

Jorge L MartÃ- nez

List of Publications by Year in descending order

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Version: 2024-02-01

52
papers

1,368
citations

623734

14
h-index

501196

28
g-index

54
all docs

54
docs citations

54
times ranked

1082
citing authors

#	ARTICLE	IF	CITATIONS
1	Mobile robot localization based on Ultra-Wide-Band ranging: A particle filter approach. <i>Robotics and Autonomous Systems</i> , 2009, 57, 496-507.	5.1	153
2	Experimental kinematics for wheeled skid-steer mobile robots. , 2007, , .		113
3	The autonomous mobile robot AURORA for greenhouse operation. <i>IEEE Robotics and Automation Magazine</i> , 1996, 3, 18-28.	2.0	88
4	Mobile robot motion estimation by 2D scan matching with genetic and iterative closest point algorithms. <i>Journal of Field Robotics</i> , 2006, 23, 21-34.	6.0	75
5	Fuzzy supervisory path tracking of mobile reports. <i>Control Engineering Practice</i> , 1994, 2, 313-319.	5.5	69
6	Power Consumption Modeling of Skid-Steer Tracked Mobile Robots on Rigid Terrain. <i>IEEE Transactions on Robotics</i> , 2009, 25, 1098-1108.	10.3	68
7	Pure-Pursuit Reactive Path Tracking for Nonholonomic Mobile Robots with a 2D Laser Scanner. <i>Eurasip Journal on Advances in Signal Processing</i> , 2009, 2009, .	1.7	68
8	Steering Limitations for a Vehicle Pulling Passive Trailers. <i>IEEE Transactions on Control Systems Technology</i> , 2008, 16, 809-818.	5.2	46
9	Steering the Last Trailer as a Virtual Tractor for Reversing Vehicles With Passive On- and Off-Axle Hitches. <i>IEEE Transactions on Industrial Electronics</i> , 2013, 60, 5729-5736.	7.9	42
10	Development of ALACRANE: A Mobile Robotic Assistance for Exploration and Rescue Missions. , 2007, , .		35
11	Automation of the Arm-Aided Climbing Maneuver for Tracked Mobile Manipulators. <i>IEEE Transactions on Industrial Electronics</i> , 2014, 61, 3638-3647.	7.9	32
12	Combination of UWB and GPS for indoor-outdoor vehicle localization. , 2007, , .		30
13	Fast range-independent spherical subsampling of 3D laser scanner points and data reduction performance evaluation for scene registration. <i>Pattern Recognition Letters</i> , 2010, 31, 1239-1250.	4.2	29
14	Boresight Calibration of Construction Misalignments for 3D Scanners Built with a 2D Laser Rangefinder Rotating on Its Optical Center. <i>Sensors</i> , 2014, 14, 20025-20040.	3.8	29
15	Static Tip-Over Stability Analysis for a Robotic Vehicle With a Single-Axle Trailer on Slopes Based on Altered Supporting Polygons. <i>IEEE/ASME Transactions on Mechatronics</i> , 2013, 18, 697-705.	5.8	28
16	Design and development of a fast and precise low-cost 3D laser rangefinder. , 2011, , .		25
17	Simplified power consumption modeling and identification for wheeled skid-steer robotic vehicles on hard horizontal ground. , 2010, , .		20
18	Caster-leg aided maneuver for negotiating surface discontinuities with a wheeled skid-steer mobile robot. <i>Robotics and Autonomous Systems</i> , 2017, 91, 25-37.	5.1	16

