micromachines

IMPACT FACTOR 3.0 | Indexed in: PubMed | CITESCORE 5.2

an Open Access Journal by MDPI

Non-volatile Memory Technologies for Neuromorphic Computing

Guest Editors:

Prof. Dr. Sumeet Kumar Gupta
School of Electrical and Computer Engineering, Purdue University, 465 Northwestern Avenue, West Lafayette, IN 47907-2035, USA

Prof. Dr. Ahmedullah Aziz
Department of Electrical Engineering and Computer Science, The University of Tennessee, Knoxville, TN 37996, USA

Prof. Dr. Sumitha George
Electrical and Computer Engineering, North Dakota State University, Fargo, ND, USA

Deadline for manuscript submissions:
closed (20 September 2022)

Message from the Guest Editors

Dear Colleagues,

The emergence of new data-intensive applications has led to a pressing need for enabling cognitive capabilities in the electronic systems. Towards that end, neuromorphic computing has shown an immense potential, wherein the artificial neurons and synapses and their complex network lead to a massively parallel processing of data with a tight compute-memory coupling. Non-volatile devices assume a prime importance for not only enabling low power inference but also supporting efficient and adaptive training mechanisms. This Special Issue aims to bring together the advancements in non-volatile memory technologies targeted towards neuromorphic computing. Contributions are sought in diverse areas spanning experimental studies of such technologies, device-circuit co-design of synaptic sub-systems, explorations of novel neural network architectures supported by the emerging non-volatile devices and the development of new learning algorithms enabled by the unique properties of the non-volatile memory technologies. This issue invites novel contributions, review papers and perspective articles on these topics.

micromachines

IMPACT FACTOR 3.0 | Indexed in: PubMed | CITESCORE 5.2

an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Ai-Qun Liu
1. Department of Electrical and Electronic Engineering, The Hong Kong Polytechnic University, Hong Kong, China
2. School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore 639798, Singapore

Message from the Editor-in-Chief

You are invited to contribute research articles or comprehensive reviews for consideration and publication in *Micromachines* (ISSN 2072-666X). *Micromachines* is published in the open access format. Research articles, reviews and other contents are released on the internet immediately after acceptance. The scientific community and the general public have unlimited free access to the content as soon as it is published. As an open access journal, *Micromachines* is supported by the authors or their institutes by payment of article processing charges (APC) for accepted papers. We are pleased to welcome you as our authors.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.
High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, dblp, and other databases.
Journal Rank: JCR - Q2 (*Physics, Applied*) / CiteScore - Q2 (*Mechanical Engineering*)

Contact Us

Micromachines Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/micromachines
micromachines@mdpi.com
𝕏@micromach_mdpi