Haibo Du

List of Publications by Year
in descending order

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112 papers	5,721 citations	126708 33 h-index	85405 71 g-index
113 all docs	113 docs citations	113 times ranked	3207 citing authors

#	Article	IF	Citations
1	Finite-time consensus algorithm for multi-agent systems with double-integrator dynamics. Automatica, 2011, 47, 1706-1712.	3.0	788
2	Finite-Time Attitude Tracking Control of Spacecraft With Application to Attitude Synchronization. IEEE Transactions on Automatic Control, 2011, 56, 2711-2717.	3.6	649
3	Chattering-free discrete-time sliding mode control. Automatica, 2016, 68, 87-91.	3.0	257
4	Distributed Formation Control of Multiple Quadrotor Aircraft Based on Nonsmooth Consensus Algorithms. IEEE Transactions on Cybernetics, 2019, 49, 342-353.	6.2	225
5	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.	3.5	213
6	Discrete-Time Fast Terminal Sliding Mode Control for Permanent Magnet Linear Motor. IEEE Transactions on Industrial Electronics, 2018, 65, 9916-9927.	5.2	197
7	Global Output Feedback Stabilization of a Class of Nonlinear Systems via Linear Sampled-Data Control. IEEE Transactions on Automatic Control, 2012, 57, 2934-2939.	3.6	194
8	Finite-Time Attitude Stabilization for a Spacecraft Using Homogeneous Method. Journal of Guidance, Control, and Dynamics, 2012, 35, 740-748.	1.6	188
9	Distributed fixed-time consensus for nonlinear heterogeneous multi-agent systems. Automatica, 2020, 113, 108797.	3.0	173
10	Finiteâ€time formation control of multiple nonholonomic mobile robots. International Journal of Robust and Nonlinear Control, 2014, 24, 140-165.	2.1	169
11	Discrete-Time Terminal Sliding Mode Control Systems Based on Euler's Discretization. IEEE Transactions on Automatic Control, 2014, 59, 546-552.	3.6	163
12	Finite-time consensus of multiple nonholonomic chained-form systems based on recursive distributed observer. Automatica, 2015, 62, 236-242.	3.0	162
13	Attitude synchronization control for a group of flexible spacecraft. Automatica, 2014, 50, 646-651.	3.0	157
14	Recursive design of finite-time convergent observers for a class of time-varying nonlinear systems. Automatica, 2013, 49, 601-609.	3.0	149
15	Distributed Finite-Time Cooperative Control of Multiple High-Order Nonholonomic Mobile Robots. IEEE Transactions on Neural Networks and Learning Systems, 2017, 28, 2998-3006.	7.2	142
16	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.	5.9	139
17	Attitude Synchronization for Flexible Spacecraft With Communication Delays. IEEE Transactions on Automatic Control, 2016, 61, 3625-3630.	3.6	124
18	Global sampled-data output feedback stabilization for a class of uncertain nonlinear systems. Automatica, 2019, 99, 403-411.	3.0	111

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19	Robust consensus algorithm for second-order multi-agent systems with external disturbances. International Journal of Control, 2012, 85, 1913-1928.	1.2	98
20	Finite-time formation control for a group of quadrotor aircraft. Aerospace Science and Technology, 2017, 69, 609-616.	2.5	87
21	Finiteâ€time formation control of multiagent systems via dynamic output feedback. International Journal of Robust and Nonlinear Control, 2013, 23, 1609-1628.	2.1	82
22	Current Sharing Control for Parallel DCâ€“DC Buck Converters Based on Finite-Time Control Technique. IEEE Transactions on Industrial Informatics, 2019, 15, 2186-2198.	7.2	67
23	Robust finiteâ€time consensus formation control for multiple nonholonomic wheeled mobile robots via output feedback. International Journal of Robust and Nonlinear Control, 2018, 28, 2082-2096.	2.1	59
24	Secondâ€order consensus for nonlinear leaderâ€following multiâ€agent systems via dynamic output feedback control. International Journal of Robust and Nonlinear Control, 2016, 26, 329-344.	2.1	56
25	Global stabilization of a class of uncertain upperâ€triangular systems under sampledâ€data control. International Journal of Robust and Nonlinear Control, 2013, 23, 620-637.	2.1	49
26	Robustness Analysis of a Continuous Higher Order Finite-Time Control System Under Sampled-Data Control. IEEE Transactions on Automatic Control, 2019, 64, 2488-2494.	3.6	47
27	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.	3.6	46
28	Hovering control for quadrotor aircraft based on finite-time control algorithm. Nonlinear Dynamics, 2017, 88, 2359-2369.	2.7	46
29	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.	5.2	45
30	Fixed-Time Synchronization Control for a Class of Masterâ€“Slave Systems Based on Homogeneous Method. IEEE Transactions on Circuits and Systems II: Express Briefs, 2019, 66, 1547-1551.	2.2	41
31	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.	2.2	38
32	Fixed-time attitude stabilization for a rigid spacecraft. ISA Transactions, 2020, 98, 263-270.	3.1	37
33	Finite-time tracking control for a class of high-order nonlinear systems and its applications. Nonlinear Dynamics, 2014, 76, 1133-1140.	2.7	36
34	Designing Discrete-Time Sliding Mode Controller With Mismatched Disturbances Compensation. IEEE Transactions on Industrial Informatics, 2020, 16, 4109-4118.	7.2	35
35	Further results on finiteâ€time consensus of secondâ€order multiâ€agent systems without velocity measurements. International Journal of Robust and Nonlinear Control, 2016, 26, 3170-3185.	2.1	33
36	Global sampledâ€data output feedback stabilisation of a class of upperâ€triangular systems with input delay. IET Control Theory and Applications, 2013, 7, 1437-1446.	1.2	31

