Horacio J Marquez

List of Publications by Year
in descending order

56 papers	1,065 citations	471509 17 h-index	501196 28 g-index
56 all docs	56 docs citations	56 times ranked	836 citing authors

#	Article	IF	Citations
1	Nonlinear observer design for one-sided Lipschitz systems. , 2010, , .		180
2	LMI optimization approach to robust *H*_∞ observer design and static output feedback stabilization for discrete-time nonlinear uncertain systems. International Journal of Robust and Nonlinear Control, 2009, 19, 313-340.	3.7	79
3	Integral-based event-triggered control scheme for a general class of non-linear systems. IET Control Theory and Applications, 2015, 9, 1982-1988.	2.1	69
4	A Multichannel IOS Small Gain Theorem for Systems With Multiple Time-Varying Communication Delays. IEEE Transactions on Automatic Control, 2009, 54, 404-409.	5.7	57
5	Robust Controller Design And Pid Tuning For Multivariable Processes. Asian Journal of Control, 2002, 4, 439-451.	3.0	54
6	Controllability and Observability for a Class of Controlled Switching Impulsive Systems. IEEE Transactions on Automatic Control, 2008, 53, 2360-2366.	5.7	46
7	Dynamical robust H_∞ filtering for nonlinear uncertain systems: An LMI approach. Journal of the Franklin Institute, 2010, 347, 1227-1241.	3.4	41
8	Effects of network communications on a class of learning controlled non-linear systems. International Journal of Systems Science, 2009, 40, 757-767.	5.5	39
9	Uniform Stability of Discrete Delay Systems and Synchronization of Discrete Delay Dynamical Networks via Razumikhin Technique. IEEE Transactions on Circuits and Systems I: Regular Papers, 2008, 55, 2795-2805.	5.4	34
10	Multirate Observers for Nonlinear Sampled-Data Systems Using Input-to-State Stability and Discrete-Time Approximation. IEEE Transactions on Automatic Control, 2014, 59, 2469-2474.	5.7	31
11	Multirate Output Feedback Control of Nonlinear Networked Control Systems. IEEE Transactions on Automatic Control, 2015, 60, 1939-1944.	5.7	28
12	On the Local Input–Output Stability of Event-Triggered Control Systems. IEEE Transactions on Automatic Control, 2019, 64, 174-189.	5.7	28
13	Robust H Observer Design for a Class of Nonlinear Uncertain Systems via Convex Optimization. Proceedings of the American Control Conference, 2007, , .	0.0	27
14	Event-Triggered Discrete-Time Cubature Kalman Filter for Nonlinear Dynamical Systems With Packet Dropout. IEEE Transactions on Automatic Control, 2020, 65, 2278-2285.	5.7	27
15	A Robust Observer Design Method for Continuous-Time Lipschitz Nonlinear Systems. , 2006, , .		24
16	Event-Triggered Design With Guaranteed Minimum Interevent Times and $\mathcal{L}_p$ Performance. IEEE Transactions on Automatic Control, 2020, 65, 1668-1675.	5.7	22
17	ROBUST ANALYSIS AND PID TUNING OF CASCADE CONTROL SYSTEMS. Chemical Engineering Communications, 2005, 192, 1204-1220.	2.6	19
18	Event-Triggered Approach to Dynamic State Estimation of a Synchronous Machine Using Cubature Kalman Filter. IEEE Transactions on Control Systems Technology, 2020, 28, 2013-2020.	5.2	19

