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Drones Navigation and Orientation

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Deadline for manuscript submissions:
closed (14 April 2025)

Message from the Guest Editors

Dear Colleagues,

The development of semi-autonomous and autonomous unmanned aerial systems, also known as drones, and their applications is experiencing continuous growth. Drones' success has resulted in increased interest in other types of uncrewed vehicles, from submarines to planetary ground vehicles. Currently, the category 'drone' embraces all types of uncrewed vehicles, from underwater autonomous ones to planetary robots (excluding driverless cars).

For most drone applications, the vehicle's position and attitude—the drone's orientation—is required to exploit the collected data. For all drone operations, knowing the drone orientation in real time—drone navigation—is required. Navigation is a fundamental function of drone guidance, control, and navigation (GNC) systems, often referred to as autopilots. In turn, GNC systems are a necessary subsystem of drones. Both drone orientation and navigation must meet certain performance specifications, often revolving around precision, accuracy, integrity, availability and continuity.

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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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