

Special Issue

High-Performance Computing and AI Compression

Message from the Guest Editors

This Special Issue aims to explore the latest innovations and developments in this area, addressing both theoretical and practical aspects. We invite original research articles, reviews, and case studies that contribute to the understanding and advancement of compression techniques tailored for HPC and AI applications. Research areas of this Special Issue may include (but are not limited to) the following:

- Novel algorithms for data compression in HPC and AI environments;
- Hardware acceleration techniques for efficient data processing and compression;
- Case studies demonstrating the practical implementation of compression techniques in real-world HPC and AI applications;
- Theoretical advancements in lossless and lossy compression methods;
- Interdisciplinary approaches combining AI with traditional compression techniques;
- Benchmarking and performance evaluation of compression methods in HPC and AI scenarios;
- Energy-efficient compression strategies for sustainable high-performance computing.

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Deadline for manuscript submissions

closed (15 July 2025)



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

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