Ugo Rosolia

List of Publications by Year in descending order

37 papers	**988** citations	840776 **11** h-index	839539 **18** g-index
37 all docs	**37** docs citations	**37** times ranked	**622** citing authors

#	Article	IF	Citations
1	Multi-Rate Control Design Under Input Constraints via Fixed-Time Barrier Functions. , 2022, 6, 608-613.		10
2	Iterative Model Predictive Control for Piecewise Systems. , 2022, 6, 842-847.		3
3	Robust Learning Model-Predictive Control for Linear Systems Performing Iterative Tasks. IEEE Transactions on Automatic Control, 2022, 67, 856-869.	5.7	12
4	A Constructive Method for Designing Safe Multirate Controllers for Differentially-Flat Systems. , 2022, 6, 2138-2143.		5
5	MLNav: Learning to Safely Navigate on Martian Terrains. IEEE Robotics and Automation Letters, 2022, 7, 5461-5468.	5.1	6
6	Interactive Multi-Modal Motion Planning With Branch Model Predictive Control. IEEE Robotics and Automation Letters, 2022, 7, 5365-5372.	5.1	23
7	Robust Predictive Control for Quadrupedal Locomotion: Learning to Close the Gap Between Reduced- and Full-Order Models. IEEE Robotics and Automation Letters, 2022, 7, 6622-6629.	5.1	8
8	Autonomous Vehicles on the Edge: A Survey on Autonomous Vehicle Racing. IEEE Open Journal of Intelligent Transportation Systems, 2022, 3, 458-488.	4.8	80
9	Unified Multirate Control: From Low-Level Actuation to High-Level Planning. IEEE Transactions on Automatic Control, 2022, 67, 6627-6640.	5.7	8
10	Minimum time learning model predictive control. International Journal of Robust and Nonlinear Control, 2021, 31, 8830-8854.	3.7	8
11	A Robust Scenario MPC Approach for Uncertain Multi-Modal Obstacles. , 2021, 5, 947-952.		29
12	Multi-Rate Control Design Leveraging Control Barrier Functions and Model Predictive Control Policies. , 2021, 5, 1007-1012.		27
13	ABC-LMPC: Safe Sample-Based Learning MPC for Stochastic Nonlinear Dynamical Systems with Adjustable Boundary Conditions. Springer Proceedings in Advanced Robotics, 2021, , 1-17.	1.3	2
14	A Simple Robust MPC for Linear Systems with Parametric and Additive Uncertainty. , 2021, , .		14
15	Decentralized Task and Path Planning for Multi-Robot Systems. IEEE Robotics and Automation Letters, 2021, 6, 4337-4344.	5.1	15
16	Output-Lifted Learning Model Predictive Control. IFAC-PapersOnLine, 2021, 54, 365-370.	0.9	1
17	Learning to Control an Unstable System with One Minute of Data: Leveraging Gaussian Process Differentiation in Predictive Control. , 2021, , .		1
18	Learning How to Autonomously Race a Car: A Predictive Control Approach. IEEE Transactions on Control Systems Technology, 2020, 28, 2713-2719.	5.2	54

#	Article	IF	Citations
19	Autonomous racing using Linear Parameter Varying-Model Predictive Control (LPV-MPC). Control Engineering Practice, 2020, 95, 104270.	5.5	51
20	Learning Model Predictive Control for Periodic Repetitive Tasks. , 2020, , .		7
21	Safety Augmented Value Estimation From Demonstrations (SAVED): Safe Deep Model-Based RL for Sparse Cost Robotic Tasks. IEEE Robotics and Automation Letters, 2020, 5, 3612-3619.	5.1	33
22	Distributed Learning Model Predictive Control for Linear Systems. , 2020, , .		6
23	Control of Unknown Nonlinear Systems with Linear Time-Varying MPC. , 2020, , .		5
24	Sample-Based Learning Model Predictive Control for Linear Uncertain Systems. , 2019, , .		11
25	Simple Policy Evaluation for Data-Rich Iterative Tasks. , 2019, , .		1
26	Learning Model Predictive Control for Iterative Tasks. A Data-Driven Control Framework. IEEE Transactions on Automatic Control, 2018, 63, 1883-1896.	5.7	191
27	Adaptive MPC for Iterative Tasks. , 2018, , .		24
28	A Stochastic MPC Approach with Application to Iterative Learning. , 2018, , .		11
29	Data-Driven Predictive Control for Autonomous Systems. Annual Review of Control, Robotics, and Autonomous Systems, 2018, 1, 259-286.	11.8	59
30	Autonomous Vehicle Control: A Nonconvex Approach for Obstacle Avoidance. IEEE Transactions on Control Systems Technology, 2017, 25, 469-484.	5.2	115
31	A decentralized algorithm for control of autonomous agents coupled by feasibility constraints. , 2017, , .		1
32	Learning Model Predictive Control for Iterative Tasks: A Computationally Efficient Approach for Linear System. IFAC-PapersOnLine, 2017, 50, 3142-3147.	0.9	37
33	Autonomous racing using learning Model Predictive Control. , 2017, , .		71
34	Robust learning model predictive control for iterative tasks: Learning from experience. , 2017, , .		18
35	Repetitive learning model predictive control: An autonomous racing example. , 2017, , .		33
36	A Cooperative Driving NLMPC for Real Time Collision Avoidance. , 2015, , .		0

#	ARTICLE	IF	CITATIONS
37	NLMPC for Real Time Path Following and Collision Avoidance. SAE International Journal of Passenger Cars - Electronic and Electrical Systems, 2015, 8, 401-405.	0.3	8