

## Special Issue

# Resilient Networking and Task Allocation for Drone Swarms

### Message from the Guest Editors

Resilient cooperation between drones is essential to enable information sharing and joint missions and to achieve autonomous drone swarms. Traditional networking and task allocation schemes cannot address the unique characteristics of drone swarms, such as high dynamic topology and capability constraints. Therefore, researchers have to study new and specific solutions for possible issues in resilient networking and task allocation for drone swarms, where transmission delay and reliability, the performance and complexity of the cooperation strategy, and even the swarm flight control strategy are the key factors affecting the implementation of the tasks. This Special Issue aims to collect studies on:

- Cooperative communication and networking-
- Resilient access strategy-
- Resilient Edge computing-
- Cooperative formation - for drone swarms;
- Complex task-driven drone swarm cooperation;
- Resilient sensing, communication and computing integrated drone swarms;
- Resilient game and confrontation for drone swarms;
- Resilient resource allocation for drone swarms.

---

### Guest Editors

Prof. Dr. Jingjing Wang

School of Cyber Science and Technology, Beihang University, Beijing, China

Dr. Yibo Zhang

School of Information and Communication Engineering, Beijing Information Science and Technology University, Beijing 100101, China

---

### Deadline for manuscript submissions

closed (20 April 2025)



## Drones

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.8  
CiteScore 7.4



[mdpi.com/si/162382](https://mdpi.com/si/162382)

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

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





# Drones

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.8  
CiteScore 7.4



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



## About the Journal

### Message from the Editor-in-Chief

*Drones* is an international open access journal focusing on advancing research in drone science, policy, technology, and applications. Today, drones have become indispensable for policymakers, regulatory authorities, mapping agencies, start-ups, and established firms. Their expanding societal and economic relevance is reflected in the rapid development of new sensors, upgraded platforms, specialized software, and novel applications. The journal provides a central forum for scholars in drone research and applications to exchange findings and innovations. With growing demand for high-quality research, our Editorial Board comprises international leaders and experts across relevant scientific areas. We offer rigorous peer review and rapid publication of papers from across all areas of drone science. We welcome you to submit your next paper to *Drones* and to contribute to the continued advancement of and innovations in the field of drones.

---

### Editor-in-Chief

Prof. Dr. Diego González-Aguilera

Cartographic and Land Engineering Department, Higher Polytechnic School of Avila, University of Salamanca, Hornos Caleros, 50 05003 Avila, Spain

---

### 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), Inspec, Ei Compendex and other databases.

#### Journal Rank:

JCR - Q1 (Remote Sensing) / CiteScore - Q1 (Aerospace Engineering)