Record Nr.	UNINA9910765725203321
Titolo	UAV sensors for environmental monitoring / / edited by Felipe Gonzalez Toro, Antonios Tsourdos
Pubbl/distr/stampa	Basel, Switzerland : , : MDPI, , [2018] ©2018
ISBN	3-03842-754-3
Descrizione fisica	1 online resource (ix, 657 Seiten) : illustrations
Disciplina	363.7063
Soggetti	Environmental monitoring
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	About the Special Issue Editors. vii Preface to "UAV Sensors for Environmental Monitoring" ix Cristiana Achille, Andrea Adami, Silvia Chiarini, Stefano Cremonesi, Francesco Fassi, Luigi Fregonese and Laura Taffurelli UAV-Based Photogrammetry and Integrated Technologies for Architectural Applications- Methodological Strategies for the After-Quake Survey of Vertical Structures in Mantua (Italy) doi: 10.3390/s150715520 1 Miguel Alvarado, Felipe Gonzalez, Andrew Fletcher and Ashray Doshi Towards the Development of a Low Cost Airborne Sensing System to Monitor Dust Particles after Blasting at Open-Pit Mine Sites doi: 10.3390/s150819667 18 Gustavo S. C. Avellar, Guilherme A. S. Pereira *, Luciano C. A. Pimenta and Paulo Iscold Multi-UAV Routing for Area Coverage and Remote Sensing with Minimum Time doi: 10.3390/s151127783 36 Piero Boccardo, Filiberto Chiabrando, Furio Dutto, Fabio Giulio Tonolo and Andrea Lingua UAV Deployment Exercise for Mapping Purposes: Evaluation of Emergency Response Applications doi: 10.3390/s150715717 54 Monica Rivas Casado, Rocio Ballesteros Gonzalez, Thomas Kriechbaumer and Amanda Veal Automated Identification of River Hydromorphological Features Using UAV High Resolution Aerial Imagery doi: 10.3390/s151127969 72 Chao-I Chen, Robert Koseluk, Chase Buchanan, Andrew Duerner, Brian Jeppesen and Hunter Laux Autonomous Aerial Refueling Ground Test Demonstration-A Sensor-in-the-Loop, Non-Tracking Method doi: 10.3390/s150510948

1.

