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	Hybrid dynamical systems. IEEE Control Systems, 2009, 29, 28-93.	0.8	1,255
2	Quaternion-Based Hybrid Control for Robust Global Attitude Tracking. IEEE Transactions on Automatic Control, 2011, 56, 2555-2566.	5.7	303
3	Invariance Principles for Hybrid Systems With Connections to Detectability and Asymptotic Stability. IEEE Transactions on Automatic Control, 2007, 52, 2282-2297.	5.7	251
4	On the performance of high-gain observers with gain adaptation under measurement noise. Automatica, 2011, 47, 2165-2176.	5.0	122
5	Optimal control of Mixed Logical Dynamical systems with Linear Temporal Logic specifications. , 2008, , .		118
6	Hybrid systems: Generalized solutions and robust stability. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 1-12.	0.4	114
7	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
8	A toolbox for simulation of hybrid systems in matlab/simulink. , 2013, , .		90
9	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
10	State estimation of linear systems in the presence of sporadic measurements. Automatica, 2016, 73, 101-109.	5.0	72
11	Robust global asymptotic attitude stabilization of a rigid body by quaternion-based hybrid feedback. , 2009, , .		65
12	Quaternion-Based Hybrid Feedback for Robust Global Attitude Synchronization. IEEE Transactions on Automatic Control, 2012, 57, 2122-2127.	5.7	64
13	Invariance principles for switching systems via hybrid systems techniques. Systems and Control Letters, 2008, 57, 980-986.	2.3	62
14	Generalized solutions to hybrid dynamical systems. ESAIM - Control, Optimisation and Calculus of Variations, 2008, 14, 699-724.	1.3	61
15	Robust global trajectory tracking for a class of underactuated vehicles. Automatica, 2015, 58, 90-98.	5.0	60
16	On Path-Lifting Mechanisms and Unwinding in Quaternion-Based Attitude Control. IEEE Transactions on Automatic Control, 2013, 58, 1179-1191.	5.7	58
17	On quaternion-based attitude control and the unwinding phenomenon. , 2011, , .		55
18	On singular perturbations due to fast actuators in hybrid control systems. Automatica, 2011, 47, 692-701.	5.0	54

#	Article	IF	Citations
19	Convergence of Nonlinear Observers on BBR^{n} With a Riemannian Metric (Part I). IEEE Transactions on Automatic Control, 2012, 57, 1709-1722.	5.7	54
20	Dynamical properties of hybrid systems simulators. Automatica, 2010, 46, 239-248.	5.0	41
21	Robust Distributed Estimation for Linear Systems Under Intermittent Information. IEEE Transactions on Automatic Control, 2018, 63, 973-988.	5.7	41
22	Robust Source-Seeking Hybrid Controllers for Autonomous Vehicles. Proceedings of the American Control Conference, 2007, , .	0.0	39
23	Passivity-based control for hybrid systems with applications to mechanical systems exhibiting impacts. Automatica, 2013, 49, 1104-1116.	5.0	38
24	A hybrid systems approach to trajectory tracking control for juggling systems. , 2007, , .		35
25	Asymptotic Stability in Hybrid Systems via Nested Matrosov Functions. IEEE Transactions on Automatic Control, 2009, 54, 1569-1574.	5.7	35
26	Robust source-seeking hybrid controllers for nonholonomic vehicles. , 2008, , .		31
27	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
28	An embedding approach for the design of stateâ€feedback tracking controllers for references with jumps. International Journal of Robust and Nonlinear Control, 2014, 24, 1585-1608.	3.7	30
29	Input-Output-to-State Stability Tools for Hybrid Systems and Their Interconnections. IEEE Transactions on Automatic Control, 2014, 59, 1360-1366.	5.7	29
30	Analysis and Design of Cyber-Physical Systems: A Hybrid Control Systems Approach. , 2015, , 3-31.		26
31	Finite time stability of sets for hybrid dynamical systems. Automatica, 2019, 100, 200-211.	5.0	26
32	Forward Invariance of Sets for Hybrid Dynamical Systems (Part I). IEEE Transactions on Automatic Control, 2019, 64, 2426-2441.	5.7	25
33	A finite-time convergent observer with robustness to piecewise-constant measurement noise. Automatica, 2015, 57, 222-230.	5.0	22
34	Robust global exponential stabilization on the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e30" altimg="si4.svg"><mml:mi>n</mml:mi></mml:math>-dimensional sphere with applications to trajectory tracking for quadrotors. Automatica, 2019, 110, 108534.	5.0	22
35	Robust hybrid source-seeking algorithms based on directional derivatives and their approximations. , 2008, , .		21
36	$mathcal {L}_2$ State Estimation With Guaranteed Convergence Speed in the Presence of Sporadic Measurements. IEEE Transactions on Automatic Control, 2019, 64, 3362-3369.	5.7	20

