines, molecular motors, living Brownian particles, etc, and theoretical applications include the study of thermodynamic fluctuations, nature of the interplay between energy, heat and work, stochasticity and the second law implications, quantum computers and memory, etc.

Guest Editor

Prof. Dr. Purushottam D. Gujrati

1. Department of Physics, The University of Akron, Akron, OH 44325, USA

2. Department of Polymer Science, The University of Akron, Akron, OH 44325, USA

Deadline for manuscript submissions

closed (30 September 2022)



Entropy

an Open Access Journal
by MDPI

Impact Factor 2.1
CiteScore 4.9
Indexed in PubMed



mdpi.com/si/59831

Entropy
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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)