

Special Issue

Wide Bandgap Semiconductor (WBG) Microelectronics and Optoelectronic Devices

Message from the Guest Editors

This Special Issue is intended to cover the latest development of WBG device technologies with a focus on the following topics:

- Advanced WBG semiconductors based on nitride, oxide, carbide, or diamond materials systems: substrate technology, epitaxial growth of heterostructures, quantum-mechanical structures, or devices.
- New device concepts using WBG semiconductors.
- WBG electronic devices including but not limited to: Heterojunction field effect transistors or high-electron-mobility transistors; High-voltage power switches: rectifiers and transistors; High-frequency and millimeter-wave transistors and integrated circuits; Oxide-based electronic devices.
- WBG optoelectronic devices including but not limited to: MicroLEDs: device fabrication and packaging technologies; UV photodetectors and imaging systems; UV emitters: light-emitting diodes and laser diodes for UVA, UVB, UVC, and EUV applications; WBG-integrated photonics.
- Emerging nanoscale WBG devices: Low-dimension electronic and optoelectronic devices; Energy conversion devices, chemical catalysis devices; Quantum-scale phenomenon, micro-cavity enhanced phenomenon.

Guest Editors

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Deadline for manuscript submissions

closed (30 September 2021)



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Editor-in-Chief

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