Antonio LorÃ-a

List of Publications by Year
in descending order

154	5,310	147566	95083
papers	citations	31 h-index	68 g-index

158	158	158	2594
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Stability and robustness of edge-agreement-based consensus protocols for undirected proximity graphs. International Journal of Control, 2022, 95, 526-534.	1.2	6
2	Leaderless Consensus Formation Control of Cooperative Multi-Agent Vehicles Without Velocity Measurements. , 2022, 6, 902-907.		16
3	Strict Lyapunov Functions for Dynamic Consensus in Linear Systems Interconnected Over Directed Graphs. , 2022, 6, 2323-2328.		5
4	Rendezvous of Nonholonomic Robots via Output-Feedback Control Under Time-Varying Delays. IEEE Transactions on Control Systems Technology, 2022, 30, 2707-2716.	3.2	4
5	Distributed Hybrid Gradient Algorithm with Application to Cooperative Adaptive Estimation. , 2022, , .		0
6	Consensus-Based Formation Control of Multiple Nonholonomic Vehicles Under Input Constraints. , 2022, 6, 2767-2772.		5
7	Distributed Full-Consensus Control of Nonholonomic Vehicles Under Non-Differentiable Measurement Delays. , 2021, 5, 97-102.		6
8	Leader-Follower Consensus of Unicycles With Communication Range Constraints via Smooth Time-Invariant Feedback. , 2021, 5, 737-742.		8
9	Consensus-Based Formation Control of Networked Nonholonomic Vehicles With Delayed Communications. IEEE Transactions on Automatic Control, 2021, 66, 2242-2249.	3.6	15
10	An adaptive observer for a class of nonlinear systems with a high-gain approach. Application to the twin-rotor system. International Journal of Control, 2021, 94, 370-381.	1.2	10
11	A Switching Observer for a Class of Nonuniformly Observable Systems via Singular Time-Rescaling. IEEE Transactions on Automatic Control, 2021, 66, 6071-6076.	3.6	3
12	Leader-follower consensus formation control of differential-drive nonholonomic vehicles with time-varying delays. , 2021, , .		0
13	Edge-based strict Lyapunov functions for consensus with connectivity preservation over directed graphs. Automatica, 2021, 132, 109812.	3.0	9
14	Distributed Full-Consensus Control of Multi-Robot Systems with Range and Field-of-View Constraints. , 2021, , .		2
15	Practical dynamic consensus of Stuartâ€“Landau oscillators over heterogeneous networks. International Journal of Control, 2020, 93, 261-273.	1.2	8
16	A unique robust controller for tracking and stabilisation of non-holonomic vehicles. International Journal of Control, 2020, 93, 2302-2313.	1.2	6
17	Acceleration Estimation Using Imperfect Incremental Encoders in Automotive Applications. IEEE Transactions on Control Systems Technology, 2020, 28, 1058-1065.	3.2	5
18	Extended-Braking-Stiffness Estimation Under Varying Road-Adherence Conditions. IEEE Transactions on Control Systems Technology, 2020, 28, 1964-1971.	3.2	5

