Quan Quan

List of Publications by Year
in descending order

95 papers	1,288 citations	430442 18 h-index	500791 28 g-index
95 all docs	95 docs citations	95 times ranked	800 citing authors

#	Article	IF	Citations
1	Introduction to Multicopter Design and Control. , 2017, , .		196
2	A Practical Performance Evaluation Method for Electric Multicopters. IEEE/ASME Transactions on Mechatronics, 2017, 22, 1337-1348.	3.7	77
3	Controllability Analysis for Multirotor Helicopter Rotor Degradation and Failure. Journal of Guidance, Control, and Dynamics, 2015, 38, 978-985.	1.6	53
4	Controllability Analysis and Degraded Control for a Class of Hexacopters Subject to Rotor Failures. Journal of Intelligent and Robotic Systems: Theory and Applications, 2015, 78, 143-157.	2.0	49
5	RFlySim: Automatic test platform for UAV autopilot systems with FPGA-based hardware-in-the-loop simulations. Aerospace Science and Technology, 2021, 114, 106727.	2.5	47
6	A Profust Reliability Based Approach to Prognostics and Health Management. IEEE Transactions on Reliability, 2014, 63, 26-41.	3.5	45
7	Robust Pose Estimation for Multirotor UAVs Using Off-Board Monocular Vision. IEEE Transactions on Industrial Electronics, 2017, 64, 7942-7951.	5.2	44
8	An Analytical Design-Optimization Method for Electric Propulsion Systems of Multicopter UAVs With Desired Hovering Endurance. IEEE/ASME Transactions on Mechatronics, 2019, 24, 228-239.	3.7	42
9	Time-domain analysis of the Savitzkyâ€"Golay filters. , 2012, 22, 238-245.		38
10	Indoor Multi-Camera-Based Testbed for 3-D Tracking and Control of UAVs. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 3139-3156.	2.4	35
11	Additiveâ€state-decompositionâ€based tracking control framework for a class of nonminimum phase systems with measurable nonlinearities and unknown disturbances. International Journal of Robust and Nonlinear Control, 2015, 25, 163-178.	2.1	33
12	Modeling and simulation of bow wave effect in probe and drogue aerial refueling. Chinese Journal of Aeronautics, 2016, 29, 448-461.	2.8	28
13	Efficiency Optimization and Component Selection for Propulsion Systems of Electric Multicopters. IEEE Transactions on Industrial Electronics, 2019, 66, 7800-7809.	5.2	28
14	Practical Distributed Control for VTOL UAVs to Pass a Virtual Tube. IEEE Transactions on Intelligent Vehicles, 2022, 7, 342-353.	9.4	28
15	Multicopter Design and Control Practice. , 2020, , .		26
16	Additive-state-decomposition-based tracking control for TORA benchmark. Journal of Sound and Vibration, 2013, 332, 4829-4841.	2.1	25
17	Proportional-Integral Stabilizing Control of a Class of MIMO Systems Subject to Nonparametric Uncertainties by Additive-State-Decomposition Dynamic Inversion Design. IEEE/ASME Transactions on Mechatronics, 2016, 21, 1092-1101.	3.7	25
18	Output Feedback ILC for a Class of Nonminimum Phase Nonlinear Systems With Input Saturation: An Additive-State-Decomposition-Based Method. IEEE Transactions on Automatic Control, 2017, 62, 502-508.	3.6	25

