Special Issue

Advances in Silicon Quantum Electronics

Message from the Guest Editors

The future of quantum is bright. The development of key quantum technologies like quantum computing, quantum communication, and quantum sensing is strategically carried out in many countries. Success in achieving advanced quantum technologies will reshape our world in the future. Quantum electronics is the building block of quantum technologies, with extensive progress having been made in the field in recent decades. In this Special Issue, both original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

- Silicon-integrated quantum light sources and detectors;
- Spin-based silicon electronic devices;
- Silicon-based optoelectronic devices;
- Silicon-integrated superconducting devices;
- Silicon-integrated quantum systems and demonstrations;
- Novel materials (i.e. quantum dots, carbon nanotube, 2D materials, etc.) integrated with silicon for quantum applications.

We look forward to receiving your contributions.

Guest Editors

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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

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).

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