Sabine Mondie

List of Publications by Year
in descending order

132 papers	2,647 citations	279487 23 h-index	205818 48 g-index
133 all docs	133 docs citations	133 times ranked	903 citing authors

#	Article	IF	Citations
1	Stabilisation of distributed time-delay systems: a smoothed spectral abscissa optimisation approach. International Journal of Control, 2022, 95, 2911-2923.	1.2	2
2	Estimates for solutions of homogeneous time-delay systems: comparison of Lyapunov–Krasovskii and Lyapunov–Razumikhin techniques. International Journal of Control, 2022, 95, 3002-3011.	1.2	3
3	Necessary and sufficient stability conditions for integral delay systems. International Journal of Robust and Nonlinear Control, 2022, 32, 3152-3174.	2.1	6
4	On the Stability of Linear Time-Delay Systems with Arbitrary Delays. Lecture Notes in Control and Information Sciences - Proceedings, 2022, , 73-80.	0.1	0
5	Special issue on System Theory and Delay in honor of Vladimir Kharitonov. International Journal of Robust and Nonlinear Control, 2022, 32, 3099-3100.	2.1	1
6	Dynamic predictor-based adaptive cruise control. Journal of the Franklin Institute, 2022, 359, 6123-6141.	1.9	8
7	Necessary and Sufficient Stability Condition by Finite Number of Mathematical Operations for Time-delay Systems of Neutral Type. IEEE Transactions on Automatic Control, 2021, 66, 2802-2808.	3.6	13
8	Backstepping for Uncertain Nonlinear Systems with a Delay in the Control. IFAC-PapersOnLine, 2021, 54, 758-763.	0.5	0
9	Observer–based predictor for a susceptible–infectious–recovered model with delays: An optimal–control case study. International Journal of Robust and Nonlinear Control, 2021, 31, 5118-5133.	2.1	6
10	Comments on the Bellman functional for linear time–delay systems. Optimal Control Applications and Methods, 2021, 42, 1531-1540.	1.3	2
11	Estimates for weighted homogeneous delay systems: A Lyapunov-Krasovskii-Razumikhin approach. , 2021, , .		3
12	Necessary stability conditions for linear systems with incommensurate delays. Automatica, 2021, 129, 109628.	3.0	4
13	Lyapunov–Krasovskii functionals for a class of homogeneous perturbed nonlinear time delay systems. , 2021, , .		0
14	Necessary Stability Conditions for Integral Delay Systems. IEEE Transactions on Automatic Control, 2020, 65, 4377-4384.	3.6	10
15	Robust stability analysis for linear systems with distributed delays: A time–domain approach. International Journal of Robust and Nonlinear Control, 2020, 30, 8299-8312.	2.1	6
16	Dynamic predictor for systems with state and input delay: A time–domain robust stability analysis. International Journal of Robust and Nonlinear Control, 2020, 30, 2204-2218.	2.1	14
17	A New Control Scheme for Time-Delay Compensation for Structural Vibration. IFAC-PapersOnLine, 2020, 53, 4804-4809.	0.5	3
18	Lyapunov-Krasovskii prescribed derivative and the Bellman functional for time-delay systems. IFAC-PapersOnLine, 2020, 53, 7160-7165.	0.5	1

