Haibo Du

List of Publications by Year
in descending order

112 papers	5,721 citations	126907 33 h-index	85541 71 g-index
113 all docs	113 docs citations	113 times ranked	3207 citing authors

#	ARTICLE	IF	CITATIONS
1	Neural network-based robust finite-time attitude stabilization for rigid spacecraft under angular velocity constraint. Neural Computing and Applications, 2022, 34, 5107-5117.	5.6	7
2	Robust discrete-time non-smooth consensus protocol for multi-agent systems via super-twisting algorithm. Applied Mathematics and Computation, 2022, 413, 126636.	2.2	1
3	On event‐triggered nonsmooth attitude tracking controller for a rigid spacecraft. International Journal of Robust and Nonlinear Control, 2022, 32, 900-916.	3.7	6
4	Nonsmooth Observer-Based Sensorless Speed Control for Permanent Magnet Synchronous Motor. IEEE Transactions on Industrial Electronics, 2022, 69, 13514-13523.	7.9	9
5	Analysis and control of complex cyber‐physical networks. Asian Journal of Control, 2022, 24, 495-497.	3.0	1
6	Design and Implementation of Bounded Finite-Time Control Algorithm for Speed Regulation of Permanent Magnet Synchronous Motor. IEEE Transactions on Industrial Electronics, 2021, 68, 2417-2426.	7.9	45
7	Global Event-Triggered Output Feedback Stabilization of a Class of Nonlinear Systems. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 4040-4047.	9.3	28
8	Autonomous Obstacle Navigating System of Quadrotor UAV Based on Vision Positioning and Cascade Control Algorithm. , 2021, , .		0
9	Indoor positioning system based on multi-camera joint calibration. , 2021, , .		2
10	Robust adaptive finite‐time trajectory tracking control of a quadrotor aircraft. International Journal of Robust and Nonlinear Control, 2021, 31, 8030-8054.	3.7	14
11	Homogeneous constrained finite-time controller for double integrator systems: Analysis and experiment. Automatica, 2021, 134, 109894.	5.0	11
12	Design of Output-Based Finite-Time Convergent Composite Controller for a Class of Perturbed Second-Order Nonlinear Systems. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 6768-6778.	9.3	15
13	Current-constrained finite-time control algorithm for DC-DC Buck converter. Journal of the Franklin Institute, 2021, 358, 9467-9467.	3.4	2
14	Research on finite-time consensus algorithm for second-order multi-agent systems under sampled-data control. , 2021, , .		0
15	Active finite-time disturbance rejection control for attitude tracking of quad-rotor under input saturation. Journal of the Franklin Institute, 2020, 357, 11153-11170.	3.4	22
16	Fixed-time attitude stabilization for a rigid spacecraft. ISA Transactions, 2020, 98, 263-270.	5.7	37
17	Position control for permanent magnet synchronous motor based on neural network and terminal sliding mode control. Transactions of the Institute of Measurement and Control, 2020, 42, 1632-1640.	1.7	19
18	Design of Robust Discretized Sliding Mode Controller: Analysis and Application to Buck Converters. IEEE Transactions on Industrial Electronics, 2020, 67, 10672-10681.	7.9	18

