

Eugenio B Castelan

List of Publications by Year in descending order

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88
papers

1,144
citations

471371

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88
all docs

88
docs citations

88
times ranked

750
citing authors

#	ARTICLE	IF	CITATIONS
1	On invariant polyhedra of continuous-time linear systems. IEEE Transactions on Automatic Control, 1993, 38, 1680-1685.	3.6	112
2	Event-triggered tracking control of unicycle mobile robots. Automatica, 2015, 52, 302-308.	3.0	110
3	Control design for a class of nonlinear continuous-time systems. Automatica, 2008, 44, 2034-2039.	3.0	99
4	Eigenstructure assignment for state constrained linear continuous time systems. Automatica, 1992, 28, 605-611.	3.0	70
5	Fuzzy dynamic output feedback control through nonlinear Takagi-Sugeno models. Fuzzy Sets and Systems, 2015, 263, 92-111.	1.6	66
6	On the solution of a Sylvester equation appearing in descriptor systems control theory. Systems and Control Letters, 2005, 54, 109-117.	1.3	61
7	Gain-scheduled output control design for a class of discrete-time nonlinear systems with saturating actuators. Systems and Control Letters, 2011, 60, 169-173.	1.3	46
8	A dynamic output feedback controller for NCS based on delay estimates. Automatica, 2013, 49, 788-792.	3.0	45
9	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
10	H_2 -Stabilization of continuous-time linear systems with saturating actuators. International Journal of Robust and Nonlinear Control, 2006, 16, 935-944.	2.1	39
11	ISS Robust Stabilization of State-Delayed Discrete-Time Systems With Bounded Delay Variation and Saturating Actuators. IEEE Transactions on Automatic Control, 2019, 64, 3913-3919.	3.6	31
12	Bounded Nash type controls for uncertain linear systems. Automatica, 2008, 44, 1874-1879.	3.0	26
13	An eigenstructure assignment approach for constrained linear continuous-time singular systems. Systems and Control Letters, 1995, 24, 333-343.	1.3	23
14	A reduced-order framework applied to linear systems with constrained controls. IEEE Transactions on Automatic Control, 1996, 41, 249-255.	3.6	22
15	Local stabilization of nonlinear discrete-time systems with time-varying delay in the states and saturating actuators. Information Sciences, 2020, 518, 272-285.	4.0	22
16	Finite l_1 -induced gain and l_1 -contractivity of discrete-time switching systems including modal nonlinearities and actuator saturations. Nonlinear Analysis: Hybrid Systems, 2011, 5, 289-300.	2.1	21
17	Delay Dependent Local Stabilization Conditions for Time-delay Nonlinear Discrete-time Systems Using Takagi-Sugeno Models. International Journal of Control, Automation and Systems, 2018, 16, 1435-1447.	1.6	18
18	Local Stabilization of Time-Delay Nonlinear Discrete-Time Systems Using Takagi-Sugeno Models and Convex Optimization. Mathematical Problems in Engineering, 2014, 2014, 1-10.	0.6	16