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37	A Hybrid Control Strategy for Robust Contact Detection and Force Regulation. Proceedings of the American Control Conference, 2007, , .	0.0	19
38	Supervising a family of hybrid controllers for robust global asymptotic stabilization. , 2008, , .		19
39	Robust global asymptotic stabilization of a 6-DOF rigid body by quaternion-based hybrid feedback. , 2009, , .		19
40	Global trajectory tracking for a class of underactuated vehicles. , 2013, , .		19
41	Computationally aware control of autonomous vehicles: a hybrid model predictive control approach. Autonomous Robots, 2015, 39, 503-517.	4.8	19
42	Robust distributed synchronization of networked linear systems with intermittent information. Automatica, 2019, 105, 323-333.	5.0	19
43	Global trajectory tracking for underactuated VTOL aerial vehicles using a cascade control paradigm. , 2013, , .		18
44	A Model Predictive Control Framework for Hybrid Dynamical Systems. IFAC-PapersOnLine, 2018, 51, 128-133.	0.9	18
45	Hybrid Systems: Limit Sets and Zero Dynamics with a View Toward Output Regulation. , 2008, , 241-261.		18
46	A "Throw-and-Catch" Hybrid Control Strategy for Robust Global Stabilization of Nonlinear Systems. Proceedings of the American Control Conference, 2007, , .	0.0	17
47	A hybrid control framework for robust maneuver-based motion planning. , 2008, , .		16
48	Results on input-to-output and input-output-to-state stability for hybrid systems and their interconnections. , 2010, , .		16
49	Distance function design and Lyapunov techniques for the stability of hybrid trajectories. Automatica, 2016, 73, 38-46.	5.0	16
50	Inter-event Times Analysis for Planar Linear Event-triggered Controlled Systems. , 2019, , .		16
51	Rigid-Body Pose Hybrid Control Using Dual Quaternions: Global Asymptotic Stabilization and Robustness. Journal of Guidance, Control, and Dynamics, 2020, 43, 1631-1641.	2.8	16
52	Lyapunov Analysis of Sample-and-Hold Hybrid Feedbacks. , 2006, , .		15
53	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
54	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

