

Jie Chen

List of Publications by Year in descending order

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Version: 2024-02-01

101
papers

3,279
citations

186209

28
h-index

175177

52
g-index

102
all docs

102
docs citations

102
times ranked

1225
citing authors

#	ARTICLE	IF	CITATIONS
1	On stability crossing curves for general systems with two delays. <i>Journal of Mathematical Analysis and Applications</i> , 2005, 311, 231-253.	0.5	293
2	A new method for computing delay margins for stability of linear delay systems. <i>Systems and Control Letters</i> , 1995, 26, 107-117.	1.3	239
3	Frequency sweeping tests for stability independent of delay. <i>IEEE Transactions on Automatic Control</i> , 1995, 40, 1640-1645.	3.6	230
4	Distributed adaptive coordination for multiple Lagrangian systems under a directed graph without using neighbors' velocity information. <i>Automatica</i> , 2013, 49, 1723-1731.	3.0	166
5	Limitations on maximal tracking accuracy. <i>IEEE Transactions on Automatic Control</i> , 2000, 45, 326-331.	3.6	159
6	Best tracking and regulation performance under control energy constraint. <i>IEEE Transactions on Automatic Control</i> , 2003, 48, 1320-1336.	3.6	132
7	Sensitivity integral relations and design trade-offs in linear multivariable feedback systems. <i>IEEE Transactions on Automatic Control</i> , 1995, 40, 1700-1716.	3.6	116
8	On sufficient conditions for stability independent of delay. <i>IEEE Transactions on Automatic Control</i> , 1995, 40, 1675-1680.	3.6	107
9	On computing the maximal delay intervals for stability of linear delay systems. <i>IEEE Transactions on Automatic Control</i> , 1995, 40, 1087-1093.	3.6	104
10	Tracking performance limitations in LTI multivariable discrete-time systems. <i>IEEE Transactions on Circuits and Systems Part 1: Regular Papers</i> , 2002, 49, 657-670.	0.1	99
11	Delay Margin of Low-Order Systems Achievable by PID Controllers. <i>IEEE Transactions on Automatic Control</i> , 2019, 64, 1958-1973.	3.6	90
12	Worst case system identification in H_2 : validation of a priori information, essentially optimal algorithms, and error bounds. <i>IEEE Transactions on Automatic Control</i> , 1995, 40, 1260-1265.	3.6	78
13	Bipartite consensus of general linear multi-agent systems. , 2014, , .		71
14	Frequency-domain tests for validation of linear fractional uncertain models. <i>IEEE Transactions on Automatic Control</i> , 1997, 42, 748-760.	3.6	66
15	An Eigenvalue Perturbation Approach to Stability Analysis, Part I: Eigenvalue Series of Matrix Operators. <i>SIAM Journal on Control and Optimization</i> , 2010, 48, 5564-5582.	1.1	51
16	Fundamental performance limitations in tracking sinusoidal signals. <i>IEEE Transactions on Automatic Control</i> , 2003, 48, 1371-1380.	3.6	50
17	An Eigenvalue Perturbation Approach to Stability Analysis, Part II: When Will Zeros of Time-Delay Systems Cross Imaginary Axis?. <i>SIAM Journal on Control and Optimization</i> , 2010, 48, 5583-5605.	1.1	48
18	Minimum-Energy Distributed Consensus Control of Multiagent Systems: A Network Approximation Approach. <i>IEEE Transactions on Automatic Control</i> , 2020, 65, 1144-1159.	3.6	43