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19	Cascades-Based Leaderâ€“Follower Formation Tracking and Stabilization of Multiple Nonholonomic Vehicles. IEEE Transactions on Automatic Control, 2020, 65, 3639-3646.	3.6	18
20	Lyapunov-based synchronization of networked systems: From continuous-time to hybrid dynamics. Annual Reviews in Control, 2020, 50, 335-342.	4.4	4
21	Decentralized partial-consensus control of nonholonomic vehicles over networks with interconnection delays. , 2020, , .		0
22	Distributed consensus-formation of force-controlled nonholonomic robots with time-varying delays. Automatica, 2020, 120, 109114.	3.0	49
23	Robust Consensus and Connectivity-maintenance under Edge-agreement-based Protocols for Directed Spanning Tree Graphs. IFAC-PapersOnLine, 2020, 53, 2988-2993.	0.5	1
24	Strict Lyapunov functions for consensus under directed connected graphs. , 2020, , .		6
25	Trajectory Tracking for Underwater Swimming Manipulators using a Super Twisting Algorithm. Asian Journal of Control, 2019, 21, 208-223.	1.9	25
26	A hybrid controller for ABS based on extended-braking-stiffness estimation. IFAC-PapersOnLine, 2019, 52, 452-457.	0.5	2
27	Adaptive state estimation for a class of nonlinear systems: a high gain approach. , 2019, , .		2
28	Decentralized synchronization of time-varying oscillators under time-varying bidirectional graphs. , 2019, , .		2
29	Leaderless Consensus-based Formation Control of Multiple Nonholonomic Mobile Robots with Interconnecting Delays. , 2019, , .		2
30	Consensus of Multi-Agent Systems With Nonholonomic Restrictions via Lyapunovâ€™s Direct Method. , 2019, 3, 344-349.		31
31	Strict Lyapunov Functions for Model Reference Adaptive Control: Application to Lagrangian Systems. IEEE Transactions on Automatic Control, 2019, 64, 3040-3045.	3.6	20
32	A Cascades Approach to Formation-Tracking Stabilization of Force-Controlled Autonomous Vehicles. IEEE Transactions on Automatic Control, 2018, 63, 2662-2669.	3.6	14
33	On the estimation of the consensus rate of convergence in graphs with persistent interconnections. International Journal of Control, 2018, 91, 132-144.	1.2	16
34	Formation-Tracking Control of Autonomous Vehicles Under Relaxed Persistency of Excitation Conditions. IEEE Transactions on Control Systems Technology, 2018, 26, 1860-1865.	3.2	33
35	A robust Î´-persistently exciting controller for leader-follower tracking-agreement of multiple vehicles. European Journal of Control, 2018, 40, 1-12.	1.6	22
36	On the compensation of incremental encoder imperfections for motion control: a DC motor case-study. IFAC-PapersOnLine, 2018, 51, 627-632.	0.5	0

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37	On Consensus of Double Integrators Over Directed Graphs and with Relative Measurement Bias. , 2018, , .		5
38	A switched adaptive observer for extended braking stiffness estimation. , 2018, , .		5
39	Consensus under switching spanning-tree topologies and persistently exciting interconnections. , 2018, , .		3
40	Leader-follower simultaneous tracking-agreement formation control of nonholonomic vehicles. , 2018, , .		1
41	Synchronization and Dynamic Consensus of Heterogeneous Networked Systems. IEEE Transactions on Automatic Control, 2017, 62, 3758-3773.	3.6	115
42	Strict Lyapunov functions for time-varying systems with persistency of excitation. Automatica, 2017, 78, 274-279.	3.0	21
43	A Separation Principle for Underactuated Lossless Lagrangian Systems. IEEE Transactions on Automatic Control, 2017, 62, 5318-5323.	3.6	5
44	Stability, as told by its developers * *See also LorÃa and Panteley (2006). This work was supported by CNRS under grant BFC 248824.. IFAC-PapersOnLine, 2017, 50, 5219-5230.	0.5	6
45	A robust Î´-persistently exciting controller for formation-agreement stabilization of multiple mobile robots. , 2017, , .		1
46	Adaptive tracking control of Eulerâ€“Lagrange systems with bounded controls. International Journal of Adaptive Control and Signal Processing, 2017, 31, 299-313.	2.3	14
47	Lyapunov Functions for Persistently-Excited Cascaded Time-Varying Systems: Application to Consensus. IEEE Transactions on Automatic Control, 2017, 62, 3416-3422.	3.6	14
48	Angular velocity estimation from incremental encoder measurements in the presence of sensor imperfections * *The work of the first author is supported by CONACYT and SEP, Mexico. IFAC-PapersOnLine, 2017, 50, 5979-5984.	0.5	4
49	Consensus-based Formation Control of Nonholonomic Robots using a Strict Lyapunov Function. IFAC-PapersOnLine, 2017, 50, 2439-2444.	0.5	8
50	Global tracking-stabilization control of mobile robots with parametric uncertainty * *The work of the third author is supported by Government of Russian Federation (grant 074-U01). IFAC-PapersOnLine, 2017, 50, 4114-4119.	0.5	5
51	Synchronisation and Emergent Behaviour in Networks of Heterogeneous Systems: A Control Theory Perspective. Lecture Notes in Control and Information Sciences, 2017, , 81-102.	0.6	4
52	Lyapunov-based formation-tracking control of nonholonomic systems under persistency of excitation. IFAC-PapersOnLine, 2016, 49, 404-409.	0.5	15
53	A strict Lyapunov function for non-holonomic systems under persistently-exciting controllers. IFAC-PapersOnLine, 2016, 49, 217-222.	0.5	2
54	Singular-perturbations-based analysis of synchronization in heterogeneous networks: A case-study. , 2016, , .		8

