

# Ricardo G Sanfelice

## List of Publications by Year in descending order

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241  
papers

4,972  
citations

257450

24  
h-index

133252

59  
g-index

245  
all docs

245  
docs citations

245  
times ranked

2254  
citing authors

#	ARTICLE	IF	CITATIONS
1	Explaining the “Mystery” of Periodicity in Inter-Transmission Times in Two-Dimensional Event-Triggered Controlled Systems. IEEE Transactions on Automatic Control, 2023, 68, 912-927.	5.7	6
2	On the Converse Safety Problem for Differential Inclusions: Solutions, Regularity, and Time-Varying Barrier Functions. IEEE Transactions on Automatic Control, 2023, 68, 172-187.	5.7	0
3	Robust Coordinated Hybrid Source Seeking With Obstacle Avoidance in Multivehicle Autonomous Systems. IEEE Transactions on Automatic Control, 2022, 67, 706-721.	5.7	14
4	On the Robustness of Nominally Well-Posed Event-Triggered Controllers. , 2022, 6, 415-420.		6
5	Hysteresis-based switching observers for linear systems using quadratic boundedness. Automatica, 2022, 136, 109982.	5.0	4
6	Sufficient Conditions for Optimality and Asymptotic Stability in Two-Player Zero-Sum Hybrid Games. , 2022, , .		1
7	Optimality and Asymptotic Stability in Two-Player Zero-Sum Hybrid Games. , 2022, , .		0
8	Observer design for hybrid dynamical systems with approximately known jump times. Automatica, 2022, 141, 110225.	5.0	13
9	Challenges in Optimization-Based Control. , 2022, , .		0
10	Forward Invariance of Sets for Hybrid Dynamical Systems (Part II). IEEE Transactions on Automatic Control, 2021, 66, 89-104.	5.7	9
11	Sufficient conditions for forward invariance and contractivity in hybrid inclusions using barrier functions. Automatica, 2021, 124, 109328.	5.0	14
12	Hybrid Adaptive Control for the DC-DC Boost Converter. IFAC-PapersOnLine, 2021, 54, 73-78.	0.9	2
13	Hybrid Model Predictive Control. , 2021, , 930-939.		0
14	Hybrid Dynamical Systems, Feedback Control of. , 2021, , 917-930.		0
15	Adaptive Safety with Multiple Barrier Functions Using Integral Concurrent Learning. , 2021, , .		12
16	Challenges in set-valued model-predictive control. , 2021, , .		1
17	Self-Triggered Control to Guarantee Forward Pre-Invariance with Uniformly Positive Inter-Event Times. , 2021, , .		1
18	A Robust Hybrid Finite Time Parameter Estimator With Relaxed Persistence of Excitation Condition. , 2021, , .		1

