

## Special Issue

# Wide and Ultrawide Band Gap Semiconductors: Materials and Devices

### Message from the Guest Editors

We invite the submission of original research contributions and reviews in areas including, but not limited to, the homoepitaxy and heterojunction of wide- and ultrawide-bandgap semiconductors; metastable phase control and stabilization; quantum-well fabrication and characterization; the development of novel growth and characterization methods; theoretical calculations of the formation and activation of semiconductor defects; novel transport phenomena and defect characterization techniques; device simulation; power device applications, including diodes and metal-oxide-semiconductor field-effect transistors (MOSFETs); ultraviolet LEDs and photodetectors; and quantum information devices. Specific research areas may include (but are not limited to) the following:

- Epitaxy of wide- and ultrawide-bandgap semiconductors, including oxides (Ga<sub>2</sub>O<sub>3</sub> and ZnGa<sub>2</sub>O<sub>4</sub>), nitrides (GaN, AlGa<sub>2</sub>N, and BN), carbide (SiC), and diamond;
- Heterostructure design, phase control, and interface-driven phenomena;
- DFT calculations of defects in semiconductors;
- Carrier transport simulation and characterization methods;
- Power devices including diodes and MOSFETs;
- Ultraviolet LEDs and photodetectors.

### Guest Editors

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### Deadline for manuscript submissions

closed (31 October 2024)



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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.

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### Editor-in-Chief

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