

Karthik Elamvazhuthi

List of Publications by Year in descending order

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Version: 2024-02-01

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papers

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docs citations

20
times ranked

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citing authors

#	ARTICLE	IF	CITATIONS
1	Neural ODE Control for Trajectory Approximation of Continuity Equation. , 2022, 6, 3152-3157.		1
2	Stabilization of Nonlinear Discrete-Time Systems to Target Measures Using Stochastic Feedback Laws. IEEE Transactions on Automatic Control, 2021, 66, 1957-1972.	5.7	4
3	Controllability and decentralized stabilization of the Kolmogorov forward equation for Markov chains. Automatica, 2021, 124, 109351.	5.0	2
4	Controllability and Stabilization for Herding a Robotic Swarm Using a Leader: A Mean-Field Approach. IEEE Transactions on Robotics, 2021, 37, 418-432.	10.3	12
5	Mean-field models in swarm robotics: a survey. Bioinspiration and Biomimetics, 2020, 15, 015001.	2.9	55
6	Spectral Gap Optimization of Divergence Type Diffusion Operators. , 2020, , .		1
7	Optimal Transport Over Deterministic Discrete-Time Nonlinear Systems Using Stochastic Feedback Laws. , 2019, 3, 168-173.		12
8	Fastest Mixing Markov Chain on a Compact Manifold. , 2019, , .		3
9	Bilinear Controllability of a Class of Advectionâ€“Diffusionâ€“Reaction Systems. IEEE Transactions on Automatic Control, 2019, 64, 2282-2297.	5.7	16
10	Mean-Field Stabilization of Markov Chain Models for Robotic Swarms: Computational Approaches and Experimental Results. IEEE Robotics and Automation Letters, 2018, 3, 1985-1992.	5.1	10
11	Performance Bounds on Spatial Coverage Tasks by Stochastic Robotic Swarms. IEEE Transactions on Automatic Control, 2018, 63, 1563-1578.	5.7	11
12	Nonlinear Generalizations of Diffusion-Based Coverage by Robotic Swarms. , 2018, , .		6
13	Mean-Field Stabilization of Robotic Swarms to Probability Distributions with Disconnected Supports. , 2018, , .		5
14	PDE-based optimization for stochastic mapping and coverage strategies using robotic ensembles. Automatica, 2018, 95, 356-367.	5.0	25
15	Decentralized stochastic control of robotic swarm density: Theory, simulation, and experiment. , 2017, , .		18
16	Controllability to equilibria of the 1-D fokker-planck equation with zero-flux boundary condition. , 2017, , .		2
17	Mean-field controllability and decentralized stabilization of Markov chains. , 2017, , .		11
18	Confinement control of double integrators using partially periodic leader trajectories. , 2016, , .		2

#	ARTICLE	IF	CITATIONS
19	Coverage and field estimation on bounded domains by diffusive swarms. , 2016, , .		11
20	Optimal control of stochastic coverage strategies for robotic swarms. , 2015, , .		22