Abhishek Halder

List of Publications by Year
in descending order

33 papers	375 citations	1163117 8 h-index	1281871 11 g-index
33 all docs	33 docs citations	33 times ranked	183 citing authors

#	Article	IF	Citations
1	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
2	Finite horizon linear quadratic Gaussian density regulator with Wasserstein terminal cost. , 2016, , .		40
3	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
4	On the Parameterized Computation of Minimum Volume Outer Ellipsoid of Minkowski Sum of Ellipsoids. , 2018, , .		21
5	Beyond Monte Carlo: A Computational Framework for Uncertainty Propagation in Planetary Entry, Descent and Landing. , 2010, , .		17
6	Model validation: A probabilistic formulation. , 2011, , .		16
7	Probabilistic model validation for uncertain nonlinear systems. Automatica, 2014, 50, 2038-2050.	5.0	15
8	Gradient Flow Algorithms for Density Propagation in Stochastic Systems. IEEE Transactions on Automatic Control, 2020, 65, 3991-4004.	5.7	14
9	Further results on probabilistic model validation in Wasserstein metric. , 2012, , .		13
10	Stability Theory of Stochastic Models in Opinion Dynamics. IEEE Transactions on Automatic Control, 2020, 65, 522-533.	5.7	13
11	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
12	Uncertainty quantification for stochastic nonlinear systems using Perron-Frobenius operator and Karhunen-Loève expansion. , 2012, , .		11
13	Gradient flows in uncertainty propagation and filtering of linear Gaussian systems. , 2017, , .		11
14	Gradient Flows in Filtering and Fisher-Rao Geometry. , 2018, , .		11
15	Optimal Transport Approach for Probabilistic Robustness Analysis of F-16 Controllers. Journal of Guidance, Control, and Dynamics, 2015, 38, 1935-1946.	2.8	8
16	Proximal Recursion for Solving the Fokker-Planck Equation. , 2019, , .		8
17	Smallest Ellipsoid Containing p-Sum of Ellipsoids With Application to Reachability Analysis. IEEE Transactions on Automatic Control, 2021, 66, 2512-2525.	5.7	8
18	The Convex Geometry of Integrator Reach Sets. , 2020, , .		8

#	Article	IF	Citations
19	Finite Horizon Density Steering for Multi-input State Feedback Linearizable Systems. , 2020, , .		8
20	Optimal Control of Thermostatic Loads for Planning Aggregate Consumption: Characterization of Solution and Explicit Strategies. , 2019, 3, 877-882.		5
21	Nonlinear filtering with transfer operator. , 2013, , .		4
22	Proximal Recursion for the Wonham Filter. , 2019, , .		4
23	Prediction and Optimal Feedback Steering of Probability Density Functions for Safe Automated Driving. , 2021, 5, 2168-2173.		4
24	Probabilistic robustness analysis of F-16 controller performance: An optimal transport approach. , 2013, , .		3
25	Optimal power consumption for demand response of thermostatically controlled loads. Optimal Control Applications and Methods, 2019, 40, 68-84.	2.1	3
26	Hopfield Neural Network Flow: A Geometric Viewpoint. IEEE Transactions on Neural Networks and Learning Systems, 2020, 31, 4869-4880.	11.3	3
27	Certifying the Intersection of Reach Sets of Integrator Agents with Set-valued Input Uncertainties. , 2022, , 1-1.		3
28	FLIER: A Novel Sensor Fusion Algorithm. , 2008, , .		2
29	DeGrootâ€"Friedkin Map in Opinion Dynamics Is Mirror Descent. , 2019, 3, 463-468.		2
30	Opinion Dynamics over Influence Networks. , 2019, , .		2
31	Density-Based Stochastic Reachability Computation for Occupancy Prediction in Automated Driving. IEEE Transactions on Control Systems Technology, 2022, 30, 2406-2419.	5.2	2
32	Frequency domain model validation in Wasserstein metric. , 2013, , .		1
33	Leader-follower dynamics for unicycles. , 2009, , .		0