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55	A Hybrid Adaptive Feedback Law for Robust Obstacle Avoidance and Coordination in Multiple Vehicle Systems. , 2018, , .		15
56	A Feedback Control Motivation for Generalized Solutions to Hybrid Systems. Lecture Notes in Computer Science, 2006, , 522-536.	1.3	14
57	Synergistic Lyapunov functions and backstepping hybrid feedbacks. , 2011, , .		14
58	Robust hybrid supervisory control for rendezvous and docking of a spacecraft. , 2016, , .		14
59	Convergence of Nonlinear Observers on <inline-formula> <tex-math notation="LaTeX">${mathbb{R}}^{n}$</tex-math> </inline-formula> With a Riemannian Metric (Part II). IEEE Transactions on Automatic Control, 2016, 61, 2848-2860.	5.7	14
60	Sufficient conditions for forward invariance and contractivity in hybrid inclusions using barrier functions. Automatica, 2021, 124, 109328.	5.0	14
61	Robust Coordinated Hybrid Source Seeking With Obstacle Avoidance in Multivehicle Autonomous Systems. IEEE Transactions on Automatic Control, 2022, 67, 706-721.	5.7	14
62	Further results on synergistic Lyapunov functions and hybrid feedback design through backstepping. , 2011, , .		13
63	A hybrid model predictive controller for path planning and path following. , 2015, , .		13
64	Characterizations of safety in hybrid inclusions via barrier functions. , 2019, , .		13
65	Hybrid Control for Robust and Global Tracking on Smooth Manifolds. IEEE Transactions on Automatic Control, 2020, 65, 1870-1885.	5.7	13
66	Observer design for hybrid dynamical systems with approximately known jump times. Automatica, 2022, 141, 110225.	5.0	13
67	Hybrid controllers for tracking of impulsive reference state trajectories. , 2011, , .		12
68	Observers for Hybrid Dynamical Systems with Linear Maps and Known Jump Times. , 2018, , .		12
69	Asymptotically Stabilizing Model Predictive Control for Hybrid Dynamical Systems. , 2019, , .		12
70	Adaptive Safety with Multiple Barrier Functions Using Integral Concurrent Learning. , 2021, , .		12
71	A robust hybrid control algorithm for a single-phase DC/AC inverter with variable input voltage. , 2014, , .		11
72	On minimum-time paths of bounded curvature with position-dependent constraints. Automatica, 2014, 50, 537-546.	5.0	11

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73	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
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	A globally asymptotically stabilizing trajectory tracking controller for fully actuated rigid bodies using landmarkâ€based information. International Journal of Robust and Nonlinear Control, 2015, 25, 3617-3640.	3.7	10
76	A Hybrid Consensus Protocol for Pointwise Exponential Stability with Intermittent Information. IFAC-PapersOnLine, 2016, 49, 146-151.	0.9	10
77	Barrier Function Certificates for Forward Invariance in Hybrid Inclusions. , 2018, , .		10
78	Suboptimality bounds for linear quadratic problems in hybrid linear systems. , 2013, , .		10
79	Nonlinear observer design with an appropriate Riemannian metric. , 2009, , .		9
80	On the non-robustness of inconsistent quaternion-based attitude control systems using memoryless path-lifting schemes. , 2011, , .		9
81	A Robust Hybrid Heavy Ball Algorithm for Optimization with High Performance. , 2019, , .		9
82	Forward Invariance of Sets for Hybrid Dynamical Systems (Part II). IEEE Transactions on Automatic Control, 2021, 66, 89-104.	5.7	9
83	On Notions of Detectability and Observers for Hybrid Systems. , 2020, , .		9
84	Hybrid control strategy for robust global swing-up of the pendubot. , 2008, , .		8
85	Tracking control for hybrid systems via embedding of known reference trajectories. , 2011, , .		8
86	Global exponential stabilization on the n-dimensional sphere. , 2015, , .		8
87	On notions and sufficient conditions for forward invariance of sets for hybrid dynamical systems. , 2015, , .		8
88	Robust Asymptotic Stability of Desynchronization in Impulse-Coupled Oscillators. IEEE Transactions on Control of Network Systems, 2016, 3, 127-136.	3.7	8
89	Hybrid dynamical systems with hybrid inputs: Definition of solutions and applications to interconnections. International Journal of Robust and Nonlinear Control, 2020, 30, 5892-5916.	3.7	8
90	Robust supervisory control for uniting two output-feedback hybrid controllers with different objectives. Automatica, 2013, 49, 1958-1969.	5.0	7