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55	Global position-feedback tracking control of flexible-joint robots. , 2016, , .		12
56	Effects of network topology on the synchronized behaviour of coupled nonlinear oscillators: a case study**This article is supported by Government of Russian Federation (grant 074-U01).. IFAC-PapersOnLine, 2016, 49, 90-92.	0.5	3
57	A New Prediction Scheme for Input Delay Compensation in Restricted-Feedback Linearizable Systems. IEEE Transactions on Automatic Control, 2016, 61, 3693-3699.	3.6	9
58	Observers are Unnecessary for Output-Feedback Control of Lagrangian Systems. IEEE Transactions on Automatic Control, 2016, 61, 905-920.	3.6	76
59	Leaderâ€“Follower Formation and Tracking Control of Mobile Robots Along Straight Paths. IEEE Transactions on Control Systems Technology, 2016, 24, 727-732.	3.2	195
60	On practical synchronisation and collective behaviour of networked heterogeneous oscillators**This article is supported by Government of Russian Federation (grant 074-U01).. IFAC-PapersOnLine, 2015, 48, 25-30.	0.5	5
61	On the Stability and Robustness of Stuart-Landau Oscillatorsâˆ—âˆ—This article is supported by Government of Russian Federation (grant 074-U01). IFAC-PapersOnLine, 2015, 48, 645-650.	0.5	8
62	Analysis and control of Andronov-Hopf oscillators with applications to neuronal populations. , 2015, , .		4
63	On practical synchronization of heterogeneous networks of nonlinear systems: application to chaotic systems. , 2015, , .		3
64	Closed-loop identification and tracking control of Lagrangian systems under input constraints. , 2015, , .		3
65	Robust passivityâ€based control of switchedâ€reluctance motors. International Journal of Robust and Nonlinear Control, 2015, 25, 3384-3403.	2.1	4
66	Velocity-sensorless tracking control and identification of switched-reluctance motors. Automatica, 2014, 50, 3123-3130.	3.0	7
67	Decentralized formation-tracking control of autonomous vehicles on straight paths. , 2014, , .		6
68	A robust observer for switched-reluctance motors. , 2014, , .		0
69	Global adaptive linear control of the permanentâ€magnet synchronous motor. International Journal of Adaptive Control and Signal Processing, 2014, 28, 971-986.	2.3	12
70	Exponential Stabilization of Switched-Reluctance Motors Via Speed-Sensorless Feedback. IEEE Transactions on Control Systems Technology, 2014, 22, 1224-1232.	3.2	6
71	Robust formation tracking control of mobile robots via one-to-one time-varying communication. International Journal of Control, 2014, 87, 1822-1832.	1.2	18
72	Output-feedback global tracking control of robot manipulators with flexible joints. , 2014, , .		11

