

Special Issue

Recent Advances in High-Power Gyro-Devices: Design, Optimization, Manufacturing, and Control

Message from the Guest Editors

We invite original research articles and comprehensive reviews addressing, but not limited to, the following themes:

- Design and Simulation: Novel gyrotron, gyroklystron, and gyro-TWA configurations, and advanced computational models for mode interaction and beam-wave dynamics.
- Performance Optimization: Efficiency enhancement, bandwidth broadening, and stability improvements in high-power regimes.
- Manufacturing Innovations: Precision fabrication techniques, additive manufacturing, and cooling solutions for thermal management.
- Control Systems: AI/ML-driven diagnostics, real-time monitoring, and adaptive control algorithms for operational reliability.
- Materials and Components: High-performance cathodes, RF window materials, and magnetic systems for compact designs.
- Emerging Applications: Fusion energy, directed-energy systems, spectroscopy, and space communications.
- Review Articles: Critical assessments of state-of-the-art technologies and future directions.

We look forward to receiving your contributions.

Guest Editors

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Deadline for manuscript submissions

closed (30 November 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.

Editor-in-Chief

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