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19	Drogue dynamic model under bow wave in probe-and-drogue refueling. IEEE Transactions on Aerospace and Electronic Systems, 2016, 52, 1728-1742.	2.6	23
20	A Filtered Repetitive Controller for a Class of Nonlinear Systems. IEEE Transactions on Automatic Control, 2011, 56, 399-405.	3.6	19
21	Iterative learning control and initial value estimation for probe–drogue autonomous aerial refueling of UAVs. Aerospace Science and Technology, 2018, 82-83, 583-593.	2.5	18
22	Simulation Credibility Assessment Methodology With FPGA-based Hardware-in-the-Loop Platform. IEEE Transactions on Industrial Electronics, 2021, 68, 3282-3291.	5.2	17
23	Calibration of multiple fish-eye cameras using a wand. IET Computer Vision, 2015, 9, 378-389.	1.3	16
24	A health evaluation method of multicopters modeled by Stochastic Hybrid System. Aerospace Science and Technology, 2017, 68, 149-162.	2.5	16
25	Terminal Iterative Learning Control for Autonomous Aerial Refueling Under Aerodynamic Disturbances. Journal of Guidance, Control, and Dynamics, 2018, 41, 1577-1584.	1.6	16
26	Reliable Docking Control Scheme for Probe–Drogue Refueling. Journal of Guidance, Control, and Dynamics, 2019, 42, 2511-2520.	1.6	16
27	High-level rather than low-level warming destabilizes plant community biomass production. Journal of Ecology, 2021, 109, 1607-1617.	1.9	16
28	Additive Decomposition and its applications to internal-model-based tracking. , 2009, , .		14
29	RflySim: A Rapid Multicopter Development Platform for Education and Research Based on Pixhawk and MATLAB. , 2021, , .		13
30	A Survey of Repetitive Control for Nonlinear Systems. Science Foundation in China, 2011, 18, 45-53.	0.3	12
31	Global optical flow-based estimation of velocity for multicopters using monocular vision in GPS-denied environments. Optik, 2020, 219, 164923.	1.4	12
32	Hose-Drum-Unit Modeling and Control for Probe-and-Drogue Autonomous Aerial Refueling. IEEE Transactions on Aerospace and Electronic Systems, 2020, 56, 2779-2791.	2.6	12
33	Pose Estimation for Multicopters Based on Monocular Vision and AprilTag. , 2018, , .		11
34	Docking control for probe-drogue refueling: An additive-state-decomposition-based output feedback iterative learning control method. Chinese Journal of Aeronautics, 2020, 33, 1016-1025.	2.8	11
35	Accurate and Flexible Calibration Method for a Class of Visual Sensor Networks. IEEE Sensors Journal, 2020, 20, 3257-3269.	2.4	11
36	Fault detection and identification for quadrotor based on airframe vibration signals: A data-driven method. , 2015, , .		10

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37	Additive-state-decomposition-based station-keeping control for autonomous aerial refueling. Science China Information Sciences, 2021, 64, 1.	2.7	10
38	Bibliometric analysis of UAV swarms. Journal of Systems Engineering and Electronics, 2022, 33, 406-425.	1.1	10
39	A new viewpoint on the internal model principle and its application to periodic signal tracking. , 2010, , .		9
40	Repetitive control for TORA benchmark: An additive-state-decomposition-based approach. International Journal of Automation and Computing, 2015, 12, 289-296.	4.5	9
41	A modified profust-performance-reliability algorithm and its application to dynamic systems. Journal of Intelligent and Fuzzy Systems, 2017, 32, 643-660.	0.8	9
42	Practical Control for Multicopters to Avoid Non-Cooperative Moving Obstacles. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 10839-10857.	4.7	9
43	Output feedback tracking control by additive state decomposition for a class of uncertain systems. International Journal of Systems Science, 2014, 45, 1799-1813.	3.7	8
44	Additive-output-decomposition-based dynamic inversion tracking control for a class of uncertain linear time-invariant systems. , 2012, , .		7
45	Reliability analysis of multicopter configurations based on controllability theory. , 2016, , .		7
46	Failsafe Mechanism Design for Autonomous Aerial Refueling using State Tree Structures. Unmanned Systems, 2019, 07, 261-279.	2.7	7
47	Active Infrared Coded Target Design and Pose Estimation for Multiple Objects. , 2019, , .		7
48	Reachability analysis on optimal trim state for aerial docking. Aerospace Science and Technology, 2021, 110, 106471.	2.5	7
49	A new method to obtain ultimate bounds and convergence rates for perturbed time€delay systems. International Journal of Robust and Nonlinear Control, 2012, 22, 1873-1880.	2.1	6
50	Quadrotor trajectory tracking by using fixed-time differentiator. International Journal of Control, 2019, 92, 2854-2868.	1.2	6
51	Two-degree-of-freedom attitude tracking control for bank-to-turn aerial vehicles: An additive-state-decomposition-based method. Aerospace Science and Technology, 2018, 77, 409-418.	2.5	5
52	Saturated repetitive control for a class of nonlinear systems: A contraction mapping method. Systems and Control Letters, 2018, 122, 93-100.	1.3	5
53	Optimization of Multicopter Propulsion System Based on Degree of Controllability. Journal of Aircraft, 2019, 56, 2062-2069.	1.7	5
54	An Autonomous Intercept Drone with Image-based Visual Servo. , 2020, , .		5

