Special Issue

Machine Learning and Artificial Intelligence in Quantum Computing Platforms

Message from the Guest Editors

As the complexity of quantum devices increases, groundbreaking experimental work is evidencing the potential of machine learning approaches for the development and automation of new quantum technologies. Among the forefront challenges in scaling up contemporary quantum computing platforms are reliable fabrication, large arrays design, and the time-consuming procedures necessary to achieve the high-level control required to operate quantum devices. This Special Issue targets this emerging field, focusing on advances in machine-learning-enhanced control, calibration, and fabrication of quantum devices in a range of quantum computing platforms. Of special interest is the application of machine learning methods to experiments, focusing on the control of quantum circuits as well as machine learning software for quantum devices.

- machine learning
- automation of experiments
- scalability
- deep learning
- reinforcement learning
- autonomous tuning

Guest Editors

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Deadline for manuscript submissions

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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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