Bing Xiao

List of Publications by Year
in descending order

91 papers	4,264 citations	109137 35 h-index	110170 64 g-index
92 all docs	92 docs citations	92 times ranked	2387 citing authors

#	Article	IF	Citations
1	Adaptive Sliding Mode Fault Tolerant Attitude Tracking Control for Flexible Spacecraft Under Actuator Saturation. IEEE Transactions on Control Systems Technology, 2012, 20, 1605-1612.	3.2	382
2	A Review on Recent Development of Spacecraft Attitude Fault Tolerant Control System. IEEE Transactions on Industrial Electronics, 2016, 63, 3311-3320.	5.2	301
3	Tracking Control of Robotic Manipulators With Uncertain Kinematics and Dynamics. IEEE Transactions on Industrial Electronics, 2016, 63, 6439-6449.	5.2	216
4	Velocity-Free Fault-Tolerant and Uncertainty Attenuation Control for a Class of Nonlinear Systems. IEEE Transactions on Industrial Electronics, 2016, 63, 4400-4411.	5.2	143
5	A New Disturbance Attenuation Control Scheme for Quadrotor Unmanned Aerial Vehicles. IEEE Transactions on Industrial Informatics, 2017, 13, 2922-2932.	7.2	139
6	Fault-Tolerant Tracking Control of Spacecraft with Attitude-Only Measurement Under Actuator Failures. Journal of Guidance, Control, and Dynamics, 2014, 37, 838-849.	1.6	127
7	Reconfigurable Tolerant Control of Uncertain Mechanical Systems With Actuator Faults: A Sliding Mode Observer-Based Approach. IEEE Transactions on Control Systems Technology, 2018, 26, 1249-1258.	3.2	123
8	Exponential Tracking Control of Robotic Manipulators With Uncertain Dynamics and Kinematics. IEEE Transactions on Industrial Informatics, 2019, 15, 689-698.	7.2	123
9	A Structure Simple Controller for Satellite Attitude Tracking Maneuver. IEEE Transactions on Industrial Electronics, 2017, 64, 1436-1446.	5.2	114
10	Robust fixed-time attitude stabilization control of flexible spacecraft with actuator uncertainty. Nonlinear Dynamics, 2020, 100, 2505-2519.	2.7	109
11	Attitude Stabilization of Spacecrafts Under Actuator Saturation and Partial Loss of Control Effectiveness. IEEE Transactions on Control Systems Technology, 2013, 21, 2251-2263.	3.2	108
12	Faster Fixed-Time Control of Flexible Spacecraft Attitude Stabilization. IEEE Transactions on Industrial Informatics, 2020, 16, 1281-1290.	7.2	105
13	Fault-Tolerant Attitude Control for Flexible Spacecraft Without Angular Velocity Magnitude Measurement. Journal of Guidance, Control, and Dynamics, 2011, 34, 1556-1561.	1.6	104
14	Finite-Time Attitude Tracking of Spacecraft With Fault-Tolerant Capability. IEEE Transactions on Control Systems Technology, 2015, 23, 1338-1350.	3.2	104
15	Tracking Control of Surface Ships With Disturbance and Uncertainties Rejection Capability. IEEE/ASME Transactions on Mechatronics, 2017, 22, 1154-1162.	3.7	94
16	A Novel Disturbance Estimation Scheme for Formation Control of Ocean Surface Vessels. IEEE Transactions on Industrial Electronics, 2017, 64, 4994-5003.	5.2	89
17	Finite-time Extended State Observer based fault tolerant output feedback control for attitude stabilization. ISA Transactions, 2019, 91, 11-20.	3.1	89
18	Fault-tolerant sliding mode attitude control for flexible spacecraft under loss of actuator effectiveness. Nonlinear Dynamics, 2011, 64, 13-23.	2.7	88

