Special Issue

Wide-Bandgap-Semiconductor-Based Microelectronics

Message from the Guest Editors

Wide-bandgap (WBG) semiconductors have become very popular in recent years due to continuous research and growing commercial interest. While SiC-based semiconductors drive sustainable mobility and industrial markets, GaN semiconductors find their place in lower-voltage applications such as consumer electronics, data centres, telecommunications, and aerospace. In addition, other promising ultra-WBG semiconductors based on diamond, AlN, and Ga2O3 have recently been introduced to overcome the technological limitations of SiC and GaN. The aim of this Special Issue is to present the latest technology advancements on WBG semiconductors, with particular interest on GaN and latest WBG materials, at both device- and system-levels. Original research articles and reviews are welcome.

- manufacturing processes and packaging;
- finite-element simulations of WBG semiconductors;
- thermal analysis and optimization;
- device- and system-level reliability;
- robustness to short-circuit;
- improved layout design and gate driver optimization for WBG devices;
- radiation

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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.

Editor-in-Chief

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