

Special Issue

Wide-Bandgap Device Application: Devices, Circuits, and Drivers

Message from the Guest Editors

(1) As SiC and GaN devices are increasingly being applied in power electronics, the excellent performance of these devices is required. Therefore, how to design the devices, how to drive them, and what other fields these devices can be applied in are attractive research issues. (2) This Special Issue aims to exhibit the research progress of the application of wide-bandgap semiconductor devices, including the novel structures of devices, new topology of circuits for the high performance of wide-bandgap devices, and integrated circuit application of wide-bandgap semiconductors. (3) In this Special Issue, original research articles and reviews are welcome. Research areas may include (but not limited to) the following: high-efficiency SiC MOSFET-based DC/DC converters for EV application, high-voltage SiC-based DC/DC converters for HVDC application, SiC-based AC/DC for EV charging station application, high-power density power converters based on GaN devices, integrated circuits based on SiC material for harsh environment application, and integrated circuits based on GaN material for high-frequency application.

Guest Editors

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Deadline for manuscript submissions

closed (15 October 2024)



Electronics

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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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