Yuan-Li Cai

List of Publications by Year
in descending order

115 papers	925 citations	566801 15 h-index	552369 26 g-index
119 all docs	119 docs citations	119 times ranked	809 citing authors

#	Article	IF	Citations
1	Observability Metrics for Single-Target Tracking With Bearings-Only Measurements. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2022, 52, 1065-1077.	5.9	8
2	Three-dimensional cooperative interception guidance law with impact time constraint. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2022, 236, 191-201.	0.7	2
3	Evasion guidance for air-breathing hypersonic vehicles against unknown pursuer dynamics. Neural Computing and Applications, 2022, 34, 5213-5224.	3.2	4
4	The impact of vaccination on the spread of COVID-19: Studying by a mathematical model. Physica A: Statistical Mechanics and Its Applications, 2022, 590, 126717.	1.2	25
5	Three-dimensional cooperative guidance law to control impact time and angle with fixed-time convergence. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2022, 236, 1647-1666.	0.7	4
6	A spread model of COVID-19 with some strict anti-epidemic measures. Nonlinear Dynamics, 2022, 109, 265-284.	2.7	2
7	Fixed-time non-singular terminal sliding mode control with globally fast convergence. IET Control Theory and Applications, 2022, 16, 1227-1241.	1.2	7
8	Distributed Double-Layered Dynamic Matrix Control for Large-Scale System. Mathematical Problems in Engineering, 2022, 2022, 1-15.	0.6	0
9	Midcourse Iterative Guidance Method for the Impact Time and Angle Control of Two-Pulse Interceptors. Aerospace, 2022, 9, 323.	1.1	3
10	Output feedback MPC for uncertain delayed system and control of a wind tunnel system. Information Sciences, 2021, 556, 273-287.	4.0	4
11	Robust Model Predictive Control With Bi-Level Optimization for Boiler-Turbine System. IEEE Access, 2021, 9, 48244-48253.	2.6	5
12	Evasion-Faced Fast Adaptive Neural Attitude Control for Generic Hypersonic Vehicles with Structural and Parametric Uncertainties. Mathematical Problems in Engineering, 2021, 2021, 1-12.	0.6	1
13	Intercept Strategy for Maneuvering Target Based on Deep Reinforcement Learning. , 2021, , .		6
14	Fixed-Time Nonsingular Terminal Sliding Mode Control with Compound Sliding Surface. , 2021, , .		0
15	Bare Bones Particle Swarms With Linear Variable Weight. , 2021, , .		0
16	Robust MPC for Asymmetric Input and State Constraints. , 2021, , .		1
17	On-line Prediction Method of Ferrous Concentration in Iron Removal Process by Goethite. , 2021, , .		0
18	Attitude Estimation Algorithm of Portable Mobile Robot Based on Complementary Filter. Micromachines, 2021, 12, 1373.	1.4	6

