Ming Xin

List of Publications by Year
in descending order

92 papers	2,441 citations	279798 23 h-index	214800 47 g-index
92 all docs	92 docs citations	92 times ranked	1313 citing authors

#	Article	IF	Citations
1	High-degree cubature Kalman filter. Automatica, 2013, 49, 510-518.	5.0	387
2	Sparse-grid quadrature nonlinear filtering. Automatica, 2012, 48, 327-341.	5.0	230
3	Integrated Optimal Formation Control of Multiple Unmanned Aerial Vehicles. IEEE Transactions on Control Systems Technology, 2013, 21, 1731-1744.	5.2	229
4	Sparse Gauss-Hermite Quadrature Filter with Application to Spacecraft Attitude Estimation. Journal of Guidance, Control, and Dynamics, 2011, 34, 367-379.	2.8	122
5	A new method for suboptimal control of a class of non-linear systems. Optimal Control Applications and Methods, 2005, 26, 55-83.	2.1	95
6	Sliding-Mode Impact Time Guidance Law Design for Various Target Motions. Journal of Guidance, Control, and Dynamics, 2019, 42, 136-148.	2.8	95
7	Nonlinear Missile Autopilot Design with Theta-D Technique. Journal of Guidance, Control, and Dynamics, 2004, 27, 406-417.	2.8	93
8	Integrated nonlinear optimal control of spacecraft in proximity operations. International Journal of Control, 2010, 83, 347-363.	1.9	92
9	New Impact Time and Angle Guidance Strategy via Virtual Target Approach. Journal of Guidance, Control, and Dynamics, 2018, 41, 1755-1765.	2.8	79
10	Indirect Robust Control of Spacecraft via Optimal Control Solution. IEEE Transactions on Aerospace and Electronic Systems, 2012, 48, 1798-1809.	4.7	70
11	Three-Dimensional Guidance for Various Target Motions With Terminal Angle Constraints Using Twisting Control. IEEE Transactions on Industrial Electronics, 2020, 67, 1242-1253.	7.9	52
12	Three-Dimensional Cooperative Homing Guidance Law with Field-of-View Constraint. Journal of Guidance, Control, and Dynamics, 2020, 43, 389-397.	2.8	42
13	A modified cooperative proportional navigation guidance law. Journal of the Franklin Institute, 2019, 356, 5692-5705.	3.4	38
14	Multi-agent consensus algorithm with obstacle avoidance via optimal control approach. International Journal of Control, 2010, 83, 2606-2621.	1.9	37
15	Nonlinear robust and optimal control of robot manipulators. Nonlinear Dynamics, 2014, 76, 237-254.	5.2	33
16	Cooperative Guidance for Multiple Powered Missiles with Constrained Impact and Bounded Speed. Journal of Guidance, Control, and Dynamics, 2021, 44, 825-841.	2.8	29
17	Depth control of autonomous underwater vehicles using indirect robust control method. International Journal of Control, 2012, 85, 98-113.	1.9	28
18	Multiple sensor estimation using a new fifth-degree cubature information filter. Transactions of the Institute of Measurement and Control, 2015, 37, 15-24.	1.7	28

