

Cunjia Liu

List of Publications by Year in descending order

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Version: 2024-02-01

79
papers

2,028
citations

236612

25
h-index

276539

41
g-index

80
all docs

80
docs citations

80
times ranked

1842
citing authors

#	ARTICLE	IF	CITATIONS
1	Tracking control of small-scale helicopters using explicit nonlinear MPC augmented with disturbance observers. <i>Control Engineering Practice</i> , 2012, 20, 258-268.	3.2	183
2	Wheat yellow rust monitoring by learning from multispectral UAV aerial imagery. <i>Computers and Electronics in Agriculture</i> , 2018, 155, 157-166.	3.7	180
3	Aerial Visual Perception in Smart Farming: Field Study of Wheat Yellow Rust Monitoring. <i>IEEE Transactions on Industrial Informatics</i> , 2021, 17, 2242-2249.	7.2	96
4	Unmanned Aerial Vehicles: Control Methods and Future Challenges. <i>IEEE/CAA Journal of Automatica Sinica</i> , 2022, 9, 601-614.	8.5	69
5	A machine learning based personalized system for driving state recognition. <i>Transportation Research Part C: Emerging Technologies</i> , 2019, 105, 241-261.	3.9	64
6	Spatio-temporal monitoring of wheat yellow rust using UAV multispectral imagery. <i>Computers and Electronics in Agriculture</i> , 2019, 167, 105035.	3.7	60
7	Disturbance Observer Based Control with Anti-Windup Applied to a Small Fixed Wing UAV for Disturbance Rejection. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2017, 88, 329-346.	2.0	56
8	Flight Control Design for Small-Scale Helicopter Using Disturbance-Observer-Based Backstepping. <i>Journal of Guidance, Control, and Dynamics</i> , 2015, 38, 2235-2240.	1.6	55
9	Disturbance Rejection Flight Control for Small Fixed-Wing Unmanned Aerial Vehicles. <i>Journal of Guidance, Control, and Dynamics</i> , 2016, 39, 2810-2819.	1.6	54
10	An Explicit Model Predictive Control Framework for Turbocharged Diesel Engines. <i>IEEE Transactions on Industrial Electronics</i> , 2014, 61, 3540-3552.	5.2	52
11	Path-following control for small fixed-wing unmanned aerial vehicles under wind disturbances. <i>International Journal of Robust and Nonlinear Control</i> , 2013, 23, 1682-1698.	2.1	50
12	Information-Based Search for an Atmospheric Release Using a Mobile Robot: Algorithm and Experiments. <i>IEEE Transactions on Control Systems Technology</i> , 2019, 27, 2388-2402.	3.2	50
13	Optimal Polygon Decomposition for UAV Survey Coverage Path Planning in Wind. <i>Sensors</i> , 2018, 18, 2132.	2.1	45
14	Optimal Path Following for Small Fixed-Wing UAVs Under Wind Disturbances. <i>IEEE Transactions on Control Systems Technology</i> , 2021, 29, 996-1008.	3.2	44
15	Band selection in sentinel-2 satellite for agriculture applications. , 2017, , .		43
16	Source term estimation of a hazardous airborne release using an unmanned aerial vehicle. <i>Journal of Field Robotics</i> , 2019, 36, 797-817.	3.2	43
17	Online optimisation-based backstepping control design with application to quadrotor. <i>IET Control Theory and Applications</i> , 2016, 10, 1601-1611.	1.2	39
18	Trajectory Clustering Aided Personalized Driver Intention Prediction for Intelligent Vehicles. <i>IEEE Transactions on Industrial Informatics</i> , 2019, 15, 3693-3702.	7.2	38