#	ARTICLE	IF	CITATIONS
19	A Tâ€™S Fuzzy Approach to the Local Stabilization of Nonlinear Discrete-Time Systems Subject to Energy-Bounded Disturbances. Journal of Control, Automation and Electrical Systems, 2015, 26, 191-200.	1.2	15
20	Positively invariant sets for singular discrete-time systems. International Journal of Systems Science, 1993, 24, 1687-1705.	3.7	13
21	Trajectory tracking of a nonholonomic mobile robot with parametric and nonparametric uncertainties: A proposed neural control. , 2008, , .		11
22	Uniform ultimate boundedness analysis and synthesis for linear systems with dead-zone in the actuators. International Journal of Robust and Nonlinear Control, 2015, 25, 2502-2514.	2.1	11
23	H/sub âˆž/ and H/sub 2/ design techniques for a class of prefilers. IEEE Transactions on Automatic Control, 1996, 41, 865-870.	3.6	10
24	Co-design of an event-triggered dynamic output feedback controller for discrete-time LPV systems with constraints. Journal of the Franklin Institute, 2022, 359, 697-718.	1.9	10
25	Event-triggered policy for dynamic output stabilization of discrete-time LPV systems under input constraints. Systems and Control Letters, 2021, 153, 104950.	1.3	10
26	Absolute stabilization of discrete-time systems with a sector bounded nonlinearity under control saturations. , 0, , .		9
27	ISS Stabilization of Discrete-time LPV Systems with Interval Time-varying State Delay and Saturating Actuators. IFAC-PapersOnLine, 2018, 51, 143-148.	0.5	9
28	Visual-Inertial Fusion for Indoor Autonomous Navigation of a Quadrotor Using ORB-SLAM. , 2018, , .		9
29	Neural Dynamic Control of a Nonholonomic Mobile Robot Incorporating the Actuator Dynamics. , 2008, , .		8
30	Pole assignment in a disk for linear systems by static output feedback. IET Control Theory and Applications, 2004, 151, 706-712.	1.7	7
31	Synthesis of output feedback controllers for a class of nonlinear parameter-varying discrete-time systems subject to actuators limitations. , 2010, , .		7
32	A Dynamic Compensator for Parameter Varying Systems Subject to Actuator Limitations applied to a T-S Fuzzy System. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 14495-14500.	0.4	7
33	Compressed air saving in symmetrical and asymmetrical pneumatic positioning systems. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2015, 229, 957-969.	0.7	7
34	Quadratic characterization and use of output stabilizable subspaces. IEEE Transactions on Automatic Control, 2003, 48, 654-660.	3.6	6
35	Transmission Limits Analysis of a 40 Channels DWDM System at 10 Gb/s Without Amplification. IEEE Latin America Transactions, 2011, 9, 284-287.	1.2	6
36	Stabilization of time-delay nonlinear discrete-time systems with saturating actuators through T-S models. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 11000-11005.	0.4	6

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37	A new kinetostatic model for humanoid robots using screw theory. <i>Robotica</i> , 2018, 36, 570-587.	1.3	6
38	Output feedback design for discrete-time constrained systems subject to persistent disturbances via bilinear programming. <i>Journal of the Franklin Institute</i> , 2021, 358, 9741-9770.	1.9	6
39	Stability and Stabilization of Linear Discrete-Time Systems Subject to Control Saturation. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2001, 34, 525-530.	0.4	5
40	Identification and friction compensation for an industrial robot using two degrees of freedom controllers. , 0, , .		5
41	STABILITY AND STABILIZATION OF A CLASS OF UNCERTAIN NONLINEAR DISCRETE-TIME SYSTEMS WITH SATURATING ACTUATORS. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2007, 40, 518-523.	0.4	5
42	Stabilization of Discrete-time Nonlinear Systems subject to Input Saturations: a New Lyapunov Function Class. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2011, 44, 3403-3408.	0.4	5
43	Control of nonlinear discrete-time systems subject to energy bounded disturbances using local T-S fuzzy models. , 2013, , .		5
44	Explicit Computation of Stabilizing Feedback Control Gains Using Polyhedral Lyapunov Functions. , 2018, , .		5
45	Linear Regulator Design for Bounded Uncertain Discrete-Time Systems with Additive Disturbances. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 1996, 29, 3192-3197.	0.4	4
46	A new class of Lyapunov functions for nonstandard switching systems: The stability analysis problem. , 2011, , .		4
47	Sampling period assignment: A cooperative design approach. , 2014, , .		4
48	Input-To-State Stabilization of Discrete-Time LPV Systems with Bounded Time-Varying State Delay and Saturating Actuators through a Dynamic Controller. , 2019, , .		4
49	Positively invariant polyhedral sets for discrete-time singular systems with additive perturbations. , 0, , .		3
50	Invariant Polyhedra and Control of Large Scale Systems. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2001, 34, 563-568.	0.4	3
51	Stabilization of discrete-time switching systems including modal nonlinearities and saturating actuators. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2009, 42, 174-179.	0.4	3
52	Delay-dependent local stabilization of nonlinear discrete-time system using T-S models through convex optimization. , 2014, , .		3
53	L2-induced gain for discrete-time switched Lur'e systems via a suitable Lyapunov function. <i>IFAC-PapersOnLine</i> , 2015, 48, 277-282.	0.5	3
54	Emulation-Based Dynamic Output-Feedback Control of Saturating Discrete-Time LPV Systems. , 2021, 5, 1549-1554.		3