90 -- Kai-Wei Chiang, Meng-Lun Tsai, El-Sheimy Naser, Ayman Habib and Chien-Hsun Chu A New Calibration Method Using Low Cost MEM IMUs to Verify the Performance of UAV-Borne MMS Payloads doi: 10.3390/s150306560 112 -- Bar s Fidan and Ilknur Umay Adaptive Environmental Source Localization and Tracking with Unknown Permittivity and PathLoss Coefficients † doi: 10.3390/s151229852 136 -- Fatih G "ok,ce, G "oktrk Uoluk, Erol sahin and Sinan Kalkan" Vision-Based Detection and Distance Estimation of Micro Unmanned Aerial Vehicles doi: 10.3390/s150923805 15 -- Luis F. Gonzalez, Glen A. Montes, Eduard Puig, Sandra Johnson, Kerrie Mengersen and Kevin J. Gaston Unmanned Aerial Vehicles (UAVs) and Artificial Intelligence Revolutionizing Wildlife Monitoring and Conservation doi: 10.3390 /s16010097 . 192 -- Yoav Gottlieb and Tal Shima UAVs Task and Motion Planning in the Presence of Obstacles and Prioritized Targets doi: 10.3390/s151129734 210 -- Andres Hernandez, Harold Murcia, Cosmin Copot and Robin De Keyser Towards the Development of a Smart Flying Sensor: Illustration in the Field of Precision Agriculture doi: 10.3390/s150716688 237 -- Jaegyu Jang, Woo-Guen Ahn, Seungwoo Seo, Jang Yong Lee and Jun-Pyo Park Flight Test Result for the Ground-Based Radio Navigation System Sensor with an Unmanned Air Vehicle doi: 10.3390/s151128472 255 -- Wonseok Kang, Soohwan Yu, Seungyong Ko and Joonki Paik Multisensor Super Resolution Using Directionally-Adaptive Regularization for UAV Images doi: 10.3390 /s150512053 272 -- Simon Karpenko, Ivan Konovalenko, Alexander Miller, Boris Miller and Dmitry Nikolaev UAV Control on the Basis of 3D Landmark Bearing-Only Observations doi: 10.3390/s151229768 295 -- Jonathan Las Fargeas, Pierre Kabamba and Anouck Girard Cooperative Surveillance and Pursuit Using Unmanned Aerial Vehicles and Unattended Ground Sensors doi: 10.3390/s150101365 314 --Hanlun Li, Aiwu Zhang and Shaoxing Hu A Multispectral Image Creating Method for a New Airborne Four-Camera System with Different Bandpass Filters doi: 10.3390/s150717453 333 -- Kopp ´any M ´ath 'e and Lucian Bu soniu Vision and Control for UAVs: A Survey of General Methods and of Inexpensive Platforms for Infrastructure Inspection doi: 10.3390/s150714887 348 -- Davide O. Nitti, Fabio Bovenga, Maria T. Chiaradia, Mario Greco and Gianpaolo Pinelli Feasibility of Using Synthetic Aperture Radar to Aid UAV Navigation doi: 10.3390/s150818334 372 -- Miguel A. Olivares-Mendez, Changhong Fu, Philippe Ludivig, Tegawend'e F. Bissyand 'e, Somasundar Kannan, Maciej Zurad, Arun Annaiyan, Holger Voos and Pascual Campoy Towards an Autonomous Vision-Based Unmanned Aerial System against Wildlife Poachers doi: 10.3390/s151229861 394 -- Chulwoo Park, Namhoon Cho, Kyunghyun Lee and Youdan Kim Formation Flight of Multiple UAVs via Onboard Sensor Information Sharing doi: 10.3390 /s150717397 424 -- Juan Jes 'us Roldn, Guillaume Joossen, David Sanz, Jaime del Cerro and Antonio Barrientos Mini-UAV Based Sensory System for Measuring Environmental Variables in Greenhouses doi: 10.3390/s150203334 444 -- Inkyu Sa, Stefan Hrabar and Peter Corke Inspection of Pole-Like Structures Using a Visual-Inertial Aided VTOL Platform with Shared Autonomy doi: 10.3390/s150922003 459 -- Ali Sayyed, Gustavo Medeiros de Ara ´ujo, Jo˜ao Paulo Bodanese and Leandro Buss Becker Dual-Stack Single-Radio Communication Architecture for UAV Acting As a Mobile Node to Collect Data in WSNs doi: 10.3390/s150923376 502 -- Mozhdeh Shahbazi, Gunho Sohn, J 'er 'ome Th'eau and Patrick Menard Development and Evaluation of a UAV-Photogrammetry System for Precise 3D Environmental Modeling doi: 10.3390/s151127493 525 -- Micaela Troglia Gamba, Gianluca Marucco, Marco Pini, Sabrina Ugazio, Emanuela Falletti and Letizia Lo

	Presti Prototyping a GNSS-Based PassiveRadar for UAVs: An Instrument to Classify the WaterContent Feature of Lands doi: 10.3390 /s151128287 555 Fernando Vanegas and Felipe Gonzalez Enabling UAV Navigation with Sensor and Environmental Uncertainty in Cluttered and GPS-Denied Environments doi: 10.3390/s16050666 . 579 Marc Wehrhan, Philipp Rauneker and Michael Sommer UAV-Based Estimation of Carbon Exports from Heterogeneous Soil Landscapes-A Case Study from the CarboZALF Experimental Area doi: 10.3390/s16020255 . 596 Inhye Yoon, Seokhwa Jeong, Jaeheon Jeong, Doochun Seo and Joonki Paik Wavelength-Adaptive Dehazing Using Histogram Merging- Based Classification for UAV Images doi: 10.3390/s150306633 620 Jisheng Zhang, Limin Jia, Shuyun Niu, Fan Zhang, Lu Tong and Xuesong Zhou A Space-Time Network-Based Modeling Framework for Dynamic Unmanned Aerial Vehicle Routing in Traffic Incident Monitoring Applications doi: 10.3390/s150613874 637.
Sommario/riassunto	The rapid development and growth of UAVs as a remote sensing platform, as well as advances in the miniaturization of instrumentation and data systems, are catalyzing a renaissance in remote sensing in a variety of fields and disciplines from precision agriculture to ecology, atmospheric research, and disaster response. This Special Issue was open for submissions that highlight advances in the development and use of sensors deployed on UAVs. Topics include, but were not limited, to: - Optical, multi-spectral, hyperspectral, laser, and optical SAR technologies - Gas analyzers and sensors - Artificial intelligence and data mining based strategies from UAVs - UAV onboard data storage, transmission, and retrieval - Collaborative strategies and mechanisms to control multiple UAVs and sensor networks - UAV sensor applications: precision agriculture; pest detection, forestry, mammal species tracking search and rescue; target tracking, the monitoring of the atmosphere; chemical, biological, and natural disaster phenomena; fire prevention, flood prevention; volcanic monitoring, pollution monitoring, micro-climates and land use.