#	ARTICLE	IF	CITATIONS
19	Uniting Nesterov's Accelerated Gradient Descent and the Heavy Ball Method for Strongly Convex Functions with Exponential Convergence Rate. , 2021, , .		0
20	Encouraging Volitional Pedaling in Functional Electrical Stimulation-Assisted Cycling Using Barrier Functions. <i>Frontiers in Robotics and AI</i> , 2021, 8, 742986.	3.2	7
21	Robust hybrid supervisory control for spacecraft close proximity missions. <i>Annual Reviews in Control</i> , 2021, 52, 316-329.	7.9	2
22	Set-Valued Model Predictive Control. , 2021, , .		1
23	Exponentially Converging Distributed Gradient Descent with Intermittent Communication via Hybrid Methods. , 2021, , .		1
24	A Duality Approach to Set Invariance and Safety for Nonlinear Systems. , 2021, , .		0
25	A Local Hybrid Observer for a Class of Hybrid Dynamical Systems with Linear Maps and Unknown Jump Times. , 2021, , .		1
26	Robust Finite-Time Parameter Estimation for Linear Dynamical Systems. , 2021, , .		0
27	Parameter Estimation for Hybrid Dynamical Systems using Hybrid Gradient Descent. , 2021, , .		1
28	Hybrid Systems With Delayed Jumps: Asymptotic Stability via Robustness and Lyapunov Conditions. <i>IEEE Transactions on Automatic Control</i> , 2020, 65, 3381-3396.	5.7	5
29	A unifying convex analysis and switching system approach to consensus with undirected communication graphs. <i>Automatica</i> , 2020, 111, 108598.	5.0	3
30	Hybrid Control for Robust and Global Tracking on Smooth Manifolds. <i>IEEE Transactions on Automatic Control</i> , 2020, 65, 1870-1885.	5.7	13
31	Hybrid dynamical systems with hybrid inputs: Definition of solutions and applications to interconnections. <i>International Journal of Robust and Nonlinear Control</i> , 2020, 30, 5892-5916.	3.7	8
32	Analysis and design of event-triggered control algorithms using hybrid systems tools. <i>International Journal of Robust and Nonlinear Control</i> , 2020, 30, 5936-5965.	3.7	7
33	Rigid-Body Pose Hybrid Control Using Dual Quaternions: Global Asymptotic Stabilization and Robustness. <i>Journal of Guidance, Control, and Dynamics</i> , 2020, 43, 1631-1641.	2.8	16
34	Lipschitzness of Minimal-Time Functions in Constrained Continuous-Time Systems with Applications to Reachability Analysis. , 2020, , .		3
35	LMI-Based Output Feedback Control Design in the Presence of Sporadic Measurements. , 2020, , .		2
36	HyNTP: An Adaptive Hybrid Network Time Protocol for Clock Synchronization in Heterogeneous Distributed Systems. , 2020, , .		4

#	ARTICLE	IF	CITATIONS
37	Regularity Properties of Reachability Maps for Hybrid Dynamical Systems with Applications to Safety. , 2020, , .		3
38	Linear temporal logic for hybrid dynamical systems: Characterizations and sufficient conditions. Nonlinear Analysis: Hybrid Systems, 2020, 36, 100865.	3.5	4
39	Hybrid Model Predictive Control. , 2020, , 1-10.		0
40	Semicontinuity Properties of Solutions and Reachable Sets of Nominally Well-Posed Hybrid Dynamical Systems. , 2020, , .		3
41	Upper bounds and Cost Evaluation in Dynamic Two-player Zero-sum Games. , 2020, , .		1
42	On Notions of Detectability and Observers for Hybrid Systems. , 2020, , .		9
43	An Adaptive Hybrid Control Algorithm for Sender-Receiver Clock Synchronization. IFAC-PapersOnLine, 2020, 53, 1906-1911.	0.9	1
44	A Hybrid Control Algorithm for Gradient-Free Optimization using Conjugate Directions. IFAC-PapersOnLine, 2020, 53, 5825-5830.	0.9	0
45	Zeroing Control Barrier Functions for Safe Volitional Pedaling in a Motorized Cycle. IFAC-PapersOnLine, 2020, 53, 218-223.	0.9	7
46	Hybrid Dynamical Systems, Feedback Control of. , 2020, , 1-14.		0
47	Local lipschitzness of reachability maps for hybrid systems with applications to safety. , 2020, , .		3
48	Sufficient conditions for satisfaction of formulas with until operators in hybrid systems. , 2020, , .		1
49	Model Predictive Control for Hybrid Dynamical Systems: Sufficient Conditions for Asymptotic Stability with Persistent Flows or Jumps. , 2020, , .		4
50	Hybrid Predictive Control for Tracking in a Single-Phase DC/AC Inverter with an Unknown Load. , 2020, , .		0
51	$L_2$ State Estimation With Guaranteed Convergence Speed in the Presence of Sporadic Measurements. IEEE Transactions on Automatic Control, 2019, 64, 3362-3369.	5.7	20
52	Set-Based Predictive Control for Collision Detection and Evasion. , 2019, , .		5
53	Characterizations of safety in hybrid inclusions via barrier functions. , 2019, , .		13
54	Safety characterization in hybrid inclusions using barrier functions. , 2019, , .		0

