FrÃ©dÃ©ric Mazenc

List of Publications by Year
in descending order

97 **papers**	2,343 **citations**	257101 24 **h-index**	214527 47 **g-index**
97 **all docs**	97 **docs citations**	97 **times ranked**	1062 **citing authors**

#	Article	IF	Citations
1	Vector Extensions of Halanay's Inequality. IEEE Transactions on Automatic Control, 2022, 67, 1453-1459.	3.6	8
2	New Finite-Time and Fast Converging Observers With a Single Delay. , 2022, 6, 1561-1566.		3
3	Event-triggered control for continuous-time linear systems with a delay in the input. Systems and Control Letters, 2022, 159, 105075.	1.3	12
4	New Versions of Halanay's Inequality With Multiple Gain Terms. , 2022, 6, 1790-1795.		3
5	Event-Triggered Control for Discrete-Time Systems Using a Positive Systems Approach. , 2022, 6, 1843-1848.		6
6	Event-triggered control for linear time-varying systems using a positive systems approach. Systems and Control Letters, 2022, 161, 105131.	1.3	8
7	Event-Triggered Prediction-Based Delay Compensation Approach. , 2022, 6, 2515-2520.		2
8	Almost Finite-Time Observers for a Family of Nonlinear Continuous-Time Systems. , 2022, 6, 2593-2598.		1
9	New Bounds for State Transition Matrices. , 2022, , 1-1.		0
10	Feedback stabilization and robustness analysis using bounds on fundamental matrices. Systems and Control Letters, 2022, 164, 105212.	1.3	1
11	Sampled-data estimator for nonlinear systems with uncertainties and arbitrarily fast rate of convergence. Automatica, 2022, 142, 110361.	3.0	2
12	ISS inequalities for vector versions of Halanay's inequality and of the trajectory-based approach. European Journal of Control, 2022, 68, 100665.	1.6	2
13	Global Stabilization of Discrete-Time Linear Systems Subject to Input Saturation and Time Delay. IEEE Transactions on Automatic Control, 2021, 66, 1345-1352.	3.6	17
14	Stability Analysis for Time-Varying Systems With Asynchronous Sampling Using Contractivity Approach. , 2021, 5, 49-54.		3
15	Stability Analysis Using Generalized Sup-Delay Inequalities. , 2021, 5, 1411-1416.		3
16	Stability and observer designs using new variants of Halanay's inequality. Automatica, 2021, 123, 109299.	3.0	6
17	Backstepping for Uncertain Nonlinear Systems with a Delay in the Control. IFAC-PapersOnLine, 2021, 54, 758-763.	0.5	0
18	Stability Analysis using New Variant of Halanay's Inequality. IFAC-PapersOnLine, 2021, 54, 783-786.	0.5	1

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19	Reduced-order fast converging observers for systems with discrete measurements and measurement error. Systems and Control Letters, 2021, 150, 104892.	1.3	6
20	Stability Analysis using Generalized Sup-Delay Inequalities. , 2021, , .		0
21	Event-triggered control using a positive systems approach. European Journal of Control, 2021, 62, 63-68.	1.6	10
22	A behavioural dynamic model for constant power loads in single-phase AC systems. Automatica, 2021, 131, 109744.	3.0	6
23	Reduced Order Fast Converging Observer for Systems with Discrete Measurements. IFAC-PapersOnLine, 2021, 54, 219-224.	0.5	1
24	Controls for a nonlinear system arising in visionâ€based landing of airliners. International Journal of Robust and Nonlinear Control, 2021, 31, 1227-1244.	2.1	1
25	Feedback Stabilization with Discrete Measurements using Bounds on Fundamental Matrices. , 2021, , .		2
26	New Fixed Time and Fast Converging Reduced Order Observers. , 2021, , .		0
27	Event-Triggered Control for Systems with State Delays Using a Positive Systems Approach. , 2021, , .		3
28	Delay-Hybrid-Dependent Stability for Systems With Large Delays. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2020, 50, 2752-2759.	5.9	10
29	Continuous Discrete Sequential Observers for Time-Varying Systems Under Sampling and Input Delays. IEEE Transactions on Automatic Control, 2020, 65, 1704-1709.	3.6	17
30	Stabilization for a chain of saturating integrators arising in the visual landing of aircraft with sampling. Systems and Control Letters, 2020, 135, 104574.	1.3	2
31	Sequential predictors for delay compensation for discrete time systems with time-varying delays. Automatica, 2020, 122, 109188.	3.0	9
32	Global Stabilization of the Discrete-Time Integrators System by Bounded Controls. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 5175-5188.	3.5	3
33	Sampled-Data Estimator for Nonlinear Systems with Arbitrarily Fast Rate of Convergence. , 2020, , .		1
34	Reduced order finite time observers and output feedback for time-varying nonlinear systems. Automatica, 2020, 119, 109083.	3.0	10
35	Constructive backstepping for a class of delay systems based on functionals of complete type. IFAC-PapersOnLine, 2020, 53, 4810-4815.	0.5	0
36	Finite time estimation for time-varying systems with delay in the measurements. Systems and Control Letters, 2019, 133, 104551.	1.3	11

