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Nota di contenuto	<p>Preface to "Feature Papers of Drones-Volume I" vii -- Propeller Position Effects over the Pressure and Friction Coefficients over the Wing of an UAV with Distributed Electric Propulsion: A Proper Orthogonal Decomposition Analysis 1 -- Optimum Sizing of Photovoltaic-Battery Power Supply for Drone-Based Cellular Networks 31 -- Computational Study of the Propeller Position Effects in Wing-Mounted, Distributed Electric Propulsion with Boundary Layer Ingestion in a 25 kg Remotely Piloted Aircraft 49 -- Biomimetic Drones Inspired by Dragonflies Will Require a Systems Based Approach and -- Insights from Biology 67 -- Suitability of the Reforming-Controlled Compression Ignition Concept for UAV Applications 91 -- Modeling and Investigations on Surface Colors of Wings on the Performance of Albatross-Inspired Mars Drones and Thermoelectric Generation Capabilities 109 -- Unmanned Autogyro for Mars Exploration: A Preliminary Study 131 -- Safety Enhancement of UAVs from the Signal Processing's Perspectives: A Bird's Eye View 149 -- Drones in B5G/6G Networks as Flying Base Stations 165 -- On the Performance of a UAV-Aided Wireless Network Based on NB-IoT 183 -- Communication Aware UAV Swarm Surveillance Based on Hierarchical Architecture 203 -- StratoTrans: Unmanned Aerial System (UAS) 4G Communication Framework Applied on the -- Monitoring of Road Traffic and Linear Infrastructure 229 -- SuSy-EnGaD: Surveillance System Enhanced by Games of Drones 243 -- Designing a User-Centered Interaction Interface for Human-Swarm</p>

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Sommario/riassunto

This reprint compiles the articles, communications, and review articles from top researchers describing novel or new cutting-edge designs, developments, and/or applications of unmanned vehicles. This reprint encompasses the key topics related to drone design, communications as well as autonomous Flight and Navigation. Special attention is paid to the drones' applications to environmental and earth sciences, including in agriculture, forestry, water, and marine environments; other innovative applications are also explored including in relation to the field of application, such as the inclusion of new deep learning techniques.
