entropy

an Open Access Journal by MDPI

IMPACT FACTOR 2.7

Indexed in: PubMed

CITESCORE 4.7

Applications of Statistical Thermodynamics

Guest Editor:

Dr. Nobumitsu Shohoji
Independent Researcher, 1649-038 Lisboa, Portugal

Deadline for manuscript submissions:
closed (18 March 2020)

Message from the Guest Editor

Statistical thermodynamics span the bridge between the visible macroscopic world and the invisible atomistic world to evaluate values of atomistic interaction parameters with unambiguous physical significance from measured values of state parameters, such as temperature, pressure and chemical composition under equilibrium state. Unlike conventional thermodynamics, in which entropy, enthalpy, and free energy are defined mathematically in terms of state parameters and thus applicable universally to any system, even without knowing exactly the nature of compound under consideration, statistical thermodynamic analysis must be started from unambiguous a priori modeling of compounds under consideration. When an unrealistic model is chosen at the onset of the statistical thermodynamic approach, the evaluated parameters are without valid physical significance. The Guest Editor wishes this Special Issue will attract the attention of authors who have been working on entropy and enthalpy aspects of materials science, as well as physicists and chemists using statistical thermodynamics as an analysis tool.

entropy

IMPACT FACTOR 2.7 | Indexed in: PubMed | CITESCORE 4.7

an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Kevin H. Knuth
Department of Physics, University at Albany, 1400 Washington Avenue, Albany, NY 12222, USA

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.

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*)

Contact Us

Entropy Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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

mdpi.com/journal/entropy
entropy@mdpi.com
𝕏@Entropy_MDPI