

## Special Issue

# Intelligent Control and Optimization of Electric Vertical Take-Off and Landing Unmanned Aerial Vehicles

### Message from the Guest Editors

Electric vertical take-off and landing (eVTOL) unmanned aerial vehicles (UAVs) are a category of aircraft equipped with multiple rotors, with or without tilting capabilities. They combine the functionalities of vertical take-off and landing with the ability to fly forward at high speeds. This unique capability makes them highly versatile, enabling them to address various applications that require velocity, agility, and long-range flight performance. This Special Issue aims to present the latest advancements in intelligent control strategies, optimization methods, and system design for eVTOL UAVs. However, the inherent challenges, including dynamic transition control, aerodynamic interference, power management, and safety redundancy, necessitate innovative approaches in intelligent control algorithms and optimization techniques. This Special Issue aims to bridge the gap between theoretical research and practical applications, focusing on innovations which address challenges in flight dynamics, energy efficiency, real-time decision making, and mission planning for eVTOL UAVs.

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### Guest Editors

Dr. Zongyang Lv

Prof. Dr. Qing Zhao

Dr. Hao Wei

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### Deadline for manuscript submissions

1 August 2025



## Drones

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## 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.

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### Editor-in-Chief

Prof. Dr. Diego González-Aguilera

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