#	ARTICLE	IF	CITATIONS
19	Adaptive super-twisting control for orbiting around irregular shape small bodies with input saturation. Aerospace Science and Technology, 2020, 106, 106171.	2.5	12
20	A Fast Nonsingular Terminal Sliding Mode Control Method for Nonlinear Systems With Fixed-Time Stability Guarantees. IEEE Access, 2020, 8, 60444-60454.	2.6	47
21	Robust Receding Horizon Control with Free Control Moves for Polytopic Parametric Uncertainty Systems Subject to Multiple Input Delays. Mathematical Problems in Engineering, 2020, 2020, 1-12.	0.6	0
22	Twistor-based pose control for asteroid landing with path constraints. Nonlinear Dynamics, 2020, 100, 2427-2448.	2.7	14
23	Research on the Prediction of Load Regulation Capacity for Supercritical Thermal Power Unit. Journal of Power and Energy Engineering, 2020, 08, 23-36.	0.3	1
24	Gaussian sum pseudolinear Kalman filter for bearings–only tracking. IET Control Theory and Applications, 2020, 14, 452-460.	1.2	8
25	Adaptive neural network disturbance observer based nonsingular fast terminal sliding mode control for a constrained flexible air-breathing hypersonic vehicle. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2019, 233, 2642-2662.	0.7	4
26	A Cooperative Guidance Law for Multiple Missiles with Impact Time and Terminal Angle Constraints. , 2019, , .		1
27	Efficient and accurate online estimation algorithm for zero-effort-miss and time-to-go based on data driven method. Chinese Journal of Aeronautics, 2019, 32, 2311-2323.	2.8	5
28	Immersion and Invariance Based Adaptive Backstepping Control for Body-Fixed Hovering Over an Asteroid. IEEE Access, 2019, 7, 34850-34861.	2.6	18
29	3D optimal defensive guidance strategy with safe distance. Transactions of the Institute of Measurement and Control, 2019, 41, 4285-4300.	1.1	2
30	Velocity-Free Saturated Control for Hovering Over an Asteroid With Disturbance Rejection. IEEE Access, 2019, 7, 69292-69303.	2.6	5
31	Adaptive Estimation and Cooperative Guidance for Active Aircraft Defense in Stochastic Scenario. Sensors, 2019, 19, 979.	2.1	5
32	Multi-interceptor Target Allocation Based on Improved Particle Swarm Optimization Algorithm. , 2019, , .		3
33	Maneuvering Target Tracking based on Adaptive Cooperative Cubature Kalman Filter. , 2019, , .		0
34	Three-Dimensional Fast Fixed-time Convergence Guidance Law With Impact Angle Constraint. IEEE Access, 2019, 7, 180467-180481.	2.6	10
35	Robust Output Feedback Model Predictive Control for Systems With Norm-Bounded Uncertainty: An LMI Approach. IEEE Access, 2019, 7, 183869-183876.	2.6	6
36	Adaptive double-saturated control for hovering over an asteroid. Advances in Space Research, 2019, 63, 2035-2051.	1.2	13

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37	A new direct statistical analysis of nonlinear systems: CAUTDET. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2019, 233, 382-389.	0.7	1
38	A Fuzzy Model Predictive Control Based Upon Adaptive Neural Network Disturbance Observer for a Constrained Hypersonic Vehicle. IEEE Access, 2018, 6, 5927-5938.	2.6	23
39	Scheduled Composite Off-Line Output Feedback Model Predictive Control for a Constrained Hypersonic Vehicle Using Polyhedral Invariant Sets. Journal of Aerospace Engineering, 2018, 31, 04018035.	0.8	5
40	Optimal cooperative guidance with guaranteed miss distance in three-body engagement. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2018, 232, 492-504.	0.7	7
41	Adaptive Fifth-Degree Cubature Information Filter for Multi-Sensor Bearings-Only Tracking. Sensors, 2018, 18, 3241.	2.1	12
42	Robust Finite Time Control for Stabilization of Rigid Spacecraft. , 2018, , .		0
43	Three‐Dimensional Impact Angle Constrained Guidance Laws with Fixed‐Time Convergence. Asian Journal of Control, 2017, 19, 2240-2254.	1.9	14
44	Reentry Trajectory Optimization for Hypersonic Glide Vehicle with Flexible Initial Conditions. Journal of Aerospace Engineering, 2017, 30, .	0.8	11
45	On SFTSM control with fixed‐time convergence. IET Control Theory and Applications, 2017, 11, 766-773.	1.2	82
46	Stability of switched nonlinear time-delay systems with stable and unstable subsystems. Nonlinear Analysis: Hybrid Systems, 2017, 24, 58-68.	2.1	32
47	Feedforward DMC-PID cascade strategy for main steam temperature control system in fossil-fired power plant. , 2017, , .		4
48	Bearings-only tracking with a Gaussian-sum based ensemble Kalman filter. , 2017, , .		1
49	Quaternion based sliding mode attitude control design for spacecraft. , 2017, , .		3
50	Combined moving horizon estimation and model predictive control for main steam temperature system. , 2017, , .		1
51	NDOB-based three-dimensional guidance law with fast and finite-time convergence. , 2017, , .		2
52	Comparing EKF and SPKF Algorithms for Simultaneous Localization and Mapping (SLAM). Journal of Robotics, Networking and Artificial Life, 2017, 3, 217.	0.2	2
53	Safety on Teleoperation Demining wheeled robots based on fuzzy logic controller and haptic system. Journal of Robotics, Networking and Artificial Life, 2017, 3, 227.	0.2	1
54	Evidence-Based Multi-disciplinary Robust Optimization for Mars Microentry Probe Design. Studies in Computational Intelligence, 2017, , 135-155.	0.7	1

