Javier Alonso-Mora

List of Publications by Year
in descending order

79	4,226	361413	276875
papers	citations	20 h-index	41 g-index

79	79	79	3005
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Group-Based Distributed Auction Algorithms for Multi-Robot Task Assignment. IEEE Transactions on Automation Science and Engineering, 2023, 20, 1292-1303.	5.2	19
2	Anticipatory routing methods for an on-demand ridepooling mobility system. Transportation, 2022, 49, 1921-1962.	4.0	5
3	How to split the costs and charge the travellers sharing a ride? aligning systemâ€™s optimum with usersâ€™ equilibrium. European Journal of Operational Research, 2022, 301, 956-973.	5.7	6
4	Decentralized probabilistic multi-robot collision avoidance using buffered uncertainty-aware Voronoi cells. Autonomous Robots, 2022, 46, 401-420.	4.8	15
5	A business class for autonomous mobility-on-demand: Modeling service quality contracts in dynamic ridesharing systems. Transportation Research Part C: Emerging Technologies, 2022, 136, 103520.	7.6	17
6	Improving Pedestrian Prediction Models With Self-Supervised Continual Learning. IEEE Robotics and Automation Letters, 2022, 7, 4781-4788.	5.1	6
7	Probabilistic Risk Metric for Highway Driving Leveraging Multi-Modal Trajectory Predictions. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 19399-19412.	8.0	16
8	Learning Interaction-Aware Guidance for Trajectory Optimization in Dense Traffic Scenarios. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 18808-18821.	8.0	5
9	Where to Look Next: Learning Viewpoint Recommendations for Informative Trajectory Planning. , 2022, , .		9
10	Regulations Aware Motion Planning for Autonomous Surface Vessels in Urban Canals. , 2022, , .		4
11	If you are late, everyone is late: late passenger arrival and ride-pooling systems' performance. Transportmetrica A: Transport Science, 2021, 17, 1077-1100.	2.0	7
12	Social Trajectory Planning for Urban Autonomous Surface Vessels. IEEE Transactions on Robotics, 2021, 37, 452-465.	10.3	6
13	Scenario-Based Trajectory Optimization in Uncertain Dynamic Environments. IEEE Robotics and Automation Letters, 2021, 6, 5389-5396.	5.1	12
14	Learning Interaction-Aware Trajectory Predictions for Decentralized Multi-Robot Motion Planning in Dynamic Environments. IEEE Robotics and Automation Letters, 2021, 6, 2256-2263.	5.1	29
15	On-demand ridesharing with optimized pick-up and drop-off walking locations. Transportation Research Part C: Emerging Technologies, 2021, 126, 103061.	7.6	49
16	Where to go Next: Learning a Subgoal Recommendation Policy for Navigation in Dynamic Environments. IEEE Robotics and Automation Letters, 2021, 6, 4616-4623.	5.1	32
17	Integrated Task Assignment and Path Planning for Capacitated Multi-Agent Pickup and Delivery. IEEE Robotics and Automation Letters, 2021, 6, 5816-5823.	5.1	58
18	Coupled Mobile Manipulation via Trajectory Optimization with Free Space Decomposition. , 2021, , .		9

#	Article	IF	Citations
19	Towards a geographically even level of service in on-demand ridepooling. , 2021, , .		1
20	Curvature Aware Motion Planning with Closed-Loop Rapidly-exploring Random Trees. , 2021, , .		0
21	Multi-robot Task Assignment for Aerial Tracking with Viewpoint Constraints. , 2021, , .		2
22	On-Demand Grocery Delivery From Multiple Local Stores With Autonomous Robots. , 2021, , .		6
23	Unreliability in ridesharing systems: Measuring changes in usersâ€™ times due to new requests. Transportation Research Part C: Emerging Technologies, 2020, 121, 102831.	7.6	18
24	Robust Vision-based Obstacle Avoidance for Micro Aerial Vehicles in Dynamic Environments. , 2020, , .		39
25	Online trajectory planning and control of a MAV payload system in dynamic environments. Autonomous Robots, 2020, 44, 1065-1089.	4.8	13
26	Trajectory Optimization and Situational Analysis Framework for Autonomous Overtaking With Visibility Maximization. IEEE Transactions on Intelligent Vehicles, 2020, 5, 7-20.	12.7	19
27	Compositional and Contract-Based Verification for Autonomous Driving on Road Networks. Springer Proceedings in Advanced Robotics, 2020, , 163-181.	1.3	9
28	With Whom to Communicate: Learning Efficient Communication for Multi-Robot Collision Avoidance. , 2020, , .		9
29	Distributed multi-robot formation control in dynamic environments. Autonomous Robots, 2019, 43, 1079-1100.	4.8	85
30	Model Predictive Contouring Control for Collision Avoidance in Unstructured Dynamic Environments. IEEE Robotics and Automation Letters, 2019, 4, 4459-4466.	5.1	85
31	Optimizing Vehicle Distributions and Fleet Sizes for Shared Mobility-on-Demand. , 2019, , .		9
32	Distributed Multi-Robot Formation Splitting and Merging in Dynamic Environments. , 2019, , .		22
33	Chance-Constrained Collision Avoidance for MAVs in Dynamic Environments. IEEE Robotics and Automation Letters, 2019, 4, 776-783.	5.1	130
34	B-UAVC: Buffered Uncertainty-Aware Voronoi Cells for Probabilistic Multi-Robot Collision Avoidance. , 2019, , .		33
35	Social behavior for autonomous vehicles. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 24972-24978.	7.1	212
36	Optimizing Multi-class Fleet Compositions for Shared Mobility-as-a-Service. , 2019, , .		8

