

1. Record Nr.	UNINA9910647243103321
Titolo	Feature Papers of Drones . Volume 2 // edited by Diego Gonzalez-Aguilera, Pablo Rodriguez-Gonzalvez
Pubbl/distr/stampa	[Place of publication not identified] : , : MDPI - Multidisciplinary Digital Publishing Institute, , 2023
ISBN	3-0365-6190-0
Descrizione fisica	1 online resource (662 pages)
Disciplina	006.31
Soggetti	Transfer learning (Machine learning)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Preface to "Feature Papers of Drones-Volume II" ix -- Pasture Productivity Assessment under Mob Grazing and Fertility Management Using Satellite and UAS Imagery 1 -- A Review of Unmanned System Technologies with Its Application to Aquaculture Farm Monitoring and Management 19 -- The Relationship between Drone Speed and the Number of Flights in RFID Tag Reading for Plant Inventory 61 -- Comparison of RGB and Multispectral Unmanned Aerial Vehicle for Monitoring Vegetation Coverage Changes on a Landslide Area 73 -- Quantifying the Spatial Variability of Annual and Seasonal Changes in Riverscape Vegetation Using Drone Laser Scanning 87 -- UAV-Based Classification of Cercospora Leaf Spot Using RGB Images 109 -- Unmanned Aerial Vehicles for Wildland Fires: Sensing, Perception, Cooperation and Assistance 125 -- Spray Deposition on Weeds (Palmer Amaranth and Morningglory) from a Remotely Piloted Aerial Application System and Backpack Sprayer 151 -- An Approach for Route Optimization in Applications of Precision Agriculture Using UAVs 169 -- High Resolution Geospatial Evapotranspiration Mapping of Irrigated Field Crops Using -- Multispectral and Thermal Infrared Imagery with METRIC Energy Balance Model 193 -- Vegetation Extraction Using Visible-Bands from Openly Licensed Unmanned Aerial Vehicle Imagery 211 -- Comparing UAS LiDAR and Structure-from-Motion Photogrammetry for Peatland Mapping -- and Virtual Reality (VR) Visualization 227 -- Application of Drone Technologies in Surface

Water Resources Monitoring and Assessment: A Systematic Review of Progress, Challenges, and Opportunities in the Global South 253 -- Monitoring Dynamic Braided River Habitats: Applicability and Efficacy of Aerial Photogrammetry from Manned Aircraft versus Unmanned Aerial Systems 275 -- Assessing the Potential of Remotely-Sensed Drone Spectroscopy to Determine Live Coral Cover on Heron Reef 293 -- The Use of UAVs for the Characterization and Analysis of Rocky Coasts 313 -- Modeling Streamflow and Sediment Loads with a Photogrammetrically Derived UAS Digital Terrain Model: Empirical Evaluation from a Fluvial Aggregate Excavation Operation 331 -- Temperature Profiling of Waterbodies with a UAV-Integrated Sensor Subsystem 49 -- Implementing Mitigations for Improving Societal Acceptance of Urban Air Mobility 359 -- The Use of Drones in the Spatial Social Sciences 379 -- On the Dominant Factors of Civilian-Use Drones: A Thorough Study and Analysis of Cross-Group Opinions Using a Triple Helix Model (THM) with the Analytic Hierarchy Process (AHP) 391 -- Drone Control in AR: An Intuitive System for Single-Handed Gesture Control, Drone Tracking, and Contextualized Camera Feed Visualization in Augmented Reality 423 -- Demystifying the Differences between Structure-from-Motion Software Packages for Pre-Processing Drone Data 449 -- Determining the Optimal Number of Ground Control Points for Varying Study Sites through Accuracy Evaluation of Unmanned Aerial System-Based 3D Point Clouds and Digital Surface Models 471 -- Drone Magnetometry in Mining Research. An Application in the Study of Triassic Cu-Co-Ni Mineralizations in the Estancias Mountain Range, Almería (Spain) 491 -- A Practical Validation of Uncooled Thermal Imagers for Small RPAS 503 -- Advanced Leak Detection and Quantification of Methane Emissions Using sUAS 531 -- Numerical Fluid Dynamics Simulation for Drones' Chemical Detection 573 -- Convolutional Neural Networks for Classification of Drones Using Radars 587 -- Ice Detection on Aircraft Surface Using Machine Learning Approaches Based on Hyperspectral and Multispectral Images 605 -- Deep Learning Classification of 2D Orthomosaic Images and 3D Point Clouds for Post-Event Structural Damage Assessment 631.

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.