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55	Design and numerical simulation of a differential game guidance law. , 2016, , .		2
56	State space description based predictive control for normal temperature continuous transonic wind tunnel. , 2016, , .		0
57	Scheduled dual mode predictive control for a flexible air-breathing hypersonic vehicle using polyhedral invariant sets. , 2016, , .		0
58	On the guidance and control scheme of EKV in terminal interception phase. , 2016, , .		0
59	Finite-time stability of discrete-time switched delay systems with nonlinear disturbances. , 2016, , .		1
60	Finite-time stability for impulsive switched delay systems with nonlinear disturbances. Journal of the Franklin Institute, 2016, 353, 3578-3594.	1.9	23
61	N4SID based subspace identification method for normal temperature continuous transonic wind tunnel system. , 2016, , .		2
62	A Novel Evolution Kalman Filter Algorithm for Short‑Term Climate Prediction. Asian Journal of Control, 2016, 18, 400-405.	1.9	4
63	Variable fidelity robust optimization of pulsed laser orbital debris removal under epistemic uncertainty. Advances in Space Research, 2016, 57, 1698-1714.	1.2	6
64	Adaptive Finite-Time Control for Attitude Tracking of Rigid Spacecraft. Journal of Aerospace Engineering, 2016, 29, 04016016.	0.8	8
65	Nonlinear disturbance observer-based model predictive control for a generic hypersonic vehicle. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2016, 230, 3-12.	0.7	16
66	Robust adaptive finite time control for spacecraft global attitude tracking maneuvers. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2016, 230, 1027-1043.	0.7	3
67	Haptic system with fuzzy controller for extended control of Teleoperation mine detector wheeled robots. Proceedings of International Conference on Artificial Life and Robotics, 2016, 21, 285-288.	0.1	0
68	Simultaneous Localization and Mapping (SLAM) algorithm base on EKF and SPKF.. Proceedings of International Conference on Artificial Life and Robotics, 2016, 21, 217-220.	0.1	1
69	A study on re-planning orbit of exoatmospheric vehicle. , 2015, , .		0
70	Oscillation and asymptotic behavior of third-order neutral differential equations with distributed deviating arguments. Advances in Difference Equations, 2015, 2015, .	3.5	18
71	Effect analysis of uncertainties in the reentry process of hypersonic vehicles. , 2015, , .		0
72	Offset-Free Output Feedback Robust Model Predictive Control for a Generic Hypersonic Vehicle. Journal of Aerospace Engineering, 2015, 28, 04014147.	0.8	5

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73	Exponential Stabilization of a Class of Time-Varying Delay Systems with Nonlinear Perturbations. Mathematical Problems in Engineering, 2015, 2015, 1-11.	0.6	1
74	A modified algorithm for the time-fixed orbital interception. , 2015, , .		1
75	Robust design optimization using integrated evidence computation — With application to Orbital Debris Removal. , 2015, , .		1
76	Some dynamic integral inequalities with mixed nonlinearities on time scales. Journal of Inequalities and Applications, 2015, 2015, .	0.5	9
77	Asymptotic behavior of switched delay systems with nonlinear disturbances. Applied Mathematics and Computation, 2015, 268, 522-533.	1.4	15
78	Fixed-time control for spacecraft attitude tracking based on quaternion. Acta Astronautica, 2015, 115, 303-313.	1.7	56
79	Higher Order Sliding Mode Control with Fast Transient Performance. , 2015, , .		2
80	Existence of nonoscillatory solutions to second-order nonlinear neutral difference equations. Journal of Nonlinear Science and Applications, 2015, 08, 884-892.	0.4	6
81	Side-Mounted Window Orientation Algorithm and Attitude Controller Design for Kinetic Kill Vehicle. , 2014, , .		2
82	Robust design of Mars entry micro-probe with evidence theory and multi-fidelity strategies. Engineering Computations, 2014, 31, 1052-1073.	0.7	1
83	Robust Optimization with Tchebysheff Decomposition for Mars Entry Probe Design. Advances in Intelligent Systems and Computing, 2014, , 275-289.	0.5	1
84	Highâ€order sliding mode control design based on adaptive terminal sliding mode. International Journal of Robust and Nonlinear Control, 2013, 23, 149-166.	2.1	29
85	An opposite direction searching algorithm for calculating the type-1 ordered weighted average. Knowledge-Based Systems, 2013, 52, 176-180.	4.0	1
86	Seeding and Harvest: A Framework for Unsupervised Feature Selection Problems. Sensors, 2013, 13, 292-333.	2.1	0
87	Likelihood-based iteration square-root cubature Kalman filter with applications to state estimation of re-entry ballistic target. Transactions of the Institute of Measurement and Control, 2013, 35, 949-958.	1.1	10
88	Ordinal outlier detection based on recursive uniform partitioning. Transactions of the Institute of Measurement and Control, 2013, 35, 940-948.	1.1	0
89	Energy-Management Steering Maneuver for Thrust Vector-Controlled Interceptors. Journal of Guidance, Control, and Dynamics, 2012, 35, 1798-1804.	1.6	6
90	Predictive Functional Control-Based Missile Autopilot Design. Journal of Guidance, Control, and Dynamics, 2012, 35, 1450-1455.	1.6	21