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91	Dynamical properties of a two-gene network with hysteresis. Information and Computation, 2014, 236, 102-121.	0.7	7
92	Results on incremental stability for a class of hybrid systems. , 2014, , .		7
93	Input-output triggered control using Lp-stability over finite horizons. International Journal of Robust and Nonlinear Control, 2015, 25, 2299-2327.	3.7	7
94	A hybrid observer with a continuous intersample injection in the presence of sporadic measurements. , 2015, , .		7
95	Solution of a Riccati equation for the design of an observer contracting a Riemannian distance. , 2015, , .		7
96	Results on finite time stability for a class of hybrid systems. , 2016, , .		7
97	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
98	A hybrid predictive control algorithm for tracking in a single-phase DC/AC inverter. , 2017, , .		7
99	Characterization of Safety and Conditional Invariance for Nonlinear Systems. , 2019, , .		7
100	Analysis and design of eventâ€triggered control algorithms using hybrid systems tools. International Journal of Robust and Nonlinear Control, 2020, 30, 5936-5965.	3.7	7
101	On the Optimality of Dubins Paths across Heterogeneous Terrain. Lecture Notes in Computer Science, 2008, , 457-470.	1.3	7
102	Robust Asymptotic Stabilization of Hybrid Systems using Control Lyapunov Functions. , 2016, , .		7
103	Zeroing Control Barrier Functions for Safe Volitional Pedaling in a Motorized Cycle. IFAC-PapersOnLine, 2020, 53, 218-223.	0.9	7
104	Encouraging Volitional Pedaling in Functional Electrical Stimulation-Assisted Cycling Using Barrier Functions. Frontiers in Robotics and AI, 2021, 8, 742986.	3.2	7
105	Hybrid MPC: Open-Minded but Not Easily Swayed. , 2007, , 17-34.		6
106	A nested Matrosov theorem for hybrid systems. , 2008, , .		6
107	On the synchronization of two impulsive oscillators under communication constraints. , 2012, , .		6
108	Results on stability and robustness of hybrid limit cycles for a class of hybrid systems. , 2015, , .		6

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109	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
110	Analysis and design of event-triggered control algorithms using hybrid systems tools. , 2017, , .		6
111	On the Robustness of Nominally Well-Posed Event-Triggered Controllers. , 2022, 6, 415-420.		6
112	Explaining the â€œMysteryâ€•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
113	On robust, global stabilization of the attitude of an underactuated rigid body using hybrid feedback. , 2008, , .		5
114	Passivity-based controllers for a class of hybrid systems with applications to mechanical systems interacting with their environment. , 2011, , .		5
115	Asymptotic properties of solutions to set dynamical systems. , 2014, , .		5
116	Detectability and Invariance Properties for Set Dynamical Systems**This research has been partially supported by the National Science Foundation under CAREER Grant no. ECCS-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
117	How well-posedness of hybrid systems can extend beyond Zeno times. , 2016, , .		5
118	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
119	Hybrid Stabilization of Linear Systems With Reverse Polytopic Input Constraints. IEEE Transactions on Automatic Control, 2017, 62, 6473-6480.	5.7	5
120	Hybrid feedback for global asymptotic stabilization on a compact manifold. , 2017, , .		5
121	Stealthy Attacks in Cloud-Connected Linear Impulsive Systems. , 2018, , .		5
122	Set-Based Predictive Control for Collision Detection and Evasion. , 2019, , .		5
123	A Model Predictive Control Framework for Asymptotic Stabilization of Discretized Hybrid Dynamical Systems. , 2019, , .		5
124	Adaptive Backstepping of Synergistic Hybrid Feedbacks with Application to Obstacle Avoidance. , 2019, , .		5
125	Hybrid Systems With Delayed Jumps: Asymptotic Stability via Robustness and Lyapunov Conditions. IEEE Transactions on Automatic Control, 2020, 65, 3381-3396.	5.7	5
126	Robust global asymptotic attitude synchronization by hybrid control. , 2010, , .		4

