



*sensors*



an Open Access Journal by MDPI

## Advances and Applications in Aerial Unmanned Robots: Sensing, Planning, and Control

Guest Editors:

**Prof. Dr. Bo Zhang**

**Dr. Yue Wei**

**Dr. Shiyu Chen**

**Dr. Yu Hu**

**Dr. Yaohua Liu**

Deadline for manuscript  
submissions:

**closed (30 October 2024)**

### Message from the Guest Editors

As sensor and control technology rapidly advance, aerial unmanned robots have been more widely investigated due to their applications in the areas of surveillance, monitoring, infrastructure inspection, delivery, etc. Aerial unmanned robots include fixed-wing drones, multi-rotor drones, aerostat, etc., which can offer tailored solutions for diverse observation tasks. Research into aerial unmanned robots encompasses the territories of sensing, planning, and control. In complex environments, it may require multiple aerial unmanned robots to complete sensing tasks cooperatively, followed by real-time data fusion. Optimal planning results for aerial unmanned robots must also be obtained through optimization theories in order to address requirements such as energy efficiency and obstacle avoidance. Simultaneously, a dependable control strategy is indispensable for the motion of aerial unmanned robots in perturbed environments like complex wind fields.

You are invited to submit to this Special Issue of *Sensors*, entitled “Advances and Applications in Aerial Unmanned Robots: Sensing, Planning, and Control”.



[mdpi.com/si/189875](https://mdpi.com/si/189875)

# Special Issue



*sensors*



an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Vittorio M. N. Passaro**

Dipartimento di Ingegneria  
Elettrica e dell'Informazione  
(Department of Electrical and  
Information Engineering),  
Politecnico di Bari, Via Edoardo  
Orabona n. 4, 70125 Bari, Italy

## Message from the Editor-in-Chief

*Sensors* is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. *Sensors* organizes Special Issues devoted to specific sensing areas and applications each year.

## Author Benefits

**Open Access :** free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

**High Visibility:** indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [PubMed](#), [MEDLINE](#), [PMC](#), [Ei Compendex](#), [Inspec](#), [Astrophysics Data System](#), and [other databases](#).

**Journal Rank:** JCR - Q2 (Instruments and Instrumentation) / CiteScore - Q1 (Instrumentation)

## Contact Us

*Sensors* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/sensors](http://mdpi.com/journal/sensors)  
[sensors@mdpi.com](mailto:sensors@mdpi.com)  
[X@Sensors\\_MDPI](#)