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19	Distributed fixed-time consensus for nonlinear heterogeneous multi-agent systems. Automatica, 2020, 113, 108797.	5.0	173
20	Universal finite-time observer based second-order sliding mode control for DC-DC buck converters with only output voltage measurement. Journal of the Franklin Institute, 2020, 357, 11863-11879.	3.4	17
21	Current-constrained Finite-time Control Algorithm for Buck Converter. , 2020, , .		0
22	Attitude trajectory planning and attitude control for quad-rotor aircraft based on finite-time control technique. Applied Mathematics and Computation, 2020, 386, 125493.	2.2	8
23	Finite-time Leaderless Consensus of Second-order Multi-agent Systems With Velocity and Input Constraints. , 2020, , .		2
24	Implementation of integral fixed-time sliding mode controller for speed regulation of PMSM servo system. Nonlinear Dynamics, 2020, 102, 185-196.	5.2	16
25	Speed Regulation for PMSM Based on Fixed-time Sliding Mode Control. , 2020, , .		1
26	Designing Discrete-Time Sliding Mode Controller With Mismatched Disturbances Compensation. IEEE Transactions on Industrial Informatics, 2020, 16, 4109-4118.	11.3	35
27	Formation control for multiquadrotor aircraft: Connectivity preserving and collision avoidance. International Journal of Robust and Nonlinear Control, 2020, 30, 2352-2366.	3.7	22
28	Finite-Time Consensus for Power Regulation of Parallel PV Grid-Connected Inverters. IEEE Transactions on Circuits and Systems II: Express Briefs, 2020, 67, 2632-2636.	3.0	4
29	Research on Angle Steel Tower Climbing Robot System Based on Digital Twin. , 2020, , .		3
30	Flying velocity constraint control for quad-rotor system based on finite-Time control technique. , 2020, , .		0
31	A Coupled Finite-Time Attitude Controller and Finite-Time Observer with an Unknown Constant Drift Bias. , 2020, , .		0
32	Chattering-Free Discrete-time Fast Terminal Sliding Mode Control of Automotive Electronic Throttle with Disturbances. , 2020, , .		2
33	Design and Analysis of Nonlinear Constrained Control Algorithm for Rigid Aircraft. IFAC-PapersOnLine, 2020, 53, 476-478.	0.9	0
34	Global finite-time attitude stabilization for spacecraft under velocity constraint. , 2020, , .		1
35	Research on trajectory planning method of dual-arm robot based on ROS. , 2020, , .		1
36	Gait Planning of Quadruped Robot Based on ROS. , 2020, , .		2

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37	Current Sharing Control for Parallel DC–DC Buck Converters Based on Finite-Time Control Technique. IEEE Transactions on Industrial Informatics, 2019, 15, 2186-2198.	11.3	67
38	Intelligent station area recognition technology based on NB-IoT and SVM. , 2019, , .		4
39	Observer‐based finite‐time output‐feedback controller for DC‐DC buck converters with unknown load variations. International Journal of Robust and Nonlinear Control, 2019, 29, 5274-5289.	3.7	1
40	Position tracking control for permanent magnet linear motor via fast nonsingular terminal sliding mode control. Nonlinear Dynamics, 2019, 97, 2595-2605.	5.2	30
41	Integral Active Finite-time Disturbance Rejection Control for Attitude Tracking of Quad-rotor. , 2019, , .		0
42	Globally exponential stabilization for a class of nonlinear systems with time delays both in nonlinearities and input. Applied Mathematics and Computation, 2019, 359, 478-489.	2.2	6
43	Application research on improved CGAN in image raindrop removal. Journal of Engineering, 2019, 2019, 8404-8408.	1.1	3
44	Observer-Based Output Feedback Stabilization for Perturbed Second-Order Uncertain System with Finite-Time Convergence. , 2019, , .		1
45	Robustness Analysis of a Continuous Higher Order Finite-Time Control System Under Sampled-Data Control. IEEE Transactions on Automatic Control, 2019, 64, 2488-2494.	5.7	47
46	Fixed-Time Synchronization Control for a Class of Master–Slave Systems Based on Homogeneous Method. IEEE Transactions on Circuits and Systems II: Express Briefs, 2019, 66, 1547-1551.	3.0	41
47	Global sampled-data output feedback stabilization for a class of uncertain nonlinear systems. Automatica, 2019, 99, 403-411.	5.0	111
48	Distributed Formation Control of Multiple Quadrotor Aircraft Based on Nonsmooth Consensus Algorithms. IEEE Transactions on Cybernetics, 2019, 49, 342-353.	9.5	225
49	Synchronization of nonlinear networked agents under event-triggered control. Information Sciences, 2018, 459, 317-326.	6.9	30
50	Discrete-Time Fast Terminal Sliding Mode Control for Permanent Magnet Linear Motor. IEEE Transactions on Industrial Electronics, 2018, 65, 9916-9927.	7.9	197
51	Circulating Current Suppression of Parallel Photovoltaic Grid-Connected Converters. IEEE Transactions on Circuits and Systems II: Express Briefs, 2018, 65, 1214-1218.	3.0	25
52	Fixed‐Time Synchronization of a Class of Second‐Order Nonlinear Leader‐Following Multi‐Agent Systems. Asian Journal of Control, 2018, 20, 39-48.	3.0	28
53	Robust finite‐time consensus formation control for multiple nonholonomic wheeled mobile robots via output feedback. International Journal of Robust and Nonlinear Control, 2018, 28, 2082-2096.	3.7	59
54	Second-Order Sliding Mode Control of Nonlinear Systems with Nonvanishing Mismatched Disturbance. , 2018, , .		0

