

## Special Issue

# Recent Advances in Autonomous Systems and Robotics

### Message from the Guest Editors

Autonomous technology can use multi-source sensors and complex software to make systems without or limited communication for a long time, and the systems can automatically adjust in an unknown environment, independently complete tasks, and maintain good performance. Autonomous systems and robotics are interdisciplinary fields involving real-time detection, information processing, comprehensive analysis, intelligent judgment, robust control, etc. With the continuous improvement of technical complexity, the possibility of system failure, vulnerability, and overall afunction will also increase. Most applications still need the combination of human and autonomous systems to complete different tasks, so intelligent and unmanned systems are still challenging in current research.

The aim of this Special Issue is to celebrate the recent advances in the autonomous systems and robotics, and promote the exchange and development of modern technologies, methods, and theories. Areas to be covered in this Special Issue may include, but are not limited to: machine vision; machine learning and deep learning; artificial intelligence technology; fault detection and diagnosis; and intelligent robots.

---

### Guest Editors

Prof. Dr. Xinhua Liu

Dr. Jun Wu

Dr. Lei Si

Dr. Xiaoyu Zou

Dr. Dezheng Hua

---

### Deadline for manuscript submissions

closed (31 December 2023)



## Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/si/145636](https://mdpi.com/si/145636)

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





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

#### Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering )