Joao Manoel Gomes da Silva Junior

List of Publications by Year
in descending order

125 papers	3,290 citations	279487 23 h-index	189595 50 g-index
125 all docs	125 docs citations	125 times ranked	1431 citing authors

#	Article	IF	Citations
1	Stability and Stabilization of Linear Systems with Saturating Actuators. , 2011, , .		464
2	Antiwindup design with guaranteed regions of stability: an LMI-based approach. IEEE Transactions on Automatic Control, 2005, 50, 106-111.	3.6	431
3	Stability Analysis and Stabilization of Systems Presenting Nested Saturations. IEEE Transactions on Automatic Control, 2006, 51, 1364-1371.	3.6	226
4	Synthesis of controllers for continuous-time delay systems with saturating controls via LMIs. IEEE Transactions on Automatic Control, 2000, 45, 105-111.	3.6	190
5	Local stabilization of discrete-time linear systems with saturating controls: an LMI-based approach. IEEE Transactions on Automatic Control, 2001, 46, 119-125.	3.6	188
6	Multiple Resonant Controllers for Uninterruptible Power Suppliesâ€"A Systematic Robust Control Design Approach. IEEE Transactions on Industrial Electronics, 2014, 61, 1528-1538.	5.2	139
7	Anti-windup design with guaranteed regions of stability for discrete-time linear systems. Systems and Control Letters, 2006, 55, 184-192.	1.3	111
8	Taking into account period variations and actuator saturation in sampled-data systems. Systems and Control Letters, 2012, 61, 1286-1293.	1.3	90
9	Local stabilization of linear systems under amplitude and rate saturating actuators. IEEE Transactions on Automatic Control, 2003, 48, 842-847.	3.6	75
10	Delay-dependent anti-windup strategy for linear systems with saturating inputs and delayed outputs. International Journal of Robust and Nonlinear Control, 2004, 14, 665-682.	2.1	70
11	Observerâ€based eventâ€triggered control coâ€design for linear systems. IET Control Theory and Applications, 2016, 10, 2466-2473.	1.2	54
12	Wave Equation With Cone-Bounded Control Laws. IEEE Transactions on Automatic Control, 2016, 61, 3452-3463.	3.6	50
13	Polyhedral regions of local stability for linear discrete-time systems with saturating controls. IEEE Transactions on Automatic Control, 1999, 44, 2081-2085.	3.6	49
14	Computing estimates of the region of attraction for rational control systems with saturating actuators. IET Control Theory and Applications, 2010, 4, 315-325.	1.2	49
15	Dynamic Output Feedback for Discrete-Time Systems Under Amplitude and Rate Actuator Constraints. IEEE Transactions on Automatic Control, 2008, 53, 2367-2372.	3.6	47
16	Static antiâ€windup design for a class of nonlinear systems. International Journal of Robust and Nonlinear Control, 2014, 24, 793-810.	2.1	44
17	Stabilisation of neutral systems with saturating control inputs. International Journal of Systems Science, 2011, 42, 1093-1103.	3.7	43
18	Dynamic output feedback stabilization for systems with sector-bounded nonlinearities and saturating actuators. Journal of the Franklin Institute, 2013, 350, 464-484.	1.9	41

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19	â„’2-Stabilization of continuous-time linear systems with saturating actuators. International Journal of Robust and Nonlinear Control, 2006, 16, 935-944.	2.1	39
20	Regional Stability Analysis of Discrete-Time Dynamic Output Feedback Under Aperiodic Sampling and Input Saturation. IEEE Transactions on Automatic Control, 2016, 61, 4176-4182.	3.6	37
21	Delay-Dependent Anti-Windup Loops for Enlarging the Stability Region of Time Delay Systems With Saturating Inputs. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2003, 125, 265-267.	0.9	37
22	Anti-windup Design for Time-delay Systems Subject to Input Saturation An LMI-based Approach. European Journal of Control, 2006, 12, 622-634.	1.6	33
23	Event-Triggered State-Feedback Control for Continuous-Time Plants Subject to Input Saturation. Journal of Control, Automation and Electrical Systems, 2016, 27, 473-484.	1.2	30
24	Repetitive Control Design for MIMO Systems With Saturating Actuators. IEEE Transactions on Automatic Control, 2012, 57, 192-198.	3.6	25
25	A reduced-order framework applied to linear systems with constrained controls. IEEE Transactions on Automatic Control, 1996, 41, 249-255.	3.6	22
26	Control design for LPV systems with input saturation and state constraints: An application to a semi-active suspension. , 2011, , .		22
27	Robust stability of uncertain polytopic linear time-delay systems with saturating inputs: an LMI approach. Computers and Electrical Engineering, 2002, 28, 157-169.	3.0	21
28	Estimating the Region of Attraction of Nonlinear Control Systems with Saturating Actuators. Proceedings of the American Control Conference, 2007, , .	0.0	21
29	Finite â„’2 gain and internal stabilisation of linear systems subject to actuator and sensor saturations. IET Control Theory and Applications, 2009, 3, 799-812.	1.2	21
30	PI event-triggered control under saturating actuators. International Journal of Control, 2019, 92, 1634-1644.	1.2	21
31	Sampled-data control under magnitude and rate saturating actuators. International Journal of Robust and Nonlinear Control, 2016, 26, 3232-3252.	2.1	20
32	A systematic approach for robust repetitive controller design. Control Engineering Practice, 2016, 54, 214-222.	3.2	20
33	Dynamic output controller design for linear systems with actuator and sensor saturation. Proceedings of the American Control Conference, 2007, , .	0.0	19
34	Non-rational dynamic output feedback for time-delay systems with saturating inputs. International Journal of Control, 2008, 81, 557-570.	1.2	18
35	Stability regions for linear systems with saturating controls. , 1999, , .		17
36	Design of time-varying controllers for discrete-time linear systems with input saturation. IET Control Theory and Applications, 2007, 1, 155-162.	1.2	17