#	ARTICLE	IF	CITATIONS
55	Robust global exponential stabilization on the $n$ -dimensional sphere with applications to trajectory tracking for quadrotors. Automatica, 2019, 110, 108534.	5.0	22
56	Analyzing action games. , 2019, , .		1
57	Forward Invariance of Sets for Hybrid Dynamical Systems (Part I). IEEE Transactions on Automatic Control, 2019, 64, 2426-2441.	5.7	25
58	Robust distributed synchronization of networked linear systems with intermittent information. Automatica, 2019, 105, 323-333.	5.0	19
59	Asymptotically Stabilizing Model Predictive Control for Hybrid Dynamical Systems. , 2019, , .		12
60	Characterization of Safety and Conditional Invariance for Nonlinear Systems. , 2019, , .		7
61	Asymptotic Stability of Limit Cycles in Hybrid Systems with Explicit Logic States. , 2019, , .		1
62	Monotonicity Along Solutions to Constrained Differential Inclusions. , 2019, , .		4
63	Inter-event Times Analysis for Planar Linear Event-triggered Controlled Systems. , 2019, , .		16
64	A Model Predictive Control Framework for Asymptotic Stabilization of Discretized Hybrid Dynamical Systems. , 2019, , .		5
65	Adaptive Backstepping of Synergistic Hybrid Feedbacks with Application to Obstacle Avoidance. , 2019, , .		5
66	Observer-based Synchronization of Multi-agent Systems Using Intermittent Output Measurements. , 2019, , .		2
67	Multiple Barrier Function Certificates for Forward Invariance in Hybrid Inclusions. , 2019, , .		0
68	A Robust Hybrid Heavy Ball Algorithm for Optimization with High Performance. , 2019, , .		9
69	Multiple Barrier Function Certificates for Weak Forward Invariance in Hybrid Inclusions. , 2019, , .		2
70	A Hybrid Control Strategy for Autonomous Navigation while Avoiding Multiple Obstacles at Unknown Locations. , 2019, , .		2
71	Certifying Optimality in Hybrid Control Systems via Lyapunov-like Conditions. IFAC-PapersOnLine, 2019, 52, 245-250.	0.9	2
72	An Algorithm to Generate Solutions to Hybrid Dynamical Systems with Inputs. , 2019, , .		2

