João Y Ishihara

List of Publications by Year
in descending order

100 papers	1,270 citations	471061 17 h-index	414034 32 g-index
100 all docs	100 docs citations	100 times ranked	1002 citing authors

#	Article	IF	Citations
1	A Systematization of the Unscented Kalman Filter Theory. IEEE Transactions on Automatic Control, 2015, 60, 2583-2598.	3.6	188
2	On the Lyapunov theorem for singular systems. IEEE Transactions on Automatic Control, 2002, 47, 1926-1930.	3.6	185
3	Robust Kalman Filter for Descriptor Systems. IEEE Transactions on Automatic Control, 2006, 51, 1354-1354.	3.6	80
4	Optimal Robust Linear Quadratic Regulator for Systems Subject to Uncertainties. IEEE Transactions on Automatic Control, 2014, 59, 2586-2591.	3.6	66
5	Motion and force control of cooperative robotic manipulators with passive joints. IEEE Transactions on Control Systems Technology, 2006, 14, 725-734.	3.2	62
6	Optimal recursive estimation for discrete-time descriptor systems. International Journal of Systems Science, 2005, 36, 605-615.	3.7	44
7	Optimal robust filtering for systems subject to uncertainties. Automatica, 2015, 52, 111-117.	3.0	37
8	Output feedback of Markov jump linear systems with no mode observation: An automotive throttle application. International Journal of Robust and Nonlinear Control, 2016, 26, 1980-1993.	2.1	33
9	Information Filtering and Array Algorithms for Discrete-Time Markovian Jump Linear Systems. IEEE Transactions on Automatic Control, 2009, 54, 158-162.	3.6	31
10	Hybrid kinematic control for rigid body pose stabilization using dual quaternions. Journal of the Franklin Institute, 2017, 354, 2769-2787.	1.9	30
11	Unscented Kalman Filters for Estimating the Position of an Automotive Electronic Throttle Valve. IEEE Transactions on Vehicular Technology, 2016, 65, 4627-4632.	3.9	29
12	The full information and state feedback H2 optimal controllers for descriptor systems. Automatica, 2003, 39, 391-402.	3.0	24
13	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" display="inline" overflow="scroll"><mml:msub><mml:mrow><mml:mi mathvariant="script">H</mml:mi></mml:mrow><mml:mrow><mml:mi>âˆ'ž</mml:mi></mml:mrow></mml:msub></mml:math> filtering for rectangular discrete-time descriptor systems. Automatica, 2009, 45, 1743-1748.	3.0	24
14	Robust Estimation for Discrete-Time Markovian Jump Linear Systems. IEEE Transactions on Automatic Control, 2013, 58, 2065-2071.	3.6	19
15	Unscented Kalman Filters for Riemannian State-Space Systems. IEEE Transactions on Automatic Control, 2019, 64, 1487-1502.	3.6	19
16	Robust state prediction for descriptor systems. Automatica, 2008, 44, 2185-2190.	3.0	18
17	A robust extended Kalman filter for discrete-time systems with uncertain dynamics, measurements and correlated noise. , 2009, , .		18
18	Recursive linear estimation for general discrete-time descriptor systems. Automatica, 2010, 46, 761-766.	3.0	17

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19	Doubly coprime factorizations related to any stabilizing controllers in state space. Automatica, 1999, 35, 1573-1577.	3.0	16
20	A new smallest sigma set for the Unscented Transform and its applications on SLAM. , 2011, , .		15
21	A new condition for finite time boundedness analysis. Journal of the Franklin Institute, 2015, 352, 5514-5528.	1.9	15
22	Attitude Control of an Underactuated Satellite Using Two Reaction Wheels. Journal of Guidance, Control, and Dynamics, 2015, 38, 2010-2018.	1.6	13
23	Comments on â€œFinite-Horizon Robust Kalman Filtering for Uncertain Discrete Time-Varying Systems With Uncertain-Covariance White Noisesâ€. IEEE Signal Processing Letters, 2010, 17, 213-216.	2.1	12
24	Disturbance rejection in a fixed wing UAV using nonlinear H<inf>&#x221E;</inf> state feedback. , 2011, , .		12
25	Unscented and squareâ€root unscented Kalman filters for quaternionic systems. International Journal of Robust and Nonlinear Control, 2018, 28, 4500-4527.	2.1	12
26	Robust <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e855" altimg="si6.svg"><mml:msub><mml:mrow><mml:mi>H</mml:mi></mml:mrow><mml:mrow><mml:mi>âˆ</mml:mi></mml:mrow></mml:... kinematic control of manipulator robots using dual quaternion algebra. Automatica, 2021, 132, 109817.	3.0	12
27	Recursive robust regulator for discrete-time state-space systems. , 2009, , .		11
28	Recursive robust regulator for discrete-time Markovian jump linear systems via penalty game approach. , 2010, , .		11
29	Split and merge algorithm for identification of Piecewise Affine systems. , 2011, , .		11
30	New minimum sigma set for unscented filtering. International Journal of Robust and Nonlinear Control, 2015, 25, 3286-3298.	2.1	11
31	Robust stability of networked control systems. , 2009, , .		10
32	Existence of Continuous or Constant Finsler's Variables for Parameter-Dependent Systems. IEEE Transactions on Automatic Control, 2017, 62, 4187-4193.	3.6	9
33	Electrical three phase circuit analysis using quaternions. , 2018, , .		9
34	Robust H âˆ Output Tracking Control for a Class of Nonlinear Systems with Time-Varying Delays. Circuits, Systems, and Signal Processing, 2014, 33, 1451-1471.	1.2	8
35	Estimation of foot orientation with respect to ground for an above knee robotic prosthesis. , 2009, , .		7
36	New delay-and-delay-derivative-dependent stability criteria for systems with time-varying delay. , 2010, , .		7

