Nuno Gracias

List of Publications by Year
in descending order

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92	2,418	218662	254170
papers	citations	26	43
		h-index	g-index

97	97	97	1985
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Collision Detection and Avoidance for Underwater Vehicles Using Omnidirectional Vision. Sensors, 2022, 22, 5354.	3.8	4
2	Meadow fragmentation influences Posidonia oceanica density at the edge of nearby gaps. Estuarine, Coastal and Shelf Science, 2021, 249, 107106.	2.1	11
3	Underwater Object Recognition Using Point-Features, Bayesian Estimation and Semantic Information. Sensors, 2021, 21, 1807.	3.8	14
4	Needs and Gaps in Optical Underwater Technologies and Methods for the Investigation of Marine Animal Forest 3D-Structural Complexity. Frontiers in Marine Science, 2021, 8, .	2.5	24
5	Shallow-water hydrothermalism at Milos (Greece): Nature, distribution, heat fluxes and impact on ecosystems. Marine Geology, 2021, 438, 106521.	2.1	6
6	Involving fishers in scaling up the restoration of cold-water coral gardens on the Mediterranean continental shelf. Biological Conservation, 2021, 262, 109301.	4.1	8
7	Semantic Mapping for Autonomous Subsea Intervention. Sensors, 2021, 21, 6740.	3.8	2
8	Hyperspectral 3D Mapping of Underwater Environments. , 2021, , .		4
9	Combined use of a frame and a linear pushbroom camera for deep-sea 3D hyperspectral mapping. , 2021, , .		0
10	Automatic segmentation of fish using deep learning with application to fish size measurement. ICES Journal of Marine Science, 2020, 77, 1354-1366.	2.5	81
11	Omnidirectional Multicamera Video Stitching Using Depth Maps. IEEE Journal of Oceanic Engineering, 2020, 45, 1337-1352.	3.8	12
12	Automatic scale estimation of structure from motion based 3D models using laser scalers in underwater scenarios. ISPRS Journal of Photogrammetry and Remote Sensing, 2020, 159, 13-25.	11.1	24
13	Fragmentation in Seagrass Canopies Can Alter Hydrodynamics and Sediment Deposition Rates. Water (Switzerland), 2020, 12, 3473.	2.7	8
14	Multisensor online 3D view planning for autonomous underwater exploration. Journal of Field Robotics, 2020, 37, 1123-1147.	6.0	28
15	Allowing untrained scientists to safely pilot ROVs: Early collision detection and avoidance using omnidirectional vision. , 2020, , .		2
16	Performing submarine field survey without scuba gear using GIS-like mapping in a Virtual Reality environment. , 2019, , .		4
17	3D Object Recognition Based on Point Clouds in Underwater Environment with Global Descriptors: A Survey. Sensors, 2019, 19, 4451.	3.8	8
18	Scale Accuracy Evaluation of Image-Based 3D Reconstruction Strategies Using Laser Photogrammetry. Remote Sensing, 2019, 11, 2093.	4.0	12

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19	First attempts towards the restoration of gorgonian populations on the Mediterranean continental shelf. Aquatic Conservation: Marine and Freshwater Ecosystems, 2019, 29, 1278-1284.	2.0	20
20	Mismatched image identification using histogram of loop closure error for feature-based optical mapping. International Journal of Intelligent Robotics and Applications, 2019, 3, 196-206.	2.8	0
21	Marked annual coral bleaching resilience of an inshore patch reef in the Florida Keys: A nugget of hope, aberrance, or last man standing?. Coral Reefs, 2018, 37, 533-547.	2.2	85
22	Immersive Touring for Marine Archaeology. Application of a New Compact Omnidirectional Camera to Mapping the GnaliÄ‡ shipwreck withÂan AUV. Advances in Intelligent Systems and Computing, 2018, , 183-195.	0.6	5
23	Object Recognition and Pose Estimation using Laser scans For Advanced Underwater Manipulation. , 2018, , .		6
24	Semantic SLAM for an AUV using object recognition from point clouds. IFAC-PapersOnLine, 2018, 51, 360-365.	0.9	16
25	Vision for the Marine Environment. , 2018, , 1-9.		0
26	Tectonic structure, evolution, and the nature of oceanic core complexes and their detachment fault zones (13Â°20â€²N and 13Â°30â€²N, Mid Atlantic Ridge). Geochemistry, Geophysics, Geosystems, 2017, 18, 1451-1482.	2.5	94
27	An integrated view of the methane system in the pockmarks at Vestnesa Ridge, 79Â°N. Marine Geology, 2017, 390, 282-300.	2.1	74
28	Fast Underwater Image Mosaicing through Submapping. Journal of Intelligent and Robotic Systems: Theory and Applications, 2017, 85, 167-187.	3.4	7
29	Real-time fish detection in trawl nets. , 2017, , .		5
30	Mission-time 3D reconstruction with quality estimation. , 2017, , .		8
31	LOON-DOCK: AUV homing and docking for high-bandwidth data transmission. , 2017, , .		6
32	Underwater Multi-Vehicle Trajectory Alignment and Mapping Using Acoustic and Optical Constraints. Sensors, 2016, 16, 387.	3.8	29
33	Close-Range Tracking of Underwater Vehicles Using Light Beacons. Sensors, 2016, 16, 429.	3.8	33
34	Autonomous Underwater Navigation and Optical Mapping in Unknown Natural Environments. Sensors, 2016, 16, 1174.	3.8	50
35	The European Project MORPH: Distributed UUV Systems for Multimodal, 3D Underwater Surveys. Marine Technology Society Journal, 2016, 50, 26-41.	0.4	18
36	Autonomous homing and docking for AUVs using Range-Only Localization and Light Beacons. IFAC-PapersOnLine, 2016, 49, 54-60.	0.9	27