#	ARTICLE	IF	CITATIONS
19	Asymptotic Tracking Control for a More Representative Class of Uncertain Nonlinear Systems With Mismatched Uncertainties. IEEE Transactions on Industrial Electronics, 2019, 66, 9417-9427.	5.2	88
20	Robust Tracking Control of Robot Manipulators With Actuator Faults and Joint Velocity Measurement Uncertainty. IEEE/ASME Transactions on Mechatronics, 2020, 25, 1354-1365.	3.7	88
21	Fault-Tolerant Attitude Stabilization for Satellites Without Rate Sensor. IEEE Transactions on Industrial Electronics, 2015, 62, 7191-7202.	5.2	86
22	Finite-time formation tracking control with collision avoidance for quadrotor UAVs. Journal of the Franklin Institute, 2020, 357, 4034-4058.	1.9	71
23	Reaction Wheel Fault Compensation and Disturbance Rejection for Spacecraft Attitude Tracking. Journal of Guidance, Control, and Dynamics, 2013, 36, 1565-1575.	1.6	70
24	Reaction wheel fault tolerant control for spacecraft attitude stabilization with finite‐time convergence. International Journal of Robust and Nonlinear Control, 2013, 23, 1737-1752.	2.1	69
25	Finite-time fault tolerant attitude stabilization control for rigid spacecraft. ISA Transactions, 2014, 53, 241-250.	3.1	68
26	Trajectory exponential tracking control of unmanned surface ships with external disturbance and system uncertainties. ISA Transactions, 2018, 78, 47-55.	3.1	68
27	Fixed-time integral-type sliding mode control for the quadrotor UAV attitude stabilization under actuator failures. Aerospace Science and Technology, 2019, 95, 105444.	2.5	68
28	Attitude Tracking Control of Rigid Spacecraft With Actuator Misalignment and Fault. IEEE Transactions on Control Systems Technology, 2013, 21, 2360-2366.	3.2	67
29	Adaptive fault tolerant control using integral sliding mode strategy with application to flexible spacecraft. International Journal of Systems Science, 2013, 44, 2273-2286.	3.7	63
30	Appointed Fixed Time Observer-Based Sliding Mode Control for a Quadrotor UAV Under External Disturbances. IEEE Transactions on Aerospace and Electronic Systems, 2022, 58, 290-303.	2.6	59
31	Attitude Stabilization Control of Flexible Satellites With High Accuracy: An Estimator-Based Approach. IEEE/ASME Transactions on Mechatronics, 2017, 22, 349-358.	3.7	55
32	Active fault‐tolerant attitude control for flexible spacecraft with loss of actuator effectiveness. International Journal of Adaptive Control and Signal Processing, 2013, 27, 925-943.	2.3	50
33	Prescribed Time Attitude Tracking Control of Spacecraft With Arbitrary Disturbance. IEEE Transactions on Aerospace and Electronic Systems, 2022, 58, 2531-2540.	2.6	45
34	An Intelligent Actuator Fault Reconstruction Scheme for Robotic Manipulators. IEEE Transactions on Cybernetics, 2018, 48, 639-647.	6.2	38
35	Modeling and sliding mode-based attitude tracking control of a quadrotor UAV with time-varying mass. ISA Transactions, 2022, 124, 436-443.	3.1	38
36	Huber Second-order Variable Structure Predictive Filter for Satellites Attitude Estimation. International Journal of Control, Automation and Systems, 2019, 17, 1781-1792.	1.6	36

