Yinyan Zhang

List of Publications by Year
in descending order

71 papers	1,756 citations	279798 23 h-index	276875 41 g-index
74 all docs	74 docs citations	74 times ranked	998 citing authors

#	Article	IF	Citations
1	GNN Model for Time-Varying Matrix Inversion With Robust Finite-Time Convergence. IEEE Transactions on Neural Networks and Learning Systems, 2024, 35, 559-569.	11.3	8
2	Initialization-Based k-Winners-Take-All Neural Network Model Using Modified Gradient Descent. IEEE Transactions on Neural Networks and Learning Systems, 2023, 34, 4130-4138.	11.3	19
3	Dynamic Mooreâ€“Penrose Inversion With Unknown Derivatives: Gradient Neural Network Approach. IEEE Transactions on Neural Networks and Learning Systems, 2023, 34, 10919-10929.	11.3	11
4	Distributed k-Winners-Take-All Network: An Optimization Perspective. IEEE Transactions on Cybernetics, 2023, 53, 5069-5081.	9.5	8
5	Distributed Estimation of Algebraic Connectivity. IEEE Transactions on Cybernetics, 2022, 52, 3047-3056.	9.5	10
6	Learning and Near-Optimal Control of Underactuated Surface Vessels With Periodic Disturbances. IEEE Transactions on Cybernetics, 2022, 52, 7453-7463.	9.5	15
7	Tri-Projection Neural Network for Redundant Manipulators. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 4879-4883.	3.0	8
8	Consensus of High-Order Discrete-Time Multiagent Systems With Switching Topology. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 721-730.	9.3	27
9	Input Delay Estimation for Input-Affine Dynamical Systems Based on Taylor Expansion. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 1298-1302.	3.0	2
10	Distributed Near-Optimal Consensus of Double-Integrator Multi-Agent Systems With Input Constraints. , 2021, , .		0
11	Distributed Connectivity Maximization for Networked Mobile Robots with Collision Avoidance. , 2021, , .		0
12	A Passivity-Based Approach for Kinematic Control of Manipulators With Constraints. IEEE Transactions on Industrial Informatics, 2020, 16, 3029-3038.	11.3	30
13	Machine Behavior Design And Analysis. , 2020, , .		0
14	Analysis and design of a distributed <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e178" altimg="si114.svg"><mml:mi>k</mml:mi></mml:math>-winners-take-all model. Automatica, 2020, 115, 108868.	5.0	17
15	A Survey of Near-Optimal Control of Nonlinear Systems. Studies in Systems, Decision and Control, 2020, , 1-20.	1.0	4
16	Model-Free Adaptive Near-Optimal Tracking Control. Studies in Systems, Decision and Control, 2020, , 129-165.	1.0	1
17	Near-Optimal Control with Input Saturation. Studies in Systems, Decision and Control, 2020, , 21-48.	1.0	0
18	Adaptive Near-Optimal Control Using Sliding Mode. Studies in Systems, Decision and Control, 2020, , 97-128.	1.0	0

#	Article	IF	Citations
19	Adaptive Near-Optimal Control with Full-State Feedback. Studies in Systems, Decision and Control, 2020, , 49-95.	1.0	0
20	Adaptive Kinematic Control of Redundant Manipulators. Studies in Systems, Decision and Control, 2020, , 167-197.	1.0	1
21	Redundancy Resolution with Periodic Input Disturbance. Studies in Systems, Decision and Control, 2020, , 199-225.	1.0	0
22	Continuous-Time Biased Min-Consensus. , 2020, , 45-71.		0
23	Second-Order Min-Consensus. , 2020, , 5-19.		0
24	Biased Consensus Based Distributed Neural Network. , 2020, , 97-124.		0
25	Near-Optimal Consensus. , 2020, , 125-156.		0
26	Discrete-Time Biased Min-Consensus. , 2020, , 73-96.		0
27	Near-Optimal Consensus of Multi-Dimensional Double-Integrator Multi-Agent Systems. , 2020, , .		0
28	Recurrent Neural Network for Kinematic Control of Redundant Manipulators With Periodic Input Disturbance and Physical Constraints. IEEE Transactions on Cybernetics, 2019, 49, 4194-4205.	9.5	77
29	Near-optimal control of nonlinear dynamical systems: A brief survey. Annual Reviews in Control, 2019, 47, 71-80.	7.9	43
30	Recurrent-Neural-Network-Based Velocity-Level Redundancy Resolution for Manipulators Subject to a Joint Acceleration Limit. IEEE Transactions on Industrial Electronics, 2019, 66, 3573-3582.	7.9	55
31	Near-Optimal Control Without Solving HJB Equations and Its Applications. IEEE Transactions on Industrial Electronics, 2018, 65, 7173-7184.	7.9	22
32	A Neural Controller for Image-Based Visual Servoing of Manipulators With Physical Constraints. IEEE Transactions on Neural Networks and Learning Systems, 2018, 29, 5419-5429.	11.3	57
33	Time-Scale Expansion-Based Approximated Optimal Control for Underactuated Systems Using Projection Neural Networks. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2018, 48, 1957-1967.	9.3	39
34	Adaptive Near-Optimal Control of Uncertain Systems With Application to Underactuated Surface Vessels. IEEE Transactions on Control Systems Technology, 2018, 26, 1204-1218.	5.2	54
35	Neural Networks Based Single Robot Arm Control for Visual Servoing. SpringerBriefs in Applied Sciences and Technology, 2018, , 1-11.	0.4	0
36	Neural Networks for Robot Arm Cooperation with a Star Control Topology. SpringerBriefs in Applied Sciences and Technology, 2018, , 13-30.	0.4	0

