Special Issue

CMOS Devices: Design, Applications, and Future Prospects

Message from the Guest Editors

Complementary Metal–Oxide–Semiconductor (CMOS) technology has long been the cornerstone of modern electronics, underpinning a vast range of applications from microprocessors and memory devices to sensors and power-efficient systems. The continued scaling of CMOS transistors, aligned with Moore's Law, has driven unprecedented advances in computational performance, energy efficiency, and miniaturization. However, as we approach the physical and economic limits of traditional CMOS scaling, new challenges and opportunities arise in device design, system integration, and functional diversification. This makes CMOS device research more critical than ever, especially in the context of emerging fields such as AI, IoT, biomedical systems, and quantum computing. The aim is to provide a comprehensive platform for the latest advancements in CMOS device design, their innovative applications, and emerging directions shaping the future of the field. This Special Issue is aligned with the journal's scope by promoting interdisciplinary research at the interface of materials science, electrical engineering, and system-level integration.

Guest Editors

Dr. Min-Woo Kwon

Department of Electronic Engineering, Seoul National University of Science and Technology, Seoul 01811, Republic of Korea

Dr. Myung-Hyun Baek

Department of Electronic and Semiconductor Engineering, Gangneung-Wonju National University, Gangneung 25457, Republic of Korea

Deadline for manuscript submissions

15 February 2026

Electronics

an Open Access Journal by MDPI

Impact Factor 2.6
CiteScore 6.1

mdpi.com/si/246421

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

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), 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).