#	ARTICLE	IF	CITATIONS
19	Computation of the Lyapunov matrix for periodic time-delay systems and its application to robust stability analysis. Systems and Control Letters, 2019, 132, 104501.	1.3	11
20	Fast consensus in a large-scale multi-agent system with directed graphs using time-delayed measurements. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20180130.	1.6	11
21	Lyapunov matrix based necessary and sufficient stability condition by finite number of mathematical operations for retarded type systems. Automatica, 2019, 108, 108475.	3.0	22
22	Delays compensation for an atmospheric sliced tomatoes dehydration process via state predictors. Journal of the Franklin Institute, 2019, 356, 11473-11491.	1.9	2
23	Assisted Cooperative Adaptive Cruise Control with human memory effects. , 2019, , .		4
24	Design of delay-based output-feedback controllers optimizing a quadratic cost function via the delay Lyapunov matrix. Automatica, 2019, 107, 146-153.	3.0	14
25	Nested Stabilization for Connected Cruise Control via the Delay Lyapunov Matrix. , 2019, , .		0
26	Dynamic predictor-based controls: a time-domain stability analysis. IEEE Latin America Transactions, 2019, 17, 1207-1213.	1.2	0
27	On the Lyapunov Matrix for Integral Delay Systems with a Class of General Kernel. IFAC-PapersOnLine, 2019, 52, 91-96.	0.5	4
28	Dynamic Predictor-based Extended Cooperative Adaptive Cruise Control. IFAC-PapersOnLine, 2019, 52, 7-12.	0.5	5
29	Necessary stability conditions for neutral-type systems with multiple commensurate delays. International Journal of Control, 2019, 92, 1155-1166.	1.2	15
30	Scanning the Space of Parameters for Stability Regions of a Class of Time-Delay Systems; A Lyapunov Matrix Approach. Advances in Delays and Dynamics, 2019, , 153-167.	0.4	1
31	Necessary Stability Conditions for Linear Difference Equations in Continuous Time. IEEE Transactions on Automatic Control, 2018, 63, 4405-4412.	3.6	20
32	Connected cruise control of a car platoon: A time-domain stability analysis. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2018, 232, 672-682.	0.7	4
33	Cascade proportional integral retarded control of servodrives. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2018, 232, 662-671.	0.7	6
34	Passivity-based PI control of first-order systems with I/O communication delays: aÂfrequency domain analysis. International Journal of Control, 2018, 91, 2549-2562.	1.2	7
35	Proportional-delayed controllers design for LTI-systems: a geometric approach. International Journal of Control, 2018, 91, 907-925.	1.2	28
36	Implementing Time-delay Controllers on an Educational Motion Control Platform. , 2018, , .		0

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37	Lyapunov Matrices for the Stability Analysis of a Multiple Distributed Time-Delay System with Piecewise-Function Kernel. , 2018, , .		5
38	Lyapunov matrices for the stability analysis of a system with state and input delays and dynamic predictor control. , 2018, , .		1
39	Construction of Delay Lyapunov Matrix for Integral Delay Systems. , 2018, , .		5
40	A tuning procedure for the Cascade Proportional Integral Retarded Controller. IFAC-PapersOnLine, 2018, 51, 61-65.	0.5	4
41	Stability conditions for time delay systems in terms of the Lyapunov matrix. IFAC-PapersOnLine, 2018, 51, 136-141.	0.5	7
42	A new stability criterion for neutral-type systems with one delay. IFAC-PapersOnLine, 2018, 51, 177-182.	0.5	5
43	Two delay-based nonlinear controllers and their tuning methods. , 2018, , .		0
44	Optimization of the H2 Norm for Time-Delay Systems, with Application to Control Design and Model Approximation. IEEE Transactions on Automatic Control, 2018, , 1-1.	3.6	3
45	An Analytical Approach to Tuning of Delay-Based Controllers for LTI-SISO Systems. SIAM Journal on Control and Optimization, 2017, 55, 397-412.	1.1	45
46	Necessary and sufficient stability conditions for linear systems with pointwise and distributed delays. Automatica, 2017, 80, 218-224.	3.0	54
47	Computation of the region of attraction for a class of nonlinear neutral type delay systems * *Project CONACYT 180725.. IFAC-PapersOnLine, 2017, 50, 11990-11995.	0.5	3
48	Quad rotor-UAV stabilization by predictor based control. , 2017, , .		0
49	Necessary Stability Conditions for Neutral Type Systems With a Single Delay. IEEE Transactions on Automatic Control, 2017, 62, 4691-4697.	3.6	22
50	On the Lyapunov Matrix of Linear Delay Difference Equations in Continuous Time * *Project CONACYT 180725. IFAC-PapersOnLine, 2017, 50, 6507-6512.	0.5	4
51	Position control of servodrives using a cascade proportional integral retarded controller. , 2017, , .		4
52	Stability analysis of a car platoon with communication delays and headway compensation. , 2017, , .		0
53	A Lyapunov matrix based stability criterion for a class of time-delay systems. Vestnik Sankt-Peterburgskogo Universiteta, Prikladnaya Matematika, Informatika, Protsessy Upravleniya, 2017, 13, 407-416.	0.1	2
54	Singularly perturbed implicit control law for linear time-varying delay MIMO systems. International Journal of Robust and Nonlinear Control, 2016, 26, 1395-1421.	2.1	2