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37	Synchronization of nonlinear networked agents under event-triggered control. Information Sciences, 2018, 459, 317-326.	4.0	30
38	Position tracking control for permanent magnet linear motor via fast nonsingular terminal sliding mode control. Nonlinear Dynamics, 2019, 97, 2595-2605.	2.7	30
39	Fixedâ€Time Synchronization of a Class of Secondâ€Order Nonlinear Leaderâ€Following Multiâ€Agent Systems. Asian Journal of Control, 2018, 20, 39-48.	1.9	28
40	Finite-time output feedback tracking control for a nonholonomic wheeled mobile robot. Aerospace Science and Technology, 2018, 78, 574-579.	2.5	28
41	Global Event-Triggered Output Feedback Stabilization of a Class of Nonlinear Systems. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 4040-4047.	5.9	28
42	Finite-time output feedback control for a class of second-order nonlinear systems with application to DCâ€“DC buck converters. Nonlinear Dynamics, 2014, 78, 2021-2030.	2.7	27
43	Circulating Current Suppression of Parallel Photovoltaic Grid-Connected Converters. IEEE Transactions on Circuits and Systems II: Express Briefs, 2018, 65, 1214-1218.	2.2	25
44	Active finite-time disturbance rejection control for attitude tracking of quad-rotor under input saturation. Journal of the Franklin Institute, 2020, 357, 11153-11170.	1.9	22
45	Formation control for multiquadrotor aircraft: Connectivity preserving and collision avoidance. International Journal of Robust and Nonlinear Control, 2020, 30, 2352-2366.	2.1	22
46	Robust finite-time synchronization of coupled harmonic oscillations with external disturbance. Journal of the Franklin Institute, 2015, 352, 4366-4381.	1.9	21
47	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.	0.9	20
48	A generalised homogeneous solution for global stabilisation of a class of non-smooth upper-triangular systems. International Journal of Control, 2014, 87, 951-963.	1.2	19
49	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.	1.1	19
50	A genuine nonlinear approach for controller design of a boilerâ€“turbine system. ISA Transactions, 2012, 51, 446-453.	3.1	18
51	Design of Robust Discretized Sliding Mode Controller: Analysis and Application to Buck Converters. IEEE Transactions on Industrial Electronics, 2020, 67, 10672-10681.	5.2	18
52	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.	1.9	17
53	Implementation of integral fixed-time sliding mode controller for speed regulation of PMSM servo system. Nonlinear Dynamics, 2020, 102, 185-196.	2.7	16
54	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.	5.9	15

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55	Robust adaptive finiteâ€time trajectory tracking control of a quadrotor aircraft. International Journal of Robust and Nonlinear Control, 2021, 31, 8030-8054.	2.1	14
56	Synchronization of a class of nonlinear multi-agent systems with sampled-data information. Nonlinear Dynamics, 2015, 82, 1483-1492.	2.7	12
57	Homogeneous constrained finite-time controller for double integrator systems: Analysis and experiment. Automatica, 2021, 134, 109894.	3.0	11
58	Control of a hovering quadrotor aircraft based finite-time attitude control algorithm. , 2016, , .		10
59	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.	0.8	10
60	Nonsmooth Observer-Based Sensorless Speed Control for Permanent Magnet Synchronous Motor. IEEE Transactions on Industrial Electronics, 2022, 69, 13514-13523.	5.2	9
61	Global finite-time attitude regulation using bounded feedback for a rigid spacecraft. Control Theory and Technology, 2017, 15, 26-33.	1.0	8
62	Attitude trajectory planning and attitude control for quad-rotor aircraft based on finite-time control technique. Applied Mathematics and Computation, 2020, 386, 125493.	1.4	8
63	Neural network-based robust finite-time attitude stabilization for rigid spacecraft under angular velocity constraint. Neural Computing and Applications, 2022, 34, 5107-5117.	3.2	7
64	Current sharing control for parallel DC-DC buck converters based on consensus theory. , 2017, , .		6
65	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.	1.4	6
66	On eventâ€triggered nonsmooth attitude tracking controller for a rigid spacecraft. International Journal of Robust and Nonlinear Control, 2022, 32, 900-916.	2.1	6
67	Position tracking control for permanent magnet synchronous motor based on integral high-order terminal sliding mode control. , 2017, , .		5
68	Finite-time attitude regulation control for a rigid spacecraft under input saturation. , 2014, , .		4
69	Fixed-time synchronization of a class of second-order nonlinear multi-agent systems. , 2016, , .		4
70	Finite-time formation control of multiple mobile robots. , 2016, , .		4
71	Distributed formation control of multiple quadrotor aircraft based on quaternion. , 2017, , .		4
72	Intelligent station area recognition technology based on NB-IoT and SVM. , 2019, , .		4