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37	Delay-Dependent Robust Stability Analysis for Time-Delay T–S Fuzzy Systems with Nonlinear Local Models. Journal of Control, Automation and Electrical Systems, 2013, 24, 11-21.	1.2	7
38	Stability of networked control systems with dynamic controllers in the feedback loop. , 2010, , .		6
39	New algorithm for identification of discrete-time switched linear systems. , 2013, , .		6
40	Robust global bimodal rest-to-rest attitude control of rigid body using unit quaternion. Journal of the Franklin Institute, 2017, 354, 3554-3573.	1.9	6
41	Non linear controller and path planner algorithm for an autonomous variable shape formation flight. , 2017, , .		6
42	A Decentralized Low-Chattering Sliding Mode Formation Flight Controller for a Swarm of UAVs. Sensors, 2020, 20, 3094.	2.1	6
43	A Low-Cost Attitude Determination and Control System for the UYS-1 nanosatellite. , 2013, , .		5
44	Dual quaternion-based bimodal global control for robust rigid body pose kinematic stabilization. , 2017, , .		5
45	A real-time web-based networked control system education platform. International Journal of Electrical Engineering and Education, 2018, 55, 130-141.	0.4	5
46	Hybrid Dec-POMDP/PID Guidance System for Formation Flight of Multiple UAVs. Journal of Intelligent and Robotic Systems: Theory and Applications, 2021, 101, 1.	2.0	5
47	LMI-based consensus of linear multi-agent systems by reduced-order dynamic output feedback. ISA Transactions, 2022, 129, 121-129.	3.1	5
48	Optimal robust prediction for general discrete time singular systems. , 2008, , .		4
49	Stochastic stability for discrete-time singular systems with Markov jump parameters. , 2008, , .		4
50	Linear quadratic regulator for a class of Markovian jump systems with control in jumps. , 2010, , .		4
51	Delay-Dependent Robust H∞ Output Tracking Control for Uncertain Networked Control Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 3256-3261.	0.4	4
52	Identification of state-space switched linear systems using clustering and hybrid filtering. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2017, 39, 565-573.	0.8	4
53	Robust Controller Design for Attitude Dynamics Subjected to Time-Delayed State Measurements. IEEE Transactions on Automatic Control, 2018, 63, 2191-2198.	3.6	4
54	Stability of switching linear systems with switching signals driven by stochastic processes. Journal of the Franklin Institute, 2019, 356, 31-41.	1.9	4

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55	Fair Power Factor Billing Under Unbalanced and Nonsinusoidal Voltage Supply. IEEE Access, 2022, 10, 19301-19311.	2.6	4
56	Multiple Hypotheses Mixing Filter for hybrid Markovian switching systems. , 2010, , .		3
57	Hybrid data fusion for 3D localization under heavy disturbances. , 2010, , .		3
58	A new approach to robust linear filtering problems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 1174-1179.	0.4	3
59	Robust stability criteria for uncertain systems with delay and its derivative varying within intervals. , 2011, , .		3
60	A high precision attitude determination and control system for the UYS-1 nanosatellite. , 2013, , .		3
61	Uniform versions of Finsler's lemma. , 2015, , .		3
62	Information filtering and array algorithms for discrete-time Markovian jump linear systems. Proceedings of the American Control Conference, 2007, , .	0.0	2
63	Design and experimental evaluation of rotor speed regulators for model helicopters in a test bench. , 2007, , .		2
64	Author's Reply to the â€œComments on Robust Kalman Filter for Descriptor Systemsâ€• IEEE Transactions on Automatic Control, 2009, 54, 673-673.	3.6	2
65	A new procedure to solve generalized Lyapunov equations. , 2010, , .		2
66	Finite time robust filtering for time-varying uncertain polytopic linear systems. , 2013, , .		2
67	An improved stability criterion of networked control systems with dynamic controllers in the feedback loop. , 2014, , .		2
68	Antenna pointing system for satellite tracking based on Kalman filtering and model predictive control techniques. Advances in Space Research, 2016, 58, 2328-2340.	1.2	2
69	Diffusion LMS filter for distributed estimation of systems with stochastic state transition and observation matrices. , 2017, , .		2
70	Evolving Interdisciplinary Research with Model-View-Controller Evolutionary Acquisition Interdisciplinary Research Project Management. Advanced Science Letters, 2013, 19, 2170-2173.	0.2	2
71	H<sub>&#x0221E;</sub> Estimation and Array Algorithms for Discrete-time Descriptor Systems. , 2006, , .		1
72	Robust Kalman filter for discrete-time systems with correlated noises. , 2008, , .		1