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55	Necessary exponential stability conditions for linear periodic time–delay systems. International Journal of Robust and Nonlinear Control, 2016, 26, 3996-4007.	2.1	20
56	Scanning the space of parameters for stability regions of neutral type delay systems: A Lyapunov matrix approach. , 2016, , .		6
57	The control of drilling vibrations: A coupled PDE-ODE modeling approach. International Journal of Applied Mathematics and Computer Science, 2016, 26, 335-349.	1.5	32
58	Robust stability of dynamic predictor based control laws for input and state delay systems. Systems and Control Letters, 2016, 96, 95-102.	1.3	15
59	Obtention of the functional of complete type for neutral type delay systems via a new Cauchy formula**Project CONACYT 180725. IFAC-PapersOnLine, 2016, 49, 118-123.	0.5	4
60	A control oriented guided tour in oilwell drilling vibration modeling. Annual Reviews in Control, 2016, 42, 100-113.	4.4	56
61	Algebraic dominant pole placement methodology for unmanned aircraft systems with time delay. IEEE Transactions on Aerospace and Electronic Systems, 2016, 52, 1108-1119.	2.6	11
62	Exponential Stability With Decay Rate Estimation for Linear Difference Equations. IEEE Transactions on Automatic Control, 2016, 61, 252-257.	3.6	16
63	Necessary Stability Conditions for Delay Systems With Multiple Pointwise and Distributed Delays. IEEE Transactions on Automatic Control, 2016, 61, 1987-1994.	3.6	19
64	A constructive approach for an optimal control applied to a class of nonlinear time delay systems. Journal of Process Control, 2016, 40, 35-49.	1.7	17
65	Design of Proportional-Integral-Retarded (PIR) Controllers for Second-Order LTI Systems. IEEE Transactions on Automatic Control, 2016, 61, 1688-1693.	3.6	115
66	Saturations-based nonlinear controllers with integral term: validation in real-time. International Journal of Control, 2016, 89, 879-891.	1.2	3
67	Estimate of the Exponential Decay of Linear Delay Systems Via the Lyapunov Matrix. Advances in Delays and Dynamics, 2016, , 89-105.	0.4	1
68	Quad-rotor orientation control by predictor based sliding mode control. , 2015, , .		1
69	Distributed delay systems with truncated Gamma distribution: instability regions∗—∗—Supported by CONACYT Project 180725.. IFAC-PapersOnLine, 2015, 48, 239-244.	0.5	5
70	Critical parameters of integral delay systems. International Journal of Robust and Nonlinear Control, 2015, 25, 1094-1105.	2.1	10
71	Stability of linear continuous–time difference equations with distributed delay: Constructive exponential estimates. International Journal of Robust and Nonlinear Control, 2015, 25, 3195-3209.	2.1	21
72	Guaranteed cost control using Lyapunov redesign for uncertain linear time delay systems∗—∗—Partially supported by Conacyt Projects 239371 and 180725. IFAC-PapersOnLine, 2015, 48, 392-397.	0.5	6