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37	Neural Networks for Robot Arm Cooperation with a Full Distributed Control Topology. SpringerBriefs in Applied Sciences and Technology, 2018, , 49-74.	0.4	0
38	Adaptive Projection Neural Network for Kinematic Control of Redundant Manipulators With Unknown Physical Parameters. IEEE Transactions on Industrial Electronics, 2018, 65, 4909-4920.	7.9	96
39	Tracking Control of Robot Manipulators with Unknown Models: A Jacobian-Matrix-Adaption Method. IEEE Transactions on Industrial Informatics, 2018, 14, 3044-3053.	11.3	148
40	Velocity-Level Control With Compliance to Acceleration-Level Constraints: A Novel Scheme for Manipulator Redundancy Resolution. IEEE Transactions on Industrial Informatics, 2018, 14, 921-930.	11.3	69
41	Second-order min-consensus on switching topology. Automatica, 2018, 96, 293-297.	5.0	25
42	Neural Network-Based Model-Free Adaptive Near-Optimal Tracking Control for a Class of Nonlinear Systems. IEEE Transactions on Neural Networks and Learning Systems, 2018, 29, 6227-6241.	11.3	35
43	Division by zero, pseudo-division by zero, Zhang dynamics method and Zhang-gradient method about control singularity conquering. International Journal of Systems Science, 2017, 48, 1-12.	5.5	79
44	From Davidenko Method to Zhang Dynamics for Nonlinear Equation Systems Solving. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2017, 47, 2817-2830.	9.3	45
45	Noise-Tolerant ZNN Models for Solving Time-Varying Zero-Finding Problems: A Control-Theoretic Approach. IEEE Transactions on Automatic Control, 2017, 62, 992-997.	5.7	166
46	Predictive Suboptimal Consensus of Multiagent Systems With Nonlinear Dynamics. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2017, 47, 1701-1711.	9.3	56
47	Signum-function array activated ZNN with easier circuit implementation and finite-time convergence for linear systems solving. Information Processing Letters, 2017, 124, 30-34.	0.6	23
48	Distributed Biased Min-Consensus With Applications to Shortest Path Planning. IEEE Transactions on Automatic Control, 2017, 62, 5429-5436.	5.7	75
49	A type of biased consensus-based distributed neural network for path planning. Nonlinear Dynamics, 2017, 89, 1803-1815.	5.2	33
50	Adaptive near-optimal consensus of high-order nonlinear multi-agent systems with heterogeneity. Automatica, 2017, 85, 426-432.	5.0	46
51	Perturbing consensus for complexity: A finite-time discrete biased min-consensus under time-delay and asynchronism. Automatica, 2017, 85, 441-447.	5.0	13
52	A dynamic neural controller for adaptive optimal control of permanent magnet DC motors. , 2017, , .		2
53	Nonlinearly activated neural network for solving dynamic complex-valued matrix pseudoinverse. , 2017, , .		0
54	Further Investigations on Noise-Tolerant Zeroing Neural Network for Time-Varying Quadratic Programming with Robotic Applications. , 2017, , .		2

#	Article	IF	Citations
55	A recurrent neural network approach for visual servoing of manipulators. , 2017, , .		14
56	Porcellio scaber algorithm (PSA) for solving constrained optimization problems. MATEC Web of Conferences, 2017, 139, 00033.	0.2	3
57	Sigmoid function array based ZG control for bounded input, energy saving and output tracking of time-invariant linear system. , 2016, , .		0
58	Robot 1LpMD system output control using ZD method with four-state space representation. , 2016, , .		0
59	Z-type control of populations for Lotkaâ€“Volterra model with exponential convergence. Mathematical Biosciences, 2016, 272, 15-23.	1.9	37
60	Modified ZNN for Time-Varying Quadratic Programming With Inherent Tolerance to Noises and Its Application to Kinematic Redundancy Resolution of Robot Manipulators. IEEE Transactions on Industrial Electronics, 2016, 63, 6978-6988.	7.9	194
61	Optimal parameter value of Zhang equivalence for MVN redundancy resolution at velocity and acceleration levels. , 2016, , .		1
62	Tracking control of modified Lorenz nonlinear system using ZG neural dynamics with additive input or mixed inputs. Neurocomputing, 2016, 196, 82-94.	5.9	43
63	GD-aided IOL (inputâ€“output linearisation) controller for handling affine-form nonlinear system with loose condition on relative degree. International Journal of Control, 2016, 89, 757-769.	1.9	17
64	ZG control for 2-output tracking of 3-input nonlinear system with GD used additionally twice more. , 2015, , .		3
65	Spot hover control of helicopter and swing control of helicopter sling load by using Zhang-gradient method. , 2015, , .		4
66	Synchronization of two chaotic systems with three or two inputs via ZG method. , 2015, , .		1
67	ZG stabilization and tracking control for bilinear system of u-integration type. , 2015, , .		8
68	ZG tracking control of 3-input 3-output nonlinear system with GD used additionally once more. , 2015, , .		2
69	Tracking and stabilizing Chen chaotic system via one multiplicative coefficient as Zhang-gradient control input. , 2015, , .		3
70	ZG Control of Populations of Lotka-Volterra Equations Using Interaction Coefficients as Inputs. , 2014, , .		0
71	Consensus of High-Order Discrete-Time Multiagent Systems With Switching Topology. , 0, .		1