Michael V Jakuba

List of Publications by Year
in descending order

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43 papers	2,178 citations	471509 17 h-index	713466 21 g-index
44 all docs	44 docs citations	44 times ranked	2700 citing authors

#	Article	IF	Citations
1	Tracking Hydrocarbon Plume Transport and Biodegradation at Deepwater Horizon. Science, 2010, 330, 201-204.	12.6	701
2	Techniques for Deep Sea Near Bottom Survey Using an Autonomous Underwater Vehicle. International Journal of Robotics Research, 2007, 26, 41-54.	8.5	189
3	Monitoring of Benthic Reference Sites: Using an Autonomous Underwater Vehicle. IEEE Robotics and Automation Magazine, 2012, 19, 73-84.	2.0	153
4	Hydrothermal exploration with the Autonomous Benthic Explorer. Deep-Sea Research Part I: Oceanographic Research Papers, 2008, 55, 203-219.	1.4	132
5	Explosive volcanism on the ultraslow-spreading Gakkel ridge, Arctic Ocean. Nature, 2008, 453, 1236-1238.	27.8	127
6	Longâ€baseline acoustic navigation for underâ€ice autonomous underwater vehicle operations. Journal of Field Robotics, 2008, 25, 861-879.	6.0	82
7	Influence of ice thickness and surface properties on light transmission through <scp>A</scp>rctic sea ice. Journal of Geophysical Research: Oceans, 2015, 120, 5932-5944.	2.6	70
8	A featureless approach to efficient bathymetric SLAM using distributed particle mapping. Journal of Field Robotics, 2011, 28, 19-39.	6.0	64
9	Autonomous and Remotely Operated Vehicle Technology for Hydrothermal Vent Discovery, Exploration, and Sampling. Oceanography, 2007, 20, 152-161.	1.0	62
10	Mapping multiple gas/odor sources in an uncontrolled indoor environment using a Bayesian occupancy grid mapping based method. Robotics and Autonomous Systems, 2011, 59, 988-1000.	5.1	57
11	Regional-scale benthic monitoring for ecosystem-based fisheries management (EBFM) using an autonomous underwater vehicle (AUV). ICES Journal of Marine Science, 2012, 69, 1108-1118.	2.5	54
12	Toward extraplanetary underâ€ice exploration: Robotic steps in the Arctic. Journal of Field Robotics, 2009, 26, 411-429.	6.0	53
13	Bathymetric particle filter SLAM using trajectory maps. International Journal of Robotics Research, 2012, 31, 1409-1430.	8.5	49
14	Mid-water current aided localization for autonomous underwater vehicles. Autonomous Robots, 2016, 40, 1207-1227.	4.8	34
15	Navigation and control of the Nereus hybrid underwater vehicle for global ocean science to 10,903 m depth: Preliminary results. , 2010, , .		31
16	Scientific Challenges and Present Capabilities in Underwater Robotic Vehicle Design and Navigation for Oceanographic Exploration Under-Ice. Remote Sensing, 2020, 12, 2588.	4.0	30
17	A novel trigger-based method for hydrothermal vents prospecting using an autonomous underwater robot. Autonomous Robots, 2010, 29, 67-83.	4.8	26
18	Towards autonomous habitat classification using Gaussian Mixture Models. , 2010, , .		21

#	Article	IF	Citations
19	Dynamic diel proteome and daytime nitrogenase activity supports buoyancy in the cyanobacterium Trichodesmium. Nature Microbiology, 2022, 7, 300-311.	13.3	21
20	Repeated AUV surveying of urchin barrens in North Eastern Tasmania. , 2010, , .		18
21	Toward ice-relative navigation of underwater robotic vehicles under moving sea ice: Experimental evaluation in the Arctic sea. , 2015, , .		18
22	The design and 200 day per year operation of the Autonomous Underwater Vehicle Sentry. , 2016, , .		18
23	Teleoperation and robotics under ice: Implications for planetary exploration. , 2018, , .		17
24	Mid-Ocean Ridge Exploration with an Autonomous Underwater Vehicle. Oceanography, 2007, 20, 52-61.	1.0	15
25	Bathymetric SLAM with no map overlap using Gaussian Processes. , 2011, , .		14
26	Field trials of the Nereus hybrid underwater robotic vehicle in the challenger deep of the Mariana Trench. , 2009, , .		12
27	Revealing ocean-scale biochemical structure with a deep-diving vertical profiling autonomous vehicle. Science Robotics, 2020, 5, .	17.6	12
28	Water column current profile aided localisation combined with view-based SLAM for Autonomous Underwater Vehicle navigation. , 2011, , .		11
29	Toward automatic classification of chemical sensor data from autonomous underwater vehicles. , 2011, , .		10
30	Design of Nereid-UI: A remotely operated underwater vehicle for oceanographic access under ice. , 2014, , .		10
31	Clio: An Autonomous Vertical Sampling Vehicle for Global Ocean Biogeochemical Mapping. , 2018, , .		10
32	Water column current aided localisation for significant horizontal trajectories with Autonomous Underwater Vehicles. , 2011, , .		10
33	In situ observation of sponge trails suggests common sponge locomotion in the deep central Arctic. Current Biology, 2021, 31, R368-R370.	3.9	9
34	AUV Sensors for Real-Time Detection, Localization, Characterization, and Monitoring of Underwater Munitions. Marine Technology Society Journal, 2009, 43, 76-84.	0.4	8
35	High resolution, consistent navigation and 3D optical reconstructions from AUVs using magnetic compasses and pressure-based depth sensors. , 2010, , .		6
36	Predictive habitat models from AUV-based multibeam and optical imagery. , 2010, , .		5

#	Article	IF	Citations
37	Dirichlet process mixture models for autonomous habitat classification. , 2010, , .		5
38	Lightly tethered unmanned underwater vehicle for under-ice exploration. , 2012, , .		5
39	Toward under-ice operations with hybrid underwater robotic vehicles. , 2008, , .		3
40	Adaptive exploration of benthic habitats using Gaussian processes. , 2010, , .		3
41	Integration and algorithm development for forward looking imaging sonars on hybrid and autonomous underwater robots. , 2015, , .		2
42	Toward automatic classification of chemical sensor data from autonomous underwater vehicles. , 2011, , .		1
43	Bathymetric SLAM with no map overlap using Gaussian processes. , 2011, , .		0