



Advanced CMOS Devices and Applications, 2nd Edition

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Message from the Guest Editors

The Special Issue aims to provide an overview of the recent progress in advanced CMOS and memory technologies from research scientists and engineers working in the fields of semiconductor devices, materials, and reliability and to discuss the opportunities and challenges in these fields, as well as any new findings, new phenomena, and state-of-the-art technologies related to advanced CMOS and memory devices. Papers related to device and material technologies for advanced CMOS and emerging non-volatile memories for neuromorphic computing applications are solicited, with topics including the following:

1. Advanced CMOS device architectures for high performance, ultra-low-power consumption, and reliability improvement
2. Emerging materials and advanced process technologies for high-mobility channels, gate stack formation, S/D contact, and junctions
3. Device physics, novel characterization methods, TCAD simulation, and ab initio calculation for advanced CMOS and emerging non-volatile memories
4. Conventional memories and emerging memories such as ReRAM, MRAM, PCRAM, and FeRAM
5. Memory device physics, reliability, and modeling
6. Synaptic devices for neuromorphic computing applications





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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 guest-edited by leading experts in selected topics of interest.

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