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127	Uniting two output-feedback controllers with different objectives. , 2010, , .		4
128	Hybrid control of the boost converter: Robust global stabilization. , 2013, , .		4
129	A framework for modeling and analysis of dynamical properties of spiking neurons. , 2014, , .		4
130	An invariance principle for differential-algebraic equations with jumps. , 2014, , .		4
131	On necessary and sufficient conditions for incremental stability of hybrid systems using the graphical distance between solutions. , 2015, , .		4
132	Sufficient conditions for asymptotic stability and feedback control of set dynamical systems. , 2017, , .		4
133	Hybrid attack monitor design to detect recurrent attacks in a class of cyber-physical systems. , 2017, , .		4
134	Robust Hybrid Global Asymptotic Stabilization of Rigid Body Dynamics using Dual Quaternions. , 2018, , .		4
135	Sufficient Conditions for Temporal Logic Specifications in Hybrid Dynamical Systems. IFAC-PapersOnLine, 2018, 51, 97-102.	0.9	4
136	On Robustness of Pre-Asymptotic Stability to Delayed Jumps in Hybrid Systems. , 2018, , .		4
137	Monotonicity Along Solutions to Constrained Differential Inclusions. , 2019, , .		4
138	HyNTP: An Adaptive Hybrid Network Time Protocol for Clock Synchronization in Heterogeneous Distributed Systems. , 2020, , .		4
139	Linear temporal logic for hybrid dynamical systems: Characterizations and sufficient conditions. Nonlinear Analysis: Hybrid Systems, 2020, 36, 100865.	3.5	4
140	Hybrid Control Systems. , 2012, , 704-728.		4
141	Model Predictive Control for Hybrid Dynamical Systems: Sufficient Conditions for Asymptotic Stability with Persistent Flows or Jumps. , 2020, , .		4
142	Hysteresis-based switching observers for linear systems using quadratic boundedness. Automatica, 2022, 136, 109982.	5.0	4
143	Control Lyapunov functions and stabilizability of compact sets for hybrid systems. , 2011, , .		3
144	Switching System Model for Pinpoint Lunar Landing Guidance Using a Hybrid Control Strategy. , 2012, , .		3

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145	Pointwise minimum norm control laws for hybrid systems. , 2013, , .		3
146	A coupled pair of Luenberger observers for linear systems to improve rate of convergence and robustness to measurement noise. , 2013, , .		3
147	Results on the asymptotic stability properties of desynchronization in impulse-coupled oscillators. , 2013, , .		3
148	Sufficient conditions for passivity and stability of interconnections of hybrid systems using sums of storage functions. , 2014, , .		3
149	Robust distributed state observers with performance guarantees and optimized communication graph. , 2014, , .		3
150	Robust synchronization of two linear systems over intermittent communication networks. , 2015, , .		3
151	Observer-based control design for linear systems in the presence of limited measurement streams and intermittent input access. , 2015, , .		3
152	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
153	On asymptotic synchronization of interconnected hybrid systems with applications. , 2017, , .		3
154	Existence of hybrid limit cycles and Zhukovskii stability in hybrid systems. , 2017, , .		3
155	Applications of convex analysis to consensus algorithms, pointwise asymptotic stability, and its robustness. , 2018, , .		3
156	Cost Evaluation for Hybrid Inclusions: A Lyapunov Approach. , 2018, , .		3
157	Robust Hybrid Kalman Filter for a Class of Nonlinear Systems. , 2018, , .		3
158	A Hybrid Predictive Control Approach to Trajectory Tracking for a Fully Actuated Biped. , 2018, , .		3
159	A unifying convex analysis and switching system approach to consensus with undirected communication graphs. Automatica, 2020, 111, 108598.	5.0	3
160	Lipschitzness of Minimal-Time Functions in Constrained Continuous-Time Systems with Applications to Reachability Analysis. , 2020, , .		3
161	Regularity Properties of Reachability Maps for Hybrid Dynamical Systems with Applications to Safety. , 2020, , .		3
162	Semicontinuity Properties of Solutions and Reachable Sets of Nominally Well-Posed Hybrid Dynamical Systems. , 2020, , .		3

