

Special Issue

Quantum Computing and Quantum Information Processing

Message from the Guest Editor

The foundations of quantum theory were formulated over a hundred years ago, but it was not until the last quarter century that quantum theory left the tranquillity of physical laboratories. Theoretical and technological developments have allowed for serious treatment of the new research discipline commonly known as quantum information processing. It seems that we will sooner or later enter the era of technological use of quantum technology. Therefore, we hope that this Special Issue will provide an overall picture of the discussed problems and up-to-date findings to both researchers and students and that the readers will ultimately benefit from reading the contributions. Scope: Potential topics (theories and experiments) dealing with, but not limited to, the following subheadings are deemed suitable for publication:

- Quantum algorithms;
- Quantum computing;
- Quantum communication;
- Quantum complexity theory;
- Quantum cryptography;
- Quantum games;
- Quantum information processing;
- Quantum networks;
- Quantum programming.

Prof. Jan Śladkowski

Guest Editor

Prof. Dr. Jan Śladkowski

Institute of Physics, University of Silesia, 75 Pułku Piechoty 1, PL 41-005 Chorzów, Poland

Deadline for manuscript submissions

closed (30 June 2021)



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



mdpi.com/si/41327

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

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