Special Issue

Special Applications of the Second Law of Thermodynamics: From a Cell to Society

Message from the Guest Editors

The main objective of this Special Issue on “Applications of the Second Law of Thermodynamics: From a Cell to Society” is to showcase to the scientific world different applications of the concepts of entropy generation or destroyed exergy as a tool of diagnosis of different energy conversion systems, from pathologies to a rational use of energy in society. Irreversibilities are inherent to any process, and an increase in this physical quantity indicates a possible misfunctioning in biological systems and may be used as a tool even for diagnosing some illnesses. Also of interest is the demonstration of how society can properly use its natural resources, including methods to progress toward a more sustainable society. This Special Issue invites articles that explain the malfunctioning/better function of “aging systems”, including small systems, the human body (sports, thermal comfort, hypothermia, hyperthermia), corporations, cities, sectors and society, and other thermodynamic systems.

Guest Editors

Prof. Dr. Carlos Eduardo Keutenedjian Mady

Department of Mechanical Engineering, Centro Universitário da FEI, São Bernardo do Campo 09850-901, Brazil

Prof. Dr. Monica Carvalho

Department of Renewable Energy Engineering, Federal University of Paraíba (UFPB), Joao Pessoa 58051-970, Brazil

Deadline for manuscript submissions

closed (16 February 2024)

Entropy

an Open Access Journal by MDPI

Impact Factor 2.0
CiteScore 5.2
Indexed in PubMed

mdpi.com/si/130839

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

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

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)

MDPI