

Special Issue

Computer Simulation of Quantum and Classical Systems

Message from the Guest Editors

Notwithstanding the promises of quantum computing, classical simulations are still the method of choice for non-perturbative calculations in quantum and classical many-body systems. Classical simulations are closer to our intuition and can provide great insight. Hence, they will remain useful even after the coming of age of quantum computers. There is a very strong connection between simulations of quantum and classical systems. This link is founded on very general grounds: quantum systems are often mapped onto classical models. Hence, the techniques used in simulations of classical systems are also useful for quantum systems and vice versa. Important advancements may be made when simulations of classical systems overcome the problems of multiscale modeling, long-time dynamics, and sampling of rare events. Papers dealing with the above topics are welcome for submission to this Special Issue.

Guest Editors

Dr. Alessandro Sergi

Dipartimento di Scienze Matematiche e Informatiche, Scienze Fisiche e Scienze della Terra, Università degli Studi di Messina Contrada Papardo, 98166 Messina, Italy

Prof. Dr. Gabriel Hanna

Department of Chemistry, University of Alberta, Edmonton, AB T6G 2R3, Canada

Deadline for manuscript submissions

closed (25 April 2022)



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



mdpi.com/si/55674

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

mdpi.com/journal/appls





Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



[mdpi.com/journal/
applsci](https://mdpi.com/journal/applsci)



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 multi-dimensional 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)