

Tingshu Hu

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

54
papers

3,409
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58
g-index

85
ext. papers

4,325
ext. citations

4
avg, IF

5.31
L-index

#	Paper	IF	Citations
54	Control Systems with Actuator Saturation 2001 ,		649
53	An analysis and design method for linear systems subject to actuator saturation and disturbance. <i>Automatica</i> , 2002 , 38, 351-359	5.7	522
52	Analysis and design for discrete-time linear systems subject to actuator saturation. <i>Systems and Control Letters</i> , 2002 , 45, 97-112	2.4	308
51	Composite quadratic Lyapunov functions for constrained control systems. <i>IEEE Transactions on Automatic Control</i> , 2003 , 48, 440-450	5.9	192
50	Stability and Performance for Saturated Systems via Quadratic and Nonquadratic Lyapunov Functions. <i>IEEE Transactions on Automatic Control</i> , 2006 , 51, 1770-1786	5.9	173
49	Stability analysis of linear time-delay systems subject to input saturation. <i>IEEE Transactions on Circuits and Systems Part 1: Regular Papers</i> , 2002 , 49, 233-240		148
48	Analysis of linear systems in the presence of actuator saturation and L2-disturbances. <i>Automatica</i> , 2004 , 40, 1229-1238	5.7	145
47	Anti-windup synthesis for linear control systems with input saturation: Achieving regional, nonlinear performance. <i>Automatica</i> , 2008 , 44, 512-519	5.7	140
46	Stabilization of Switched Systems via Composite Quadratic Functions. <i>IEEE Transactions on Automatic Control</i> , 2008 , 53, 2571-2585	5.9	86
45	Absolute stability with a generalized sector condition. <i>IEEE Transactions on Automatic Control</i> , 2004 , 49, 535-548	5.9	76
44	Exact characterization of invariant ellipsoids for single input linear systems subject to actuator saturation. <i>IEEE Transactions on Automatic Control</i> , 2002 , 47, 164-169	5.9	69
43	Nonlinear control design for linear differential inclusions via convex hull of quadratics. <i>Automatica</i> , 2007 , 43, 685-692	5.7	67
42	Piecewise-quadratic Lyapunov functions for systems with deadzones or saturations. <i>Systems and Control Letters</i> , 2009 , 58, 365-371	2.4	59
41	Conjugate convex Lyapunov functions for dual linear differential inclusions. <i>IEEE Transactions on Automatic Control</i> , 2006 , 51, 661-666	5.9	58
40	An explicit description of null controllable regions of linear systems with saturating actuators. <i>Systems and Control Letters</i> , 2002 , 47, 65-78	2.4	56
39	Non-conservative matrix inequality conditions for stability/stabilizability of linear differential inclusions. <i>Automatica</i> , 2010 , 46, 190-196	5.7	51
38	Control design for robust tracking and smooth transition in power systems with battery/supercapacitor hybrid energy storage devices. <i>Journal of Power Sources</i> , 2014 , 267, 566-575	8.9	44

