

Special Issue

Advances in Blockchain Challenges

Message from the Guest Editors

This Special Issue highlights recent advancements in blockchain technology that tackle these obstacles. Topics of interest include but are not limited to the following:

- **Scalability Solutions:** Novel approaches to enhance transaction throughput, reduce latency, and improve consensus mechanisms in large-scale blockchain systems.
- **Privacy-Preserving Techniques:** Advanced cryptographic methods, such as zero-knowledge proofs, homomorphic encryption, and privacy-preserving quantum AI, to ensure user privacy and data security on blockchain platforms.
- **Energy Efficiency:** Research on reducing the environmental impact of blockchain systems, including energy-efficient consensus algorithms and the integration of green technologies.
- **Quantum-Resistant Blockchain:** Exploring quantum computing's impact on blockchain security, including developing quantum-resistant cryptographic protocols and quantum machine learning algorithms that enhance blockchain resilience.
- **Blockchain for Carbon Credit Trading:** Papers that explore the role of blockchain and smart contracts in carbon credit markets.

Guest Editors

Dr. Yun-Cheng Tsai

Department of Technology Application and Human Resource Development, National Taiwan Normal University, Taipei City 10610, Taiwan

Dr. Samuel Yen-Chi Chen

Wells Fargo Bank, New York, NY 10017, USA

Deadline for manuscript submissions

15 December 2025



Electronics

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 6.1



mdpi.com/si/220887

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

[mdpi.com/journal/
electronics](https://mdpi.com/journal/electronics)





Electronics

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 6.1



[mdpi.com/journal/
electronics](https://mdpi.com/journal/electronics)



About the Journal

Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

Editor-in-Chief

Prof. Dr. Flavio Canavero

Department of Electronics and Telecommunications, Politecnico di
Torino, 10129 Torino, Italy

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), CAPus /
SciFinder, Inspec, Ei Compendex and other databases.

Journal Rank:

JCR - Q2 (Engineering, Electrical and Electronic) /
CiteScore - Q1 (Electrical and Electronic Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).