#	ARTICLE	IF	CITATIONS
73	Finite time stability of sets for hybrid dynamical systems. Automatica, 2019, 100, 200-211.	5.0	26
74	Robust Stability of Hybrid Limit Cycles With Multiple Jumps in Hybrid Dynamical Systems. IEEE Transactions on Automatic Control, 2018, 63, 1220-1226.	5.7	11
75	Pointwise Asymptotic Stability in a Hybrid System and Well-Posed Behavior Beyond Zeno. SIAM Journal on Control and Optimization, 2018, 56, 1358-1385.	2.1	15
76	Robust Hybrid Global Asymptotic Stabilization of Rigid Body Dynamics using Dual Quaternions. , 2018, , .		4
77	Robust Distributed Estimation for Linear Systems Under Intermittent Information. IEEE Transactions on Automatic Control, 2018, 63, 973-988.	5.7	41
78	Hybrid Regional Stabilization of Linear Systems with Actuator Saturation and Multi-Rate Samplers. , 2018, , .		2
79	Observers for Hybrid Dynamical Systems with Linear Maps and Known Jump Times. , 2018, , .		12
80	Barrier Function Certificates for Forward Invariance in Hybrid Inclusions. , 2018, , .		10
81	Applications of convex analysis to consensus algorithms, pointwise asymptotic stability, and its robustness. , 2018, , .		3
82	Cost Evaluation for Hybrid Inclusions: A Lyapunov Approach. , 2018, , .		3
83	Robust Hybrid Supervisory Control for a 3-DOF Spacecraft in Close-Proximity Operations. IFAC-PapersOnLine, 2018, 51, 88-93.	0.9	0
84	Hybrid Control for Autonomous Spacecraft Rendezvous Proximity Operations and Docking. IFAC-PapersOnLine, 2018, 51, 94-99.	0.9	2
85	Sufficient Conditions for Temporal Logic Specifications in Hybrid Dynamical Systems. IFAC-PapersOnLine, 2018, 51, 97-102.	0.9	4
86	State Estimation of Linear Systems over a Network subject to Sporadic Measurements, Delays, and Clock Mismatches. IFAC-PapersOnLine, 2018, 51, 313-318.	0.9	1
87	A Model Predictive Control Framework for Hybrid Dynamical Systems. IFAC-PapersOnLine, 2018, 51, 128-133.	0.9	18
88	A Hybrid PID Design for Asymptotic Stabilization with Intermittent Measurements. , 2018, , .		1
89	A Hybrid Control Algorithm for Object Grasping Using Multiple Agents. , 2018, , .		1
90	A Hybrid Adaptive Feedback Law for Robust Obstacle Avoidance and Coordination in Multiple Vehicle Systems. , 2018, , .		15

#	ARTICLE	IF	CITATIONS
91	Robust Exponential Stability of an Intermittent Transmission State Estimation Protocol. , 2018, , .		1
92	Model Predictive Control under Intermittent Measurements due to Computational Constraints: Feasibility, Stability, and Robustness. , 2018, , .		2
93	Stealthy Attacks in Cloud-Connected Linear Impulsive Systems. , 2018, , .		5
94	On Robustness of Pre-Asymptotic Stability to Delayed Jumps in Hybrid Systems. , 2018, , .		4
95	Robust Hybrid Kalman Filter for a Class of Nonlinear Systems. , 2018, , .		3
96	A Hybrid Predictive Control Approach to Trajectory Tracking for a Fully Actuated Biped. , 2018, , .		3
97	On the Optimality of Lyapunov-based Feedback Laws for Constrained Difference Inclusions. , 2018, , .		2
98	Robust Global Trajectory Tracking for Underactuated VTOL Aerial Vehicles Using Inner-Outer Loop Control Paradigms. IEEE Transactions on Automatic Control, 2017, 62, 97-112.	5.7	109
99	On an invariance principle for differential-algebraic equations with jumps and its application to switched differential-algebraic equations. Mathematics of Control, Signals, and Systems, 2017, 29, 1.	2.3	1
100	Hybrid Stabilization of Linear Systems With Reverse Polytopic Input Constraints. IEEE Transactions on Automatic Control, 2017, 62, 6473-6480.	5.7	5
101	A hybrid feedback control strategy for autonomous waypoint transitioning and loitering of unmanned aerial vehicles. Nonlinear Analysis: Hybrid Systems, 2017, 26, 115-136.	3.5	0
102	Sufficient conditions for asymptotic stability and feedback control of set dynamical systems. , 2017, , .		4
103	On asymptotic synchronization of interconnected hybrid systems with applications. , 2017, , .		3
104	Analysis and design of event-triggered control algorithms using hybrid systems tools. , 2017, , .		6
105	Existence of hybrid limit cycles and Zhukovskii stability in hybrid systems. , 2017, , .		3
106	On robust forward invariance of sets for hybrid dynamical systems. , 2017, , .		2
107	Hybrid robust minimum-time control for a class of non-exponentially unstable planar systems. , 2017, , .		0
108	Hybrid attack monitor design to detect recurrent attacks in a class of cyber-physical systems. , 2017, , .		4

