Francisco Bonin-Font

List of Publications by Year
in descending order

47	1,032	840776	552781
papers	citations	11 h-index	26 g-index

48	48	48	1087
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Combining Deep Learning and Robust Estimation for Outlier-Resilient Underwater Visual Graph SLAM. Journal of Marine Science and Engineering, 2022, 10, 511.	2.6	8
2	NetHALOC : A learned global image descriptor for loop closing in underwater visual SLAM. Expert Systems, 2021, 38, e12635.	4.5	13
3	Sparse Gaussian process for online seagrass semantic mapping. Expert Systems With Applications, 2021, 170, 114478.	7.6	6
4	Adaptive Visual Information Gathering for Autonomous Exploration of Underwater Environments. IEEE Access, 2021, 9, 136487-136506.	4.2	7
5	Path Planning for Underwater Information Gathering Based on Genetic Algorithms and Data Stochastic Models. Journal of Marine Science and Engineering, 2021, 9, 1183.	2.6	11
6	Autonomous Marine Vehicles and CNN: Tech Tools for Posidonia Meadows Monitoring. , 2021, , .		2
7	AUVs for Control of Marine Alien Invasive Species. , 2021, , .		0
8	An Unsupervised Neural Network for Loop Detection in Underwater Visual SLAM. Journal of Intelligent and Robotic Systems: Theory and Applications, 2020, 100, 1157-1177.	3.4	5
9	On-Line Multi-Class Segmentation of Side-Scan Sonar Imagery Using an Autonomous Underwater Vehicle. Journal of Marine Science and Engineering, 2020, 8, 557.	2.6	11
10	Towards Multi-Robot Visual Graph-SLAM for Autonomous Marine Vehicles. Journal of Marine Science and Engineering, 2020, 8, 437.	2.6	10
11	Visual Loop Detection in Underwater Robotics: an Unsupervised Deep Learning Approach. IFAC-PapersOnLine, 2020, 53, 14656-14661.	0.9	0
12	Towards Visual Loop Detection in Underwater Robotics using a Deep Neural Network. , 2020, , .		0
13	Real-time Hash-based Loop Closure Detection in Underwater Multi-Session Visual SLAM. , 2019, , .		4
14	A Trajectory-Based Approach to Multi-Session Underwater Visual SLAM Using Global Image Signatures. Journal of Marine Science and Engineering, 2019, 7, 278.	2.6	11
15	Towards Multi Session Visual SLAM in Underwater Environments Colonized with Posidonia Oceanica. , 2018, , .		1
16	ARSEA: A Virtual Reality Subsea Exploration Assistant. IFAC-PapersOnLine, 2018, 51, 26-31.	0.9	4
17	Deep Semantic Segmentation in an AUV for Online Posidonia Oceanica Meadows Identification. IEEE Access, 2018, 6, 60956-60967.	4.2	36
18	Evaluating the impact of sewage discharges on the marine environment with a lightweight AUV. Marine Pollution Bulletin, 2018, 135, 714-722.	5.0	18

#	Article	IF	Citations
19	Visual Discrimination and Large Area Mapping of Posidonia Oceanica Using a Lightweight AUV. IEEE Access, 2017, 5, 24479-24494.	4.2	31
20	USBL Integration and Assessment in a Multisensor Navigation Approach for AUVs 1 1This work is partially supported by Ministry of Economy and Competitiveness under contracts TIN2014-58662-R, DPI2014-57746-C3-2-R and FEDER funds.. IFAC-PapersOnLine, 2017, 50, 7905-7910.	0.9	16
21	Building large-scale coverage maps of posidonia oceanica using an autonomous underwater vehicle. , 2017, , .		1
22	Towards a new methodology to evaluate the environmental impact of a marine outfall using a lightweight AUV. , 2017, , .		3
23	Machine learning and deep learning strategies to identify Posidonia meadows in underwater images. , 2017, , .		14
24	Hacia la NavegaciÃ³n Visual de un VehÃculo AutÃ³nomo Submarino en Ãreas con Posidonia Oceanica. RIAI - Revista Iberoamericana De Automatica E Informatica Industrial, 2017, 15, 24.	1.0	7
25	An USBL-aided multisensor navigation system for field AUVs. , 2016, , .		14
26	Towards Visual Detection, Mapping and Quantification of Posidonia Oceanica using a Lightweight AUV**This work is partially supported by Ministry of Economy and Competitiveness under contracts TIN2014-58662-R, DPI2014-57746-C3-2-R and FEDER funds. IFAC-PapersOnLine, 2016, 49, 500-505.	0.9	21
27	Robust world-centric stereo EKF localization with active loop closing for AUVs. Pattern Recognition and Image Analysis, 2016, 26, 205-215.	1.0	2
28	Towards automatic visual sea grass detection in underwater areas of ecological interest. , 2016, , .		13
29	Cluster-based loop closing detection for underwater slam in feature-poor regions. , 2016, , .		28
30	Global image signature for visual loop-closure detection. Autonomous Robots, 2016, 40, 1403-1417.	4.8	23
31	Stereo Graph-SLAM for Autonomous Underwater Vehicles. Advances in Intelligent Systems and Computing, 2016, , 351-360.	0.6	6
32	Inertial Sensor Self-Calibration in a Visually-Aided Navigation Approach for a Micro-AUV. Sensors, 2015, 15, 1825-1860.	3.8	22
33	Structured light and stereo vision for underwater 3D reconstruction. , 2015, , .		8
34	Trajectory-Based Visual Localization in Underwater Surveying Missions. Sensors, 2015, 15, 1708-1735.	3.8	24
35	Stereo SLAM for robust dense 3D reconstruction of underwater environments. , 2015, , .		8
36	Visual sensing for autonomous underwater exploration and intervention tasks. Ocean Engineering, 2015, 93, 25-44.	4.3	49

#	Article	IF	Citations
37	LSH for loop closing detection in underwater visual SLAM. , 2014, , .		4
38	Reducing the computational cost of underwater visual SLAM using dynamic adjustment of overlap detection. , 2014, , .		2
39	Vision-based mobile robot motion control combining T² and ND approaches. Robotica, 2014, 32, 591-609.	1.9	1
40	A monocular mobile robot reactive navigation approach based on the inverse perspective transformation. Robotica, 2013, 31, 225-249.	1.9	7
41	Multisensor aided inertial navigation in 6DOF AUVs using a Multiplicative Error State Kalman Filter. , 2013, , .		2
42	Concurrent visual navigation and localisation using inverse perspective transformation. Electronics Letters, 2012, 48, 264.	1.0	4
43	Combining obstacle avoidance with robocentric localization in a reactive visual navigation task. , 2012, , .		1
44	A Visual Navigation Strategy Based on Inverse Perspective Transformation. , 2010, , .		1
45	Towards monocular localization using ground points. , 2010, , .		1
46	Building a qualitative local occupancy grid in a new vision-based reactive navigation strategy for mobile robots. , 2009, , .		6
47	Visual Navigation for Mobile Robots: A Survey. Journal of Intelligent and Robotic Systems: Theory and Applications, 2008, 53, 263-296.	3.4	562