



Performance and Reliability of Wide Bandgap Semiconductor and Nano Device-Based Circuits for Energy Systems

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Message from the Guest Editors

Dear Colleagues,

Energy systems are rapidly moving toward the adoption of wide-bandgap semiconductor (WBG) devices for improved performance and/or environmental robustness in traditional power electronics applications. Such applications include power conversion in grid energy management, electric vehicles, and space/military platforms as well as newly emerging areas in wireless energy transfer/charging, energy storage, data center efficiency, and high density power conversion. Growing interest is seen from manufacturer and government investments in the utilization of SiC, GaN semiconductors, and more recently Ga₂O₃, are being developed in a variety of device structures in both a horizontal and vertical fashion.

This Special Issue aims to collect original research and review articles that relate reliability and performance for WBG semiconductor devices (of various materials and device structures) and circuits (or various topologies and operating domains) in energy systems. Additionally, submissions are sought that describe the standards that these technologies should meet for specific application areas.





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Message from the Editor-in-Chief

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