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73	Enhanced robust Kalman predictor for discrete-time systems with uncertain correlated noises. , 2008, , .		1
74	Fast array algorithms for H<inf>&#x221E;</inf> information estimation of rectangular discrete-time descriptor systems. , 2009, , .		1
75	A delay-fractioning approach to stability analysis of networked control systems with time-varying delay. , 2011, , .		1
76	Estimates for Discrete-Time Markovian Jump Linear Systems. Mathematical Problems in Engineering, 2013, 2013, 1-7.	0.6	1
77	Novel stabilization technique for the H<inf>&#x221E;</inf> control of systems with time-varying input delay. , 2013, , .		1
78	Homogeneous polynomially parameter-dependent state feedback controllers for finite time stabilization of linear time-varying systems. , 2013, , .		1
79	Stationary policies for lower bounds on the minimum average cost of discrete-time nonlinear control systems. International Journal of Robust and Nonlinear Control, 2014, 24, 2943-2957.	2.1	1
80	Quaternion-based H<inf>∞</inf> kinematic attitude control subjected to input time-varying delays. , 2015, , .		1
81	Finite time boundedness and stability analysis of discrete time uncertain systems. , 2015, , .		1
82	Applying the MVC EA-IRPM to reporting-guidelines in medicine: A strategy that is a web system. , 2017, , .		1
83	Robust and Synchronous Nonlinear Controller for Autonomous Formation Flight of Fixed Wing UASs. , 2019, , .		1
84	Performance Study on dqRNEA – A Novel Dual Quaternion Based Recursive Newton-Euler Inverse Dynamics Algorithms. , 2019, , .		1
85	Stochastic stability of switching linear systems with application to an automotive powertrain model. Mathematics and Computers in Simulation, 2022, 191, 278-287.	2.4	1
86	Control of a Underactuated Manipulator Robot via H 2 , H ∞ , H 2 / H ∞ and µ -Synthesis. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 139-144.	0.4	0
87	Optimal recursive linear filtering for general discrete time singular systems. , 2008, , .		0
88	On the solvability of singular linear system with Markov jump parameters. , 2008, , .		0
89	An Efficient Technique for Computing a Sub-optimal Disturbance Attenuation H_{infty} Control Problem Feedback Solution. , 2008, , .		0
90	Estimation for nonlinear discrete-time systems with uncertain linearization and noises statistics. , 2009, , .		0

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91	H<inf>221E;</inf> estimates for discrete-time Markovian jump linear systems. , 2010, , .		0
92	Fast array algorithm for filtering of Markovian jump linear systems. International Journal of Adaptive Control and Signal Processing, 2012, 26, 84-94.	2.3	0
93	Robust steering control of spacecraft carrier rockets. , 2013, , .		0
94	Preconditioned linear solver based on Broyden method for the power flow problem in power systems. , 2015, , .		0
95	Robust stability of networked control systems with dynamic controllers in the feedback loop. , 2016, , .		0
96	H‹inf›âˆž‹/inf› control for networked control systems with dynamic controllers in the feedback loop. , 2017, , .		0
97	A robust unscented transformation for uncertain moments. Journal of the Franklin Institute, 2019, 356, 3797-3810.	1.9	0
98	Comments on â€œOn decentralized adaptive full-order sliding mode control of multiple UAVsâ€. ISA Transactions, 2020, 103, 390-393.	3.1	0
99	Robust global distributed attitude control for multiple rigid bodies using a hybrid controller. International Journal of Systems Science, 2020, 51, 1229-1242.	3.7	0
100	Stochastic Exponential Stability of Singular Linear Systems with Markov Jump Parameters. , 2012, , .		0