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73	The delay Lyapunov matrix in robust stability analysis of time-delay systems. IFAC-PapersOnLine, 2015, 48, 245-250.	0.5	22
74	Velocity control of servo systems using an integral retarded algorithm. ISA Transactions, 2015, 58, 357-366.	3.1	45
75	Design of Maximum Decay Rate for SISO Systems with Delayed Output Feedback Using Elimination Theoryâˆ’âˆ’This work has been supported by CONACYT grant 180725 and PNPC, and developed in part during A. RamÃrez's visit to R. Sipahi at Northeastern University.. IFAC-PapersOnLine, 2015, 48, 221-226.	0.5	11
76	Necessary conditions for the exponential stability of a class of distributed delay-systems. , 2014, , .		5
77	Necessary stability conditions for linear delay systems. Automatica, 2014, 50, 3204-3208.	3.0	60
78	Necessary exponential stability conditions for scalar periodic time-delay systems. , 2014, , .		0
79	Necessary conditions for the exponential stability of time-delay systems via the Lyapunov delay matrix. International Journal of Robust and Nonlinear Control, 2014, 24, 1760-1771.	2.1	19
80	Suppressing Stick-Slip Oscillations in Oilwell Drillstrings. Advances in Delays and Dynamics, 2014, , 189-203.	0.4	1
81	Difference equations in continuous time with distributed delay: Exponential estimates. , 2014, , .		1
82	Singularly perturbed control law for linear time-invariant delay SISO systems. Boletin De La Sociedad Matematica Mexicana, 2014, 20, 69-85.	0.2	2
83	Stability Analysis of a Vision-Based UAV Controller. Journal of Intelligent and Robotic Systems: Theory and Applications, 2014, 74, 69-84.	2.0	9
84	Robust stabilization of nonlinear time delay systems: A complete type functionals approach. Journal of the Franklin Institute, 2014, 351, 207-224.	1.9	4
85	Inverse optimality for a class of nonlinear time delay systems: A constructive approach. , 2014, , .		1
86	Necessary Stability Conditions for One Delay Systems: A Lyapunov Matrix Approach. Advances in Delays and Dynamics, 2014, , 3-16.	0.4	0
87	Practical stability and stabilization of a class of nonlinear neutral type time delay systems with multiple delays: BMIâ€™s approaches. International Journal of Control, Automation and Systems, 2013, 11, 859-867.	1.6	10
88	Predictor-based Position Control of a Quad-rotor with Delays in GPS and Vision Measurements. Journal of Intelligent and Robotic Systems: Theory and Applications, 2013, 70, 13-26.	2.0	23
89	Critical frequencies and parameters for linear delay systems: A Lyapunov matrix approach. Systems and Control Letters, 2013, 62, 781-790.	1.3	37
90	Drilling vibration reduction via attractive ellipsoid method. Journal of the Franklin Institute, 2013, 350, 485-502.	1.9	22

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91	Tuning of Proportional Retarded Controllers: Theory and Experiments. IEEE Transactions on Control Systems Technology, 2013, 21, 983-990.	3.2	72
92	Proportional Integral Retarded control of second order linear systems. , 2013, , .		16
93	Assessing the exact stability region of the single-delay scalar equation via its Lyapunov function. IMA Journal of Mathematical Control and Information, 2012, 29, 459-470.	1.1	25
94	Computation of Imaginary Axis Eigenvalues and Critical Parameters for Neutral Time Delay Systems. Lecture Notes in Control and Information Sciences, 2012, , 61-72.	0.6	5
95	Exponential Stability of Integral Delay Systems With a Class of Analytic Kernels. IEEE Transactions on Automatic Control, 2012, 57, 484-489.	3.6	32
96	Some necessary conditions for the exponential stability of one delay systems. , 2011, , .		8
97	Instability conditions for linear time delay systems: a Lyapunov matrix function approach. International Journal of Control, 2011, 84, 1601-1611.	1.2	27
98	Exponential stability analysis of the drilling system described by a switched neutral type delay equation with nonlinear perturbations. , 2011, , .		21
99	Exponential stabilization of a class of nonlinear neutral type time-delay systems, an oilwell drilling model example. , 2011, , .		2
100	Practical Stability of Time-Delay Systems: LMI's Approach. European Journal of Control, 2011, 17, 127-138.	1.6	13
101	Stick-slip Oscillations in Oillwell Drilstrings: Distributed Parameter and Neutral Type Retarded Model Approaches. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 284-289.	0.4	61
102	Guaranteed cost control of linear systems with distributed delays: A complete type functionals approach. International Journal of Control, Automation and Systems, 2010, 8, 497-505.	1.6	10
103	Stability analysis and estimate of the region of attraction of a human respiratory model: [republished article]. IMA Journal of Mathematical Control and Information, 2010, 27, 493-511.	1.1	0
104	Stability analysis and estimate of the region of attraction of a human respiratory model. IMA Journal of Mathematical Control and Information, 2010, 27, 309-327.	1.1	6
105	Bounds on the response of a drilling pipe model. IMA Journal of Mathematical Control and Information, 2010, 27, 513-526.	1.1	33
106	Frequency Stability Analysis of Linear Systems with General Distributed Delays. Lecture Notes in Control and Information Sciences, 2009, , 25-36.	0.6	6
107	Reducing stick-slip oscillations in oilwell drillstrings. , 2009, , .		9
108	Lyapunov matrix of linear systems with delays: A polynomial approximation. , 2009, , .		1