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37	Adaptive extended-state observer-based fault tolerant attitude control for spacecraft with reaction wheels. Acta Astronautica, 2018, 145, 501-514.	1.7	35
38	Adaptive Quasi-Optimal Higher Order Sliding-Mode Control Without Gain Overestimation. IEEE Transactions on Industrial Informatics, 2018, 14, 3881-3891.	7.2	34
39	Exponential and Resilient Control for Attitude Tracking Maneuvering of Spacecraft With Actuator Uncertainties. IEEE/ASME Transactions on Mechatronics, 2019, 24, 2531-2540.	3.7	34
40	Fixed-time disturbance observer-based chattering-free sliding mode attitude tracking control of aircraft with sensor noises. Aerospace Science and Technology, 2021, 111, 106565.	2.5	34
41	Tracking control of uncertain Euler–Lagrange systems with finite-time convergence. International Journal of Robust and Nonlinear Control, 2015, 25, 3299-3315.	2.1	30
42	A Fault-Tolerant Cooperative Positioning Approach for Multiple UAVs. IEEE Access, 2017, 5, 15630-15640.	2.6	29
43	Fixed-time integral sliding mode control of a high-order nonlinear system. Nonlinear Dynamics, 2022, 107, 909-920.	2.7	28
44	Predefined-Time Attitude Stabilization of Receiver Aircraft in Aerial Refueling. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 3321-3325.	2.2	26
45	Robust Fault Tolerant Control for Spacecraft Attitude Stabilization Under Actuator Faults and Bounded Disturbance. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2011, 133, .	0.9	25
46	Relative position coordinated control for spacecraft formation flying with communication delays. Acta Astronautica, 2017, 137, 302-311.	1.7	23
47	A Deep Learning Based Data-Driven Thruster Fault Diagnosis Approach for Satellite Attitude Control System. IEEE Transactions on Industrial Electronics, 2021, 68, 10162-10170.	5.2	23
48	A General Tracking Control Framework for Uncertain Systems With Exponential Convergence Performance. IEEE/ASME Transactions on Mechatronics, 2018, 23, 111-120.	3.7	19
49	Third–order sliding mode fault–tolerant control for satellites based on iterative learning observer. Asian Journal of Control, 2019, 21, 43-51.	1.9	19
50	Extended state observer-based finite-time dynamic surface control for trajectory tracking of a quadrotor unmanned aerial vehicle. Transactions of the Institute of Measurement and Control, 2020, 42, 2956-2968.	1.1	17
51	Attitude Exponential Stabilization Control of Rigid Bodies via Disturbance Observer. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 2751-2759.	5.9	16
52	Nonsingular recursive-structure sliding mode control for high-order nonlinear systems and an application in a wheeled mobile robot. ISA Transactions, 2022, 130, 553-564.	3.1	14
53	Fault-tolerant attitude control for flexible spacecraft subject to input and state constraint. Transactions of the Institute of Measurement and Control, 2020, 42, 2660-2674.	1.1	12
54	Centered error entropy Kalman filter with application to satellite attitude determination. Transactions of the Institute of Measurement and Control, 2021, 43, 3055-3070.	1.1	12

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55	Distributed prescribed performance containment control for unmanned surface vehicles based on disturbance observer. ISA Transactions, 2022, 125, 699-706.	3.1	12
56	Event-Triggered Policy to Spacecraft Attitude Stabilization With Actuator Output Nonlinearities. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 2855-2859.	2.2	11
57	Adaptive finite time control for spacecraft attitude maneuver based on second-order terminal sliding mode. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2017, 231, 1415-1427.	0.7	9
58	Neural Network Based Finite-Time Attitude Tracking Control of Spacecraft With Angular Velocity Sensor Failures and Actuator Saturation. IEEE Transactions on Industrial Electronics, 2022, 69, 4129-4136.	5.2	9
59	Modeling and practical fixed-time attitude tracking control of a paraglider recovery system. ISA Transactions, 2022, 128, 391-401.	3.1	9
60	A Data-Driven Clustering Approach for Fault Diagnosis. IEEE Access, 2017, 5, 26512-26520.	2.6	8
61	Large-Angle Velocity-Free Attitude Tracking Control of Satellites: An Observer-Free Framework. IEEE Transactions on Cybernetics, 2019, 51, 1-11.	6.2	8
62	Finite–time disturbance observer–based trajectory tracking control for quadrotor unmanned aerial vehicle with obstacle avoidance. Mathematical Methods in the Applied Sciences, 2023, 46, 1096-1110.	1.2	8
63	Robust fault tolerant attitude stabilization control for flexible spacecraft under partial loss of actuator effectiveness. , 2010, , .		7
64	On Attitude Tracking Control With Communication-Saving: An Integrated Quantized and Event-Based Scheme. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 2012-2016.	2.2	7
65	Adaptive Second Order Sliding Mode Control of a Fuel Cell Hybrid System for Electric Vehicle Applications. Mathematical Problems in Engineering, 2015, 2015, 1-14.	0.6	6
66	A genetic algorithm-based surface segmentation method for spray painting robotics. , 2017, , .		6
67	Adaptive attitude tracking control of a 3-degrees-of-freedom experimental helicopter with actuator dead-zone. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2019, 233, 91-99.	0.7	6
68	Dynamic modeling and faster finite-time attitude stabilization of receiver aircraft for aerial refueling. Nonlinear Dynamics, 2021, 104, 467-481.	2.7	6
69	L 2 disturbance attenuation control for input saturated spacecraft attitude stabilization without angular velocity measurements. International Journal of Control, Automation and Systems, 2012, 10, 71-77.	1.6	5
70	A neural network learning-based global optimization approach for aero-engine transient control schedule. Neurocomputing, 2022, 469, 180-188.	3.5	5
71	Design and flight-stability analysis of a closed fixed-wing unmanned aerial vehicle formation controller. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2019, 233, 1045-1054.	0.7	4
72	An fast reconstruction approach for actuator fault in robot manipulators. , 2016, , .		3