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37	First direct observation of coseismic slip and seafloor rupture along a submarine normal fault and implications for fault slip history. Earth and Planetary Science Letters, 2016, 450, 96-107.	4.4	21
38	Online underwater optical mapping for trajectories with gaps. Intelligent Service Robotics, 2016, 9, 217-229.	2.6	4
39	Littoral seafloor sensing and characterization using marine electromagnetics, optical imagery, and remotely and autonomously operated platforms. , 2015, , .		1
40	Improved supervised classification of underwater military munitions using height features derived from optical imagery. , 2015, , .		0
41	Pose Estimation for Underwater Vehicles using Light Beaconsâ˜.... IFAC-PapersOnLine, 2015, 48, 70-75.	0.9	10
42	Global Alignment of a Multiple-Robot Photomosaic using Opto-Acoustic Constraints. IFAC-PapersOnLine, 2015, 48, 20-25.	0.9	7
43	Creating 360° underwater virtual tours using an omnidirectional camera integrated in an AUV. , 2015, , .		10
44	Omnidirectional Underwater Camera Design and Calibration. Sensors, 2015, 15, 6033-6065.	3.8	29
45	Hydrothermal activity along the slow-spreading Lucky Strike ridge segment (Mid-Atlantic Ridge): Distribution, heatflux, and geological controls. Earth and Planetary Science Letters, 2015, 431, 173-185.	4.4	32
46	Geostatistics for Context-Aware Image Classification. Lecture Notes in Computer Science, 2015, , 228-239.	1.3	7
47	Towards automatic identification of mismatched image pairs through loop constraints. Proceedings of SPIE, 2014, , .	0.8	0
48	Graph theory approach for match reduction in image mosaicing. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2014, 31, 773.	1.5	4
49	Efficient image mosaicing for multi-robot visual underwater mapping. Pattern Recognition Letters, 2014, 46, 20-26.	4.2	28
50	Automated Detection of Underwater Military Munitions Using Fusion of 2D and 2.5D Features From Optical Imagery. Marine Technology Society Journal, 2014, 48, 61-71.	0.4	7
51	Match elimination using cycle basis in underwater optical mapping. , 2013, , .		0
52	Fast topology estimation for image mosaicing using adaptive information thresholding. Robotics and Autonomous Systems, 2013, 61, 125-136.	5.1	35
53	Optical methods to monitor temporal changes at the seafloor: The Lucky Strike deep-sea hydrothermal vent field (Mid-Atlantic Ridge). , 2013, , .		3
54	Vision-based localization and mapping system for AUV intervention. , 2013, , .		21