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19	Sensitivity integrals for multivariable discrete-time systems. <i>Automatica</i> , 1995, 31, 1113-1124.	3.0	40
20	Optimal tracking performance for SIMO systems. <i>IEEE Transactions on Automatic Control</i> , 2002, 47, 1770-1775.	3.6	38
21	The role of the condition number and the relative gain array in robustness analysis. <i>Automatica</i> , 1994, 30, 1029-1035.	3.0	37
22	Structured singular values and stability analysis of uncertain polynomials, Part 2: a missing link. <i>Systems and Control Letters</i> , 1994, 23, 97-109.	1.3	37
23	Optimal tracking performance: preview control and exponential signals. <i>IEEE Transactions on Automatic Control</i> , 2001, 46, 1647-1653.	3.6	37
24	Consensus of second-order heterogeneous multi-agent systems under a directed graph. , 2014, , .		36
25	Optimal tracking performance of discrete-time systems over an additive white noise channel. , 2009, , .		35
26	The Caratheodory-Fejer problem and H_{∞} identification: a time domain approach. <i>IEEE Transactions on Automatic Control</i> , 1995, 40, 729-735.	3.6	34
27	Control Under Stochastic Multiplicative Uncertainties: Part I, Fundamental Conditions of Stabilizability. <i>IEEE Transactions on Automatic Control</i> , 2017, 62, 1269-1284.	3.6	34
28	Bounds on Delay Consensus Margin of Second-Order Multiagent Systems With Robust Position and Velocity Feedback Protocol. <i>IEEE Transactions on Automatic Control</i> , 2019, 64, 3780-3787.	3.6	34
29	Multivariable gain-phase and sensitivity integral relations and design trade-offs. <i>IEEE Transactions on Automatic Control</i> , 1998, 43, 373-385.	3.6	33
30	Structured singular values and stability analysis of uncertain polynomials, part 1: the generalized \mathcal{H}_{∞} . <i>Systems and Control Letters</i> , 1994, 23, 53-65.	1.3	31
31	LFT uncertain model validation with time- and frequency-domain measurements. <i>IEEE Transactions on Automatic Control</i> , 1999, 44, 1435-1441.	3.6	31
32	Robust Stability of Quasi-Polynomials: Frequency-Sweeping Conditions and Vertex Tests. <i>IEEE Transactions on Automatic Control</i> , 2008, 53, 1219-1234.	3.6	30
33	Generalized eigenvalue-based stability tests for 2-D linear systems: Necessary and sufficient conditions. <i>Automatica</i> , 2006, 42, 1569-1576.	3.0	27
34	Stabilization of two-input two-output systems over SNR-constrained channels. <i>Automatica</i> , 2013, 49, 3133-3140.	3.0	25
35	Fixed-Time Stabilization of Linear Delay Systems by Smooth Periodic Delayed Feedback. <i>IEEE Transactions on Automatic Control</i> , 2022, 67, 557-573.	3.6	25
36	Effect of carbon nanotubes and their dispersion on thermal curing of polyimide precursors. <i>Polymer Degradation and Stability</i> , 2010, 95, 1672-1678.	2.7	22

