

## Special Issue

# Recent Advances in Unmanned Aerial Vehicles for Next Generation Wireless Communications Networks

### Message from the Guest Editors

Due to the high mobility and flexible deployment of Unmanned Aerial Vehicles (UAVs) in an open environment, they have generated enormous interest in civil and military applications aiming to foster agile communications and enable ubiquitous connectivity. Dominant line-of-sight communication links are a huge benefit of UAV communications; however, UAVs can be more vulnerable to adversarial eavesdropping attacks. UAVs can be used for various applications due to their adaptability, low acquisition and maintenance costs, high mobility, and hovering capability. Since their invention, UAVs have been considered for military purposes, including simple but dangerous tasks such as monitoring and attacking hostile targets. They are also used to grow civilian operations such as rescue efforts, cargo transport, resource exploitation, aerial photography, agriculture, traffic management, and communications. Therefore, it is important to study the latest advancements in UAV communications, such as integration of next-generation technologies into UAV communications. This Special Issue aims to provide selected contributions on advances in UAV communications.

---

### Guest Editors

Dr. Wali Ullah Khan

Dr. Khaled Rabie

Dr. Xingwang Li

Dr. Dinh-Thuan Do

---

### Deadline for manuscript submissions

closed (15 February 2023)



## Drones

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.8  
CiteScore 7.4



[mdpi.com/si/135786](https://mdpi.com/si/135786)

*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 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)