

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 (Ga₂O₃ and ZnGa₂O₄), nitrides (GaN, AlGa₂N, 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

Prof. Dr. Wenrui Zhang

Ningbo Institute of Materials Technology & Engineering, Chinese Academy of Sciences, Ningbo 315201, China

Prof. Dr. Wei Guo

Ningbo Institute of Materials Technology and Engineering, Chinese Academy of Sciences, Ningbo 315201, China

Deadline for manuscript submissions

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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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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 guest-edited by leading experts in selected topics of interest.

Editor-in-Chief

Prof. Dr. Flavio Canavero

Department of Electronics and Telecommunications, Politecnico di
Torino, 10129 Torino, Italy

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