#	Article	IF	Citations
19	On the Event-Triggered Controller Design. IEEE Transactions on Automatic Control, 2020, 65, 4122-4137.	5.7	19
20	A novel integral-based event triggering control for linear time-invariant systems. , 2014, , .		17
21	System Design and Modeling of a Time-Varying, Nonlinear Temperature Controller for Microfluidics. IEEE Transactions on Control Systems Technology, 2010, 18, 521-530.	5.2	15
22	Nonlinear robust H-infinity filtering for a class of uncertain systems via convex optimization. Journal of Control Theory and Applications, 2012, 10, 152-158.	0.8	15
23	Robust Gain Scheduling Synchronization Method for Quadratic Chaotic Systems With Channel Time Delay. IEEE Transactions on Circuits and Systems I: Regular Papers, 2009, 56, 604-615.	5.4	14
24	Cooperative Localization in Mobile Robots Using Event-Triggered Mechanism: Theory and Experiments. IEEE Transactions on Automation Science and Engineering, 2022, 19, 3246-3258.	5.2	13
25	Boiler Leak Detection Using a System Identification Technique. Industrial & Engineering Chemistry Research, 2002, 41, 5447-5454.	3.7	11
26	Sampledâ€data control of networked nonlinear systems with variable delays and drops. International Journal of Robust and Nonlinear Control, 2015, 25, 72-87.	3.7	10
27	Decentralized summationâ€based triggering mechanism for Lipschitz nonlinear systems. International Journal of Robust and Nonlinear Control, 2017, 27, 4227-4244.	3.7	10
28	Explicit robust model predictive control using recursive closed-loop prediction. International Journal of Robust and Nonlinear Control, 2006, 16, 519-546.	3.7	9
29	Gain Scheduling Synchronization Method for Quadratic Chaotic Systems. IEEE Transactions on Circuits and Systems I: Regular Papers, 2008, 55, 1097-1107.	5.4	9
30	An integral based event triggered control scheme of distributed network systems. , 2015, , .		9
31	Robust State Observation for Sampled-Data Nonlinear Systems with Exact and Euler Approximate Models. Proceedings of the American Control Conference, 2007, , .	0.0	8
32	Dissipativity Properties of Nonlinear Systems Under Network Constraints. IEEE Transactions on Automatic Control, 2020, 65, 2708-2715.	5.7	8
33	Robust tracking control for a class of MIMO nonlinear systems with measurable output feedback. International Journal of Robust and Nonlinear Control, 2008, 18, 69-87.	3.7	7
34	PDE Backstepping Boundary Observer Design for Microfluidic Systems. IEEE Transactions on Control Systems Technology, 2015, 23, 380-388.	5.2	7
35	An Innovative Event-Based Filtering Scheme Using ${oldsymbol{H}}_{infty}$ Performance for Stochastic LTI Systems Considering A Practical Application in Smart Modernized Microgrids. IEEE Access, 2019, 7, 48138-48150.	4.2	7
36	A multichannel IOS small gain theorem for systems with multiple time-varying communication delays. , 2007, , .		6

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37	Control of nonlinear teleoperation systems subject to disturbances and variable time delays. , 2012, , .		6
38	Observer design for discrete-time linear systems with unknown disturbances. , 2012, , .		5
39	Robust nonlinear H_∞ control based on the incremental gain. International Journal of Robust and Nonlinear Control, 2015, 25, 1183-1200.	3.7	5
40	On the Robust Stability of Unforced Nonlinear Systems. , 2006, , .		4
41	Generalized H_∞ observers design for systems with unknown inputs. , 2013, , .		4
42	Event-based controller design for a class of nolinear systems via convex optimization. , 2014, , .		4
43	Sampled-data observer for one-sided Lipschitz systems: Single-rate and multirate cases. , 2015, , .		4
44	A New Lyapunov-Based Event-Triggered Control of Linear Systems. IEEE Transactions on Automatic Control, 2023, 68, 2599-2606.	5.7	3
45	Robust static output feedback stabilization of discrete-time nonlinear uncertain systems with H_∞ performance. , 2008, , .		2
46	LMI optimization approach to robust H_∞ filtering for discrete-time nonlinear uncertain systems. , 2008, , .		2
47	Robust Stabilization of Input-Affine Nonlinear Systems Under Network Constraints. IEEE Transactions on Control of Network Systems, 2020, 7, 818-828.	3.7	2
48	A Separation Principle for Linear Event-Triggered Output Feedback Systems. IEEE Transactions on Automatic Control, 2022, 67, 1498-1505.	5.7	2
49	Control of nonlinear bilateral teleoperation systems subject to disturbances. , 2011, , .		1
50	$\mathcal{H}_\infty$ Filtering of Lipschitz nonlinear systems with network-induced uncertain delays. , 2012, , .		1
51	PDE Modeling of a Microfluidic Thermal Process for Genetic Analysis Application. Journal of Applied Mathematics, 2013, 2013, 1-12.	0.9	1
52	filtering of nonlinear plants over networks. International Journal of Robust and Nonlinear Control, 2015, 25, 486-503.	3.7	1
53	Dynamical robust nonlinear H_∞ filtering for Lipschitz descriptor systems with parametric and nonlinear uncertainties. , 2008, , .		0
54	Preservation of dissipativity under multirate sampling with application to nonlinear H_∞ control. , 2012, , .		0

#	Article	IF	Citations
55	`<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e1122" altimg="si562.svg"><mml:msub><mml:mrow><mml:mi mathvariant="script">L</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:math>`-incremental gain stability of linear systems with nonlinear Lipschitz actuator. Systems and Control Letters, 2021, 147, 104846.	2.3	0
56	Event-based stabilization of nonlinear Lipschitz systems. IFAC-PapersOnLine, 2020, 53, 2802-2807.	0.9	0