



*sensors*



an Open Access Journal by MDPI

## Autonomous Drones Technology for Sensing and Communications

Guest Editor:

**Prof. Dr. Boaz Ben-Moshe**

Department of Computer  
Science, Ariel University, Ariel  
4070000, Israel

Deadline for manuscript  
submissions:

**closed (31 August 2023)**

### Message from the Guest Editor

This Special Issue is focused on concepts, and algorithms for commercial drones to perform autonomous missions such as: mapping, inspection, remote-sensing, and ad hoc communication. In other words, this Special Issue investigates the ability of a swarm of drones to act as an efficient Dynamic Wireless Sensor Network (D-WSN).

The scope of this Special Issue includes the following topics:

1. Drone to Drone and Drone to Swarm ad hoc communication.
2. Visual navigation for drones, including visual formation flight.
3. Detecting “landable spots” in unknown regions and performing landing and take-off accordingly.
4. Swarm sensing of wildfires (including where to land and when to move).
5. Self-inspection of a drone’s “well been” using acoustic analysis
6. Sense and avoid methods for drones.
7. Video-based real-time photogrammetry.
8. Edge AI for drones: using light platforms (such as TPU or OAK—1) to allow onboard, real-time inferencing.
9. Smart cooperation between drones.



[mdpi.com/si/115965](https://mdpi.com/si/115965)

# 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 (*Chemistry, Analytical*) / 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](#)