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37	Safe Nonlinear Trajectory Generation for Parallel Autonomy With a Dynamic Vehicle Model. IEEE Transactions on Intelligent Transportation Systems, 2018, 19, 2994-3008.	8.0	67
38	Planning and Decision-Making for Autonomous Vehicles. Annual Review of Control, Robotics, and Autonomous Systems, 2018, 1, 187-210.	11.8	529
39	Cooperative Collision Avoidance for Nonholonomic Robots. IEEE Transactions on Robotics, 2018, 34, 404-420.	10.3	107
40	Reactive mission and motion planning with deadlock resolution avoiding dynamic obstacles. Autonomous Robots, 2018, 42, 801-824.	4.8	45
41	Collision-Free Reactive Mission and Motion Planning for Multi-robot Systems. Springer Proceedings in Advanced Robotics, 2018, , 459-476.	1.3	18
42	Foresight: Remote Sensing for Autonomous Vehicles Using a Small Unmanned Aerial Vehicle. Springer Proceedings in Advanced Robotics, 2018, , 591-604.	1.3	9
43	Vehicle Rebalancing for Mobility-on-Demand Systems with Ride-Sharing. , 2018, , .		39
44	The Impact of Ridesharing in Mobility-on-Demand Systems: Simulation Case Study in Prague. , 2018, , .		20
45	Joint Multi-Policy Behavior Estimation and Receding-Horizon Trajectory Planning for Automated Urban Driving. , 2018, , .		25
46	Sample Efficient Learning of Path Following and Obstacle Avoidance Behavior for Quadrotors. IEEE Robotics and Automation Letters, 2018, 3, 3852-3859.	5.1	19
47	Flycon. ACM Transactions on Graphics, 2018, 37, 1-14.	7.2	17
48	Real-Time Motion Planning for Aerial Videography With Dynamic Obstacle Avoidance and Viewpoint Optimization. IEEE Robotics and Automation Letters, 2017, 2, 1696-1703.	5.1	118
49	On-demand high-capacity ride-sharing via dynamic trip-vehicle assignment. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 462-467.	7.1	740
50	Multi-robot formation control and object transport in dynamic environments via constrained optimization. International Journal of Robotics Research, 2017, 36, 1000-1021.	8.5	178
51	Real-time planning for automated multi-view drone cinematography. ACM Transactions on Graphics, 2017, 36, 1-10.	7.2	135
52	Parallel autonomy in automated vehicles: Safe motion generation with minimal intervention. , 2017, , .		55
53	Duckietown: An open, inexpensive and flexible platform for autonomy education and research. , 2017, , .		114
54	Robust collision avoidance for multiple micro aerial vehicles using nonlinear model predictive control. , 2017, , .		67

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55	A parallel autonomy research platform. , 2017, , .		18
56	Trajectory optimization for autonomous overtaking with visibility maximization. , 2017, , .		32
57	Predictive routing for autonomous mobility-on-demand systems with ride-sharing. , 2017, , .		49
58	Data Materialities Art Gallery: Introduction and Gallery. Leonardo, 2016, 49, 352-374.	0.3	0
59	Distributed multi-robot formation control among obstacles: A geometric and optimization approach with consensus. , 2016, , .		58
60	Customized Sensing for Robot Swarms. Springer Tracts in Advanced Robotics, 2016, , 523-534.	0.4	0
61	Multi-robot navigation in formation via sequential convex programming. , 2015, , .		36
62	Collision avoidance for aerial vehicles in multi-agent scenarios. Autonomous Robots, 2015, 39, 101-121.	4.8	121
63	Local motion planning for collaborative multi-robot manipulation of deformable objects. , 2015, , .		78
64	Gesture based human - Multi-robot swarm interaction and its application to an interactive display. , 2015, , .		37
65	Human - robot swarm interaction for entertainment. , 2014, , .		9
66	Viewpoint and trajectory optimization for animation display with aerial vehicles. , 2014, , .		0
67	Shared control of autonomous vehicles based on velocity space optimization. , 2014, , .		21
68	Multi-Robot Formation Control via a Real-Time Drawing Interface. Springer Tracts in Advanced Robotics, 2014, , 175-189.	0.4	10
69	Reciprocal Collision Avoidance With Motion Continuity Constraints. IEEE Transactions on Robotics, 2013, 29, 899-912.	10.3	45
70	Design and control of a spherical omnidirectional blimp. , 2013, , .		32
71	Collision avoidance for multiple agents with joint utility maximization. , 2013, , .		9
72	Optimal Reciprocal Collision Avoidance for Multiple Non-Holonomic Robots. Springer Tracts in Advanced Robotics, 2013, , 203-216.	0.4	125

#	Article	IF	Citations
73	Image and animation display with multiple mobile robots. International Journal of Robotics Research, 2012, 31, 753-773.	8.5	73
74	Object and animation display with multiple aerial vehicles. , 2012, , .		17
75	Reciprocal collision avoidance for multiple car-like robots. , 2012, , .		66
76	Limited benefit of joint estimation in multiâ€agent iterative learning. Asian Journal of Control, 2012, 14, 613-623.	3.0	8
77	Multi-robot system for artistic pattern formation. , 2011, , .		55
78	Independent vs. joint estimation in multi-agent iterative learning control. , 2010, , .		12
79	Multi-Objective Analysis of Ridesharing in Automated Mobility-on-Demand. , 0, , .		9