Special Issue

Advances in High-Performance and Parallel Computing

Message from the Guest Editors

High-Performance Computing (HPC) and Parallel Computing play a vital role in addressing the growing demands of modern science, engineering, and data-driven applications. HPC and Parallel Computing enable researchers and practitioners to leverage multi-core processors, distributed systems, and accelerators such as GPUs and NPUs to solve problems involving increasing complexity and datasets. We hope this Special Issue provides valuable insights, fosters collaboration, and inspires future innovation in this dynamic and essential field. Research areas may include (but are not limited to) the following:

- Scalable and Distributed Computing;
- High-Performance Architectures and Systems;
- GPUs, Accelerators, and Heterogeneous Architectures for HPC:
- Programming Models and Languages for Parallel Computing:
- Compilers and Runtime Systems for Parallel Computing;
- Machine Learning and AI for HPC (and vice versa);
- Parallel Algorithms and Data Structures;
- Energy Efficiency and Green Computing in HPC;
- Fault Tolerance and Resilience in HPC;
- Performance Modeling, Benchmarking, and Tuning.

Guest Editors

Dr. Wonsun Ahn

Department of Computer Science, School of Computing and Information, University of Pittsburgh, Pittsburgh, PA 15213, USA

Prof. Dr. Chen Liu

Electrical & Computer Engineering Department, Clarkson University, Potsdam, NY 13699, USA

Deadline for manuscript submissions

15 January 2026



Electronics

an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 6.1



mdpi.com/si/245374

Electronics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
electronics@mdpi.com

mdpi.com/journal/electronics





Electronics

an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 6.1



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 guest-edited by leading experts in selected topics of interest.

Editor-in-Chief

Prof. Dr. Flavio Canavero

Department of Electronics and Telecommunications, Politecnico di Torino, 10129 Torino, Italy

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), CAPlus / SciFinder, Inspec, Ei Compendex and other databases.

Journal Rank:

JCR - Q2 (Engineering, Electrical and Electronic) / CiteScore - Q1 (Electrical and Electronic Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).

