Special Issue

Drones and UAVs Energy Management Progress and Challenges

Message from the Guest Editors

The implementation of energy storages and renewable energies for unmanned aerial vehicles (UAVs, also called drones) could be essential for guaranteeing flight durations under specific weight/volume constraints. When multiple power supply sources are installed in a drone, the variability of the operation conditions means the energy management and the power distribution strategies should match the characteristics of each power supply sources. To address these issues, some special design considerations should be adopted to combine different power sources (battery, fuel cell, supercapacitor, flywheel, etc.) and advanced energy management strategies (EMS) in the most efficient and effective way. Moreover, some fault-tolerant control strategies can be considered to insure smooth operation of the drone. In this context, this Special Issue aims to be an open platform to share knowledge about drones and UAVs energy management progress and challenges. It particularly seeks original contributions regarding ideas, recent developments, or matured studies addressing both theoretical and experimental aspects.

Guest Editors

Dr. Zhibin Zhou

Dr. Teresa Donateo

Prof. Dr. Mohamed Benbouzid

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Electronics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
electronics@mdpi.com

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Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

Editor-in-Chief

Prof. Dr. Flavio Canavero
Department of Electronics and Telecommunications, Politecnico di Torino, 10129 Torino, Italy

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