Jorge Villagra

List of Publications by Year in Descending Order

59 papers	1,196 citations	18 h-index	33 g-index
64 ext. papers	1,466 ext. citations	3.7 avg, IF	4.47 L-index

#	Paper	IF	Citations
59	Merit-Based Motion Planning for Autonomous Vehicles in Urban Scenarios. *Sensors*, **2021**, 21,	3.8	3
58	A Grid-Based Framework for Collective Perception in Autonomous Vehicles. *Sensors*, **2021**, 21,	3.8	4
57	Interaction-Aware Intention Estimation at Roundabouts. *IEEE Access*, **2021**, 9, 123088-123102	3.5	3
56	Jerk-Limited Time-Optimal Speed Planning for Arbitrary Paths. *IEEE Transactions on Intelligent Transportation Systems*, **2021**, 1-15	6.1	3
55	Ground Segmentation Algorithm for Sloped Terrain and Sparse LiDAR Point Cloud. *IEEE Access*, **2021**, 9, 132914-132927	3.5	0
54	Motion Planning Approach Considering Localization Uncertainty. *IEEE Transactions on Vehicular Technology*, **2020**, 69, 5983-5994	6.8	13
53	Self-Generated OSM-Based Driving Corridors. *IEEE Access*, **2019**, 7, 20113-20125	3.5	14
52	Real-Time Motion Planning Approach for Automated Driving in Urban Environments. *IEEE Access*, **2019**, 7, 180039-180053	3.5	18
51	Automated Driving **2018**, 275-342		2
50	A Primitive Comparison for Traffic-Free Path Planning. *IEEE Access*, **2018**, 6, 28801-28817	3.5	16
49	Smooth path planning for urban autonomous driving using OpenStreetMaps **2017**,		5
48	A Review of the Bayesian Occupancy Filter. *Sensors*, **2017**, 17,	3.8	14
47	A Comparison of FPGA and GPGPU Designs for Bayesian Occupancy Filters. *Sensors*, **2017**, 17,	3.8	1
46	Advanced Co-simulation Framework for Cooperative Maneuvers Among Vehicles **2015**,		3
45	A DRIVERLESS VEHICLE DEMONSTRATION ON MOTORWAYS AND IN URBAN ENVIRONMENTS. *Transport*, **2015**, 30, 253-263	1.4	23
44	Experimental Application of Hybrid Fractional-Order Adaptive Cruise Control at Low Speed. *IEEE Transactions on Control Systems Technology*, **2014**, 22, 2329-2336	4.8	43
43	Self-Configuration of Waypoints for Docking Maneuvers of Flexible Automated Guided Vehicles. *IEEE Transactions on Automation Science and Engineering*, **2013**, 10, 470-475	4.9	11

42	An auxiliary V2I network for road transport and dynamic environments. *Transportation Research Part C: Emerging Technologies*, **2013**, 37, 145-156	8.4	12
41	Cooperative controllers for highways based on human experience. *Expert Systems With Applications* , **2013**, 40, 1024-1033	7.8	25
40	On-line learning of a fuzzy controller for a precise vehicle cruise control system. *Expert Systems With Applications*, **2013**, 40, 1046-1053	7.8	21
39	Fractional Network-Based Control for Vehicle Speed Adaptation via Vehicle-to-Infrastructure Communications. *IEEE Transactions on Control Systems Technology*, **2013**, 21, 780-790	4.8	13
38	Trajectory generator for autonomous vehicles in urban environments **2013**,		34
37	Virtual Vehicle Approach for Longitudinal Control in Urban Environments. *Lecture Notes in Computer Science*, **2013**, 25-32	0.9	1
36	Nearly-Time Optimal Smooth Path Planning Using Continuous Curvature Derivative Primitives. *Lecture Notes in Computer Science*, **2013**, 1-8	0.9	
35	Intelligent automatic overtaking system using vision for vehicle detection. *Expert Systems With Applications*, **2012**, 39, 3362-3373	7.8	80
34	Vision-based active safety system for automatic stopping. *Expert Systems With Applications*, **2012**, 39, 11234-11242	7.8	25
33	Smooth path and speed planning for an automated public transport vehicle. *Robotics and Autonomous Systems*, **2012**, 60, 252-265	3.5	90
32	An Intelligent V2I-Based Traffic Management System. *IEEE Transactions on Intelligent Transportation Systems*, **2012**, 13, 49-58	6.1	112
31	A Comparison of Control Techniques for Robust Docking Maneuvers of an AGV. *IEEE Transactions on Control Systems Technology*, **2012**, 20, 1116-1123	4.8	39
30	. *IEEE Transactions on Industrial Electronics*, **2012**, 59, 620-628	8.9	45
29	Traffic jam driving with NMV avoidance. *Mechanical Systems and Signal Processing*, **2012**, 31, 332-344	7.8	7
28	Comparing Fuzzy and Intelligent PI Controllers in Stop-and-Go Manoeuvres. *IEEE Transactions on Control Systems Technology*, **2012**, 20, 770-778	4.8	36
27	Driving by Driverless Vehicles in Urban Environment. *Lecture Notes in Computer Science*, **2012**, 404-411	0.9	
26	Genetic optimization of a vehicle fuzzy decision system for intersections. *Expert Systems With Applications*, **2012**, 39, 13148-13157	7.8	46
25	A Reinforcement Learning Modular Control Architecture for Fully Automated Vehicles. *Lecture Notes in Computer Science*, **2012**, 390-397	0.9	2