#	ARTICLE	IF	CITATIONS
109	Notions and a passivity tool for switched DAE systems. , 2017, , .		1
110	Hybrid feedback for global asymptotic stabilization on a compact manifold. , 2017, , .		5
111	A hybrid predictive control algorithm for tracking in a single-phase DC/AC inverter. , 2017, , .		7
112	Incremental Graphical Asymptotic Stability for Hybrid Dynamical Systems. Lecture Notes in Control and Information Sciences, 2017, , 231-262.	1.0	1
113	A decentralized consensus algorithm for distributed state observers with robustness guarantees. , 2016, , .		0
114	Results on invariance-based feedback control for hybrid dynamical systems. , 2016, , .		1
115	Notions and Sufficient Conditions for Pointwise Asymptotic Stability in Hybrid Systems**The work by the first author was partially supported by the Simons Foundation Grant 315326. The work by the second author was partially supported by NSF Grants no. ECS-1150306 and CNS-1544396, and by AFOSR Grant and FA9550-16-1-0015.. IFAC-PapersOnLine, 2016, 49, 140-145.	0.9	1
116	A Hybrid Consensus Protocol for Pointwise Exponential Stability with Intermittent Information. IFAC-PapersOnLine, 2016, 49, 146-151.	0.9	10
117	On Distributed Observers for Linear Time-invariant Systems Under Intermittent Information Constraints**This research has been partially supported by the National Science Foundation under CAREER Grant no. ECS-1450484 and Grant no. CNS-1544396, and by the Air Force Office of Scientific Research under Grant no. FA9550-16-1-0015.. IFAC-PapersOnLine, 2016, 49, 654-659.	0.9	6
118	Detectability and Invariance Properties for Set Dynamical Systems**This research has been partially supported by the National Science Foundation under CAREER Grant no. ECS-1450484 and Grant no. CNS-1544396, and by the Air Force Office of Scientific Research under Grant no. FA9550-16-1-0015.. IFAC-PapersOnLine, 2016, 49, 1030-1035.	0.9	5
119	Robust hybrid supervisory control for rendezvous and docking of a spacecraft. , 2016, , .		14
120	A computationally tractable implementation of pointwise minimum norm state-feedback laws for hybrid systems. , 2016, , .		1
121	How well-posedness of hybrid systems can extend beyond Zeno times. , 2016, , .		5
122	State estimation of linear systems in the presence of sporadic measurements. Automatica, 2016, 73, 101-109.	5.0	72
123	Results on finite time stability for a class of hybrid systems. , 2016, , .		7
124	A zero-crossing detection algorithm for robust simulation of hybrid systems jumping on surfaces. Simulation Modelling Practice and Theory, 2016, 68, 1-17.	3.8	5
125	Exponential stabilization of a vectored-thrust vehicle using synergistic potential functions. , 2016, , .		0
126	Distance function design and Lyapunov techniques for the stability of hybrid trajectories. Automatica, 2016, 73, 38-46.	5.0	16



