Special Issue

Memristive Neuromorphics: Neuronal Emulators and Hardware Implementations of Neural Algorithms

Message from the Guest Editors

Many neuroscientists believe that brains differ from conventional computers in ways that exacerbate the dependence of algorithms on hardware. It is absurdly difficult, if not impossible, to understand cognition without considering its implementations. Despite the enormous research interest in memristive neuromorphics and the many significant advances in this field, most observers would judge today's memristive neuromorphic devices and circuits as still being in their infancy and lacking the sophistication and flexibility of their biological counterparts. In this context, this Special Issue aims to bring together researchers working in directions including, but not limited to:

- Novel neuromorphic devices with new operating principles (not just new materials) that serve as the more compact and bio-realistic embodiments of neuronal elements.
- Novel neuromorphic devices or circuits for mimicking neuronal behaviors, especially those with a certain dynamic complexity.
- Novel neuromorphic devices or circuits for implementing neural algorithms beyond vector–matrix multiplication.
- Device/circuit properties-inspired algorithms and their simulations or hardware implementations.

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About the Journal

Message from the Editor-in-Chief

Journal of Low Power Electronics and Applications (ISSN 2079-9268) is an open access journal which provides an advanced forum for the studies of electronics for low power applications. A special emphasize is made on ultralow power bio-medical applications. It publishes reviews, regular research papers and short communications.

Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided.

Editor-in-Chief

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