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73	Preliminary results on output tracking control for restricted-feedback linearizable systems with input delay. , 2013, , .		2
74	Speed-sensorless control of switched-reluctance motors with uncertain payload. , 2013, , .		3
75	Guest Editorial: Special Issue on Control of Quantum Mechanical Systems. IEEE Transactions on Automatic Control, 2012, 57, 1893-1895.	3.6	1
76	A simple formation-tracking controller of mobile robots based on a “spanning-tree” communication. , 2012, , .		1
77	A novel PID-based control approach for switched-reluctance motors. , 2012, , .		2
78	On the stability and stabilization of quaternion equilibria of rigid bodies. Automatica, 2012, 48, 3135-3141.	3.0	40
79	Adaptive state estimation for a class of uncertain nonlinear systems with output time-delays. , 2012, , .		2
80	Design and experimental validation of a nonlinear wheel slip control algorithm. Automatica, 2012, 48, 1852-1859.	3.0	44
81	PD+ Based Output Feedback Attitude Control of Rigid Bodies. IEEE Transactions on Automatic Control, 2012, 57, 2146-2152.	3.6	34
82	Continuously-implemented sliding-mode adaptive unknown-input observers under noisy measurements. Systems and Control Letters, 2012, 61, 1194-1202.	1.3	17
83	Hybrid attitude tracking of rigid bodies without angular velocity measurement. Systems and Control Letters, 2012, 61, 595-601.	1.3	31
84	Adaptive Unknown-Input Observers-Based Synchronization of Chaotic Systems for Telecommunication. IEEE Transactions on Circuits and Systems I: Regular Papers, 2011, 58, 800-812.	3.5	58
85	An Adaptive â€œSliding-modeâ€•Observer for Nonlinear Systems with Unknown Inputs and Noisy measurements. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 1837-1842.	0.4	1
86	Robust output stabilization: Improving performance via supervisory control. International Journal of Robust and Nonlinear Control, 2011, 21, 1219-1236.	2.1	16
87	Lyapunov stability analysis of a twisting based control algorithm for systems with unmatched perturbations. , 2011, , .		2
88	PD+ based output feedback attitude control of rigid bodies with improved performance. , 2011, , .		0
89	Hybrid attitude tracking of output feedback controlled rigid bodies. , 2011, , .		4
90	Cascade-Based Controlled Attitude Synchronization and Tracking of Spacecraft in Leader-Follower Formation. International Journal of Aerospace Engineering, 2011, 2011, 1-12.	0.5	6

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91	A new mixed wheel slip and acceleration control based on a cascaded design. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 879-884.	0.4	6
92	Control of the new 4th-order hyper-chaotic system with one input. Communications in Nonlinear Science and Numerical Simulation, 2010, 15, 1621-1630.	1.7	13
93	Cascades stability analysis applied to a control design for unmatched perturbation rejection based on HOSM. , 2010, , .		2
94	Hybrid stabilization of controlled spacecraft. , 2010, , .		1
95	Output feedback control of PMSM. , 2010, , .		0
96	Masterâ€“Slave Synchronization of Fourth-Order LÃ¼ Chaotic Oscillators via Linear Output Feedback. IEEE Transactions on Circuits and Systems II: Express Briefs, 2010, 57, 213-217.	2.2	26
97	A robust adaptive observer for nonlinear systems with unknown inputs and disturbances. , 2010, , .		3
98	PD+ attitude control of rigid bodies with improved performance. , 2010, , .		13
99	Multigoal output regulation via supervisory control: Application to stabilization of a unicycle. , 2009, , .		5
100	Spacecraft relative rotation tracking without angular velocity measurements. Automatica, 2009, 45, 750-756.	3.0	86
101	Adaptive Observers With Persistency of Excitation for Synchronization of Chaotic Systems. IEEE Transactions on Circuits and Systems I: Regular Papers, 2009, 56, 2703-2716.	3.5	57
102	A Linear Time-Varying Controller for Synchronization of LÃœ Chaotic Systems With One Input. IEEE Transactions on Circuits and Systems II: Express Briefs, 2009, 56, 674-678.	2.2	17
103	On the robustness analysis of triangular nonlinear systems: iISS and practical stability. , 2009, , .		1
104	Uniform stability of sets for difference inclusions under summability criteria. , 2009, , .		0
105	Uniform stabilization for linear systems with persistency of excitation: the neutrally stable and the double integrator cases. Mathematics of Control, Signals, and Systems, 2008, 20, 135-156.	1.4	26
106	Uniform semiglobal practical asymptotic stability for non-autonomous cascaded systems and applications. Automatica, 2008, 44, 337-347.	3.0	78
107	From feedback to cascade-interconnected systems: Breaking the loop. , 2008, , .		26
108	Uniform practical output-feedback stabilization of spacecraft relative rotation. , 2008, , .		1