37	Output feedback design for saturated linear plants using deadzone loops. <i>Automatica</i> , 2009 , 45, 2917-2924	5.7	43
36	Absolute stability analysis of discrete-time systems with composite quadratic Lyapunov functions. <i>IEEE Transactions on Automatic Control</i> , 2005 , 50, 781-797	5.9	40
35	Properties of the composite quadratic Lyapunov functions. <i>IEEE Transactions on Automatic Control</i> , 2004 , 49, 1162-1167	5.9	39
34	Output regulation of linear systems with bounded continuous feedback. <i>IEEE Transactions on Automatic Control</i> , 2004 , 49, 1941-1953	5.9	37
33	Conjugate Lyapunov functions for saturated linear systems. <i>Automatica</i> , 2005 , 41, 1949-1956	5.7	36
32	On enlarging the basin of attraction for linear systems under saturated linear feedback. <i>Systems and Control Letters</i> , 2000 , 40, 59-69	2.4	36
31	Semi-global stabilization with guaranteed regional performance of linear systems subject to actuator saturation. <i>Systems and Control Letters</i> , 2001 , 43, 203-210	2.4	33
30	Constrained Control Design for Magnetic Bearing Systems. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 2005 , 127, 601-616	1.6	23
29	On maximizing the convergence rate for linear systems with input saturation. <i>IEEE Transactions on Automatic Control</i> , 2003 , 48, 1249-1253	5.9	23
28	Null controllable region of LTI discrete-time systems with input saturation. <i>Automatica</i> , 2002 , 38, 2009-2013	5.7	22
27	Dual Matrix Inequalities in Stability and Performance Analysis of Linear Differential/Difference Inclusions 2006 , 103-122		22
26	Stabilization of exponentially unstable linear systems with saturating actuators. <i>IEEE Transactions on Automatic Control</i> , 2001 , 45, 973-979	5.9	21
25	Dissipativity for dual linear differential inclusions through conjugate storage functions 2004 ,		19
24	On the tightness of a recent set invariance condition under actuator saturation. <i>Systems and Control Letters</i> , 2003 , 49, 389-399	2.4	18
23	On semiglobal stabilizability of antistable systems by saturated linear feedback. <i>IEEE Transactions on Automatic Control</i> , 2002 , 47, 1193-1198	5.9	18
22	On improving the performance with bounded continuous feedback laws. <i>IEEE Transactions on Automatic Control</i> , 2002 , 47, 1570-1575	5.9	17
21	Reducing power loss in magnetic bearings by optimizing current allocation. <i>IEEE Transactions on Magnetics</i> , 2004 , 40, 1625-1635	2	16
20	Set invariance and performance analysis of linear systems via truncated ellipsoids. <i>Automatica</i> , 2009 , 45, 2046-2051	5.7	15

19	On Several Composite Quadratic Lyapunov Functions for Switched Systems 2006 ,		13
18	Practical stabilization of exponentially unstable linear systems subject to actuator saturation nonlinearity and disturbance. <i>International Journal of Robust and Nonlinear Control</i> , 2001 , 11, 555-588	3.6	12
17	Linear discrete-time global and regional anti-windup: an LMI approach. <i>International Journal of Control</i> , 2009 , 82, 2179-2192	1.5	11
16	A Unified Lyapunov Approach to Analysis of Oscillations and Stability for Systems With Piecewise Linear Elements. <i>IEEE Transactions on Automatic Control</i> , 2010 , 55, 2864-2869	5.9	7
15	Control of saturated linear plants via output feedback containing an internal deadzone loop 2006 ,		7
14	Regional anti-windup compensation for linear systems with input saturation		7
13	Analysis of oscillation and stability for systems with piecewise linear components via saturation functions 2009 ,		5
12	Nonlinear feedback laws for practical stabilization of systems with input and state constraints 2008 ,		5
11	Analysis of systems with saturation/deadzone via piecewise-quadratic Lyapunov functions. <i>Proceedings of the American Control Conference</i> , 2007 ,	1.2	3
10	Output regulation of general discrete-time linear systems with saturation nonlinearities. <i>International Journal of Robust and Nonlinear Control</i> , 2002 , 12, 1129-1143	3.6	3
9	Improvement of parametric stability margin under pole assignment. <i>IEEE Transactions on Automatic Control</i> , 1999 , 44, 1938-1942	5.9	3
8	Polyhedral functions, composite quadratic functions, and equivalent conditions for stability/stabilization 2008 ,		2
7	Controlled invariance of ellipsoids: linear vs. nonlinear feedback. <i>Systems and Control Letters</i> , 2004 , 53, 203-210	2.4	2
6	Convex analysis of invariant sets for a class of nonlinear systems. <i>Systems and Control Letters</i> , 2005 , 54, 729-737	2.4	2
5	Null controllability and stabilization of linear systems subject to asymmetric actuator saturation		2
4	Switching Law Construction for Discrete-Time Systems Via Composite Quadratic Functions. <i>Proceedings of the American Control Conference</i> , 2007 ,	1.2	1
3	Properties of the composite quadratic Lyapunov functions		1
2	Human gait modeling: dealing with holonomic constraints 2004 ,		1

- 1 Magnetically suspended balance beam with disturbances: A test rig for nonlinear output regulation
2004,

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