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55	Position Tracking Control for Permanent Magnet Linear Motor via Discrete-time Terminal Sliding Mode Control. , 2018, , .		0
56	Attitude Trajectory Planning and Finite-Time Attitude Tracking Control for a Quadrotor Aircraft. , 2018, , .		1
57	Position Tracking Control for Permanent Magnet Linear Motor via Continuous-Time Fast Terminal Sliding Mode Control. Journal of Control Science and Engineering, 2018, 2018, 1-6.	1.0	10
58	A Nested Saturated Second-order Sliding Mode Controller Design. , 2018, , .		1
59	Finite-time output feedback tracking control for a nonholonomic wheeled mobile robot. Aerospace Science and Technology, 2018, 78, 574-579.	4.8	28
60	Global finite-time attitude regulation using bounded feedback for a rigid spacecraft. Control Theory and Technology, 2017, 15, 26-33.	1.6	8
61	A Distributed Finite-Time Consensus Algorithm for Higher-Order Leaderless and Leader-Following Multiagent Systems. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2017, 47, 1625-1634.	9.3	139
62	Hovering control for quadrotor aircraft based on finite-time control algorithm. Nonlinear Dynamics, 2017, 88, 2359-2369.	5.2	46
63	Fast Adaptive Finite-Time Voltage Regulation Control Algorithm for a Buck Converter System. IEEE Transactions on Circuits and Systems II: Express Briefs, 2017, 64, 1082-1086.	3.0	38
64	Finite-time output feedback control for DC-DC buck power converters system. , 2017, , .		2
65	Finite-time formation control for a group of quadrotor aircraft. Aerospace Science and Technology, 2017, 69, 609-616.	4.8	87
66	Finite-time speed regulation control for permanent magnet synchronous motor system. , 2017, , .		2
67	Position tracking control for permanent magnet synchronous motor based on integral high-order terminal sliding mode control. , 2017, , .		5
68	Distributed Finite-Time Cooperative Control of Multiple High-Order Nonholonomic Mobile Robots. IEEE Transactions on Neural Networks and Learning Systems, 2017, 28, 2998-3006.	11.3	142
69	Global Stabilization for A Class of Nonlinear Systems with Time Delays via Sampled-Data Output Feedback * *This work is supported by the National Natural Science Foundation of China under grant nos. 61473080, 61673153, 61503078, 61628302 and 61504027, the NSF of Jiangsu Province (BK20140647), the Fundamental Research Funds for the Central Universities and the Priority Academic Program Development of Jiangsu Higher Education Institutions. IFAC-PapersOnLine, 2017, 50, 16040-16045.	0.9	0
70	Distributed formation control of multiple quadrotor aircraft based on quaternion. , 2017, , .		4
71	Current sharing control for parallel DC-DC buck converters based on consensus theory. , 2017, , .		6
72	Distributed Control of Networked Agent Systems: Theory and Applications. Journal of Control Science and Engineering, 2017, 2017, 1-2.	1.0	0

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73	Design and application of field equipment information acquisition system based on OPC. , 2017, , .		1
74	Finite-time consensus control for a group of quadrotor aircraft. , 2017, , .		2
75	Finite-time position tracking control of a quadrotor aircraft. , 2017, , .		3
76	Further results on finite‐time consensus of second‐order multi‐agent systems without velocity measurements. International Journal of Robust and Nonlinear Control, 2016, 26, 3170-3185.	3.7	33
77	Fixed-time synchronization of a class of second-order nonlinear multi-agent systems. , 2016, , .		4
78	Attitude synchronization for multiple heterogeneous spacecraft with communication delays. , 2016, , .		0
79	Finite-time formation control of multiple mobile robots. , 2016, , .		4
80	Control of a hovering quadrotor aircraft based finite-time attitude control algorithm. , 2016, , .		10
81	Second‐order consensus for nonlinear leader‐following multi‐agent systems via dynamic output feedback control. International Journal of Robust and Nonlinear Control, 2016, 26, 329-344.	3.7	56
82	Global Stabilization via Sampled-Data Output Feedback for a Class of Linearly Uncontrollable and Unobservable Systems. IEEE Transactions on Automatic Control, 2016, 61, 4088-4093.	5.7	46
83	Attitude Synchronization for Flexible Spacecraft With Communication Delays. IEEE Transactions on Automatic Control, 2016, 61, 3625-3630.	5.7	124
84	Chattering-free discrete-time sliding mode control. Automatica, 2016, 68, 87-91.	5.0	257
85	Analysis and Synthesis of Stochastic Nonlinear Systems. Mathematical Problems in Engineering, 2015, 2015, 1-2.	1.1	0
86	Pinning synchronization of complex networks with Lur'e-type nodes and directed switching topology. , 2015, , .		0
87	Synchronization of a class of nonlinear multi-agent systems with sampled-data information. Nonlinear Dynamics, 2015, 82, 1483-1492.	5.2	12
88	Robust finite-time synchronization of coupled harmonic oscillations with external disturbance. Journal of the Franklin Institute, 2015, 352, 4366-4381.	3.4	21
89	Global finite-time stabilization of second-order systems subject to mismatched disturbances with application to consensus. , 2015, , .		0
90	Finite-time consensus of multiple nonholonomic chained-form systems based on recursive distributed observer. Automatica, 2015, 62, 236-242.	5.0	162

