

# Jose Neira

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7501019/publications.pdf>

Version: 2024-02-01

55  
papers

6,727  
citations

361413

20  
h-index

526287

27  
g-index

55  
all docs

55  
docs citations

55  
times ranked

3973  
citing authors

#	ARTICLE	IF	CITATIONS
1	Empty Cities: A Dynamic-Object-Invariant Space for Visual SLAM. IEEE Transactions on Robotics, 2021, 37, 433-451.	10.3	19
2	DynaSLAM II: Tightly-Coupled Multi-Object Tracking and SLAM. IEEE Robotics and Automation Letters, 2021, 6, 5191-5198.	5.1	97
3	Empty Cities: Image Inpainting for a Dynamic-Object-Invariant Space. , 2019, , .		13
4	DynaSLAM: Tracking, Mapping, and Inpainting in Dynamic Scenes. IEEE Robotics and Automation Letters, 2018, 3, 4076-4083.	5.1	547
5	On the Importance of Uncertainty Representation in Active SLAM. IEEE Transactions on Robotics, 2018, 34, 829-834.	10.3	40
6	Sparse optimization for robust and efficient loop closing. Robotics and Autonomous Systems, 2017, 93, 13-26.	5.1	9
7	Past, Present, and Future of Simultaneous Localization and Mapping: Toward the Robust-Perception Age. IEEE Transactions on Robotics, 2016, 32, 1309-1332.	10.3	2,239
8	Special Issue on the 2015 Robotics: Science & Systems Conference. International Journal of Robotics Research, 2016, 35, 1679-1680.	8.5	0
9	On the monotonicity of optimality criteria during exploration in active SLAM. , 2015, , .		17
10	Place categorization using sparse and redundant representations. , 2014, , .		6
11	Robust graph SLAM back-ends: A comparative analysis. , 2014, , .		22
12	Real-time 6-DOF multi-session visual SLAM over large-scale environments. Robotics and Autonomous Systems, 2013, 61, 1144-1158.	5.1	73
13	Robust loop closing over time for pose graph SLAM. International Journal of Robotics Research, 2013, 32, 1611-1626.	8.5	165
14	Go straight, turn right: Pose graph reduction through trajectory segmentation using line segments. , 2013, , .		4
15	Realizing, reversing, recovering: Incremental robust loop closing over time using the iRRR algorithm. , 2012, , .		23
16	Fast minimum uncertainty search on a graph map representation. , 2012, , .		15
17	Robust Place Recognition With Stereo Sequences. IEEE Transactions on Robotics, 2012, 28, 871-885.	10.3	74
18	Place Recognition using Near and Far Visual Information. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 6822-6828.	0.4	7

#	ARTICLE	IF	CITATIONS
19	SLAM in with the Combined Kalman-Information Filter. Robotics and Autonomous Systems, 2010, 58, 1207-1219.	5.1	22
20	Editorial: Visual navigation and mapping outdoors. Journal of Field Robotics, 2010, 27, 509-510.	6.0	1
21	Robust place recognition with stereo cameras. , 2010, , .		31
22	Finding good cycle constraints for large scale multi-robot SLAM. , 2009, , .		3
23	SLAM in $O(\log n)$ with the Combined Kalman - Information filter. , 2009, , .		7
24	Guest editorial: selected papers from Robotics: Science&Systems&2008. Autonomous Robots, 2009, 26, 99-101.	4.8	0
25	A comparison of loop closing techniques in monocular SLAM. Robotics and Autonomous Systems, 2009, 57, 1188-1197.	5.1	222
26	Inside data association. Robotics and Autonomous Systems, 2009, 57, 1155-1156.	5.1	0
27	Underwater SLAM in man-made structured environments. Journal of Field Robotics, 2008, 25, 898-921.	6.0	161
28	Large-Scale 6-DOF SLAM With Stereo-in-Hand. IEEE Transactions on Robotics, 2008, 24, 946-957.	10.3	201
29	Divide and Conquer: EKF SLAM in $O(n)$ . IEEE Transactions on Robotics, 2008, 24, 1107-1120.	10.3	157
30	Guest Editorial Special Issue on Visual SLAM. IEEE Transactions on Robotics, 2008, 24, 929-931.	10.3	36
31	An image-to-map loop closing method for monocular SLAM. , 2008, , .		41
32	Underwater SLAM in a marina environment. , 2007, , .		38
33	EKF SLAM updates in $O(n)$ with Divide and Conquer SLAM. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	28
34	A METHOD FOR EXTRACTING LINES AND THEIR UNCERTAINTY FROM ACOUSTIC UNDERWATER IMAGES FOR SLAM. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 61-66.	0.4	0
35	Robocentric map joining: Improving the consistency of EKF-SLAM. Robotics and Autonomous Systems, 2007, 55, 21-29.	5.1	179
36	Line Extraction from Mechanically Scanned Imaging Sonar. Lecture Notes in Computer Science, 2007, , 322-329.	1.3	11

#	ARTICLE	IF	CITATIONS
37	Optimal local map size for EKF-based SLAM. , 2006, , .		18
38	SLAM using an Imaging Sonar for Partially Structured Underwater Environments. , 2006, , .		82
39	Localization of avalanche victims using robocentric SLAM. , 2006, , .		9
40	Global localization in SLAM in bilinear time. , 2005, , .		20
41	Hierarchical SLAM: real-time accurate mapping of large environments. , 2005, 21, 588-596.		279
42	Relocation using laser and vision. , 2004, , .		16
43	Limits to the consistency of EKF-based SLAM. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 716-721.	0.4	108
44	Towards Robust Data Association and Feature Modeling for Concurrent Mapping and Localization. , 2003, , 7-20.		12
45	Robust Mapping and Localization in Indoor Environments Using Sonar Data. International Journal of Robotics Research, 2002, 21, 311-330.	8.5	416
46	Multisensor fusion for simultaneous localization and map building. IEEE Transactions on Automation Science and Engineering, 2001, 17, 908-914.	2.3	152
47	Data association in stochastic mapping using the joint compatibility test. IEEE Transactions on Automation Science and Engineering, 2001, 17, 890-897.	2.3	600
48	Fusing range and intensity images for mobile robot localization. IEEE Transactions on Automation Science and Engineering, 1999, 15, 76-84.	2.3	78
49	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
50	Experiments in Multisensor Mobile Robot Localization and Map Building. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1998, 31, 369-374.	0.4	10
51	Goal-directed perception in multisensor object recognition systems. , 0, , .		2
52	Simultaneous map building and localization for mobile robots: a multisensor fusion approach. , 0, , .		58
53	Explore and return: experimental validation of real-time concurrent mapping and localization. , 0, , .		85
54	Robust Loop Closing Over Time. , 0, , .		25

#	ARTICLE	IF	CITATIONS
55	An Online Sparsity-Cognizant Loop-Closure Algorithm for Visual Navigation. , 0, , .		21