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109	SWITCHED MUTUALâ€“MASTER-SLAVE SYNCHRONISATION: APPLICATION TO MECHANICAL SYSTEMS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 11508-11513.	0.4	2
110	Uniting controllers for robust output stabilization. , 2007, , .		0
111	Towards uniform linear time-invariant stabilization of systems with persistency of excitation. , 2007, , .		1
112	NECESSARY AND SUFFICIENT CONDITIONS FOR STABILITY OF MRAC SYSTEMS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 86-91.	0.4	0
113	Adaptive Tracking Control of Chaotic Systems With Applications to Synchronization. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2007, 54, 2019-2029.	0.1	55
114	Robustness of PID-controlled Manipulators vis-Ã-vis Actuator Dynamics and External Disturbances. European Journal of Control, 2007, 13, 563-576.	1.6	13
115	Uniform Global Practical Asymptotic Stability for Time-varying Cascaded Systems*. European Journal of Control, 2006, 12, 595-605.	1.6	22
116	Necessary and sufficient conditions for uniform semiglobal practical asymptotic stability: Application to cascaded systems. Automatica, 2006, 42, 1899-1906.	3.0	23
117	Smooth time-varying stabilization of driftless systems over communication channels. Systems and Control Letters, 2006, 55, 982-991.	1.3	10
118	Robustness of PID-controlled manipulators with respect to external disturbances. , 2006, , .		6
119	Adaptive Output Feedback Control of Spacecraft Relative Translation. , 2006, , .		13
120	OUTPUT FEEDBACK CONTROL VIA ADAPTIVE OBSERVERS WITH PERSISTENCY OF EXCITATION. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 1067-1072.	0.4	0
121	A nested Matrosov theorem and persistency of excitation for uniform convergence in stable nonautonomous systems. IEEE Transactions on Automatic Control, 2005, 50, 183-198.	3.6	140
122	Uniform Parametric Convergence in the Adaptive Control of Mechanical Systems. European Journal of Control, 2005, 11, 87-100.	1.6	31
123	Control of a Planar Underactuated Biped on a Complete Walking Cycle. IEEE Transactions on Automatic Control, 2004, 49, 838-843.	3.6	20
124	On Uniform Asymptotic Stability of Time-Varying Parameterized Discrete-Time Cascades. IEEE Transactions on Automatic Control, 2004, 49, 875-887.	3.6	47
125	Explicit Convergence Rates for Linear and Nonlinear MRAC-Type Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 333-338.	0.4	1
126	On uniform boundedness of parameterized discrete-time systems with decaying inputs: applications to cascades. Systems and Control Letters, 2003, 49, 163-174.	1.3	20