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127	Robust synchronization of interconnected linear systems over intermittent communication networks. , 2016, , .		1
128	Interconnected Observers for Robust Decentralized Estimation With Performance Guarantees and Optimized Connectivity Graph. IEEE Transactions on Control of Network Systems, 2016, 3, 1-11.	3.7	11
129	Autonomous Waypoint Transitioning and Loitering for UnmannedAerial Vehicles via Hybrid Control. , 2016, , .		2
130	Computationally Aware Switching Criteria for Hybrid Model Predictive Control of Cyber-Physical Systems. IEEE Transactions on Automation Science and Engineering, 2016, 13, 479-490.	5.2	15
131	Basic properties and characterizations of incremental stability prioritizing flow time for a class of hybrid systems. Systems and Control Letters, 2016, 90, 7-15.	2.3	7
132	Convergence of Nonlinear Observers on $\mathbb{R}^n$ With a Riemannian Metric (Part II). IEEE Transactions on Automatic Control, 2016, 61, 2848-2860.	5.7	14
133	Robust Asymptotic Stability of Desynchronization in Impulse-Coupled Oscillators. IEEE Transactions on Control of Network Systems, 2016, 3, 127-136.	3.7	8
134	Robust Asymptotic Stabilization of Hybrid Systems using Control Lyapunov Functions. , 2016, , .		7
135	Hybrid Feedback Control Methods for Robust and Global Power Conversion**This research has been partially supported by the National Science Foundation under CAREER Grant no. ECS-1450484 and by the Air Force Office of Scientific Research under YIP Grant no. FA9550-12-1-0366.. IFAC-PapersOnLine, 2015, 48, 298-303.	0.9	1
136	Analysis and Design of Cyber-Physical Systems: A Hybrid Control Systems Approach. , 2015, , 3-31.		26
137	Input-output triggered control using Lp-stability over finite horizons. International Journal of Robust and Nonlinear Control, 2015, 25, 2299-2327.	3.7	7
138	A finite-time convergent observer with robustness to piecewise-constant measurement noise. Automatica, 2015, 57, 222-230.	5.0	22
139	Global exponential stabilization on the n-dimensional sphere. , 2015, , .		8
140	Invariance principles for switched Differential-Algebraic Equations under arbitrary and dwell-time switching. , 2015, , .		2
141	Robust synchronization of two linear systems over intermittent communication networks. , 2015, , .		3
142	A hybrid observer with a continuous intersample injection in the presence of sporadic measurements. , 2015, , .		7
143	Computationally aware control of autonomous vehicles: a hybrid model predictive control approach. Autonomous Robots, 2015, 39, 503-517.	4.8	19
144	On necessary and sufficient conditions for incremental stability of hybrid systems using the graphical distance between solutions. , 2015, , .		4

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145	Constructing distance functions and piecewise quadratic Lyapunov functions for stability of hybrid trajectories. , 2015, , .		1
146	Results on stability and robustness of hybrid limit cycles for a class of hybrid systems. , 2015, , .		6
147	On notions and sufficient conditions for forward invariance of sets for hybrid dynamical systems. , 2015, , .		8
148	Solution of a Riccati equation for the design of an observer contracting a Riemannian distance. , 2015, , .		7
149	Observer-based control design for linear systems in the presence of limited measurement streams and intermittent input access. , 2015, , .		3
150	On Robust Stability of Limit Cycles for Hybrid Systems With Multiple Jumps**Research by X. Lou has been supported by National Natural Science Foundation of China (61473136). Research by Y. Li and R. G. Sanfelice has been partially supported by NSF Grant no. ECCS1450484 and by AFOSR YIP Grant no. FA9550-12-1-0366.. IFAC-PapersOnLine, 2015, 48, 199-204.	0.9	3
151	A globally asymptotically stabilizing trajectory tracking controller for fully actuated rigid bodies using landmark-based information. International Journal of Robust and Nonlinear Control, 2015, 25, 3617-3640.	3.7	10
152	A hybrid model predictive controller for path planning and path following. , 2015, , .		13
153	Robust global trajectory tracking for a class of underactuated vehicles. Automatica, 2015, 58, 90-98.	5.0	60
154	Robust Global Stabilization of the DC-DC Boost Converter via Hybrid Control. IEEE Transactions on Circuits and Systems I: Regular Papers, 2015, 62, 1052-1061.	5.4	82
155	Feedback Control of Hybrid Dynamical Systems. , 2015, , 1-11.		1
156	A hybrid feedback controller for robust global trajectory tracking of quadrotor-like vehicles with minimized attitude error. , 2014, , .		1
157	A hybrid controller for global uniform exponential stabilization of linear systems with singular input constraints. , 2014, , .		2
158	Asymptotic properties of solutions to set dynamical systems. , 2014, , .		5
159	A robust hybrid control algorithm for a single-phase DC/AC inverter with variable input voltage. , 2014, , .		11
160	A framework for modeling and analysis of dynamical properties of spiking neurons. , 2014, , .		4
161	Hybrid Feedback Control For Nonlinear and Hybrid Systems. , 2014, , 1-11.		0
162	An embedding approach for the design of state-feedback tracking controllers for references with jumps. International Journal of Robust and Nonlinear Control, 2014, 24, 1585-1608.	3.7	30