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109	Linear quadratic suboptimal control for time delays systems. International Journal of Control, 2009, 82, 147-154.	1.2	29
110	Lyapunov Matrices for Neutral Type Time Delay Systems. Lecture Notes in Control and Information Sciences, 2009, , 61-71.	0.6	11
111	Stability analysis and estimate of the region of attraction of a human respiratory model. , 2008, , .		0
112	Estimate of the region of attraction for a class of nonlinear time delay systems: a leukemia post-transplantation dynamics example. , 2007, , .		2
113	On the optimal control of time delay systems: a complete type functionals approach. , 2007, , .		5
114	Global Asymptotic Stabilization of a PVTOL Aircraft Model with Delay in the Input. , 2007, , 343-356.		16
115	Exponential estimates for neutral time delay systems with multiple delays. International Journal of Robust and Nonlinear Control, 2006, 16, 71-84.	2.1	21
116	Exponential estimates for retarded time-delay systems: an LMI approach. IEEE Transactions on Automatic Control, 2005, 50, 268-273.	3.6	164
117	Robust stability of quasi-polynomials and the finite inclusions theorem. IEEE Transactions on Automatic Control, 2005, 50, 1826-1831.	3.6	14
118	Exponential estimates for neutral time-delay systems: an LMI approach. IEEE Transactions on Automatic Control, 2005, 50, 666-670.	3.6	70
119	Global stabilization of oscillators with bounded delayed input. Systems and Control Letters, 2004, 53, 415-422.	1.3	86
120	Global Asymptotic Stabilization of Feedforward Systems With Delay in the Input. IEEE Transactions on Automatic Control, 2004, 49, 844-850.	3.6	226
121	Stability Analysis of Linear Time Delay Systems via Piecewise Linear Complete Lyapunov-Krasovskii Functionals *. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 103-108.	0.4	2
122	The Effect of Approximating Distributed Delay Control Laws on Stability. Lecture Notes in Computational Science and Engineering, 2004, , 207-222.	0.1	17
123	Matrix convex directions for time delay systems. International Journal of Robust and Nonlinear Control, 2003, 13, 1259-1270.	2.1	2
124	Global asymptotic stabilization for chains of integrators with a delay in the input. IEEE Transactions on Automatic Control, 2003, 48, 57-63.	3.6	226
125	Finite spectrum assignment of unstable time-delay systems with a safe implementation. IEEE Transactions on Automatic Control, 2003, 48, 2207-2212.	3.6	325
126	The finite inclusions theorem / finite zero exclusion principle for complex quasipolynomials 1. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 245-250.	0.4	1

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127	Robust stability of time delay systems and the finite inclusions theorem 1. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 251-256.	0.4	2
128	Some Remarks on Matrix Completion Problems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2001, 34, 119-124.	0.4	0
129	On the complete controllability indexes assignment problem. IEEE Transactions on Automatic Control, 2001, 46, 348-352.	3.6	3
130	State feedback in linear control theory. Linear Algebra and Its Applications, 2000, 317, 177-192.	0.4	5
131	Assigning the Kronecker invariants of a matrix pencil by row or column completions. Linear Algebra and Its Applications, 1998, 278, 327-336.	0.4	38
132	On the Geometric Decomposition of a Space and its Quotient Space with Respect to a Linear Operator. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1998, 31, 119-123.	0.4	0