#	ARTICLE	IF	CITATIONS
37	H/sub \hat{z} / identification of multivariable systems by tangential interpolation methods. IEEE Transactions on Automatic Control, 1996, 41, 1822-1828.	3.6	21
38	On Performance Limitation in Tracking a Sinusoid. IEEE Transactions on Automatic Control, 2006, 51, 1320-1325.	3.6	21
39	Guest editorial new developments and applications in performance limitation of feedback control. IEEE Transactions on Automatic Control, 2003, 48, 1297-1297.	3.6	21
40	Structured singular values with nondiagonal structures. I. Characterizations. IEEE Transactions on Automatic Control, 1996, 41, 1507-1511.	3.6	20
41	Fundamental limit of discrete-time systems in tracking multi-tone sinusoidal signals. Automatica, 2007, 43, 15-30.	3.0	20
42	Best Achievable Tracking Performance in Sampled-Data Systems via LTI Controllers. IEEE Transactions on Automatic Control, 2008, 53, 2467-2479.	3.6	20
43	Delay Consensus Margin of First-Order Multiagent Systems With Undirected Graphs and PD Protocols. IEEE Transactions on Automatic Control, 2021, 66, 4192-4198.	3.6	19
44	Worst case identification of continuous time systems via interpolation. Automatica, 1994, 30, 1825-1837.	3.0	18
45	Consensus of linear multi-agent systems with fully distributed control gains under a general directed graph. , 2014, , .		18
46	Stability of systems with time-varying delays: An $\hat{\epsilon}$, '1 small-gain perspective. Automatica, 2015, 52, 260-265.	3.0	18
47	Optimal tracking over an additive white Gaussian noise channel. , 2009, , .		17
48	Secure State Estimation With Byzantine Sensors: A Probabilistic Approach. IEEE Transactions on Automatic Control, 2020, 65, 3742-3757.	3.6	17
49	Bounds on generalized structured singular values via the Perron root of matrix majorants. Systems and Control Letters, 1992, 19, 439-449.	1.3	15
50	Performance bounds for coprime factor controller reductions. Systems and Control Letters, 1995, 26, 119-127.	1.3	15
51	Optimal nonparametric identification from arbitrary corrupt finite time series. IEEE Transactions on Automatic Control, 1995, 40, 769-776.	3.6	15
52	Necessary and sufficient conditions for mean square stabilization over MIMO SNR-constrained channels. , 2012, , .		15
53	A comparison of small gain versus Lyapunov type robust stability bounds. International Journal of Robust and Nonlinear Control, 2001, 11, 1407-1414.	2.1	13
54	Optimal tracking design and performance analysis for LTI systems with quantization effects. , 2009, , .		13

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55	Parametric H_∞ loopshaping and weighted mixed sensitivity minimization. IEEE Transactions on Automatic Control, 1999, 44, 846-852.	3.6	12
56	High-Order Analysis Of Critical Stability Properties of Linear Time-Delay Systems. Proceedings of the American Control Conference, 2007, , .	0.0	12
57	Decentralized and Passive Model Order Reduction of Linear Networks With Massive Ports. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2012, 20, 865-877.	2.1	12
58	On D-stability and structured singular values. Systems and Control Letters, 1995, 24, 19-24.	1.3	11
59	Sensitivity integrals and transformation techniques: a new perspective. IEEE Transactions on Automatic Control, 1997, 42, 1037-1044.	3.6	11
60	Delay Robustness of PID Control of Second-Order Systems: Pseudoconcavity, Exact Delay Margin, and Performance Tradeoff. IEEE Transactions on Automatic Control, 2022, 67, 1194-1209.	3.6	11
61	Limitations on minimum tracking energy for SISO plants. , 2009, , .		10
62	Optimal Tracking Design of an MIMO Linear System with Quantization Effects. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 3268-3273.	0.4	10
63	On stabilizability of MIMO systems over parallel noisy channels. , 2014, , .		10
64	Explicit conditions for stabilization over noisy channels subject to SNR constraints. , 2013, , .		9
65	Stability Analysis of Polynomially Dependent Systems by Eigenvalue Perturbation. IEEE Transactions on Automatic Control, 2017, 62, 5915-5922.	3.6	9
66	Structured singular values with nondiagonal structures. II. Computation. IEEE Transactions on Automatic Control, 1996, 41, 1511-1516.	3.6	8
67	Output feedback stabilisation of single-input single-output linear systems with I/O network-induced delays. An eigenvalue-based approach. International Journal of Control, 2014, 87, 346-362.	1.2	8
68	Small-gain stability conditions for linear systems with time-varying delays. Systems and Control Letters, 2015, 81, 42-48.	1.3	8
69	Mean Square Stabilization Over SNR-Constrained Channels With Colored and Spatially Correlated Additive Noises. IEEE Transactions on Automatic Control, 2019, 64, 4825-4832.	3.6	8
70	Consensus of Continuous-Time Multiagent Systems via Delayed Output Feedback: Delay Versus Connectivity. IEEE Transactions on Automatic Control, 2021, 66, 1329-1336.	3.6	8
71	What Is Your Favorite Book on Classical Control? Responses to an Informal Survey. IEEE Control Systems, 2007, 27, 89-99.	1.0	6
72	Probabilistic bounds for $\ x\ $. $\langle \text{mml:math altimg="si1.gif" display="inline" overflow="scroll"} \rangle$ xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.els. Automatic	3.0	6