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163	An invariance principle for differential-algebraic equations with jumps. , 2014, , .		4
164	Sufficient conditions for passivity and stability of interconnections of hybrid systems using sums of storage functions. , 2014, , .		3
165	On minimum-time paths of bounded curvature with position-dependent constraints. Automatica, 2014, 50, 537-546.	5.0	11
166	Input-Output-to-State Stability Tools for Hybrid Systems and Their Interconnections. IEEE Transactions on Automatic Control, 2014, 59, 1360-1366.	5.7	29
167	Robust distributed state observers with performance guarantees and optimized communication graph. , 2014, , .		3
168	Dynamical properties of a two-gene network with hysteresis. Information and Computation, 2014, 236, 102-121.	0.7	7
169	Results on incremental stability for a class of hybrid systems. , 2014, , .		7
170	A toolbox for simulation of hybrid systems in matlab/simulink. , 2013, , .		90
171	On the Existence of Control Lyapunov Functions and State-Feedback Laws for Hybrid Systems. IEEE Transactions on Automatic Control, 2013, 58, 3242-3248.	5.7	31
172	Global trajectory tracking for a class of underactuated vehicles. , 2013, , .		19
173	A robust finite-time convergent hybrid observer for linear systems. , 2013, , .		2
174	On Path-Lifting Mechanisms and Unwinding in Quaternion-Based Attitude Control. IEEE Transactions on Automatic Control, 2013, 58, 1179-1191.	5.7	58
175	Passivity-based control for hybrid systems with applications to mechanical systems exhibiting impacts. Automatica, 2013, 49, 1104-1116.	5.0	38
176	Robust supervisory control for uniting two output-feedback hybrid controllers with different objectives. Automatica, 2013, 49, 1958-1969.	5.0	7
177	Juggling on a bouncing ball apparatus via hybrid control. , 2013, , .		2
178	Hybrid control of the boost converter: Robust global stabilization. , 2013, , .		4
179	Pointwise minimum norm control laws for hybrid systems. , 2013, , .		3
180	Global trajectory tracking for underactuated VTOL aerial vehicles using a cascade control paradigm. , 2013, , .		18

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181	A coupled pair of Luenberger observers for linear systems to improve rate of convergence and robustness to measurement noise. , 2013, , .		3
182	On the stability of hybrid limit cycles and isolated equilibria in a genetic network with binary hysteresis. , 2013, , .		0
183	Results on the asymptotic stability properties of desynchronization in impulse-coupled oscillators. , 2013, , .		3
184	Numerical Integration Scheme Using Singular Perturbation Method. , 2013, , .		1
185	Suboptimality bounds for linear quadratic problems in hybrid linear systems. , 2013, , .		10
186	Convergence of Nonlinear Observers on $\mathbb{B}R^n$ With a Riemannian Metric (Part I). IEEE Transactions on Automatic Control, 2012, 57, 1709-1722.	5.7	54
187	On the effect and robustness of zero-crossing detection algorithms in simulation of hybrid systems jumping on surfaces. , 2012, , .		1
188	A landmark-based controller for global asymptotic stabilization on SE(3). , 2012, , .		1
189	On the synchronization of two impulsive oscillators under communication constraints. , 2012, , .		6
190	The Effect of Solar Tracking Resolution to the Defocus of a Giant Fresnel Lens for a Solar Stove. , 2012, , .		0
191	Switching System Model for Pinpoint Lunar Landing Guidance Using a Hybrid Control Strategy. , 2012, , .		3
192	Quaternion-Based Hybrid Feedback for Robust Global Attitude Synchronization. IEEE Transactions on Automatic Control, 2012, 57, 2122-2127.	5.7	64
193	Hybrid Control Systems. , 2012, , 704-728.		4
194	On quaternion-based attitude control and the unwinding phenomenon. , 2011, , .		55
195	Quaternion-Based Hybrid Control for Robust Global Attitude Tracking. IEEE Transactions on Automatic Control, 2011, 56, 2555-2566.	5.7	303
196	On the performance of high-gain observers with gain adaptation under measurement noise. Automatica, 2011, 47, 2165-2176.	5.0	122
197	On singular perturbations due to fast actuators in hybrid control systems. Automatica, 2011, 47, 692-701.	5.0	54
198	Hybrid controllers for tracking of impulsive reference state trajectories. , 2011, , .		12