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55	Mapping the Moon: Using a lightweight AUV to survey the site of the 17th century ship â€˜La Luneâ€™. , 2013, , .		42
56	Single cluster PHD SLAM: Application to autonomous underwater vehicles using stereo vision. , 2013, , .		6
57	Bathymetry-based SLAM with difference of normals point-cloud subsampling and probabilistic ICP registration. , 2013, , .		6
58	Automated classification and thematic mapping of bacterial mats in the North Sea. , 2013, , .		11
59	Image-Based Coral Reef Classification and Thematic Mapping. Remote Sensing, 2013, 5, 1809-1841.	4.0	89
60	Vertical-To-Lateral Transitions Among Cretaceous Carbonate Facies--A Means To 3-D Framework Construction Via Markov Analysis. Journal of Sedimentary Research, 2012, 82, 232-243.	1.6	17
61	Efficient image mosaicing for optical underwater mapping. , 2012, , .		1
62	Multipurpose autonomous underwater intervention: A systems integration perspective. , 2012, , .		27
63	A Novel Blending Technique for Underwater Gigamosaicing. IEEE Journal of Oceanic Engineering, 2012, 37, 626-644.	3.8	49
64	Project-based learning as a motivating tool to teach computer vision. , 2012, , .		0
65	Quantifying diffuse and discrete venting at the Tour Eiffel vent site, Lucky Strike hydrothermal field. Geochemistry, Geophysics, Geosystems, 2012, 13, .	2.5	47
66	Reconfigurable AUV for intervention missions: a case study on underwater object recovery. Intelligent Service Robotics, 2012, 5, 19-31.	2.6	82
67	Detection of interest points in turbid underwater images. , 2011, , .		34
68	A new global alignment approach for underwater optical mapping. Ocean Engineering, 2011, 38, 1207-1219.	4.3	38
69	Damage and recovery assessment of vessel grounding injuries on coral reef habitats by use of georeferenced landscape video mosaics. Limnology and Oceanography: Methods, 2010, 8, 88-97.	2.0	32
70	Landscape video mosaic from a mesophotic coral reef. Coral Reefs, 2010, 29, 253-253.	2.2	12
71	Augmented stateâ€“extended Kalman filter combined framework for topology estimation in largeâ€area underwater mapping. Journal of Field Robotics, 2010, 27, 656-674.	6.0	22
72	A noninvasive method for measuring the velocity of diffuse hydrothermal flow by tracking moving refractive index anomalies. Geochemistry, Geophysics, Geosystems, 2010, 11, .	2.5	12

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73	Fast image blending using watersheds and graph cuts. Image and Vision Computing, 2009, 27, 597-607.	4.5	113
74	Efficient threeâ€dimensional scene modeling and mosaicing. Journal of Field Robotics, 2009, 26, 759-788.	6.0	69
75	Match Selection in Batch Mosaicing Using Mutual Information. Lecture Notes in Computer Science, 2009, , 104-111.	1.3	4
76	Globally aligned photomosaic of the Lucky Strike hydrothermal vent field (Midâ€Atlantic Ridge,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62 Geophysics, Geosystems, 2008, 9, .	2.5	56
77	Towards Detecting Changes in Underwater Image Sequences. , 2008, , .		21
78	A motion compensated filtering approach to remove sunlight flicker in shallow water images. , 2008, , .		32
79	A New Global Alignment Method for Feature Based Image Mosaicing. Lecture Notes in Computer Science, 2008, , 257-266.	1.3	18
80	Large-Area Photo-Mosaics Using Global Alignment and Navigation Data. , 2007, , .		54
81	Documenting hurricane impacts on coral reefs using two-dimensional video-mosaic technology. Marine Ecology, 2007, 28, 254-258.	1.1	37
82	Development and application of a video-mosaic survey technology to document the status of coral reef communities. Environmental Monitoring and Assessment, 2007, 125, 59-73.	2.7	124
83	Linear global mosaics for underwater surveying. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 78-83.	0.4	18
84	Mosaic-based navigation for autonomous underwater vehicles. IEEE Journal of Oceanic Engineering, 2003, 28, 609-624.	3.8	117
85	Trajectory reconstruction with uncertainty estimation using mosaic registration. Robotics and Autonomous Systems, 2001, 35, 163-177.	5.1	17
86	Underwater Video Mosaics as Visual Navigation Maps. Computer Vision and Image Understanding, 2000, 79, 66-91.	4.7	142
87	Adaptive contour estimation with genetic algorithms. , 0, , .		0
88	Fitness function design for genetic algorithms in cost evaluation based problems. , 0, , .		9
89	Automatic mosaic creation of the ocean floor. , 0, , .		16
90	Underwater mosaicing and trajectory reconstruction using global alignment. , 0, , .		41

#	Article	IF	Citations
91	Results on underwater mosaic-based navigation. , 0, , .		8
92	Underwater Mosaic Creation using Video sequences from Different Altitudes. , 0, , .		15