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37	Stability and Stabilization of Aperiodic Sampled-Data Systems Subject to Control Input Saturation: A Set Invariant Approach. IEEE Transactions on Automatic Control, 2022, 67, 1423-1429.	3.6	17
38	Observer-based event-triggered control in the presence of cone-bounded nonlinear inputs. Nonlinear Analysis: Hybrid Systems, 2019, 33, 17-32.	2.1	16
39	Convex framework for the design of dynamic anti-windup for state-delayed systems. IET Control Theory and Applications, 2011, 5, 1388-1396.	1.2	15
40	Output Feedback Controller Design for systems with Amplitude and Rate Control Constraints. Asian Journal of Control, 2012, 14, 1113-1117.	1.9	15
41	Event-triggered PI control design.. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 6947-6952.	0.4	15
42	A state feedback input constrained control design for a 4-semi-active damper suspension system: a quasi-LPV approach. IFAC-PapersOnLine, 2015, 48, 259-264.	0.5	15
43	Observer-based event-triggered control for linear systems subject to cone-bounded nonlinearities. IFAC-PapersOnLine, 2017, 50, 7893-7898.	0.5	14
44	Improved MPC Design based on Saturating Control Laws*. European Journal of Control, 2005, 11, 112-122.	1.6	13
45	Repetitive controller design for uninterruptible power supplies: An LMI approach. , 2011, , .		13
46	Observer-based event-triggered control: A discrete-time approach. , 2016, , .		13
47	â€disturbance attenuation for LPV systems under sampledâ€data control. International Journal of Robust and Nonlinear Control, 2018, 28, 5019-5032.	2.1	13
48	Semi-active suspension control problem: Some new results using an LPV/Hâˆž state feedback input constrained control. , 2015, , .		12
49	Stabilisation of discreteâ€time systems with finiteâ€level uniform and logarithmic quantisers. IET Control Theory and Applications, 2018, 12, 1125-1132.	1.2	12
50	Dynamic anti-windup design for a class of nonlinear systems. International Journal of Control, 2016, 89, 2406-2419.	1.2	11
51	Local stabilization of discrete-time linear systems with saturating controls: an LMI-based approach. , 1998, , .		10
52	Robust repetitive control with saturating actuators: a LMI approach. , 2010, , .		10
53	Regional stabilization of nonlinear sampled-data control systems: A quasi-LPV approach. European Journal of Control, 2021, 59, 301-312.	1.6	10
54	Web-based control experiments on a foundation Fieldbus pilot plant. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 323-328.	0.4	8