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73	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.	2.2	4
74	Finite-time position tracking control of a quadrotor aircraft. , 2017, , .		3
75	Application research on improved CGAN in image raindrop removal. Journal of Engineering, 2019, 2019, 8404-8408.	0.6	3
76	Research on Angle Steel Tower Climbing Robot System Based on Digital Twin. , 2020, , .		3
77	Global output feedback stabilization of a class of upper-triangular systems with input delay. , 2012, , .		2
78	Analysis of the effect of sampled-data control on continuous finite-time control systems. , 2014, , .		2
79	Finite-time output feedback control for DC-DC buck power converters system. , 2017, , .		2
80	Finite-time speed regulation control for permanent magnet synchronous motor system. , 2017, , .		2
81	Finite-time consensus control for a group of quadrotor aircraft. , 2017, , .		2
82	Finite-time Leaderless Consensus of Second-order Multi-agent Systems With Velocity and Input Constraints. , 2020, , .		2
83	Indoor positioning system based on multi-camera joint calibration. , 2021, , .		2
84	Current-constrained finite-time control algorithm for DC-DC Buck converter. Journal of the Franklin Institute, 2021, 358, 9467-9467.	1.9	2
85	Chattering-Free Discrete-time Fast Terminal Sliding Mode Control of Automotive Electronic Throttle with Disturbances. , 2020, , .		2
86	Gait Planning of Quadruped Robot Based on ROS. , 2020, , .		2
87	Finite-time consensus tracking of multiple coupled harmonic oscillations via bounded control. , 2013, , .		1
88	Design and application of field equipment information acquisition system based on OPC. , 2017, , .		1
89	Attitude Trajectory Planning and Finite-Time Attitude Tracking Control for a Quadrotor Aircraft. , 2018, , .		1
90	A Nested Saturated Second-order Sliding Mode Controller Design. , 2018, , .		1

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91	Observerâ€based finiteâ€time outputâ€feedback controller for DCâ€DC buck converters with unknown load variations. International Journal of Robust and Nonlinear Control, 2019, 29, 5274-5289.	2.1	1
92	Observer-Based Output Feedback Stabilization for Perturbed Second-Order Uncertain System with Finite-Time Convergence. , 2019, , .		1
93	Speed Regulation for PMSM Based on Fixed-time Sliding Mode Control. , 2020, , .		1
94	Robust discrete-time non-smooth consensus protocol for multi-agent systems via super-twisting algorithm. Applied Mathematics and Computation, 2022, 413, 126636.	1.4	1
95	Global finite-time attitude stabilization for spacecraft under velocity constraint. , 2020, , .		1
96	Research on trajectory planning method of dual-arm robot based on ROS. , 2020, , .		1
97	Analysis and control of complex cyberâ€physical networks. Asian Journal of Control, 2022, 24, 495-497.	1.9	1
98	Analysis and Synthesis of Stochastic Nonlinear Systems. Mathematical Problems in Engineering, 2015, 2015, 1-2.	0.6	0
99	Pinning synchronization of complex networks with Lur'e-type nodes and directed switching topology. , 2015, , .		0
100	Global finite-time stabilization of second-order systems subject to mismatched disturbances with application to consensus. , 2015, , .		0
101	Attitude synchronization for multiple heterogeneous spacecraft with communication delays. , 2016, , .		0
102	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.	0.5	0
103	Distributed Control of Networked Agent Systems: Theory and Applications. Journal of Control Science and Engineering, 2017, 2017, 1-2.	0.8	0
104	Second-Order Sliding Mode Control of Nonlinear Systems with Nonvanishing Mismatched Disturbance. , 2018, , .		0
105	Position Tracking Control for Permanent Magnet Linear Motor via Discrete-time Terminal Sliding Mode Control. , 2018, , .		0
106	Integral Active Finite-time Disturbance Rejection Control for Attitude Tracking of Quad-rotor. , 2019, , .		0
107	Current-constrained Finite-time Control Algorithm for Buck Converter. , 2020, , .		0
108	Autonomous Obstacle Navigating System of Quadrotor UAV Based on Vision Positioning and Cascade Control Algorithm. , 2021, , .		0

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109	Flying velocity constraint control for quad-rotor system based on finite-Time control technique. , 2020, , .		0
110	A Coupled Finite-Time Attitude Controller and Finite-Time Observer with an Unknown Constant Drift Bias. , 2020, , .		0
111	Design and Analysis of Nonlinear Constrained Control Algorithm for Rigid Aircraft. IFAC-PapersOnLine, 2020, 53, 476-478.	0.5	0
112	Research on finite-time consensus algorithm for second-order multi-agent systems under sampled-data control. , 2021, , .		0