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199	Passivity-based controllers for a class of hybrid systems with applications to mechanical systems interacting with their environment. , 2011, , .		5
200	Further results on synergistic Lyapunov functions and hybrid feedback design through backstepping. , 2011, , .		13
201	Control Lyapunov functions and stabilizability of compact sets for hybrid systems. , 2011, , .		3
202	Tracking control for hybrid systems via embedding of known reference trajectories. , 2011, , .		8
203	Synergistic Lyapunov functions and backstepping hybrid feedbacks. , 2011, , .		14
204	On the non-robustness of inconsistent quaternion-based attitude control systems using memoryless path-lifting schemes. , 2011, , .		9
205	A Technical Result for the Study of High-gain Observers with Sign-indefinite Gain Adaptation*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 284-289.	0.4	1
206	Dynamical properties of hybrid systems simulators. Automatica, 2010, 46, 239-248.	5.0	41
207	Robust global asymptotic attitude synchronization by hybrid control. , 2010, , .		4
208	Results on input-to-output and input-output-to-state stability for hybrid systems and their interconnections. , 2010, , .		16
209	Uniting two output-feedback controllers with different objectives. , 2010, , .		4
210	Asymptotic Stability in Hybrid Systems via Nested Matrosov Functions. IEEE Transactions on Automatic Control, 2009, 54, 1569-1574.	5.7	35
211	Hybrid dynamical systems. IEEE Control Systems, 2009, 29, 28-93.	0.8	1,255
212	Robust global asymptotic stabilization of a 6-DOF rigid body by quaternion-based hybrid feedback. , 2009, , .		19
213	Robust global asymptotic attitude stabilization of a rigid body by quaternion-based hybrid feedback. , 2009, , .		65
214	Nonlinear observer design with an appropriate Riemannian metric. , 2009, , .		9
215	Hybrid Control Systems. , 2009, , 4671-4696.		2
216	Invariance principles for switching systems via hybrid systems techniques. Systems and Control Letters, 2008, 57, 980-986.	2.3	62

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217	Analysis of hybrid systems resulting from relay-type hysteresis and saturation: A Lyapunov approach. , 2008, , .		2
218	Optimal control of Mixed Logical Dynamical systems with Linear Temporal Logic specifications. , 2008, , .		118
219	Generalized solutions to hybrid dynamical systems. ESAIM - Control, Optimisation and Calculus of Variations, 2008, 14, 699-724.	1.3	61
220	On robust, global stabilization of the attitude of an underactuated rigid body using hybrid feedback. , 2008, , .		5
221	Robust source-seeking hybrid controllers for nonholonomic vehicles. , 2008, , .		31
222	Robust hybrid source-seeking algorithms based on directional derivatives and their approximations. , 2008, , .		21
223	Supervising a family of hybrid controllers for robust global asymptotic stabilization. , 2008, , .		19
224	A nested Matrosov theorem for hybrid systems. , 2008, , .		6
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