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127	On persistently exciting observers and a non-linear separation principle: Application to the stabilization of a generator. International Journal of Control, 2003, 76, 607-617.	1.2	12
128	Position feedback global tracking control of EL systems: a state transformation approach. IEEE Transactions on Automatic Control, 2002, 47, 841-847.	3.6	31
129	UGAS of Skew-symmetric Time-varying Systems: Application to Stabilization of Chained Form Systems. European Journal of Control, 2002, 8, 33-43.	1.6	32
130	Integral Characterizations of Uniform Asymptotic and Exponential Stability with Applications. Mathematics of Control, Signals, and Systems, 2002, 15, 177-201.	1.4	73
131	Uniform exponential stability of linear time-varying systems: revisited. Systems and Control Letters, 2002, 47, 13-24.	1.3	160
132	Relaxed persistency of excitation for uniform asymptotic stability. IEEE Transactions on Automatic Control, 2001, 46, 1874-1886.	3.6	164
133	A theorem for UGAS and ULES of (passive) nonautonomous systems: robust control of mechanical systems and ships. International Journal of Robust and Nonlinear Control, 2001, 11, 95-108.	2.1	36
134	A remark on passivity-based and discontinuous control of uncertain nonlinear systems. Automatica, 2001, 37, 1481-1487.	3.0	27
135	Growth rate conditions for uniform asymptotic stability of cascaded time-varying systems. Automatica, 2001, 37, 453-460.	3.0	152
136	A separation principle for dynamic positioning of ships: theoretical and experimental results. IEEE Transactions on Control Systems Technology, 2000, 8, 332-343.	3.2	171
137	A new notion of persistency-of-excitation for UGAS of NLTV systems: Application to stabilisation of nonholonomic systems. , 1999, , .		18
138	A separation principle for a class of euler-lagrange systems. , 1999, , 229-247.		21
139	Global Uniform Asymptotic Stability of Cascaded Non-autonomous Non-linear Systems: Application to Stabilisation of a Diesel Engine. European Journal of Control, 1999, 5, 107-115.	1.6	15
140	Force/motion control of constrained manipulators without velocity measurements. IEEE Transactions on Automatic Control, 1999, 44, 1407-1412.	3.6	23
141	On global uniform asymptotic stability of nonlinear time-varying systems in cascade. Systems and Control Letters, 1998, 33, 131-138.	1.3	220
142	Bounded output feedback tracking control of fully actuated Eulerâ€“Lagrange systems. Systems and Control Letters, 1998, 33, 151-161.	1.3	91
143	Passivity-based Control of Euler-Lagrange Systems. Communications and Control Engineering, 1998, , .	1.0	1,265
144	Euler-Lagrange systems. Communications and Control Engineering, 1998, , 15-37.	1.0	44

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145	Exponential Tracking Control of a Mobile Car Using a Cascaded Approach. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1998, 31, 201-206.	0.4	75
146	On global output feedback regulation of Euler-Lagrange systems with bounded inputs. IEEE Transactions on Automatic Control, 1997, 42, 1138-1143.	3.6	121
147	Force/position regulation for robot manipulators with unmeasurable velocities and uncertain gravity. Automatica, 1996, 32, 939-943.	3.0	15
148	On output feedback stabilization of Euler-Lagrange systems with nondissipative forces. Systems and Control Letters, 1996, 27, 315-324.	1.3	17
149	On passivityâ€based output feedback global stabilization of eulerâ€lagrange systems. International Journal of Robust and Nonlinear Control, 1995, 5, 313-323.	2.1	95
150	A class of output feedback globally stabilizing controllers for flexible joints robots. IEEE Transactions on Automation Science and Engineering, 1995, 11, 766-770.	2.4	37
151	A semiglobally stable output feedback PI/sup 2/D regulator for robot manipulators. IEEE Transactions on Automatic Control, 1995, 40, 1432-1436.	3.6	178
152	Global regulation of flexible joint robots using approximate differentiation. IEEE Transactions on Automatic Control, 1994, 39, 1222-1224.	3.6	125
153	2 Cascaded Nonlinear Time-Varying Systems: Analysis and Design. Lecture Notes in Control and Information Sciences, 0, , 23-64.	0.6	66
154	6 Stability, Told by Its Developers. , 0, , 199-258.		12