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163	Local lipschitzness of reachability maps for hybrid systems with applications to safety. , 2020, , .		3
164	Analysis of hybrid systems resulting from relay-type hysteresis and saturation: A Lyapunov approach. , 2008, , .		2
165	A robust finite-time convergent hybrid observer for linear systems. , 2013, , .		2
166	Juggling on a bouncing ball apparatus via hybrid control. , 2013, , .		2
167	A hybrid controller for global uniform exponential stabilization of linear systems with singular input constraints. , 2014, , .		2
168	Invariance principles for switched Differential-Algebraic Equations under arbitrary and dwell-time switching. , 2015, , .		2
169	Autonomous Waypoint Transitioning and Loitering for UnmannedAerial Vehicles via Hybrid Control. , 2016, , .		2
170	On robust forward invariance of sets for hybrid dynamical systems. , 2017, , .		2
171	Hybrid Regional Stabilization of Linear Systems with Actuator Saturation and Multi-Rate Samplers. , 2018, , .		2
172	Hybrid Control for Autonomous Spacecraft Rendezvous Proximity Operations and Docking. IFAC-PapersOnLine, 2018, 51, 94-99.	0.9	2
173	Model Predictive Control under Intermittent Measurements due to Computational Constraints: Feasibility, Stability, and Robustness. , 2018, , .		2
174	On the Optimality of Lyapunov-based Feedback Laws for Constrained Difference Inclusions. , 2018, , .		2
175	Observer-based Synchronization of Multi-agent Systems Using Intermittent Output Measurements. , 2019, , .		2
176	Multiple Barrier Function Certificates for Weak Forward Invariance in Hybrid Inclusions. , 2019, , .		2
177	A Hybrid Control Strategy for Autonomous Navigation while Avoiding Multiple Obstacles at Unknown Locations. , 2019, , .		2
178	Certifying Optimality in Hybrid Control Systems via Lyapunov-like Conditions. IFAC-PapersOnLine, 2019, 52, 245-250.	0.9	2
179	An Algorithm to Generate Solutions to Hybrid Dynamical Systems with Inputs. , 2019, , .		2
180	LMI-Based Output Feedback Control Design in the Presence of Sporadic Measurements. , 2020, , .		2

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181	Hybrid Adaptive Control for the DC-DC Boost Converter. IFAC-PapersOnLine, 2021, 54, 73-78.	0.9	2
182	Hybrid Control Systems. , 2009, , 4671-4696.		2
183	Robust hybrid supervisory control for spacecraft close proximity missions. Annual Reviews in Control, 2021, 52, 316-329.	7.9	2
184	On the Continuity of Asymptotically Stable Compact Sets for Simulations of Hybrid Systems. , 2006, , .		1
185	Hybrid systems techniques for convergence of solutions to switching systems. , 2007, , .		1
186	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
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	Numerical Integration Scheme Using Singular Perturbation Method. , 2013, , .		1
190	A hybrid feedback controller for robust global trajectory tracking of quadrotor-like vehicles with minimized attitude error. , 2014, , .		1
191	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
192	Constructing distance functions and piecewise quadratic Lyapunov functions for stability of hybrid trajectories. , 2015, , .		1
193	Results on invariance-based feedback control for hybrid dynamical systems. , 2016, , .		1
194	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
195	A computationally tractable implementation of pointwise minimum norm state-feedback laws for hybrid systems. , 2016, , .		1
196	Robust synchronization of interconnected linear systems over intermittent communication networks. , 2016, , .		1
197	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
198	Notions and a passivity tool for switched DAE systems. , 2017, , .		1

