

## Special Issue

# Mission Planning, Perception and Control for Drones in Wide-Area Operations

### Message from the Guest Editors

This Special Issue, entitled Mission Planning, Perception, and Control for Drones in Wide-area Operations, aims to provide a scientific platform regarding the new trends in technologies for drones in wide-area operations, including mission planning technology, artificial intelligence, autonomous intelligent unmanned systems, and the combination of learning and control. Topics of interests include, but are not limited to, the following: 1) Motion control and path planning for wide-area operating drones; 2) Mission planning for wide-area operating drones; 3) Task decomposition and allocation for wide-area operating drones; 4) Simultaneous localization and mapping in a complex environment; 5) Vision recognition and detection; 6) Intelligent perception techniques; 7) Model-based predictive control for intelligent systems; 8) Robust control, sliding mode control, and adaptive control; 9) Deep learning and reinforcement learning; 10) Architecture for learning and control integration; 11) Advanced decision and control methods for unmanned systems; 12) Intelligent swarm and formation.

---

### Guest Editors

Dr. Weiran Yao

Dr. Xiangyu Shao

Dr. Yuehua Liu

Prof. Dr. Liming Xin

Dr. Jiatao Ding

---

### Deadline for manuscript submissions

closed (31 January 2025)



## Drones

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.4  
CiteScore 5.6



[mdpi.com/si/208320](https://mdpi.com/si/208320)

*Drones*

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 4.4  
CiteScore 5.6



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



## About the Journal

### 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.

---

### 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)