



State-of-the-Art High-Performance Computing and Networking

Guest Editors:

Prof. Dr. Antonio J. Pena

Department of Computer
Science, Barcelona
Supercomputing Center (BSC),
08034 Barcelona, Spain

Dr. Pedro Valero-Lara

Oak Ridge National Laboratory,
Oak Ridge, TN 37831, USA

Deadline for manuscript
submissions:

closed (30 September 2022)

Message from the Guest Editors

High-performance computing (HPC) plays an indispensable role in addressing many of the challenges of today's society. From cancer fighting to astrophysics, supercomputers are used to solve extremely large problems in a reasonable time. As all fields of science evolve, more and more computational power is required to process the ever-increasing datasets. There are big challenges associated with all of the following three broad domains: hardware, software, and applications.

This Special Issue “State-of-the-Art High-Performance Computing and Networking” aims to publish novel research related to all levels of HPC. Submissions are expected to focus on computing and/or networking aspects of current and emerging HPC platforms. Review articles are also welcome.

Topics of interest include, but are not limited to, the following:

- Applications
- Programming models, runtime systems, and compiler support
- System software
- Performance tools
- Computer architecture
- Network architecture and HPC protocols





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

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

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 multi-dimensional network.

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

Journal Rank: JCR - Q2 (*Engineering, Multidisciplinary*) / CiteScore - Q1 (*General Engineering*)

Contact Us

Applied Sciences Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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

mdpi.com/journal/applsci
applsci@mdpi.com
[X@Applsci](https://twitter.com/Applsci)