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55	Dynamic Output Feedback for Discrete-Time Systems under Amplitude and Rate Actuator Constraints. , 0, , .		8
56	Anti-windup Design for a Class of Nonlinear Control Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 13432-13437.	0.4	8
57	Stability analysis for a class of nonlinear discrete-time control systems subject to disturbances and to actuator saturation. International Journal of Control, 2013, 86, 869-882.	1.2	8
58	Event-triggered control co-design for discrete-time systems subject to actuator saturation. , 2016, , .		8
59	Regional Stabilization of Input-Delayed Uncertain Nonlinear Polynomial Systems. IEEE Transactions on Automatic Control, 2020, 65, 2300-2307.	3.6	8
60	Pole assignment in a disk for linear systems by static output feedback. IET Control Theory and Applications, 2004, 151, 706-712.	1.7	7
61	Stability analysis and stabilization of systems presenting nested saturations. , 2004, , .		7
62	Robust periodic reference tracking for uncertain linear systems subject to control saturations. , 2009, , .		7
63	Anti-windup design for a class of multivariable nonlinear control systems: An LMI-based approach. , 2011, , .		7
64	Well-posedness and stability of a 1D wave equation with saturating distributed input. , 2014, , .		7
65	A discrete-time framework for proximate time-optimal performance of damped servomechanisms. Mechatronics, 2016, 36, 27-35.	2.0	7
66	Observerâ€based eventâ€triggered control for systems with slopeâ€restricted nonlinearities. International Journal of Robust and Nonlinear Control, 2020, 30, 7409-7428.	2.1	7
67	Anti-windup design with guaranteed regions of stability for discrete-time linear systems with saturating controls. Controle and Automacao, 2004, 15, 3-9.	0.2	6
68	Correction to "Antiwindup Design With Guaranteed Regions of Stability: An LMI-Based Approach". IEEE Transactions on Automatic Control, 2007, 52, 144-144.	3.6	6
69	Dynamic anti-windup synthesis for state delayed systems: an LMI approach. , 2009, , .		6
70	An event-triggered observer based control strategy for SISO systems. , 2014, , .		6
71	Local input-to-state stabilization and â„“ _{â€‰âˆžâ€‰} -induced norm control of discrete-time quadratic systems. International Journal of Robust and Nonlinear Control, 2015, 25, 2420-2442.	2.1	6
72	Dynamic controller design for synchronization of Lurâ€™e type systems subject to control saturation. IFAC-PapersOnLine, 2017, 50, 11853-11858.	0.5	6

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73	Event-triggered Control for Nonlinear Rational Systems * *This work was supported by CAPES (PhD) Tj ETQq1 1 0.784314 rgBT /Overl Brazil.. IFAC-PapersOnLine, 2017, 50, 15307-15312.	0.5	6
74	Aperiodic sampled-data control for LPV systems under input saturation. IFAC-PapersOnLine, 2018, 51, 130-136.	0.5	6
75	Regional stability analysis of nonlinear sampled-data control systems: a quasi-LPV approach. , 2018, , .		6
76	State feedback design for rational nonlinear control systems with saturating inputs. , 2012, , .		5
77	Event-triggered PI control for continuous plants with input saturation. , 2016, , .		5
78	Saturationâ€aware control design for microâ€“nano positioning systems. IET Control Theory and Applications, 2017, 11, 2559-2566.	1.2	5
79	Stability of Sampled-Data Control Systems Under Aperiodic Sampling and Input Saturation. , 2018, , .		5
80	Controller and antiâ€windup coâ€design for the output regulation of rational systems subject to control saturation. International Journal of Robust and Nonlinear Control, 2021, 31, 1395-1417.	2.1	5
81	Dynamic output feedback under state and control constraints. , 1997, , .		4
82	Asymptotic and L<inf>2</inf> stability analysis for a class of nonlinear discrete-time control systems subject to actuator saturation. , 2010, , .		4
83	Static anti-windup synthesis for linear systems with time-varying input delays. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 14483-14488.	0.4	4
84	Design of Anti-Windup Compensators for a Class of Nonlinear Control Systems with Actuator Saturation. Journal of Control, Automation and Electrical Systems, 2013, 24, 212-222.	1.2	4
85	Tracking and rejection of periodic signals for discreteâ€time linear systems subject to control saturation. IET Control Theory and Applications, 2013, 7, 363-371.	1.2	4
86	Periodic Event-Triggered Control for Linear Systems in the Presence of Cone-Bounded Nonlinear Inputs: A Discrete-Time Approach. Journal of Control, Automation and Electrical Systems, 2021, 32, 42-56.	1.2	4
87	Aperiodic sampled-data MPC strategy for LPV systems. Journal of the Franklin Institute, 2022, 359, 786-815.	1.9	4
88	Stability and disturbance tolerance for linear systems with bounded controls. , 2001, , .		3
89	LMI approach for L2-Control of linear systems with saturating actuators. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 267-272.	0.4	3
90	Regional stabilization of rational discrete-time systems with magnitude control constraints. , 2013, , .		3

