

## Special Issue

# Quantum Optics and Quantum Information Processing: State-of-the-Art 2023

### Message from the Guest Editors

Recent developments in the field of quantum information have led to exciting new advances in our understanding of quantum mechanics and an increasing number of related technologies. Today, different physical systems are being studied as a basis for the implementation of quantum information protocols; such examples include superconducting systems, quantum dots, and NV centers, as well as many others. Among this variety of solutions, quantum optics represents one of the most promising and transversal frameworks for many fields related to quantum information, including: quantum communication, quantum computing, quantum imaging, and quantum sensing. This Special Issue offers researchers the opportunity to present their original works and reviews on recent advances regarding quantum optics and quantum information.

---

### Guest Editors

Dr. Alessio Avella

INRIM, Istituto Nazionale di Ricerca Metrologica, Strada Delle Cacce 91, 10135 Torino, Italy

Dr. Carmine Napoli

INRIM, Istituto Nazionale di Ricerca Metrologica, Strada delle Cacce 91, 10135 Torino, Italia

---

### Deadline for manuscript submissions

closed (31 October 2023)



## Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/si/138982](https://mdpi.com/si/138982)

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

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

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





# 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 )