

Special Issue

Advances in GaN-Based Electronic Materials and Devices

Message from the Guest Editor

Thick epitaxial GaN power switching devices are known to contain a high density of crystal defects, especially threading dislocations in the epitaxial layer. The impact of these defects on device performance, manufacturing yield, and long-term field-reliability, especially when operating under extremely stressful high voltage environments, is a topic of ongoing research. This Special Issue encourages manuscripts on defects in thick GaN epi and their impact on the power electronic switch, as well as the latest results on unique substrates for GaN device quality epitaxial layer growth. This Special Issue also encourages manuscripts to be submitted addressing all reliability issues, especially those related to failure mechanisms. Innovative research results of special GaN-based devices and circuits are also encouraged to be submitted to this Special Issue for publication. I look forward to receiving your contributions.

Guest Editor

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Deadline for manuscript submissions

closed (15 April 2025)



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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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