



## Wide and Ultrawide Band Gap Semiconductors: Materials and Devices

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Deadline for manuscript  
submissions:

**closed (31 October 2024)**

### 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 ( $\text{Ga}_2\text{O}_3$  and  $\text{ZnGa}_2\text{O}_4$ ), nitrides (GaN, AlGaN, 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.





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## Editor-in-Chief

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## Message from the Editor-in-Chief

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