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73	Fundamental bounds on delay margin: When is a delay system stabilizable?. , 2014, , .		6
74	Model Order Reduction Based on Dynamic Relative Gain Array for MIMO Systems. IEEE Transactions on Circuits and Systems II: Express Briefs, 2020, 67, 2507-2511.	2.2	6
75	Model Invalidation in ℓ_1 Using Frequency-Domain Data. IEEE Transactions on Automatic Control, 2004, 49, 983-989.	3.6	5
76	Author's reply to a counterexample to Generalized eigenvalue-based stability tests for 2-D linear systems: Necessary and sufficient conditions. Automatica, 2010, 46, 236-237.	3.0	5
77	Stabilization of TITO Systems over Parallel SNR-Constrained AWN channels. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 85-90.	0.4	5
78	Consensus over directed graph: Output feedback and topological constraints. , 2013, , .		5
79	On Performance Limitation in Tracking Sinusoids. , 0, , .		4
80	An Average Performance Limit of MIMO Systems in Tracking Multi-Sinusoids With Partial Signal Information. IEEE Transactions on Automatic Control, 2009, 54, 2001-2006.	3.6	4
81	On logarithmic complementary sensitivity integrals for MIMO systems. , 1998, , .		3
82	Computing Maximum Delay Deviation Allowed to Retain Stability in Systems with Two Delays. Lecture Notes in Control and Information Sciences, 2007, , 157-164.	0.6	3
83	A nearly interpolatory algorithm for H_∞ identification with mixed time and frequency response data. IEEE Transactions on Automatic Control, 2001, 46, 464-469.	3.6	2
84	On the robust stability of some parameter-dependent linear systems: solutions via matrix pencil techniques. , 2007, , .		2
85	Optimal tracking and power allocation over an additive white noise channel. , 2009, , .		2
86	Probabilistic Estimates for Mixed Model Validation Problems With \mathcal{H}_∞ Type Uncertainties. IEEE Transactions on Automatic Control, 2010, 55, 1488-1494.	3.6	2
87	Power Gain Bounds of MIMO Networked Control Systems: An Entropy Perspective. IEEE Transactions on Automatic Control, 2019, 64, 1170-1177.	3.6	2
88	An Algebraic Formula for Performance Bounds of a Weighted \mathcal{H}_∞ Optimal Control Problem. IEEE Transactions on Automatic Control, 2021, 66, 781-786.	3.6	2
89	Worst-case asymptotic properties of \hat{a}_{∞} identification. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2002, 49, 437-446.	0.1	1
90	Model validation in ℓ_1 using frequency-domain data. , 0, , .		1

#	ARTICLE	IF	CITATIONS
91	An eigenvalue perturbation stability analysis approach with applications to time-delay and polynomially dependent systems. , 2008, , .		1
92	Stabilization over additive white noise forward and feedback channels. , 2010, , .		1
93	Optimal control of linear discrete-time systems with quantization effects. , 2014, , .		1
94	Optimal regulation of linear discrete-time systems with multiplicative noises. , 2014, , .		1
95	Topological constraints on consensus via delayed output feedback over directed graph. , 2014, , .		1
96	Feedback stabilization of MIMO systems in the presence of stochastic network uncertainties and delays. , 2015, , .		1
97	An Average Performance Limit of MIMO Systems in Tracking. , 2006, , .		0
98	Classical control revisited part II rounding out the basics. IEEE Control Systems, 2007, 27, 28-29.	1.0	0
99	Classical control revisited - Re-examining the basics in the field. IEEE Control Systems, 2007, 27, 20-21.	1.0	0
100	Exponentially weighted input-to-state stability for discrete switched system. , 2010, , .		0
101	Minimum capacity in stabilizing an LTI system with quantized control inputs via output feedback. , 2012, , .		0