#	ARTICLE	IF	CITATIONS
19	Supervised Learning of Natural-Terrain Traversability with Synthetic 3D Laser Scans. Applied Sciences (Switzerland), 2020, 10, 1140.	2.5	16
20	Reactive Navigation on Natural Environments by Continuous Classification of Ground Traversability. Sensors, 2020, 20, 6423.	3.8	13
21	Power Analysis for a Skid-Steered Tracked Mobile Robot. , 2006, , .		11
22	Construction and calibration of a low-cost 3D laser scanner with 360° field of view for mobile robots. , 2015, , .		11
23	Ground Extraction from 3D Lidar Point Clouds with the Classification Learner App. , 2018, , .		11
24	Center of gravity estimation and control for a field mobile robot with a heavy manipulator. , 2009, , .		10
25	3D registration of laser range scenes by coincidence of coarse binary cubes. Machine Vision and Applications, 2012, 23, 857-867.	2.7	10
26	Virtual steering limitations for reversing an articulated vehicle with off-axle passive trailers. , 2009, , .		9
27	Incremental closed-form solution to globally consistent 2D range scan mapping with two-step pose estimation. , 2010, , .		9
28	Driver assistance system for backward maneuvers in passive multi-trailer vehicles. , 2012, , .		9
29	Field Navigation Using Fuzzy Elevation Maps Built with Local 3D Laser Scans. Applied Sciences (Switzerland), 2018, 8, 397.	2.5	9
30	PATH TRACKING FOR MOBILE ROBOTS WITH A TRAILER. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 329-334.	0.4	8
31	Driver Assistance System for Passive Multi-Trailer Vehicles with Haptic Steering Limitations on the Leading Unit. Sensors, 2013, 13, 4485-4498.	3.8	8
32	Inertia-based ICR kinematic model for tracked skid-steer robots. , 2017, , .		8
33	Steerability analysis on slopes of a mobile robot with a ground contact arm. , 2015, , .		7
34	Motion Detection from Mobile Robots with Fuzzy Threshold Selection in Consecutive 2D Laser Scans. Electronics (Switzerland), 2015, 4, 82-93.	3.1	7
35	Fuzzy modeling of natural terrain elevation from a 3D scanner point cloud. , 2011, , .		5
36	Collapsible cubes: Removing overhangs from 3D point clouds to build local navigable elevation maps. , 2014, , .		5

#	ARTICLE	IF	CITATIONS
37	A new method of generating differential GPS corrections. Control Engineering Practice, 2000, 8, 253-258.	5.5	4
38	The dual-frequency sonar system of the mobile robot RAM-2. Robotica, 2004, 22, 263-270.	1.9	4
39	Spherical Laser Point Sampling with Application to 3D Scene Genetic Registration. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	4
40	Project-based learning of scientific writing and communication skills for postgraduate students. , 2014, , .		4
41	Using multicore processors to parallelize 3D point cloud registration with the Coarse Binary Cubes method. , 2013, , .		3
42	Navigability analysis of natural terrains with fuzzy elevation maps from ground-based 3D range scans. , 2013, , .		3
43	Slide-Down Prevention for Wheeled Mobile Robots on Slopes. , 2017, , .		3
44	Automatic Generation of Labeled 3D Point Clouds of Natural Environments with Gazebo. , 2019, , .		3
45	A Redundant Configuration of Four Low-Cost GNSS-RTK Receivers for Reliable Estimation of Vehicular Position and Posture. Sensors, 2021, 21, 5853.	3.8	3
46	Outdoor scene registration from 3D laser range data with coarse binary cubes. , 2009, , .		2
47	Terrace climbing of the Alacrane mobile robot with cooperation of its onboard arm. , 2012, , .		2
48	Integration of a Canine Agent in a Wireless Sensor Network for Information Gathering in Search and Rescue Missions. , 2018, , .		2
49	Specification of operations for a manipulator on a mobile robot using grafcet. Robotica, 2005, 23, 789-791.	1.9	1
50	Improving 3D scan matching time of the coarse binary cubes method with fast spatial subsampling. , 2013, , .		1
51	Building Fuzzy Elevation Maps from a Ground-Based 3D Laser Scan for Outdoor Mobile Robots. Advances in Intelligent Systems and Computing, 2016, , 29-41.	0.6	1
52	Navigation with uncertain position estimation in the RAM-1 mobile robot. Annual Review in Automatic Programming, 1994, 19, 215-219.	0.2	0