Carrick Detweiler

List of Publications by Year
in descending order

47 papers	992 citations	516710 16 h-index	552781 26 g-index
50 all docs	50 docs citations	50 times ranked	1156 citing authors

#	Article	IF	Citations
1	Autonomous Aerial Water Sampling. Journal of Field Robotics, 2015, 32, 1095-1113.	6.0	103
2	On crop height estimation with UAVs. , 2014, , .		89
3	Intercomparison of Small Unmanned Aircraft System (sUAS) Measurements for Atmospheric Science during the LAPSE-RATE Campaign. Sensors, 2019, 19, 2179.	3.8	88
4	Resonant wireless power transfer to ground sensors from a UAV. , 2012, , .		84
5	AMOUR V: A Hovering Energy Efficient Underwater Robot Capable of Dynamic Payloads. International Journal of Robotics Research, 2010, 29, 547-570.	8.5	60
6	Smokey comes of age: unmanned aerial systems for fire management. Frontiers in Ecology and the Environment, 2016, 14, 333-339.	4.0	42
7	Automatic live fingerlings counting using computer vision. Computers and Electronics in Agriculture, 2019, 167, 105015.	7.7	35
8	Characterising the spatial and temporal activities of free-ranging cows from GPS data. Rangeland Journal, 2012, 34, 149.	0.9	32
9	Charge selection algorithms for maximizing sensor network life with UAV-based limited wireless recharging. , 2013, , .		32
10	Self-assembling mobile linkages. IEEE Robotics and Automation Magazine, 2007, 14, 45-55.	2.0	30
11	A Drone by Any Other Name: Purposes, End-User Trustworthiness, and Framing, but Not Terminology, Affect Public Support for Drones. IEEE Technology and Society Magazine, 2018, 37, 80-91.	0.8	24
12	Using unmanned aerial vehicles to sample aquatic ecosystems. Limnology and Oceanography: Methods, 2017, 15, 1021-1030.	2.0	23
13	Color-accurate underwater imaging using perceptual adaptive illumination. Autonomous Robots, 2011, 31, 285-296.	4.8	22
14	Obtaining the Thermal Structure of Lakes from the Air. Water (Switzerland), 2015, 7, 6467-6482.	2.7	21
15	Extending Wireless Rechargeable Sensor Network Life without Full Knowledge. Sensors, 2017, 17, 1642.	3.8	18
16	Design and Evaluation of Sensor Housing for Boundary Layer Profiling Using Multirotors. Sensors, 2019, 19, 2481.	3.8	18
17	UAV Recharging Opportunities and Policies for Sensor Networks. International Journal of Distributed Sensor Networks, 2015, 11, 824260.	2.2	17
18	Environmental Reviews and Case Studies: Bringing Unmanned Aerial Systems Closer to the Environment. Environmental Practice, 2015, 17, 188-200.	0.3	15

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19	Inferring and monitoring invariants in robotic systems. Autonomous Robots, 2017, 41, 1027-1046.	4.8	15
20	Matching scale-space features in 1D panoramas. Computer Vision and Image Understanding, 2006, 103, 184-195.	4.7	13
21	On air-to-water radio communication between UAVs and water sensor networks. , 2015, , .		13
22	Fire-Aware Planning of Aerial Trajectories and Ignitions. , 2018, , .		12
23	How people make sense of drones used for atmospheric science (and other purposes): hopes, concerns, and recommendations. Journal of Unmanned Vehicle Systems, 2019, 7, 219-234.	1.2	11
24	UAS-Rx interface for mission planning, fire tracking, fire ignition, and real-time updating. , 2017, , .		10
25	Unmanned Aerial Auger for Underground Sensor Installation. , 2018, , .		10
26	Dimensional inconsistencies in code and ROS messages: A study of 5.9M lines of code. , 2017, , .		9
27	Sensing water properties at precise depths from the air. Journal of Field Robotics, 2018, 35, 1205-1221.	6.0	9
28	Reducing failure rates of robotic systems though inferred invariants monitoring. , 2013, , .		8
29	Surface classification for sensor deployment from UAV landings. , 2015, , .		8
30	UAV Based Wireless Charging of Sensor Networks Without Prior Knowledge. , 2018, , .		8
31	Towards Aerial Recovery of Parachute-Deployed Payloads. , 2018, , .		7
32	Investigation of Communicative Flight Paths for Small Unmanned Aerial Systems. , 2018, , .		7
33	Omni-directional hovercraft design as a foundation for MAV education. , 2012, , .		6
34	UAV Localization in Row Crops. Journal of Field Robotics, 2017, 34, 1275-1296.	6.0	6
35	Adaptive Decentralized Control of Mobile Underwater Sensor Networks and Robots for Modeling Underwater Phenomena. Journal of Sensor and Actuator Networks, 2014, 3, 113-149.	3.9	5
36	Co-Regulated Consensus of Cyber-Physical Resources in Multi-Agent Unmanned Aircraft Systems. Electronics (Switzerland), 2019, 8, 569.	3.1	5

#	Article	IF	Citations
37	University of Nebraska unmanned aerial system (UAS) profiling during the LAPSE-RATE field campaign. Earth System Science Data, 2021, 13, 2457-2470.	9.9	5
38	The waterbug sub-surface sampler: Design, control and analysis. , 2016, , .		4
39	Sensing Water Properties at Precise Depths from the Air. Springer Proceedings in Advanced Robotics, 2018, , 205-220.	1.3	4
40	Extending Endurance of Multicopters: The Current State-of-the-Art. , 2019, , .		4
41	Trajectory Selection for Power-over-Tether Atmospheric Sensing UAS. , 2021, , .		4
42	Co-Regulating Communication for Asynchronous Information Consensus. , 2018, , .		3
43	Freyja: A Full Multirotor System for Agile & Precise Outdoor Flights. , 2021, , .		3
44	Towards In-Flight Transfer of Payloads Between Multirotors. IEEE Robotics and Automation Letters, 2020, 5, 6201-6208.	5.1	2
45	In-Air Exchange of Small Payloads Between Multirotor Aerial Systems. Springer Proceedings in Advanced Robotics, 2020, , 511-523.	1.3	2
46	Online Soil Classification Using a UAS Sensor Emplacement System. Springer Proceedings in Advanced Robotics, 2021, , 174-184.	1.3	1
47	Autonomous, Long-Range, Sensor Emplacement Using Unmanned Aircraft Systems. , 2022, 2, 437-467.		0