Lydia Tapia

List of Publications by Year
in descending order

23 papers	640 citations	1684188 5 h-index	1872680 6 g-index
23 all docs	23 docs citations	23 times ranked	595 citing authors

#	Article	IF	Citations
1	PRM-RL: Long-range Robotic Navigation Tasks by Combining Reinforcement Learning and Sampling-Based Planning. , 2018, , .		157
2	Path-guided artificial potential fields with stochastic reachable sets for motion planning in highly dynamic environments. , 2015, , .		88
3	COLREG-RRT: An RRT-Based COLREGS-Compliant Motion Planner for Surface Vehicle Navigation. IEEE Robotics and Automation Letters, 2018, 3, 2024-2031.	5.1	81
4	Learning swing-free trajectories for UAVs with a suspended load. , 2013, , .		79
5	RL-RRT: Kinodynamic Motion Planning via Learning Reachability Estimators From RL Policies. IEEE Robotics and Automation Letters, 2019, 4, 4298-4305.	5.1	79
6	A reinforcement learning approach towards autonomous suspended load manipulation using aerial robots. , 2013, , .		53
7	Reinforcement learning for balancing a flying inverted pendulum. , 2014, , .		18
8	Stochastic Ensemble Simulation motion planning in stochastic dynamic environments. , 2015, , .		15
9	Avoiding moving obstacles with stochastic hybrid dynamics using PEARL: PrEference Appraisal Reinforcement Learning. , 2016, , .		14
10	Allergen Valency, Dose, and FcÎµRI Occupancy Set Thresholds for Secretory Responses to Pen a 1 and Motivate Design of Hypoallergens. Journal of Immunology, 2017, 198, 1034-1046.	0.8	13
11	Defensive Escort Teams for Navigation in Crowds via Multi-Agent Deep Reinforcement Learning. IEEE Robotics and Automation Letters, 2020, 5, 5645-5652.	5.1	11
12	Comparison of Deep Reinforcement Learning Policies to Formal Methods for Moving Obstacle Avoidance. , 2019, , .		8
13	Influence of model resolution on geometric simulations of antibody aggregation. Robotica, 2016, 34, 1754-1776.	1.9	6
14	Construction and use of roadmaps that incorporate workspace modeling errors. , 2013, , .		5
15	Extending rule-based methods to model molecular geometry and 3D model resolution. BMC Systems Biology, 2016, 10, 48.	3.0	5
16	Extending rule-based methods to model molecular geometry. , 2015, , .		4
17	Preference-balancing motion planning under stochastic disturbances. , 2015, , .		3
18	Runtime SES planning: Online motion planning in environments with stochastic dynamics and uncertainty. , 2016, , .		1

#	Article	IF	Citations
19	Foreword on special issue on robotics methods for structural and dynamic modeling of molecular systems. Robotica, 2016, 34, 1677-1678.	1.9	0
20	Guest Editorial Special Issue on the 2018 Workshop on the Algorithmic Foundations of Robotics (WAFR). IEEE Transactions on Automation Science and Engineering, 2021, 18, 863-863.	5.2	0
21	Special Issue on the Thirteenth Workshop on the Algorithmic Foundations of Robotics (WAFR) 2018. International Journal of Robotics Research, 2021, 40, 1047-1048.	8.5	0
22	Retrospective on a Watershed Moment for IEEE Robotics and Automation Society Gender Diversity [Women in Engineering]. IEEE Robotics and Automation Magazine, 2021, 28, 163-167.	2.0	0
23	Using player generated data to elucidate molecular docking. , 2020, , .		0