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73	Further results on output-feedback stabilization of stochastic upper-triangular systems with state and input time-delays. Transactions of the Institute of Measurement and Control, 2018, 40, 2408-2415.	1.1	3
74	Velocity-Free State Feedback Fault-Tolerant Control for Satellite with Actuator and Sensor Faults. Symmetry, 2022, 14, 157.	1.1	3
75	End-Effector Trajectory Tracking Control of Space Robot with<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="M1"><mml:mrow><mml:msub><mml:mrow><mml:mi mathvariant="script">L</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:m Performance. Mathematical Problems in Engineering, 2015, 2015, 1-8.	0.6	2
76	A proportional-derivative-type attitude tracking control of satellite. , 2016, , .		2
77	Attitude output feedback tracking control of satellites without angular velocity observers. , 2017, , .		2
78	Predefined-time sliding manifold-based fixed-time attitude stabilization control of receiver aircraft with measurement noises. Transactions of the Institute of Measurement and Control, 2022, 44, 2193-2203.	1.1	2
79	Adaptive fuzzy-based backstepping control of a 3-DOF helicopter testbed with dead-zone. , 2017, , .		1
80	Modeling and control of a new multicopter. , 2017, , .		1
81	Intelligent Descriptor of Loop Closure Detection for Visual SLAM Systems. , 2019, , .		1
82	Attitude Tracking Control of 3-DOF Helicopter Based on Disturbance Observer. , 2019, , .		1
83	Laplace ℓ_1 robust Student's T-filter for attitude estimation of satellites. Measurement and Control, 2020, 53, 1988-1997.	0.9	1
84	Observer-based control for robotic manipulations with uncertain kinematics and dynamics. , 2016, , .		0
85	Velocity vector field construct for NURBS curve base on grid method. , 2016, , .		0
86	Retrofit reconfigurable fault tolerant control for mechanical systems. , 2016, , .		0
87	Visual servo control of unmanned aerial vehicles: An object tracking-based approach. , 2017, , .		0
88	Deep neural network-based fault diagnosis approach for the rocket propelling nozzle in the glide. , 2018, , .		0
89	Suboptimal obstacles avoidance control of spacecraft rendezvous. Transactions of the Institute of Measurement and Control, 2020, , 014233122092888.	1.1	0
90	Null-Space Based Optimal Control Allocation for Spacecraft Attitude Stabilization. , 2021, , 33-53.		0

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91	Finite-time extended state observer based fault tolerant output feedback control for UAV attitude stabilization under actuator failures and disturbances. , 2020, , 309-336.		0