24	Data-driven fractional PID control: application to DC motors in flexible joints. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2012**, 45, 709-714		8
23	Study of Traffic Flow Controlled with Independent Agent-Based Traffic Signals. *Lecture Notes in Computer Science*, **2012**, 382-389	0.9	
22	Traffic Light Intelligent Regulation Using Infrastructure Located Sensors. *Lecture Notes in Computer Science*, **2012**, 398-403	0.9	0
21	Precise Vehicle Cruise Control System Based on On-Line Fuzzy Control Learning. *Communications in Computer and Information Science*, **2012**, 101-110	0.3	
20	AUTOPIA Program Advances: How to Automate the Traffic?. *Lecture Notes in Computer Science*, **2012**, 374-381	0.9	2
19	Low speed control of an autonomous vehicle using a hybrid fractional order controller **2011**,		6
18	Low Speed Control of an Autonomous Vehicle by Using a Fractional PI Controller. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2011**, 44, 15025-15030		7
17	A diagnosis-based approach for tire–road forces and maximum friction estimation. *Control Engineering Practice*, **2011**, 19, 174-184	3.9	85
16	An approach to driverless vehicles in highways **2011**,		4
15	Automated On-Ramp Merging System for Congested Traffic Situations. *IEEE Transactions on Intelligent Transportation Systems*, **2011**, 12, 500-508	6.1	147
14	Power electric aiding controller for automated bus stopping **2011**,		3
13	A MODEL-FREE APPROACH FOR ACCURATE JOINT MOTION CONTROL IN HUMANOID LOCOMOTION. *International Journal of Humanoid Robotics*, **2011**, 08, 27-46	1.2	9
12	Control basado en PID inteligentes: aplicación al control de crucero de un vehículo a bajas velocidades. *RIAI - Revista Iberoamericana De Automatica E Informatica Industrial*, **2010**, 7, 44-52	1.5	5
11	Model-free control techniques for Stop & Go systems **2010**,		8
10	Robust motion control for humanoid robot flexible joints **2010**,		2
9	An algebraic approach for maximum friction estimation. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2010**, 43, 885-890		2
8	Control Basado en PID Inteligentes: Aplicación al Control Robusto de Velocidad en Entornos Urbanos. *RIAI - Revista Iberoamericana De Automatica E Informatica Industrial*, **2010**, 7, 44-52	1.5	8
7	Mechatronic design and control of a critical biped robot joint **2009**,		2

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6	Robust stop-and-go control strategy: an algebraic approach for non-linear estimation and control. *International Journal of Vehicle Autonomous Systems*, **2009**, 7, 270	0.4	25
5	An Algebraic Approach for Accurate Motion Control of Humanoid Robot Joints. *Lecture Notes in Computer Science*, **2009**, 723-732	0.9	2
4	Robust grey-box closed-loop stop-and-go control **2008**,		3
3	Estimation of Longitudinal and Lateral Vehicle Velocities: An Algebraic Approach **2008**,		21
2	Flatness-Based Vehicle Steering Control Strategy With SDRE Feedback Gains Tuned Via a Sensitivity Approach. *IEEE Transactions on Control Systems Technology*, **2007**, 15, 554-565	4.8	68
1	OBSTACLE-AVOIDING PATH PLANNING FOR HIGH VELOCITY WHEELED MOBILE ROBOTS. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2005**, 38, 49-54		11