

Special Issue

Highly Efficient Synapse-Device-Based Neuromorphic Systems

Message from the Guest Editor

This Special Issue of *Electronics* aims to call for recent research on the synapse-device-based neuromorphic system from material to system scale. Prospective authors are invited to submit original works and extended works based on the topics from a wide range of synapse-device-based neuromorphic systems. The synapse devices include (but are not limited to) the following devices: RRAM, CBRAM, FTJ (or other ferroelectric devices), STT-MRAM (or other spintronic devices), PCM, Flash (or other floating-gate/charge trap devices), etc. From material to circuitry, the following topics are solicited:

- Materials/devices for synapses and neurons;
- Brain-inspired neural networks with synapse/neuron devices;
- Selector materials/devices for crossbar array for neuromorphic systems;
- Array scale demonstration for neuromorphic systems;
- Architectural design/circuitry for neuromorphic systems;
- Learning algorithms and architecture/circuitry for neuromorphic systems.

More details via

https://www.mdpi.com/journal/electronics/special_issues/Neuromorphic_Systems Welcome to contribute.

Guest Editor

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Deadline for manuscript submissions

closed (28 February 2021)



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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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manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.4 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the second half of 2025).