#	ARTICLE	IF	CITATIONS
19	Potential Bands of Sentinel-2A Satellite for Classification Problems in Precision Agriculture. International Journal of Automation and Computing, 2019, 16, 16-26.	4.5	37
20	Machine Learning-Based Crop Drought Mapping System by UAV Remote Sensing RGB Imagery. Unmanned Systems, 2020, 08, 71-83.	2.7	36
21	Boustrophedon coverage path planning for UAV aerial surveys in wind. , 2017, , .		35
22	Dimension Reduction Aided Hyperspectral Image Classification with a Small-sized Training Dataset: Experimental Comparisons. Sensors, 2017, 17, 2726.	2.1	35
23	Nonlinear robust control of tail-sitter aircrafts in flight mode transitions. Aerospace Science and Technology, 2018, 81, 348-361.	2.5	34
24	Piecewise constant model predictive control for autonomous helicopters. Robotics and Autonomous Systems, 2011, 59, 571-579.	3.0	31
25	Implicit Personalization in Driving Assistance: State-of-the-Art and Open Issues. IEEE Transactions on Intelligent Vehicles, 2020, 5, 397-413.	9.4	31
26	Dynamic decision making in lane change: Game theory with receding horizon. , 2016, , .		30
27	Nonlinearity Estimator-Based Control of A Class of Uncertain Nonlinear Systems. IEEE Transactions on Automatic Control, 2020, 65, 2230-2236.	3.6	30
28	Personalized Driver Workload Inference by Learning From Vehicle Related Measurements. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2019, 49, 159-168.	5.9	29
29	Spectral analysis and mapping of blackgrass weed by leveraging machine learning and UAV multispectral imagery. Computers and Electronics in Agriculture, 2022, 192, 106621.	3.7	27
30	Bayesian calibration of AquaCrop model for winter wheat by assimilating UAV multi-spectral images. Computers and Electronics in Agriculture, 2019, 167, 105052.	3.7	25
31	On the Actuator Dynamics of Dynamic Control Allocation for a Small Fixed-Wing UAV With Direct Lift Control. IEEE Transactions on Control Systems Technology, 2020, 28, 984-991.	3.2	25
32	An Auxiliary Particle Filtering Algorithm With Inequality Constraints. IEEE Transactions on Automatic Control, 2017, 62, 4639-4646.	3.6	22
33	Disturbance Rejection for Nonlinear Uncertain Systems With Output Measurement Errors: Application to a Helicopter Model. IEEE Transactions on Industrial Informatics, 2020, 16, 3133-3144.	7.2	20
34	Optimization-Based Safety Analysis of Obstacle Avoidance Systems for Unmanned Aerial Vehicles. Journal of Intelligent and Robotic Systems: Theory and Applications, 2012, 65, 219-231.	2.0	19
35	Unmanned Aerial Vehicle-Based Hazardous Materials Response: Information-Theoretic Hazardous Source Search and Reconstruction. IEEE Robotics and Automation Magazine, 2020, 27, 108-119.	2.2	19
36	Decomposition-Based mission planning for fixed-wing UAVs surveying in wind. Journal of Field Robotics, 2020, 37, 440-465.	3.2	19

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37	State and parameter estimation of the AquaCrop model for winter wheat using sensitivity informed particle filter. Computers and Electronics in Agriculture, 2021, 180, 105909.	3.7	19
38	Particle Filtering With Soft State Constraints for Target Tracking. IEEE Transactions on Aerospace and Electronic Systems, 2019, 55, 3492-3504.	2.6	18
39	Ir-UNet: Irregular Segmentation U-Shape Network for Wheat Yellow Rust Detection by UAV Multispectral Imagery. Remote Sensing, 2021, 13, 3892.	1.8	17
40	Path following for small UAVs in the presence of wind disturbance. , 2012, , .		15
41	Dual Control for Exploitation and Exploration (DCEE) in autonomous search. Automatica, 2021, 133, 109851.	3.0	15
42	An explicit MPC for quadrotor trajectory tracking. , 2015, , .		14
43	An enhanced particle filtering method for GMTI radar tracking. IEEE Transactions on Aerospace and Electronic Systems, 2016, 52, 1408-1420.	2.6	14
44	Adaptive fault tolerant control for trajectory tracking of a quadrotor helicopter. Transactions of the Institute of Measurement and Control, 2018, 40, 3560-3569.	1.1	13
45	Informative Path Planning for Gas Distribution Mapping in Cluttered Environments. , 2020, , .		12
46	Constrained anti-disturbance control for a quadrotor based on differential flatness. International Journal of Systems Science, 2017, 48, 1182-1193.	3.7	11
47	New Driver Workload Prediction Using Clustering-Aided Approaches. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2019, 49, 64-70.	5.9	11
48	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
49	Autonomous Source Term Estimation in Unknown Environments: From a Dual Control Concept to UAV Deployment. IEEE Robotics and Automation Letters, 2022, 7, 2274-2281.	3.3	10
50	Optimisation based control framework for autonomous vehicles: Algorithm and experiment. , 2010, , .		9
51	Integrated guidance and control design based on a reference model. International Journal of Control, Automation and Systems, 2016, 14, 1299-1308.	1.6	9
52	Disturbance observer based control for gust alleviation of a small fixed-wing UAS. , 2016, , .		8
53	Fixed Wing UAV Survey Coverage Path Planning in Wind for Improving Existing Ground Control Station Software. , 2018, , .		8
54	Snow Coverage Mapping by Learning from Sentinel-2 Satellite Multispectral Images via Machine Learning Algorithms. Remote Sensing, 2022, 14, 782.	1.8	8

