Jorge Villagra

List of Publications by Citations

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	Automated On-Ramp Merging System for Congested Traffic Situations. *IEEE Transactions on Intelligent Transportation Systems*, **2011**, 12, 500-508	6.1	147
58	An Intelligent V2I-Based Traffic Management System. *IEEE Transactions on Intelligent Transportation Systems*, **2012**, 13, 49-58	6.1	112
57	Smooth path and speed planning for an automated public transport vehicle. *Robotics and Autonomous Systems*, **2012**, 60, 252-265	3.5	90
56	A diagnosis-based approach for tire–road forces and maximum friction estimation. *Control Engineering Practice*, **2011**, 19, 174-184	3.9	85
55	Intelligent automatic overtaking system using vision for vehicle detection. *Expert Systems With Applications*, **2012**, 39, 3362-3373	7.8	80
54	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
53	Genetic optimization of a vehicle fuzzy decision system for intersections. *Expert Systems With Applications*, **2012**, 39, 13148-13157	7.8	46
52	. *IEEE Transactions on Industrial Electronics*, **2012**, 59, 620-628	8.9	45
51	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
50	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
49	Comparing Fuzzy and Intelligent PI Controllers in Stop-and-Go Manoeuvres. *IEEE Transactions on Control Systems Technology*, **2012**, 20, 770-778	4.8	36
48	Trajectory generator for autonomous vehicles in urban environments **2013**,		34
47	Vision-based active safety system for automatic stopping. *Expert Systems With Applications*, **2012**, 39, 11234-11242	7.8	25
46	Cooperative controllers for highways based on human experience. *Expert Systems With Applications* , **2013**, 40, 1024-1033	7.8	25
45	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
44	A DRIVERLESS VEHICLE DEMONSTRATION ON MOTORWAYS AND IN URBAN ENVIRONMENTS. *Transport*, **2015**, 30, 253-263	1.4	23
43	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

42	Estimation of Longitudinal and Lateral Vehicle Velocities: An Algebraic Approach **2008**,		21
41	Real-Time Motion Planning Approach for Automated Driving in Urban Environments. *IEEE Access*, **2019**, 7, 180039-180053	3.5	18
40	A Primitive Comparison for Traffic-Free Path Planning. *IEEE Access*, **2018**, 6, 28801-28817	3.5	16
39	Self-Generated OSM-Based Driving Corridors. *IEEE Access*, **2019**, 7, 20113-20125	3.5	14
38	A Review of the Bayesian Occupancy Filter. *Sensors*, **2017**, 17,	3.8	14
37	Motion Planning Approach Considering Localization Uncertainty. *IEEE Transactions on Vehicular Technology*, **2020**, 69, 5983-5994	6.8	13
36	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
35	An auxiliary V2I network for road transport and dynamic environments. *Transportation Research Part C: Emerging Technologies*, **2013**, 37, 145-156	8.4	12
34	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
33	OBSTACLE-AVOIDING PATH PLANNING FOR HIGH VELOCITY WHEELED MOBILE ROBOTS. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2005**, 38, 49-54		11
32	A MODEL-FREE APPROACH FOR ACCURATE JOINT MOTION CONTROL IN HUMANOID LOCOMOTION. *International Journal of Humanoid Robotics*, **2011**, 08, 27-46	1.2	9
31	Model-free control techniques for Stop & Go systems **2010**,		8
30	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
29	Control Basado en PID Inteligentes: Aplicaci□ al Control Robusto de Velocidad en Entornos Urbanos. *RIAI - Revista Iberoamericana De Automatica E Informatica Industrial*, **2010**, 7, 44-52	1.5	8
28	Traffic jam driving with NMV avoidance. *Mechanical Systems and Signal Processing*, **2012**, 31, 332-344	7.8	7
27	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
26	Low speed control of an autonomous vehicle using a hybrid fractional order controller **2011**,		6
25	Smooth path planning for urban autonomous driving using OpenStreetMaps **2017**,		5

24	Control basado en PID inteligentes: aplicaci al control de crucero de un veh ulo a bajas velocidades. *RIAI - Revista Iberoamericana De Automatica E Informatica Industrial*, **2010**, 7, 44-52	1.5	5
23	An approach to driverless vehicles in highways **2011**,		4
22	A Grid-Based Framework for Collective Perception in Autonomous Vehicles. *Sensors*, **2021**, 21,	3.8	4
21	Advanced Co-simulation Framework for Cooperative Maneuvers Among Vehicles **2015**,		3
20	Power electric aiding controller for automated bus stopping **2011**,		3
19	Robust grey-box closed-loop stop-and-go control **2008**,		3
18	Merit-Based Motion Planning for Autonomous Vehicles in Urban Scenarios. *Sensors*, **2021**, 21,	3.8	3
17	Interaction-Aware Intention Estimation at Roundabouts. *IEEE Access*, **2021**, 9, 123088-123102	3.5	3
16	Jerk-Limited Time-Optimal Speed Planning for Arbitrary Paths. *IEEE Transactions on Intelligent Transportation Systems*, **2021**, 1-15	6.1	3
15	Automated Driving **2018**, 275-342		2
14	Robust motion control for humanoid robot flexible joints **2010**,		2
13	Mechatronic design and control of a critical biped robot joint **2009**,		2
12	A Reinforcement Learning Modular Control Architecture for Fully Automated Vehicles. *Lecture Notes in Computer Science*, **2012**, 390-397	0.9	2
11	An algebraic approach for maximum friction estimation. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2010**, 43, 885-890		2
10	An Algebraic Approach for Accurate Motion Control of Humanoid Robot Joints. *Lecture Notes in Computer Science*, **2009**, 723-732	0.9	2
9	AUTOPIA Program Advances: How to Automate the Traffic?. *Lecture Notes in Computer Science*, **2012**, 374-381	0.9	2
8	A Comparison of FPGA and GPGPU Designs for Bayesian Occupancy Filters. *Sensors*, **2017**, 17,	3.8	1
7	Virtual Vehicle Approach for Longitudinal Control in Urban Environments. *Lecture Notes in Computer Science*, **2013**, 25-32	0.9	1

6	Traffic Light Intelligent Regulation Using Infrastructure Located Sensors. *Lecture Notes in Computer Science*, **2012**, 398-403	0.9	0
5	Ground Segmentation Algorithm for Sloped Terrain and Sparse LiDAR Point Cloud. *IEEE Access*, **2021**, 9, 132914-132927	3.5	0
4	Driving by Driverless Vehicles in Urban Environment. *Lecture Notes in Computer Science*, **2012**, 404-411	0.9	
3	Study of Traffic Flow Controlled with Independent Agent-Based Traffic Signals. *Lecture Notes in Computer Science*, **2012**, 382-389	0.9	
2	Precise Vehicle Cruise Control System Based on On-Line Fuzzy Control Learning. *Communications in Computer and Information Science*, **2012**, 101-110	0.3	
1	Nearly-Time Optimal Smooth Path Planning Using Continuous Curvature Derivative Primitives. *Lecture Notes in Computer Science*, **2013**, 1-8	0.9	