Special Issue

Computational and Mathematical Methods for Neuroscience

Message from the Guest Editor

This Special Issue is dedicated to exploring the profound impact of computational and mathematical methods in the realm of neuroscience. It showcases the integration of state-of-the-art techniques, including computational modeling, machine learning, network analysis, and brain-computer interfaces, which have significantly advanced our comprehension of brain dynamics, network interactions, cognitive functions, and behavior. The issue critically addresses the challenges related to data integration and model validation, underscoring the potential for groundbreaking discoveries that hold far-reaching implications for medicine, technology, and our overall understanding of the human mind. We invite you to contribute your original research or review papers that delve into innovative physical, mathematical, biological, and medical approaches. Submissions showcasing cuttingedge technology and important applications are warmly welcomed. Through our collective effort, we aspire to improve our understanding of brain functionality and propel neuroscience into new frontiers of knowledge.

Guest Editor

Prof. Dr. Alexander N. Pisarchik

Center for Biomedical Technology, Technical University of Madrid, Campus Montegancedo, Pozuelo de Alarcón, 28223 Madrid, Spain

Deadline for manuscript submissions

closed (31 July 2024)



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/180191

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)