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55	Estabilizaço de sistemas descritores por realimentaço de saídas via subespaços invariantes. Controle and Automacao, 2005, 16, 467-477.	0.2	3
56	Robust Positively Invariant Polyhedral Sets and Constrained Control using Fuzzy T-S Models: a Bilinear Optimization Design Strategy. IFAC-PapersOnLine, 2020, 53, 8013-8018.	0.5	3
57	A Linear Programming Approach for Regional Pole Placement Under Pointwise Constraints. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1997, 30, 297-302.	0.4	2
58	H [∞] output feedback control with state constraints. , 1997, , 119-127.		2
59	OUTPUT FEEDBACK DESIGN BY COUPLED LYAPUNOV-LIKE EQUATIONS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 207-212.	0.4	2
60	Simple and weak delta-invariant psolyhedral sets for discrete-time singular systems. Controle and Automacao, 2003, 14, 339-347.	0.2	2
61	Dynamic output compensator design for time-varying discrete time systems with delayed states. , 2010, , .		2
62	Dynamic output stabilizing design for discrete-time fuzzy systems with time-varying delay. , 2010, , .		2
63	Full-Order Dynamic Output-Feedback Compensator for Time-Stamped Networked Control Systems. Journal of Control, Automation and Electrical Systems, 2013, 24, 22-32.	1.2	2
64	Local H [∞] -stabilization of nonlinear discrete-time systems with delayed states through T-S fuzzy models. , 2016, , .		2
65	Local stabilization of T-S fuzzy discrete-time systems with time-varying delay in the states and saturating actuators. , 2018, , .		2
66	Dynamic controllers for local input-to-state stabilization of discrete-time linear parameter-varying systems with delay and saturating actuators. International Journal of Robust and Nonlinear Control, 2021, 31, 131-147.	2.1	2
67	Control of constrained discrete-time systems with time-varying state delay. , 2021, , 347-381.		2
68	Regional input-to-state stabilization of fuzzy state-delayed discrete-time systems with saturating actuators. Information Sciences, 2021, 557, 250-267.	4.0	2
69	A reduced order framework applied to linear systems with constrained controls. , 0, , .		1
70	Maximal admissible polyhedral sets for discrete-time singular systems with additive disturbances. , 0, , .		1
71	Quadratic Characterization and Use of Output Stabilizable Subspaces for Descriptor Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2001, 34, 255-260.	0.4	1
72	Controle dependente de parâmetros para uma classe de sistemas não-lineares incertos com atuadores saturantes. Controle and Automacao, 2009, 20, 119-132.	0.2	1

#	ARTICLE	IF	CITATIONS
73	Control of Mobile Robot Considering Actuator Dynamics with Uncertainties in the Kinematic and Dynamic Models. Lecture Notes in Computer Science, 2009, , 1256-1263.	1.0	1
74	Local Stabilization of Nonlinear Discrete-Time Systems Subject to Amplitude Bounded Disturbances * *This work has been supported by CAPES and CNPq, Brazil. IFAC-PapersOnLine, 2017, 50, 8472-8477.	0.5	1
75	Information Distributed Kalman Filter Applied to Rendezvous Problems in Cooperative Robotic Teams. IFAC-PapersOnLine, 2018, 51, 190-195.	0.5	1
76	PI-controller design for constrained linear systems using positive invariance and bilinear programming. , 2021, , .		1
77	Emulation-based Dynamic Output-Feedback Control of Saturating Discrete-time LPV Systems. , 2021, , .		1
78	Stabilization of linear systems subject to control constraints via minimal-order observers. , 0, , .		0
79	Pole assignment in a disk for linear systems by static output feedback. , 0, , .		0
80	Symbolic Analysis of Bifurcations in Planar Variable Structure Systems. , 0, , .		0
81	5-link Bipedal Robot Stabilized by Means of Dorsal Movement Compensation. , 2008, , .		0
82	Stabilization of a 5-link bipedal robot by means of dorsal movement compensation. , 2008, , .		0
83	A gametheoretic approach for non-uniform pole shifting and pole homothety. Automatica, 2013, 49, 238-244.	3.0	0
84	Control of Nonlinear Systems Subject to Amplitude Bounded Disturbances Using a N-fuzzy Strategy. IFAC-PapersOnLine, 2018, 51, 299-304.	0.5	0
85	Stability and controller design for T-S fuzzy discrete-time systems with time-varying delay in the state. , 2018, , .		0
86	Evaluation of Monocular Visual-Inertial SLAM: Benchmark and Experiment. , 2019, , .		0
87	Sobre projeto de observadores desacoplados de perturbações para sistemas descritores. Controle and Automacao, 2007, 18, 423-433.	0.2	0
88	THE LINEAR CONSTRAINED REGULATION PROBLEM FOR SOME LINEAR CONTINUOUS-TIME SINGULAR SYSTEMS. , 1992, , 472-475.		0