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55	Enhanced situation awareness for unmanned aerial vehicle operating in terminal areas with circuit flight rules. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2016, 230, 1683-1693.	0.7	7
56	UAV spraying on citrus crop: impact of tank-mix adjuvant on the contact angle and droplet distribution. PeerJ, 2022, 10, e13064.	0.9	7
57	Nonlinear composite bilateral control framework for n-DOF teleoperation systems with disturbances. Science China Information Sciences, 2018, 61, 1.	2.7	6
58	Experimental Assessment of Plume Mapping using Point Measurements from Unmanned Vehicles. , 2019, , .		6
59	A Novel Algorithm for Quantized Particle Filtering With Multiple Degrading Sensors: Degradation Estimation and Target Tracking. IEEE Transactions on Industrial Informatics, 2023, 19, 5830-5838.	7.2	6
60	Experimental tests of autonomous ground vehicles with preview. International Journal of Automation and Computing, 2010, 7, 342-348.	4.5	5
61	Flight Testing Boustrophedon Coverage Path Planning for Fixed Wing UAVs in Wind. , 2019, , .		5
62	Economic Model-Predictive Control for Aircraft Forced Landing: Framework and Two-Level Implementation. IEEE Transactions on Aerospace and Electronic Systems, 2022, 58, 1119-1132.	2.6	5
63	Rapid prototyping flight test environment for autonomous unmanned aerial vehicles. International Journal of Modelling, Identification and Control, 2011, 12, 200.	0.2	4
64	Wheat Drought Assessment by Remote Sensing Imagery Using Unmanned Aerial Vehicle. , 2018, , .		4
65	Hierarchical path planning and flight control of small autonomous helicopters using MPC techniques. , 2013, , .		3
66	Robust Optimal Attitude Controller Design for Tail-Sitters. , 2018, , .		3
67	Dual-layer optimization-based control allocation for a fixed-wing UAV. Aerospace Science and Technology, 2021, 119, 107184.	2.5	3
68	UAV Multispectral Remote Sensing for Yellow Rust Mapping: Opportunities and Challenges. Smart Agriculture, 2022, , 107-122.	0.3	3
69	Guaranteed cost control of uncertain impulsive switched systems with nonlinear disturbances. , 2014, , .		2
70	Situation awareness for UAV operating in terminal areas using bearing-only observations and circuit flight rules. , 2016, , .		2
71	Data-driven situation awareness algorithm for vehicle lane change. , 2016, , .		2
72	Information Based Mobile Sensor Planning for Source Term Estimation of a Non-Continuous Atmospheric Release. , 2018, , .		2

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73	Internal model tracking control of an uncertain impulsive switched system. , 2014, , .		1
74	A modified weighted pseudo-inverse control allocation using genetic algorithm. , 2015, , .		1
75	Actuator dynamics augmented DOBC for a small scale fixed wing UAV. , 2018, , .		1
76	Bayesian Estimation of A Periodically-Releasing Biochemical Source Using Sensor Networks. , 2018, , .		1
77	Bayesian Calibration of AquaCrop Model. , 2018, , .		1
78	A Simple Optimal Planer Path Following Algorithm for Unmanned Aerial Vehiclesâ—. , 2018, , .		1
79	Coordinated standoff tracking of in- and out-of-surveillance targets using constrained particle filter for UAVs. , 2015, , .		0