Special Issue

Advances in Hardware Security Research

Message from the Guest Editors

Integrated circuits (IC) have become ubiquitous in our everyday life ranging from smartphones to militarygrade applications. The security of applications on these devices are critically dependent on the underlying IC or system-on-chip (SoC) that ensures the privacy. authenticity, and integrity of the entire solution stack. However, with the growth of third-party intellectual property (3-PIP) combined with the globalization of the IC supply chain, ease of access to critical assets has created soft targets for cybercriminals to perform malicious activities on the device. Consequently, this has led to calls for a re-evaluation of the trustworthiness of the underlying ICs. This Special Issue offers new insights in evaluating the state-of-the-art hardware security attacks and defenses that will provide a foundation for future endeavors. The topics of interest include, but are not limited to:

- IP piracy/counterfeiting/overbuilding: Attacks and defenses;
- Hardware Trojans: Attacks and defenses;
- Hardware security: Primitives, architecture, and design and test:
- Side-channel analysis.

Guest Editors

Dr. Abhrajit Sengupta

Qualcomm Technologies, Inc., San Diego, CA 95616, USA

Prof. Dr. Paris Kitsos

Electrical & Computer Engineering Department, University of the Peloponnese, 26334 Patras, Greece

Dr. Mohammed Shavan

Codelucida Inc., USA, Tucson, AZ 85701, USA

Deadline for manuscript submissions

closed (15 August 2025)



Electronics

an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 6.1



mdpi.com/si/172162

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

mdpi.com/journal/electronics





Electronics

an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 6.1



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), CAPlus / 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).

