



## Resilient Networking and Task Allocation for Drone Swarms

Guest Editors:

**Prof. Dr. Jingjing Wang**

School of Cyber Science and  
Technology, Beihang University,  
Beijing 100191, China

**Dr. Yibo Zhang**

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

Deadline for manuscript  
submissions:

**20 August 2024**

### Message from the Guest Editors

Dear Colleagues,

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:

1. Cooperative communication and networking-
2. Resilient access strategy-
3. Resilient Edge computing-
4. Cooperative formation - for drone swarms;
5. Complex task-driven drone swarm cooperation;
6. Resilient sensing, communication and computing integrated drone swarms;
7. Resilient game and confrontation for drone swarms;
8. Resilient resource allocation for drone swarms.





an Open Access Journal by MDPI

## 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

## Message from the Editor-in-Chief

*Drones* is the only international open-access journal about the science, policy and technology of drones and its applications. Nowadays, the proliferation of drones is a reality for local policy makers, regulatory bodies, mapping authorities, startups and consolidated companies. There are many uses and benefits of drones: from the emergence of new sensors and the evolution of new platforms; to the development of specific software and the emergence of new applications. *Drones* publishes reviews, regular research papers, communications and short notes, without restriction on the length of papers. *Drones* seeks to provide a central forum for scholars engaged in drones' research and applications.

There is a need for high quality papers in this area and the *Drones* Editorial Board are widely recognized international leaders. *Drones* journal guarantees a serious peer review and a rapid publication across the whole discipline of drones.

## 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)

## Contact Us

---

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

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

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