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91	Advantages of the Enhanced Opposite Direction Searching Algorithm for Computing the Centroid of An Interval Typeâ€2 Fuzzy Set. Asian Journal of Control, 2012, 14, 1422-1430.	1.9	44
92	Imaging deviation through non-uniform flow fields around high-speed flying vehicles. Optik, 2012, 123, 1177-1182.	1.4	14
93	Fuzzy disturbance observer based attitude controller design for spacecraft. , 2011, , .		2
94	Influence of non-uniform flow fields on imaging deviation of side-window airborne optical systems. , 2011, , .		3
95	High altitude aero-optic imaging deviation prediction for a hypersonic flying vehicle. , 2011, , .		2
96	Iterated cubature Kalman filter and its application. , 2011, , .		12
97	Influence of altitude on aero-optic imaging deviation. Applied Optics, 2011, 50, 2949.	2.1	50
98	A novel feature selection methodology based on outlier detection technologies. , 2011, , .		0
99	Ordinal isolation: An efficient and effective intelligent outlier detection algorithm. , 2011, , .		4
100	A high order sliding mode control scheme based on adaptive radial basis function neural network. , 2011, , .		1
101	A Reliable Energy-Efficient Multi-Level Routing Algorithm for Wireless Sensor Networks Using Fuzzy Petri Nets. Sensors, 2011, 11, 3381-3400.	2.1	29
102	Optimal guidance law and control of impact angle for the kinetic kill vehicle. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2011, 225, 1027-1036.	0.7	13
103	Fuzzy Logic Based Thickness Control System and Its Simulation. , 2009, , .		2
104	Petri nets semantics of Ï€-calculus. Frontiers of Electrical and Electronic Engineering in China: Selected Publications From Chinese Universities, 2008, 3, 290-294.	0.6	0
105	Design of an Energy-Efficient Distributed Multi-level Clustering Algorithm for Wireless Sensor Networks. , 2008, , .		8
106	On modeling and analyzing multi-agent systems using Ï€-calculus. Journal of Shanghai University, 2007, 11, 58-63.	0.1	0
107	On design of multiwavelet prefilters. Applied Mathematics and Computation, 2006, 172, 1175-1187.	1.4	8
108	System identification based on NARMAX model using Hopfield networks. Journal of Shanghai University, 2006, 10, 238-243.	0.1	2

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109	Hybrid Fuzzy Neural Network Control for Complex Industrial Process. , 2006, , 533-538.		0
110	Improved system identification approach using wavelet networks. Journal of Shanghai University, 2005, 9, 159-163.	0.1	7
111	Least Squares Wavelet Support Vector Machines for Nonlinear System Identification. Lecture Notes in Computer Science, 2005, , 436-441.	1.0	14
112	Adaptive wavelet domain thresholding denoising. , 2003, 5253, 245.		0
113	Bifurcation and Chaos in the Duffing Oscillator with a PID Controller. Nonlinear Dynamics, 1997, 12, 251-262.	2.7	18
114	Design and application of wavelet networks based on immune algorithm. , 0, , .		1
115	Square Root Cubature Particle Filter. Advanced Materials Research, 0, 219-220, 727-731.	0.3	3