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55	Repetitive control for nonlinear systems: an actuator-focussed design method. International Journal of Control, 2021, 94, 1225-1237.	1.2	5
56	A Lifting Wing Fixed on Multirotor UAVs for Long Flight Ranges. , 2021, , .		4
57	Controllable probability and optimization of multicopters. Aerospace Science and Technology, 2021, 119, 107162.	2.5	4
58	A stability theorem of the direct Lyapunov's method for neutral-type systems in a critical case. International Journal of Systems Science, 2012, 43, 641-646.	3.7	3
59	An initial research on Ultra-wideband and Inertial Measurement Unit pose estimation for Unmanned Aerial Vehicle. , 2016, , .		3
60	Sky Highway Design for Dense Traffic. IFAC-PapersOnLine, 2021, 54, 140-145.	0.5	3
61	A stochastic approximation method for probability prediction of docking success for aerial refueling. Applied Soft Computing Journal, 2021, 103, 107139.	4.1	3
62	Autonomous Aerial Refueling of Multiple UAVs: An Efficient Rendezvous Scheduling Approach. , 2021, , .		3
63	A real-time assessment approach to quadrotor flight control capability. , 2014, , .		2
64	A New Continuous-Time Equality-Constrained Optimization to Avoid Singularity. IEEE Transactions on Neural Networks and Learning Systems, 2016, 27, 262-272.	7.2	2
65	A new generator of causal ideal internal dynamics for a class of unstable linear differential equations. International Journal of Robust and Nonlinear Control, 2017, 27, 2086-2101.	2.1	2
66	Failsafe mechanism design of multicopters based on supervisory control theory. IET Cyber-Systems and Robotics, 2020, 2, 31-42.	1.1	2
67	Sampled-data repetitive control for a class of non-minimum phase nonlinear systems subject to period variation. International Journal of Systems Science, 2020, 51, 704-718.	3.7	2
68	Performance Evaluation and Design Method of Lifting-Wing Multicopters. IEEE/ASME Transactions on Mechatronics, 2022, 27, 1606-1616.	3.7	2
69	Design Automation and Optimization Methodology for Electric Multicopter Unmanned Aerial Robots. IEEE Transactions on Automation Science and Engineering, 2022, 19, 2354-2368.	3.4	2
70	Desired attitude angles design based on optimization for side window detection of Kinetic Interceptor. , 2008, , .		1
71	Initial research on stability margin of nonlinear systems under additive-state-decomposition-based control framework. , 2016, , .		1
72	A pose estimation method of a moving target based on off-board monocular vision. , 2016, , .		1

#	Article	IF	Citations
73	Further results on additive-state-decomposition-based output feedback tracking control for a class of uncertain nonminimum phase nonlinear systems. , 2016, , .		1
74	Initial research on vibration reduction for quadcopter attitude control: An additive-state-decomposition-based dynamic inversion method. , 2017, , .		1
75	Fault Detection and Diagnosis of the Homogenous Quadcopter Team in the Presence of Wind Disturbance. IFAC-PapersOnLine, 2018, 51, 74-81.	0.5	1
76	Filtered Repetitive Control with Nonlinear Systems. , 2020, , .		1
77	Bee-Dance-Inspired UAV Trajectory Pattern Design for Target Information Transfer without Direct Communication. , 2021, , .		1
78	Higher-order Adaptive Iterative Control for Uncertain Robot Manipulators. , 2006, , .		0
79	A mismatching eliminating method based on camera motion information. , 2015, , .		0
80	Transient tracking performance improvement for nonlinear nonminimum phase systems: an additive-state-decomposition-based control method. International Journal of Systems Science, 2017, 48, 2157-2167.	3.7	0
81	Reachability conditions of UAVs net recovery based on pseudo-spectral methods. , 2017, , .		0
82	Saturated D-type ILC for Multicopter Trajectory Tracking Based on Additive State Decomposition. , 2018, , .		0
83	Vision-Based Robust Position Estimation in Probe-and-Drogue Autonomous Aerial Refueling. , 2018, , .		0
84	A case study on local decentralized air traffic protocol for multiple multicopters. , 2018, , .		0
85	An Auxiliary Model Construction Method for System Identification and Its Application to An Indoor Multicopter Platform. , 2019, , .		0
86	Fast Light Show Design Platform for K-12 Children. , 2021, , .		0
87	Low-Level Flight Control. , 2017, , 251-286.		0
88	Stability and Controllability. , 2017, , 227-250.		0
89	Health Evaluation and Failsafe. , 2017, , 337-361.		0
90	Sampled-Data Filtered Repetitive Control With Nonlinear Systems: An Additive-State-Decomposition Method. , 2020, , 149-169.		0

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91	Repetitive Control with Nonlinear Systems: A Contraction Mapping Method. , 2020, , 201-217.		0
92	Continuous-Time Filtered Repetitive Control with Nonlinear Systems: An Additive-State-Decomposition Method. , 2020, , 125-147.		0
93	Preliminary. , 2020, , 19-46.		0
94	Filtered Repetitive Control with Nonlinear Systems: An Actuator-Focused Design Method. , 2020, , 171-199.		0
95	Air Traffic Network Generation for UAVs at a Low Altitude Based on Digital Maps. , 2020, , .		0