Jorge L MartÃnez

List of Publications by Year
in descending order

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	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
2	Reactive Navigation on Natural Environments by Continuous Classification of Ground Traversability. Sensors, 2020, 20, 6423.	3.8	13
3	Supervised Learning of Natural-Terrain Traversability with Synthetic 3D Laser Scans. Applied Sciences (Switzerland), 2020, 10, 1140.	2.5	16
4	Automatic Generation of Labeled 3D Point Clouds of Natural Environments with Gazebo. , 2019, , .		3
5	Integration of a Canine Agent in a Wireless Sensor Network for Information Gathering in Search and Rescue Missions. , 2018, , .		2
6	Ground Extraction from 3D Lidar Point Clouds with the Classification Learner App. , 2018, , .		11
7	Field Navigation Using Fuzzy Elevation Maps Built with Local 3D Laser Scans. Applied Sciences (Switzerland), 2018, 8, 397.	2.5	9
8	Caster-leg aided maneuver for negotiating surface discontinuities with a wheeled skid-steer mobile robot. Robotics and Autonomous Systems, 2017, 91, 25-37.	5.1	16
9	Slide-Down Prevention for Wheeled Mobile Robots on Slopes. , 2017, , .		3
10	Inertia-based ICR kinematic model for tracked skid-steer robots. , 2017, , .		8
11	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
12	Steerability analysis on slopes of a mobile robot with a ground contact arm. , 2015, , .		7
13	Motion Detection from Mobile Robots with Fuzzy Threshold Selection in Consecutive 2D Laser Scans. Electronics (Switzerland), 2015, 4, 82-93.	3.1	7
14	Construction and calibration of a low-cost 3D laser scanner with 360Â° field of view for mobile robots. , 2015, , .		11
15	Boresight Calibration of Construction Misalignments for 3D Scanners Built with a 2D Laser Rangefinder Rotating on Its Optical Center. Sensors, 2014, 14, 20025-20040.	3.8	29
16	Project-based learning of scientific writing and communication skills for postgraduate students. , 2014, , .		4
17	Collapsible cubes: Removing overhangs from 3D point clouds to build local navigable elevation maps. , 2014, , .		5
18	Automation of the Arm-Aided Climbing Maneuver for Tracked Mobile Manipulators. IEEE Transactions on Industrial Electronics, 2014, 61, 3638-3647.	7.9	32

#	ARTICLE	IF	CITATIONS
19	Static Tip-Over Stability Analysis for a Robotic Vehicle With a Single-Axle Trailer on Slopes Based on Altered Supporting Polygons. IEEE/ASME Transactions on Mechatronics, 2013, 18, 697-705.	5.8	28
20	Using multicore processors to parallelize 3D point cloud registration with the Coarse Binary Cubes method. , 2013, , .		3
21	Steering the Last Trailer as a Virtual Tractor for Reversing Vehicles With Passive On- and Off-Axle Hitches. IEEE Transactions on Industrial Electronics, 2013, 60, 5729-5736.	7.9	42
22	Driver Assistance System for Passive Multi-Trailer Vehicles with Haptic Steering Limitations on the Leading Unit. Sensors, 2013, 13, 4485-4498.	3.8	8
23	Improving 3D scan matching time of the coarse binary cubes method with fast spatial subsampling. , 2013, , .		1
24	Navigability analysis of natural terrains with fuzzy elevation maps from ground-based 3D range scans. , 2013, , .		3
25	Driver assistance system for backward maneuvers in passive multi-trailer vehicles. , 2012, , .		9
26	Terrace climbing of the Alacrane mobile robot with cooperation of its onboard arm. , 2012, , .		2
27	3D registration of laser range scenes by coincidence of coarse binary cubes. Machine Vision and Applications, 2012, 23, 857-867.	2.7	10
28	Design and development of a fast and precise low-cost 3D laser rangefinder. , 2011, , .		25
29	Fuzzy modeling of natural terrain elevation from a 3D scanner point cloud. , 2011, , .		5
30	Fast range-independent spherical subsampling of 3D laser scanner points and data reduction performance evaluation for scene registration. Pattern Recognition Letters, 2010, 31, 1239-1250.	4.2	29
31	Incremental closed-form solution to globally consistent 2D range scan mapping with two-step pose estimation. , 2010, , .		9
32	Simplified power consumption modeling and identification for wheeled skid-steer robotic vehicles on hard horizontal ground. , 2010, , .		20
33	Outdoor scene registration from 3D laser range data with coarse binary cubes. , 2009, , .		2
34	Virtual steering limitations for reversing an articulated vehicle with off-axle passive trailers. , 2009, , .		9
35	Mobile robot localization based on Ultra-Wide-Band ranging: A particle filter approach. Robotics and Autonomous Systems, 2009, 57, 496-507.	5.1	153
36	Power Consumption Modeling of Skid-Steer Tracked Mobile Robots on Rigid Terrain. IEEE Transactions on Robotics, 2009, 25, 1098-1108.	10.3	68

#	Article	IF	Citations
37	Center of gravity estimation and control for a field mobile robot with a heavy manipulator. , 2009, , .		10
38	Pure-Pursuit Reactive Path Tracking for Nonholonomic Mobile Robots with a 2D Laser Scanner. Eurasip Journal on Advances in Signal Processing, 2009, 2009, .	1.7	68
39	Steering Limitations for a Vehicle Pulling Passive Trailers. IEEE Transactions on Control Systems Technology, 2008, 16, 809-818.	5.2	46
40	Experimental kinematics for wheeled skid-steer mobile robots. , 2007, , .		113
41	Development of ALACRANE: A Mobile Robotic Assistance for Exploration and Rescue Missions. , 2007, , .		35
42	Spherical Laser Point Sampling with Application to 3D Scene Genetic Registration. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	4
43	Combination of UWB and GPS for indoor-outdoor vehicle localization. , 2007, , .		30
44	Mobile robot motion estimation by 2D scan matching with genetic and iterative closest point algorithms. Journal of Field Robotics, 2006, 23, 21-34.	6.0	75
45	Power Analysis for a Skid-Steered Tracked Mobile Robot. , 2006, , .		11
46	Specification of operations for a manipulator on a mobile robot using grafcet. Robotica, 2005, 23, 789-791.	1.9	1
47	The dual-frequency sonar system of the mobile robot RAM-2. Robotica, 2004, 22, 263-270.	1.9	4
48	PATH TRACKING FOR MOBILE ROBOTS WITH A TRAILER. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 329-334.	0.4	8
49	A new method of generating differential GPS corrections. Control Engineering Practice, 2000, 8, 253-258.	5.5	4
50	The autonomous mobile robot AURORA for greenhouse operation. IEEE Robotics and Automation Magazine, 1996, 3, 18-28.	2.0	88
51	Navigation with uncertain position estimation in the RAM-1 mobile robot. Annual Review in Automatic Programming, 1994, 19, 215-219.	0.2	0
52	Fuzzy supervisory path tracking of mobile reports. Control Engineering Practice, 1994, 2, 313-319.	5.5	69