

Special Issue

Bio-Inspired Drones

Message from the Guest Editors

Thanks to millions of years of evolution, nature showcases elaborate and effective solutions for many complex tasks, including locomotion, sensing, control and navigation. Flying animals are typically adept at hovering, rapid forward flight, complex rapid manoeuvring, high-precision navigation, robust control, and multimodal mobility. In aerial robotics, bio-inspired solutions are thus becoming widespread, with examples including flapping-wing flight mechanisms, bird-inspired perching, insect-inspired visual navigation, and bat-inspired echolocation. Bio-inspiration can allow for entirely new capabilities and lead to novel solutions to existing challenges. This Special Issue invites submissions addressing the development of novel, bio-inspired UAVs/drones, e.g., The development and investigation of new robotic platform designs, soft robotics and novel materials, adaptive and morphing design, bio-inspired control, multisensory navigation, obstacle avoidance, environment interaction and perching, machine learning applications, experimental methods and testing, datasets, demonstration of new applications, and the use of bio-inspired robots to better understand biological systems.

Guest Editors

Dr. Mirko Kovac

Dr. Sophie Armanini

Prof. Dr. Abdessattar Abdelkefi

Deadline for manuscript submissions

closed (28 February 2022)



Drones

an Open Access Journal
by MDPI

Impact Factor 4.4
CiteScore 5.6



mdpi.com/si/25525

Drones
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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)