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19	Analytical solution of field-of-view limited guidance with constrained impact and capturability analysis. Aerospace Science and Technology, 2020, 97, 105586.	4.8	28
20	Three-Dimensional Nonsingular Cooperative Guidance Law with Different Field-of-View Constraints. Journal of Guidance, Control, and Dynamics, 2021, 44, 2001-2015.	2.8	27
21	Optimal consensus algorithm integrated with obstacle avoidance. International Journal of Systems Science, 2013, 44, 166-177.	5.5	26
22	Sensor-Based Robust Incremental Three-Dimensional Guidance Law with Terminal Angle Constraint. Journal of Guidance, Control, and Dynamics, 2021, 44, 2016-2030.	2.8	26
23	Position and Attitude Control of Deep-Space Spacecraft Formation Flying Via Virtual Structure and Î¸-D Technique. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2007, 129, 689-698.	1.6	25
24	Guidance Law Design with Fixed-Time Convergent Error Dynamics. Journal of Guidance, Control, and Dynamics, 2021, 44, 1389-1398.	2.8	25
25	Vision-Based Spacecraft Relative Navigation Using Sparse-Grid Quadrature Filter. IEEE Transactions on Control Systems Technology, 2013, 21, 1595-1606.	5.2	23
26	Impact-Angle-Constrained Cooperative Guidance for Salvo Attack. Journal of Guidance, Control, and Dynamics, 2022, 45, 684-703.	2.8	23
27	A new method for suboptimal control of a class of nonlinear systems. , 0, , .		22
28	Relations Between Sparse-Grid Quadrature Rule and Spherical-Radial Cubature Rule in Nonlinear Gaussian Estimation. IEEE Transactions on Automatic Control, 2015, 60, 199-204.	5.7	22
29	Analytical Solution for Nonlinear Three-Dimensional Guidance With Impact Angle and Field-of-View Constraints. IEEE Transactions on Industrial Electronics, 2021, 68, 3423-3433.	7.9	22
30	Analysis of the Unbalance Phenomenon Caused by the PWM Delay and Modulation Frequency Ratio Related to the CPS-PWM Strategy in an MMC System. IEEE Transactions on Power Electronics, 2019, 34, 3067-3080.	7.9	19
31	Missile Guidance Law Based on New Analysis and Design of SDRE Scheme. Journal of Guidance, Control, and Dynamics, 2019, 42, 853-868.	2.8	19
32	Incremental Twisting Fault Tolerant Control for Hypersonic Vehicles With Partial Model Knowledge. IEEE Transactions on Industrial Informatics, 2022, 18, 1050-1060.	11.3	18
33	Nonlinear Control of Two-Wheeled Robot Based on Novel Analysis and Design of SDRE Scheme. IEEE Transactions on Control Systems Technology, 2020, 28, 1140-1148.	5.2	17
34	Distributed diffusion unscented Kalman filtering based on covariance intersection with intermittent measurements. Automatica, 2021, 132, 109769.	5.0	17
35	Three-Dimensional Approach Angle Guidance Under Varying Velocity and Field-of-View Limit Without Using Line-of-Sight Rate. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2022, 52, 7148-7159.	9.3	17
36	Field-of-view limited guidance with impact angle constraint and feasibility analysis. Aerospace Science and Technology, 2021, 114, 106753.	4.8	14

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37	Guidance Law Design for Missiles with Reduced Seeker Field-of-View. , 2006, , .		13
38	Unified Method for Field-of-View-Limited Homing Guidance. Journal of Guidance, Control, and Dynamics, 2022, 45, 1415-1434.	2.8	13
39	Finite-Time Input-to-State Stability Guidance Law. Journal of Guidance, Control, and Dynamics, 2018, 41, 2199-2213.	2.8	12
40	Computational Enhancement of the SDRE Scheme: General Theory and Robotic Control System. IEEE Transactions on Robotics, 2020, 36, 875-893.	10.3	12
41	Mars Entry Trajectory Planning with Range Discretization and Successive Convexification. Journal of Guidance, Control, and Dynamics, 2022, 45, 755-763.	2.8	12
42	Bearings-Only Tracking Using Augmented Ensemble Kalman Filter. IEEE Transactions on Control Systems Technology, 2020, 28, 1009-1016.	5.2	11
43	Two-Stage Guidance Law With Constrained Impact via Circle Involute. IEEE Transactions on Aerospace and Electronic Systems, 2021, 57, 1301-1316.	4.7	11
44	The high-degree cubature Kalman filter. , 2012, , .		10
45	Hypersonic entry vehicle state estimation using nonlinearity-based adaptive cubature Kalman filters. Acta Astronautica, 2017, 134, 221-230.	3.2	10
46	A new class of nonlinear Rauchâ€"Tungâ€"Striebel cubature Kalman smoothers. ISA Transactions, 2015, 55, 72-80.	5.7	9
47	Composite weighted average consensus filtering for space object tracking. Acta Astronautica, 2020, 168, 69-79.	3.2	9
48	Robust state dependent Riccati equation based robot manipulator control. , 0, , .		8
49	Impact time and angle constrained guidance via rangeâ€based lineâ€ofâ€sight shaping. International Journal of Robust and Nonlinear Control, 2022, 32, 3606-3624.	3.7	8
50	Robust state dependent Riccati equation based guidance laws. , 2001, , .		7
51	Unified nonlinear optimal flight control and state estimation of highly maneuverable aircraft. Aerospace Science and Technology, 2014, 37, 70-80.	4.8	7
52	Sculling Compensation Algorithm for SINS Based on Two-Time Scale Perturbation Model of Inertial Measurements. Sensors, 2018, 18, 282.	3.8	7
53	Quantum-Interference Artificial Neural Network With Application to Space Manipulator Control. IEEE Transactions on Aerospace and Electronic Systems, 2021, 57, 2167-2182.	4.7	7
54	Cooperative Circular Guidance with Nonuniform Field-of-View Constraints. Journal of Guidance, Control, and Dynamics, 2022, 45, 1435-1450.	2.8	7

