Bai Xue

List of Publications by Year
in descending order

31 papers	220 citations	1163117 8 h-index	1125743 13 g-index
31 all docs	31 docs citations	31 times ranked	82 citing authors

#	Article	IF	Citations
1	Robust Invariant Sets Computation for Discrete-Time Perturbed Nonlinear Systems. IEEE Transactions on Automatic Control, 2022, 67, 1053-1060.	5.7	4
2	Towards practical robustness analysis for DNNs based on PAC-model learning. , 2022, , .		7
3	Over- and Underapproximating Reach Sets for Perturbed Delay Differential Equations. IEEE Transactions on Automatic Control, 2021, 66, 283-290.	5.7	8
4	Consensus Control for Heterogeneous Multivehicle Systems: An Iterative Learning Approach. IEEE Transactions on Neural Networks and Learning Systems, 2021, 32, 5356-5368.	11.3	11
5	Synthesizing Invariant Barrier Certificates via Difference-of-Convex Programming. Lecture Notes in Computer Science, 2021, , 443-466.	1.3	2
6	Switching controller synthesis for delay hybrid systems under perturbations. , 2021, , .		2
7	Reach-avoid Analysis for Stochastic Discrete-time Systems. , 2021, , .		2
8	Improving Neural Network Verification through Spurious Region Guided Refinement. Lecture Notes in Computer Science, 2021, , 389-408.	1.3	13
9	Synthesizing Robust Domains of Attraction for State-Constrained Perturbed Polynomial Systems. SIAM Journal on Control and Optimization, 2021, 59, 1083-1108.	2.1	1
10	Reach-Avoid Analysis for Delay Differential Equations. , 2021, , .		0
11	Inner-Approximating Reachable Sets for Polynomial Systems With Time-Varying Uncertainties. IEEE Transactions on Automatic Control, 2020, 65, 1468-1483.	5.7	28
12	PAC Model Checking of Black-Box Continuous-Time Dynamical Systems. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2020, 39, 3944-3955.	2.7	10
13	Safety Verification for Random Ordinary Differential Equations. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2020, 39, 4090-4101.	2.7	2
14	Nonlinear Craig Interpolant Generation. Lecture Notes in Computer Science, 2020, , 415-438.	1.3	6
15	Unbounded-Time Safety Verification of Stochastic Differential Dynamics. Lecture Notes in Computer Science, 2020, , 327-348.	1.3	5
16	A Characterization of Robust Regions of Attraction for Discrete-Time Systems Based on Bellman Equations. IFAC-PapersOnLine, 2020, 53, 6390-6397.	0.9	3
17	Inner-approximating Reach-avoid Sets for Discrete-time Polynomial Systems. , 2020, , .		5
18	PAC Learning of Deterministic One-Clock Timed Automata. Lecture Notes in Computer Science, 2020, , 129-146.	1.3	0

#	Article	IF	Citations
19	Robust Regions of Attraction Generation for State-Constrained Perturbed Discrete-Time Polynomial Systems. IFAC-PapersOnLine, 2020, 53, 6327-6333.	0.9	2
20	Probably Approximately Correct Interpolants Generation. Lecture Notes in Computer Science, 2020, , 143-159.	1.3	1
21	Robust invariant sets generation for state-constrained perturbed polynomial systems. , 2019, , .		13
22	Safe Inputs Approximation for Black-Box Systems. , 2019, , .		3
23	Probably Approximate Safety Verification of Hybrid Dynamical Systems. Lecture Notes in Computer Science, 2019, , 236-252.	1.3	4
24	Taming Delays in Dynamical Systems. Lecture Notes in Computer Science, 2019, , 650-669.	1.3	5
25	Robust Non-termination Analysis of Numerical Software. Lecture Notes in Computer Science, 2018, , 69-88.	1.3	1
26	Underapproximating Backward Reachable Sets by Semialgebraic Sets. IEEE Transactions on Automatic Control, 2017, 62, 5185-5197.	5.7	14
27	Reach-Avoid Verification for Nonlinear Systems Based on Boundary Analysis. IEEE Transactions on Automatic Control, 2017, 62, 3518-3523.	5.7	26
28	Just scratching the surface: Partial exploration of initial values in reach-set computation. , 2017, , .		4
29	Safe Over- and Under-Approximation of Reachable Sets for Delay Differential Equations. Lecture Notes in Computer Science, 2017, , 281-299.	1.3	13
30	Under-Approximating Backward Reachable Sets by Polytopes. Lecture Notes in Computer Science, 2016, , 457-476.	1.3	24
31	Temporal Logic Verification for Delay Differential Equations. Lecture Notes in Computer Science, 2016, , 405-421.	1.3	1