

Special Issue

Advanced CMOS Technologies and Applications

Message from the Guest Editors

Complementary metal-oxide-semiconductor (CMOS) technology remains at the heart of modern electronics, driving innovations in integrated circuits, sensor systems, and communication technologies. This Special Issue on Advanced CMOS technologies and applications explores the cutting-edge developments, challenges, and prospects in CMOS technology. The focus will be on innovative approaches to enhance CMOS performance, power efficiency, scaling, and reliability, as well as novel applications where CMOS plays a critical role. In this Special Issue, original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

- Advanced CMOS scaling techniques (e.g., FinFET, GAAFET, SOI);
- Low-power CMOS design methodologies;
- CMOS for emerging applications: IoT, AI, 5G, and beyond;
- Mixed-signal and RF CMOS circuits and systems;
- Reliability, variability, and thermal management in CMOS devices;
- CMOS integration with novel materials (e.g., graphene, 2D materials);
- Photonics and optoelectronic integration with CMOS.

We look forward to receiving your contributions.

Guest Editors

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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 guestedited by leading experts in selected topics of interest.

Editor-in-Chief

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.4 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the second half of 2025).