

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.

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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.

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