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91	Analysis of the effect of sampled-data control on continuous finite-time control systems. , 2014, , .		2
92	Finite-time attitude regulation control for a rigid spacecraft under input saturation. , 2014, , .		4
93	Finite‐time formation control of multiple nonholonomic mobile robots. International Journal of Robust and Nonlinear Control, 2014, 24, 140-165.	3.7	169
94	Attitude synchronization control for a group of flexible spacecraft. Automatica, 2014, 50, 646-651.	5.0	157
95	Discrete-Time Terminal Sliding Mode Control Systems Based on Euler's Discretization. IEEE Transactions on Automatic Control, 2014, 59, 546-552.	5.7	163
96	Finite-Time Synchronization of a Class of Second-Order Nonlinear Multi-Agent Systems Using Output Feedback Control. IEEE Transactions on Circuits and Systems I: Regular Papers, 2014, 61, 1778-1788.	5.4	213
97	A generalised homogeneous solution for global stabilisation of a class of non-smooth upper-triangular systems. International Journal of Control, 2014, 87, 951-963.	1.9	19
98	Finite-time output feedback control for a class of second-order nonlinear systems with application to DC–DC buck converters. Nonlinear Dynamics, 2014, 78, 2021-2030.	5.2	27
99	Finite-time tracking control for a class of high-order nonlinear systems and its applications. Nonlinear Dynamics, 2014, 76, 1133-1140.	5.2	36
100	Global stabilization of a class of uncertain upper‐triangular systems under sampled‐data control. International Journal of Robust and Nonlinear Control, 2013, 23, 620-637.	3.7	49
101	Finite‐time formation control of multiagent systems via dynamic output feedback. International Journal of Robust and Nonlinear Control, 2013, 23, 1609-1628.	3.7	82
102	Recursive design of finite-time convergent observers for a class of time-varying nonlinear systems. Automatica, 2013, 49, 601-609.	5.0	149
103	Global sampled‐data output feedback stabilisation of a class of upper‐triangular systems with input delay. IET Control Theory and Applications, 2013, 7, 1437-1446.	2.1	31
104	Finite-time consensus tracking of multiple coupled harmonic oscillations via bounded control. , 2013, , .		1
105	Global Output Feedback Stabilization of a Class of Nonlinear Systems via Linear Sampled-Data Control. IEEE Transactions on Automatic Control, 2012, 57, 2934-2939.	5.7	194
106	Global output feedback stabilization of a class of upper-triangular systems with input delay. , 2012, , .		2
107	Robust consensus algorithm for second-order multi-agent systems with external disturbances. International Journal of Control, 2012, 85, 1913-1928.	1.9	98
108	Finite-Time Attitude Stabilization for a Spacecraft Using Homogeneous Method. Journal of Guidance, Control, and Dynamics, 2012, 35, 740-748.	2.8	188

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109	A genuine nonlinear approach for controller design of a boiler–turbine system. ISA Transactions, 2012, 51, 446-453.	5.7	18
110	A semi-global finite-time convergent observer for a class of nonlinear systems with bounded trajectories. Nonlinear Analysis: Real World Applications, 2012, 13, 1827-1836.	1.7	20
111	Finite-Time Attitude Tracking Control of Spacecraft With Application to Attitude Synchronization. IEEE Transactions on Automatic Control, 2011, 56, 2711-2717.	5.7	649
112	Finite-time consensus algorithm for multi-agent systems with double-integrator dynamics. Automatica, 2011, 47, 1706-1712.	5.0	788