Abhishek Halder

List of Publications by Year
in descending order

33	375	1163117	1281871
papers	citations	8	11
		h-index	g-index

33	33	33	183
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Wasserstein Proximal Algorithms for the Schrödinger Bridge Problem: Density Control With Nonlinear Drift. IEEE Transactions on Automatic Control, 2022, 67, 1163-1178.	5.7	12
2	Density-Based Stochastic Reachability Computation for Occupancy Prediction in Automated Driving. IEEE Transactions on Control Systems Technology, 2022, 30, 2406-2419.	5.2	2
3	Certifying the Intersection of Reach Sets of Integrator Agents with Set-valued Input Uncertainties. , 2022, , 1-1.		3
4	Smallest Ellipsoid Containing p-Sum of Ellipsoids With Application to Reachability Analysis. IEEE Transactions on Automatic Control, 2021, 66, 2512-2525.	5.7	8
5	Prediction and Optimal Feedback Steering of Probability Density Functions for Safe Automated Driving. , 2021, 5, 2168-2173.		4
6	Stability Theory of Stochastic Models in Opinion Dynamics. IEEE Transactions on Automatic Control, 2020, 65, 522-533.	5.7	13
7	Gradient Flow Algorithms for Density Propagation in Stochastic Systems. IEEE Transactions on Automatic Control, 2020, 65, 3991-4004.	5.7	14
8	Hopfield Neural Network Flow: A Geometric Viewpoint. IEEE Transactions on Neural Networks and Learning Systems, 2020, 31, 4869-4880.	11.3	3
9	The Convex Geometry of Integrator Reach Sets. , 2020, , .		8
10	Finite Horizon Density Steering for Multi-input State Feedback Linearizable Systems. , 2020, , .		8
11	DeGroot–Friedkin Map in Opinion Dynamics Is Mirror Descent. , 2019, 3, 463-468.		2
12	Optimal Control of Thermostatic Loads for Planning Aggregate Consumption: Characterization of Solution and Explicit Strategies. , 2019, 3, 877-882.		5
13	Proximal Recursion for Solving the Fokker-Planck Equation. , 2019, , .		8
14	Opinion Dynamics over Influence Networks. , 2019, , .		2
15	Proximal Recursion for the Wonham Filter. , 2019, , .		4
16	Optimal power consumption for demand response of thermostatically controlled loads. Optimal Control Applications and Methods, 2019, 40, 68-84.	2.1	3
17	On the Parameterized Computation of Minimum Volume Outer Ellipsoid of Minkowski Sum of Ellipsoids. , 2018, , .		21
18	Gradient Flows in Filtering and Fisher-Rao Geometry. , 2018, , .		11

#	Article	IF	Citations
19	Architecture and Algorithms for Privacy Preserving Thermal Inertial Load Management by a Load Serving Entity. IEEE Transactions on Power Systems, 2017, 32, 3275-3286.	6.5	24
20	Gradient flows in uncertainty propagation and filtering of linear Gaussian systems. , 2017, , .		11
21	Finite horizon linear quadratic Gaussian density regulator with Wasserstein terminal cost. , 2016, , .		40
22	Optimal Transport Approach for Probabilistic Robustness Analysis of F-16 Controllers. Journal of Guidance, Control, and Dynamics, 2015, 38, 1935-1946.	2.8	8
23	Probabilistic model validation for uncertain nonlinear systems. Automatica, 2014, 50, 2038-2050.	5.0	15
24	Probabilistic robustness analysis of F-16 controller performance: An optimal transport approach. , 2013, , .		3
25	Nonlinear filtering with transfer operator. , 2013, , .		4
26	Frequency domain model validation in Wasserstein metric. , 2013, , .		1
27	Further results on probabilistic model validation in Wasserstein metric. , 2012, , .		13
28	Uncertainty quantification for stochastic nonlinear systems using Perron-Frobenius operator and Karhunen-Loève expansion. , 2012, , .		11
29	Model validation: A probabilistic formulation. , 2011, , .		16
30	Dispersion Analysis in Hypersonic Flight During Planetary Entry Using Stochastic Liouville Equation. Journal of Guidance, Control, and Dynamics, 2011, 34, 459-474.	2.8	79
31	Beyond Monte Carlo: A Computational Framework for Uncertainty Propagation in Planetary Entry, Descent and Landing. , 2010, , .		17
32	Leader-follower dynamics for unicycles. , 2009, , .		0
33	FLIER: A Novel Sensor Fusion Algorithm. , 2008, , .		2