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37	Finite-time guaranteed state estimation for discrete-time systems with disturbances. , 2019, , .		4
38	Stabilization and Robustness Analysis for a Chain of Saturating Integrators With Imprecise Measurements. , 2019, 3, 428-433.		6
39	Stabilization and Robustness Analysis for a Chain of Saturating Integrators Arising in the Visual Landing of Aircraft. , 2019, , .		1
40	Sampled-Data Observers: Scarce Arbitrarily Large Sampling Intervals*. , 2019, , .		2
41	On Average Values of Time-Varying Delays and a New Representation of Systems with Time-Varying Delays. , 2019, , .		0
42	Partial Lyapunov Strictification: Dual-Quaternion-Based Observer for 6-DOF Tracking Control. IEEE Transactions on Control Systems Technology, 2019, 27, 2453-2469.	3.2	21
43	Backstepping design for output feedback stabilization for a class of uncertain systems. Systems and Control Letters, 2019, 123, 134-143.	1.3	8
44	High-Gain Nonlinear Observer With Lower Tuning Parameter. IEEE Transactions on Automatic Control, 2019, 64, 3194-3209.	3.6	46
45	Bounded backstepping control and robustness analysis for time-varying systems under converging-input-converging-state conditions. European Journal of Control, 2018, 42, 15-24.	1.6	9
46	Control in dormancy or eradication of cancer stem cells: Mathematical modeling and stability issues. Journal of Theoretical Biology, 2018, 449, 103-123.	0.8	11
47	Robust compensation of a chattering time-varying input delay with jumps. Automatica, 2018, 92, 225-234.	3.0	21
48	Stability and Robustness Analysis for Switched Systems with Time-Varying Delays. SIAM Journal on Control and Optimization, 2018, 56, 158-182.	1.1	21
49	Dynamic output feedback stabilization of switched linear systems with delay via a trajectory based approach. Automatica, 2018, 93, 92-97.	3.0	22
50	Stabilization with imprecise measurements: application to a vision based landing problem. , 2018, , .		4
51	Continuous-Discrete Sequential Observers under Sampling and Input Delays. , 2018, , .		3
52	Reduced Order Finite Time Observers for Time-Varying Nonlinear Systems. , 2018, , .		3
53	Sequential Predictors for Linear Time-Varying Systems with Delays in the Vector Field and in the Input. , 2018, , .		1
54	Backstepping Design for Output Feedback Stabilization for a Class of Uncertain Systems using Dynamic Extension. IFAC-PapersOnLine, 2018, 51, 260-265.	0.5	2

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55	Finite Time Estimation via Piecewise Constant Measurements. IFAC-PapersOnLine, 2018, 51, 508-513.	0.5	0
56	Stabilization of a Nonlinear System that Arises in the Context of Vision Based Landing of an Airliner. , 2018, , .		2
57	Finite time estimation through a continuousâ€discrete observer. International Journal of Robust and Nonlinear Control, 2018, 28, 4831-4849.	2.1	15
58	Extensions of Razumikhinâ€™s theorem and Lyapunovâ€"Krasovskii functional constructions for time-varying systems with delay. Automatica, 2017, 78, 1-13.	3.0	52
59	Stability and Control Design for Time-Varying Systems with Time-Varying Delays using a Trajectory-Based Approach. SIAM Journal on Control and Optimization, 2017, 55, 533-556.	1.1	32
60	Stabilization and robustness analysis for time-varying systems with time-varying delays using a sequential subpredictors approach. Automatica, 2017, 82, 118-127.	3.0	44
61	Stabilization of linear systems with both input and state delays by observerâ€"predictors. Automatica, 2017, 83, 368-377.	3.0	59
62	Stabilization of Nonlinear Time-Varying Systems Through a New Prediction Based Approach. IEEE Transactions on Automatic Control, 2017, 62, 2908-2915.	3.6	60
63	Bounded backstepping through a dynamic extension with delay. , 2017, , .		4
64	New bounded backstepping control designs for time-varying systems under converging-input-converging-state conditions. , 2016, , .		6
65	New prediction approach for stabilizing time-varying systems under time-varying input delay. , 2016, , .		14
66	Analysis of a Nonlinear Delay Differential-Difference Biological Model**This work is supported by a public grant overseen by the French National Research Agency (ANR) as part of the "Investissement dâ€™Avenir" program, through the "iCODE Institute project" funded by the IDEX Paris-Saclay, ANR-ll-IDEX-0003-02. IFAC-PapersOnLine, 2016, 49, 246-251.	0.5	1
67	Stability of immature cell dynamics in healthy and unhealthy hematopoiesis. , 2016, , .		5
68	New control design for bounded backstepping under input delays. Automatica, 2016, 66, 48-55.	3.0	27
69	Predictor-based sampled-data exponential stabilization through continuousâ€"discrete observers. Automatica, 2016, 63, 74-81.	3.0	17
70	Stability Analysis for Time-Varying Systems With Delay Using Linear Lyapunov Functionals and a Positive Systems Approach. IEEE Transactions on Automatic Control, 2016, 61, 771-776.	3.6	48
71	Bounded backstepping approach under input delays. , 2015, , .		5
72	Lyapunov stability analysis of a model describing hematopoiesis. , 2015, , .		8

