Special Issue

Physical Layer Security for Next-Generation Wireless Networks: Theory, Technologies, and Applications

Message from the Guest Editors

With the rapid development of sixth-generation (6G) communication systems, various forms of wireless networks, including Internet of Things (IoT), unmanned aerial vehicle (UAV) communications, and satellite communications, suffer from high security risks due to the open nature of wireless channels. Traditional cryptographic methods alone are no longer sufficient to meet the growing security demands of large-scale, heterogeneous, and resource-constrained next generation wireless networks. On the other hand, physical layer security (PLS), including secret key generation, secure communications via the wiretap channel and covert communication, has emerged as a solution and gained significant research interest in the past decade. Leveraging tools from information theory, signal processing, and wireless communications, PLS aims to provide confidentiality, integrity, and stealth against eavesdropping, jamming, and detection among other malicious attacks. PLS offers unique advantages via ultra-low latency, high reliability, and seamless integration with cutting edge technologies for wireless networks.

Guest Editors

Dr. Lin Zhou

Prof. Dr. Jingjing Wang

Dr. Xin Zhang

Dr. Jinpeng Xu

Deadline for manuscript submissions

31 July 2026

Entropy

an Open Access Journal by MDPI

Impact Factor 2.0
CiteScore 5.2
Indexed in PubMed

mdpi.com/si/255413

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