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199	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
200	A Hybrid PID Design for Asymptotic Stabilization with Intermittent Measurements. , 2018, , .		1
201	A Hybrid Control Algorithm for Object Grasping Using Multiple Agents. , 2018, , .		1
202	Robust Exponential Stability of an Intermittent Transmission State Estimation Protocol. , 2018, , .		1
203	Analyzing action games. , 2019, , .		1
204	Asymptotic Stability of Limit Cycles in Hybrid Systems with Explicit Logic States. , 2019, , .		1
205	Challenges in set-valued model-predictive control. , 2021, , .		1
206	Self-Triggered Control to Guarantee Forward Pre-Invariance with Uniformly Positive Inter-Event Times. , 2021, , .		1
207	A Robust Hybrid Finite Time Parameter Estimator With Relaxed Persistence of Excitation Condition. , 2021, , .		1
208	Feedback Control of Hybrid Dynamical Systems. , 2015, , 1-11.		1
209	Incremental Graphical Asymptotic Stability for Hybrid Dynamical Systems. Lecture Notes in Control and Information Sciences, 2017, , 231-262.	1.0	1
210	Upper bounds and Cost Evaluation in Dynamic Two-player Zero-sum Games. , 2020, , .		1
211	An Adaptive Hybrid Control Algorithm for Sender-Receiver Clock Synchronization. IFAC-PapersOnLine, 2020, 53, 1906-1911.	0.9	1
212	Sufficient conditions for satisfaction of formulas with until operators in hybrid systems. , 2020, , .		1
213	Set-Valued Model Predictive Control. , 2021, , .		1
214	Exponentially Converging Distributed Gradient Descent with Intermittent Communication via Hybrid Methods. , 2021, , .		1
215	A Local Hybrid Observer for a Class of Hybrid Dynamical Systems with Linear Maps and Unknown Jump Times. , 2021, , .		1
216	Parameter Estimation for Hybrid Dynamical Systems using Hybrid Gradient Descent. , 2021, , .		1

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217	Sufficient Conditions for Optimality and Asymptotic Stability in Two-Player Zero-Sum Hybrid Games. , 2022, , .		1
218	The Effect of Solar Tracking Resolution to the Defocus of a Giant Fresnel Lens for a Solar Stove. , 2012, , .		0
219	On the stability of hybrid limit cycles and isolated equilibria in a genetic network with binary hysteresis. , 2013, , .		0
220	Hybrid Feedback Control For Nonlinear and Hybrid Systems. , 2014, , 1-11.		0
221	A decentralized consensus algorithm for distributed state observers with robustness guarantees. , 2016, , .		0
222	Exponential stabilization of a vectored-thrust vehicle using synergistic potential functions. , 2016, , .		0
223	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
224	Hybrid robust minimum-time control for a class of non-exponentially unstable planar systems. , 2017, , .		0
225	Robust Hybrid Supervisory Control for a 3-DOF Spacecraft in Close-Proximity Operations. IFAC-PapersOnLine, 2018, 51, 88-93.	0.9	0
226	Safety characterization in hybrid inclusions using barrier functions. , 2019, , .		0
227	Multiple Barrier Function Certificates for Forward Invariance in Hybrid Inclusions. , 2019, , .		0
228	Hybrid Model Predictive Control. , 2021, , 930-939.		0
229	Hybrid Dynamical Systems, Feedback Control of. , 2021, , 917-930.		0
230	Uniting Nesterov's Accelerated Gradient Descent and the Heavy Ball Method for Strongly Convex Functions with Exponential Convergence Rate. , 2021, , .		0
231	A Hybrid Model of a Genetic Regulatory Network in Mammalian Sclera. Electronic Proceedings in Theoretical Computer Science, EPTCS, 0, 125, 99-105.	0.8	0
232	Hybrid Model Predictive Control. , 2020, , 1-10.		0
233	A Hybrid Control Algorithm for Gradient-Free Optimization using Conjugate Directions. IFAC-PapersOnLine, 2020, 53, 5825-5830.	0.9	0
234	Hybrid Dynamical Systems, Feedback Control of. , 2020, , 1-14.		0

#	Article	IF	Citations
235	Hybrid Predictive Control for Tracking in a Single-Phase DC/AC Inverter with an Unknown Load. , 2020, , .		0
236	Necessary and sufficient conditions for the nonincrease of functions of solutions to constrained differential inclusions. ESAIM - Control, Optimisation and Calculus of Variations, 0, , .	1.3	0
237	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
238	A Duality Approach to Set Invariance and Safety for Nonlinear Systems. , 2021, , .		0
239	Robust Finite-Time Parameter Estimation for Linear Dynamical Systems. , 2021, , .		0
240	Optimality and Asymptotic Stability in Two-Player Zero-Sum Hybrid Games. , 2022, , .		0
241	Challenges in Optimization-Based Control. , 2022, , .		0