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73	Trajectory Based Approach for the Stability Analysis of Nonlinear Systems with Time Delays. IEEE Transactions on Automatic Control, 2015, 60, 1716-1721.	3.6	45
74	Partial Lyapunov Strictification: Smooth Angular Velocity Observers for Attitude Tracking Control. Journal of Guidance, Control, and Dynamics, 2015, 38, 442-451.	1.6	49
75	Estimation of solutions of observable nonlinear systems with disturbances. Systems and Control Letters, 2015, 79, 47-58.	1.3	22
76	Design of continuous–discrete observers for time-varying nonlinear systems. Automatica, 2015, 57, 135-144.	3.0	64
77	Continuous-Discrete Observers for Time-Varying Nonlinear Systems: A Tutorial on Recent Results. , 2015, , 181-188.		6
78	Asymptotic stabilization of linear time-varying systems with input delays via delayed static output feedback. , 2015, , .		7
79	Predictor-based sampled-data stabilization via continuous-discrete observers. , 2014, , .		2
80	ISS interval observers for nonlinear systems transformed into triangular systems. International Journal of Robust and Nonlinear Control, 2014, 24, 1241-1261.	2.1	20
81	Reduction Model Approach for Linear Time-Varying Systems With Delays. IEEE Transactions on Automatic Control, 2014, 59, 2068-2082.	3.6	68
82	Local Stabilization of Nonlinear Systems Through the Reduction Model Approach. IEEE Transactions on Automatic Control, 2014, 59, 3033-3039.	3.6	30
83	Construction of interval observers for continuous-time systems with discrete measurements. Automatica, 2014, 50, 2555-2560.	3.0	59
84	Asymptotic stabilization for feedforward systems with delayed feedbacks. Automatica, 2013, 49, 780-787.	3.0	26
85	Continuous-discrete interval observers for systems with discrete measurements. , 2013, , .		15
86	Lyapunov Technique and Backstepping for Nonlinear Neutral Systems. IEEE Transactions on Automatic Control, 2013, 58, 512-517.	3.6	15
87	Reduction Model Approach for Linear Systems With Sampled Delayed Inputs. IEEE Transactions on Automatic Control, 2013, 58, 1263-1268.	3.6	51
88	Robustness of nonlinear systems with respect to delay and sampling of the controls. Automatica, 2013, 49, 1925-1931.	3.0	86
89	Lyapunov–Krasovskii functionals and application to input delay compensation for linear time-invariant systems. Automatica, 2012, 48, 1317-1323.	3.0	115
90	Backstepping for Nonlinear Systems with Delay in the Input Revisited. SIAM Journal on Control and Optimization, 2011, 49, 2263-2278.	1.1	52

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91	Generating positive and stable solutions through delayed state feedback. Automatica, 2011, 47, 525-533.	3.0	64
92	Interval observers for linear time-invariant systems with disturbances. Automatica, 2011, 47, 140-147.	3.0	365
93	Constructions of Strict Lyapunov Functions. Communications and Control Engineering, 2009, , .	1.0	204
94	A Simplified Design for Strict Lyapunov Functions Under Matrosov Conditions. IEEE Transactions on Automatic Control, 2009, 54, 177-183.	3.6	21
95	Further results on input-to-state stability for nonlinear systems with delayed feedbacks. Automatica, 2008, 44, 2415-2421.	3.0	150
96	Lyapunov functions for time-varying systems satisfying generalized conditions of Matrosov theorem. Mathematics of Control, Signals, and Systems, 2007, 19, 151-182.	1.4	33
97	Backstepping with Bounded Feedbacks for Time-Varying Systems. SIAM Journal on Control and Optimization, 2004, 43, 856-871.	1.1	20