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91	Stability analysis of sampled-data control systems under magnitude and rate saturating actuators. , 2015, , .		3
92	Stability analysis of nonlinear rational sampled-data control systems over communication networks. , 2015, , .		3
93	Stability of Discrete-time Control Systems with Uniform and Logarithmic Quantizers. IFAC-PapersOnLine, 2016, 49, 132-137.	0.5	3
94	Tuning of Proportional-Resonant Controllers Combined with Phase-Lead Compensators Based on the Frequency Response. Journal of Control, Automation and Electrical Systems, 2021, 32, 910-926.	1.2	3
95	Polyhedral Regions of Stability for Aperiodic Sampled-Data Linear Control Systems With Saturating Inputs. , 2022, 6, 241-246.		3
96	Synthesis of anti-windup loops for enlarging the stability region of time-delay systems with saturating inputs. , 2003, , .		3
97	Event-Triggered Tracking Control: a Discrete-Time Approach. IFAC-PapersOnLine, 2020, 53, 4565-4570.	0.5	3
98	Necessary and Sufficient Convex Condition for the Stabilization of Linear Sampled-Data Systems Under Poisson Sampling Process. , 2022, 6, 3403-3408.		3
99	A web-based remote laboratory for control education. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 43-48.	0.4	2
100	Dynamic periodic observer for a combustion engine test bench. , 2009, , .		2
101	A convex framework for the design of dynamic anti-windup for state-delayed systems. , 2010, , .		2
102	Networked control: taking into account sample period variations and actuators saturation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 14501-14506.	0.4	2
103	Static anti-windup for systems with sector-bounded nonlinearities. , 2012, , .		2
104	Acceleration enhancement factor for damped systems subject to the discrete Proximate Time-Optimal Servomechanism. , 2013, , .		2
105	Sampled-data LPV Control: a Looped Functional Approach**J. V. Flores and J. M. Gomes da Silva, Jr. are supported by the Brazilian National Council for Research (CNPq) under Grant Nos. 443979/2014-6, 480638/2012-8 and 306210/2009-6. V.M. Moraes and A.H.K. Palmeira are supported by CAPES scholarships, Brazil.. IFAC-PapersOnLine, 2015, 48, 19-24.	0.5	2
106	Antiwindup Design for Zero-Phase Repetitive Controllers. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2015, 137, .	0.9	2
107	Synchronization of discrete-time Lurâ€™e systems under saturating control. , 2018, , .		2
108	Stability analysis of rational nonlinear sampled-data control systems: a looped-functional approach. , 2019, , .		2

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109	Disturbance Rejection for Uncertain Discrete-Time Linear Systems Through Event-Triggered Control. Journal of Control, Automation and Electrical Systems, 2022, 33, 103-114.	1.2	2
110	Application of hybrid and polytopic modeling to the stability analysis of linear systems with saturating inputs. Controle and Automacao, 2004, 15, 401-412.	0.2	1
111	Acceleration-Bounded Control Design for Actuator Fault Prevention. Proceedings of the American Control Conference, 2007, , .	0.0	1
112	SÃntese de parÃ¢metros de controladores Proporcionais-Ressonantes atravÃ©s do mÃ©todo da resposta em frequÃªncia. , 0, , .		1
113	Guest Editorial Introduction to the Special Issue of the IEEE L-CSS on Learning and Control. , 2020, 4, 710-712.		1
114	Stabilization of Discrete-Time Piecewise Affine Systems in Implicit Representation. , 2021, , .		1
115	Stabilization of Sampled-Data Lure Systems with Slope-Restricted Nonlinearities. , 2021, , .		1
116	Improving the stability region of saturated linear systems controlled by dynamic delayed output feedback through anti-windup strategy. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 41-46.	0.4	0
117	L>inf<2>/inf<performance design problem for systems presenting nested saturations. , 0, , .		0
118	Discussion on: â€œStabilization Under Constrained States and Controls of Positive Systems with Time Delaysâ€• European Journal of Control, 2012, 18, 191-193.	1.6	0
119	Anti-windup design with guaranteed stability regions for resonant and repetitive controllers. * *The authors are supported in part by CNPq, Brazil.. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 935-940.	0.4	0
120	Synchronization Analysis of Piecewise-Linear Lurâ€™e Systems under Sampled-Data Control. IFAC-PapersOnLine, 2018, 51, 234-239.	0.5	0
121	Robust Control for Boost Converters with Anti-Windup Compensation. , 2019, , .		0
122	Event-triggered control co-design for rational systems. IFAC-PapersOnLine, 2020, 53, 2720-2725.	0.5	0
123	Regional Stability of Nonlinear Sampled-Data Controlled Systems Under Actuator Saturation: A Quasi-LPV Approach. Advances in Delays and Dynamics, 2022, , 189-207.	0.4	0
124	Event-Triggered Synchronization of Saturated Lurâ€™e-type Systems. , 2021, , .		0
125	Stabilization of Aperiodic Sampled-data Linear Systems with Input Constraints: a Low Complexity Polyhedral Approach. , 2021, , .		0