

Juan Domingo TardÃ³s Solano

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4558874/publications.pdf>

Version: 2024-02-01

52
papers

16,046
citations

257450

24
h-index

526287

27
g-index

52
all docs

52
docs citations

52
times ranked

6892
citing authors

#	ARTICLE	IF	CITATIONS
1	ORB-SLAM: A Versatile and Accurate Monocular SLAM System. IEEE Transactions on Robotics, 2015, 31, 1147-1163.	10.3	4,585
2	ORB-SLAM2: An Open-Source SLAM System for Monocular, Stereo, and RGB-D Cameras. IEEE Transactions on Robotics, 2017, 33, 1255-1262.	10.3	3,975
3	Bags of Binary Words for Fast Place Recognition in Image Sequences. IEEE Transactions on Robotics, 2012, 28, 1188-1197.	10.3	1,273
4	ORB-SLAM3: An Accurate Open-Source Library for Visual, Visual-Inertial, and Multimap SLAM. IEEE Transactions on Robotics, 2021, 37, 1874-1890.	10.3	1,265
5	Data association in stochastic mapping using the joint compatibility test. IEEE Transactions on Automation Science and Engineering, 2001, 17, 890-897.	2.3	600
6	Visual-Inertial Monocular SLAM With Map Reuse. IEEE Robotics and Automation Letters, 2017, 2, 796-803.	5.1	562
7	Robust Mapping and Localization in Indoor Environments Using Sonar Data. International Journal of Robotics Research, 2002, 21, 311-330.	8.5	416
8	Hierarchical SLAM: real-time accurate mapping of large environments. , 2005, 21, 588-596.		279
9	The SPMAP: a probabilistic framework for simultaneous localization and map building. IEEE Transactions on Automation Science and Engineering, 1999, 15, 948-952.	2.3	228
10	A comparison of loop closing techniques in monocular SLAM. Robotics and Autonomous Systems, 2009, 57, 1188-1197.	5.1	222
11	Large-Scale 6-DOF SLAM With Stereo-in-Hand. IEEE Transactions on Robotics, 2008, 24, 946-957.	10.3	201
12	Fast relocalisation and loop closing in keyframe-based SLAM. , 2014, , .		184
13	Robocentric map joining: Improving the consistency of EKF-SLAM. Robotics and Autonomous Systems, 2007, 55, 21-29.	5.1	179
14	Underwater SLAM in man-made structured environments. Journal of Field Robotics, 2008, 25, 898-921.	6.0	161
15	Divide and Conquer: EKF SLAM in $\mathcal{O}(n)$. IEEE Transactions on Robotics, 2008, 24, 1107-1120.	10.3	157
16	Multisensor fusion for simultaneous localization and map building. IEEE Transactions on Automation Science and Engineering, 2001, 17, 908-914.	2.3	152
17	Mobile Robot Localization and Map Building. , 1999, , .		114
18	Limits to the consistency of EKF-based SLAM. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 716-721.	0.4	108

#	ARTICLE	IF	CITATIONS
19	Real-time monocular object SLAM. Robotics and Autonomous Systems, 2016, 75, 435-449.	5.1	99
20	DynaSLAM II: Tightly-Coupled Multi-Object Tracking and SLAM. IEEE Robotics and Automation Letters, 2021, 6, 5191-5198.	5.1	97
21	Large-Scale SLAM Building Conditionally Independent Local Maps: Application to Monocular Vision. IEEE Transactions on Robotics, 2008, 24, 1094-1106.	10.3	92
22	Real-time loop detection with bags of binary words. , 2011, , .		91
23	A comparison of SLAM algorithms based on a graph of relations. , 2009, , .		87
24	Explore and return: experimental validation of real-time concurrent mapping and localization. , 0, , .		85
25	RoboEarth Semantic Mapping: A Cloud Enabled Knowledge-Based Approach. IEEE Transactions on Automation Science and Engineering, 2015, 12, 432-443.	5.2	84
26	SLAM using an Imaging Sonar for Partially Structured Underwater Environments. , 2006, , .		82
27	Fusing range and intensity images for mobile robot localization. IEEE Transactions on Automation Science and Engineering, 1999, 15, 76-84.	2.3	78
28	Robust Place Recognition With Stereo Sequences. IEEE Transactions on Robotics, 2012, 28, 871-885.	10.3	74
29	Inertial Aiding of Inverse Depth SLAM using a Monocular Camera. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	72
30	An image-to-map loop closing method for monocular SLAM. , 2008, , .		41
31	Underwater SLAM in a marina environment. , 2007, , .		38
32	Scalable SLAM building conditionally independent local maps. , 2007, , .		34
33	Inertial-Only Optimization for Visual-Inertial Initialization. , 2020, , .		34
34	ORB_SLAM-Atlas: a robust and accurate multi-map system. , 2019, , .		33
35	Robust place recognition with stereo cameras. , 2010, , .		31
36	EKF SLAM updates in $O(n)$ with Divide and Conquer SLAM. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	28

#	ARTICLE	IF	CITATIONS
37	CI-Graph simultaneous localization and mapping for three-dimensional reconstruction of large and complex environments using a multicamera system. <i>Journal of Field Robotics</i> , 2010, 27, 561-586.	6.0	28
38	Robust scan matching localization using ultrasonic range finders. , 2005, , .		22
39	Global localization in SLAM in bilinear time. , 2005, , .		20
40	Fast and Robust Initialization for Visual-Inertial SLAM. , 2019, , .		20
41	Fast localization of avalanche victims using sum of Gaussians. , 0, , .		15
42	CI-Graph: An efficient approach for large scale SLAM. , 2009, , .		14
43	Towards semantic SLAM using a monocular camera. , 2011, , .		14
44	Towards Robust Data Association and Feature Modeling for Concurrent Mapping and Localization. , 2003, , 7-20.		12
45	Structure and motion from straight line segments. <i>Pattern Recognition</i> , 2000, 33, 1295-1307.	8.1	11
46	Line Extraction from Mechanically Scanned Imaging Sonar. <i>Lecture Notes in Computer Science</i> , 2007, , 322-329.	1.3	11
47	SD-DefSLAM: Semi-Direct Monocular SLAM for Deformable and Intracorporeal Scenes. , 2021, , .		11
48	Experiments in Multisensor Mobile Robot Localization and Map Building. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 1998, 31, 369-374.	0.4	10
49	Localization of avalanche victims using robocentric SLAM. , 2006, , .		9
50	Adaptive Scale Robust Segmentation for 2D Laser Scanner. , 2006, , .		5
51	Finding good cycle constraints for large scale multi-robot SLAM. , 2009, , .		3
52	A METHOD FOR EXTRACTING LINES AND THEIR UNCERTAINTY FROM ACOUSTIC UNDERWATER IMAGES FOR SLAM. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2007, 40, 61-66.	0.4	0