Special Issue

Advances in High-Performance Computing Research and Applications

Message from the Guest Editors

The multicore era began in 2004. With multicore systems, the personal computers of today can offer the power of super computers of 1990s and thus provide the opportunity to perform extensive computations. Advancement in applications high performance computing (HPC) has a significant impact on data analysis, energy research, oil and gas industry, health sectors, weather forecasting, decoding the human genome, deep learning, self-driving vehicles, drug discovery and more. Today, the computing landscape is dominated by multicore architectures, and HPC has evolved tremendously in its ability to offer solutions to complex problems. In this Special Issue, we invite original and unpublished submissions discussing the applications of HPC and related disciplines. This includes developing new models, image processing, oil exploration, control systems, applications of HPC in the health sector, cyber security, and adapting available tools to efficiently run on computer core systems.

Guest Editors

Prof. Dr. Nasro Min-Allah

SAUDI ARAMCO Cybersecurity Chair, Department of Computer Science, Imam Abdulrahman Bin Faisal University, Dammam, Saudi Arabia

Dr. Ubaid Abbasi

Department of Computer Science, Grande Prairie Regional College, Grand Priaire, AB T8V 4C4, Canada

Deadline for manuscript submissions

closed (20 October 2023)



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/100662

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

mdpi.com/journal/applsci





Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



About the Journal

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 multidimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

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), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