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55	A new state observer and flight control of highly maneuverable aircraft. , 2009, , .		6
56	Trajectory Control of Miniature Helicopters Using a Unified Nonlinear Optimal Control Technique. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2011, 133, .	1.6	6
57	Hierarchical control of cooperative nonlinear dynamical systems. International Journal of Control, 2012, 85, 1093-1111.	1.9	6
58	On-line battery state of charge estimation using Gauss-Hermite quadrature filter. , 2012, , .		6
59	Adaptive radial rule based cubature Kalman filter. , 2015, , .		6
60	Distributed estimation in general directed sensor networks based on batch covariance intersection. , 2016, , .		6
61	Flocking of Multi-Agent Systems Using a Unified Optimal Control Approach. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2013, 135, .	1.6	5
62	A three-dimensional anti-saturation terminal guidance law with finite-time convergence. , 2017, , .		5
63	Nonlinear optimal control of spacecraft approaching a tumbling target. , 2009, , .		4
64	Multi-agent consensus algorithm with obstacle avoidance via optimal control approach. , 2011, , .		4
65	Hypersonic Entry Vehicle State Estimation Using High-degree Cubature Kalman Filter. , 2014, , .		4
66	Iterative Diffusion-Based Distributed Cubature Gaussian Mixture Filter for Multisensor Estimation. Sensors, 2016, 16, 1741.	3.8	4
67	Refined Nonlinear Gaussian Quadrature Filter. , 2019, , .		4
68	Alternative SDRE Scheme for Planar Systems. IEEE Transactions on Circuits and Systems II: Express Briefs, 2019, 66, 998-1002.	3.0	4
69	Data-Driven Enhanced Nonlinear Gaussian Filter. IEEE Transactions on Circuits and Systems II: Express Briefs, 2020, 67, 1144-1148.	3.0	4
70	Reducedâ€order suboptimal control design for a class of nonlinear distributed parameter systems using POD and Î¸â€“D techniques. Optimal Control Applications and Methods, 2008, 29, 191-224.	2.1	3
71	Feedback-control-aided image stitching using multi-UAV platform. , 2016, , .		3
72	Prescribed grass fire evolution mapping and rate of spread measurement using orthorectified thermal imagery from a fixed-wing UAS. International Journal of Remote Sensing, 2022, 43, 2357-2376.	2.9	3

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73	Depth control of autonomous underwater vehicles using indirect robust control method. , 2012, , .		2
74	Comparison of the sparse-grid quadrature rule and the cubature rule in nonlinear filtering. , 2012, , .		2
75	High-degree cubature joint probabilistic data association information filter for multiple sensor multiple target tracking. , 2014, , .		2
76	Multi-UAV UWA video surveillance system. , 2016, , .		2
77	An Optimal Control Approach for Consensus of General Linear Time-Invariant Multi-Agent Systems. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2021, 143, .	1.6	2
78	Rauch-Tung-Striebel high-degree cubature Kalman smoother. , 2013, , .		1
79	Uncertainty propagation via multi-element grid. , 2013, , .		1
80	Robust Nonlinear Filter Using Adaptive Edgeworth Expansion. , 2018, , .		1
81	Finite-Time Guidance Law Design with Autopilot Dynamics Using Input-to-State Stability. , 2018, , .		1
82	Cooperative Guidance law under Large Actuator Delay. , 2019, , .		1
83	Guaranteed Continuity and Computational Improvement in SDRE Controllers for Cancer Treatment Analysis. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2020, 142, .	1.6	1
84	Nonlinear H/sub âˆž/ missile longitudinal autopilot design with Î¸-D method. , 0, , .		0
85	Reduced Order Suboptimal Control Design for a Class of Nonlinear Distributed Parameter Systems Using POD and /spl thetas/-D Techniques. , 2007, , .		0
86	The effect of continuum model on the stability of feedback control of thermal systems. , 2016, , .		0
87	Nonlinear estimation by Hermite polynomial-based uncorrelated conversion within LMMSE framework. , 2017, , .		0
88	Arbitrary Polynomial Chaos for Short-Arc Orbital Uncertainty Propagation. , 2018, , .		0
89	Robust Nonlinear Distributed Estimation Using Maximum Correntropy. , 2019, , .		0
90	Orbital Uncertainty Propagation with PC-Kriging. , 2020, , .		0

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91	Orbital Uncertainty Propagation via Multi-Element Arbitrary Polynomial Chaos. , 2020, , .		0
92	Suboptimal Control Design for Differential Wheeled Mobile Robots with Î¸Ì‡ D Technique. , 2021, , .		0