Special Issue

Current Updates of Neuromorphic Computing

Message from the Guest Editors

With the end of Moore's law and technology scaling approaching, research communities have been looking at a new innovative alternative method of continuing the advancement of computational performance. In this regard, neuromorphic computing is an emerging field that has the potential to drastically influence every human's life in future decades.

Neuromorphic computing explores the computing process of the brain and attempts to replicate it onto modern electronic hardware. It offers improvements to overcome the limitations associated with current computer architecture and will lead to more efficient computing, the easier development of machine learning, and further integration of electronics and biology.

This Special Issue invites original research focused on synaptic device material (organinc/inorganic), models, circuit implementation, system configurations, and algorithmic investigations. Considering the wide usability of neuromorphic computing, applications to various areas such as healthcare, signal processing (image/video/sound), industrial production/optimization, and artificial intelligence (edge device, large scale) are also welcome.

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Deadline for manuscript submissions

closed (20 February 2025)



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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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