

## Special Issue

# Novel Insights into Orbital Angular Momentum Beams: From Fundamentals, Devices to Applications

### Message from the Guest Editors

This Special Issue aims to explore the novel insights of OAM beams. It will focus on state-of-the-art advances in fundamental theories, devices and applications, as well as future perspectives of OAM beams. Topics of interest include, but are not limited to, the following areas:

- Fundamental principles and properties of structured light beams.
- Technology and device to generate, manipulate and detect OAM light beams.
- Micromanipulation using OAM beams, such as optical tweezers, optical trapping, particle acceleration.
- Spectroscopy, microscopy, imaging, sensing technology using vortex beams.
- Light-matter interaction by vortex beams, including laser machining and nonlinear interactions.
- OAM-based spatial mode encoding/multiplexing for quantum cryptography and classical communications.

---

### Guest Editors

Prof. Dr. Yang Yue

Dr. Hao Huang

Dr. Yongxiong Ren

Prof. Dr. Zhongqi Pan

Prof. Alan E. Willner

---

### Deadline for manuscript submissions

closed (30 April 2019)



## Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 6.1



[mdpi.com/si/16994](https://mdpi.com/si/16994)

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

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

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





# Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 6.1



[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, Embase, CAPIus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (Fluid Flow and Transfer Processes)