

Alessandro Astolfi

List of Publications by Year in descending order

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280
papers

9,605
citations

38742

50
h-index

45317

90
g-index

283
all docs

283
docs citations

283
times ranked

4291
citing authors

#	ARTICLE	IF	CITATIONS
1	Homogeneous Approximation, Recursive Observer Design, and Output Feedback. SIAM Journal on Control and Optimization, 2008, 47, 1814-1850.	2.1	642
2	Immersion and invariance: a new tool for stabilization and adaptive control of nonlinear systems. IEEE Transactions on Automatic Control, 2003, 48, 590-606.	5.7	631
3	Nonlinear and Adaptive Control with Applications. Communications and Control Engineering, 2008, . .	1.6	353
4	Conditions for stability of droop-controlled inverter-based microgrids. Automatica, 2014, 50, 2457-2469.	5.0	340
5	Interconnection and damping assignment passivity-based control of mechanical systems with underactuation degree one. IEEE Transactions on Automatic Control, 2005, 50, 1936-1955.	5.7	264
6	Control by Interconnection and Standard Passivity-Based Control of Port-Hamiltonian Systems. IEEE Transactions on Automatic Control, 2008, 53, 2527-2542.	5.7	255
7	Model Reduction by Moment Matching for Linear and Nonlinear Systems. IEEE Transactions on Automatic Control, 2010, 55, 2321-2336.	5.7	254
8	Spacecraft attitude control using magnetic actuators. Automatica, 2004, 40, 1405-1414.	5.0	194
9	Sensorless Control of Surface-Mount Permanent-Magnet Synchronous Motors Based on a Nonlinear Observer. IEEE Transactions on Power Electronics, 2010, 25, 290-297.	7.9	191
10	High gain observers with updated gain and homogeneous correction terms. Automatica, 2009, 45, 422-428.	5.0	180
11	Transient stabilization of multimachine power systems with nontrivial transfer conductances. IEEE Transactions on Automatic Control, 2005, 50, 60-75.	5.7	179
12	On global extremum seeking in the presence of local extrema. Automatica, 2009, 45, 245-251.	5.0	161
13	Estimation of Rotor Position and Speed of Permanent Magnet Synchronous Motors With Guaranteed Stability. IEEE Transactions on Control Systems Technology, 2011, 19, 601-614.	5.2	152
14	Nonlinear Control of Feedforward Systems With Bounded Signals. IEEE Transactions on Automatic Control, 2004, 49, 1975-1990.	5.7	148
15	Stabilization of continuous-time switched nonlinear systems. Systems and Control Letters, 2008, 57, 95-103.	2.3	136
16	A Differential Game Approach to Multi-agent Collision Avoidance. IEEE Transactions on Automatic Control, 2017, 62, 4229-4235.	5.7	132
17	A Nonlinear Tracking Controller for Voltage-Fed Induction Motors With Uncertain Load Torque. IEEE Transactions on Control Systems Technology, 2009, 17, 608-619.	5.2	125
18	Two solutions to the adaptive visual servoing problem. IEEE Transactions on Automation Science and Engineering, 2002, 18, 387-392.	2.3	123

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19	A globally exponentially convergent immersion and invariance speed observer for mechanical systems with non-holonomic constraints. <i>Automatica</i> , 2010, 46, 182-189.	5.0	120
20	Invariant Manifold Based Reduced-Order Observer Design for Nonlinear Systems. <i>IEEE Transactions on Automatic Control</i> , 2008, 53, 2602-2614.	5.7	114
21	Path-Tracking of a Tractor-Trailer Vehicle Along Rectilinear and Circular Paths: A Lyapunov-Based Approach. <i>IEEE Transactions on Automation Science and Engineering</i> , 2004, 20, 154-160.	2.3	109
22	Robust nonlinear output feedback control for brake by wire control systems. <i>Automatica</i> , 2008, 44, 1078-1087.	5.0	102
23	Total Energy Shaping Control of Mechanical Systems: Simplifying the Matching Equations Via Coordinate Changes. <i>IEEE Transactions on Automatic Control</i> , 2007, 52, 1093-1099.	5.7	100
24	Global magnetic attitude control of spacecraft in the presence of gravity gradient. <i>IEEE Transactions on Aerospace and Electronic Systems</i> , 2006, 42, 796-805.	4.7	98
25	Dynamic scaling and observer design with application to adaptive control. <i>Automatica</i> , 2009, 45, 2883-2889.	5.0	96
26	Robust stabilization of chained systems via hybrid control. <i>IEEE Transactions on Automatic Control</i> , 2003, 48, 1768-1772.	5.7	94
27	A new solution to the problem of range identification in perspective vision systems. <i>IEEE Transactions on Automatic Control</i> , 2005, 50, 2074-2077.	5.7	92
28	Nonlinear adaptive control of systems in feedback form: An alternative to adaptive backstepping. <i>Systems and Control Letters</i> , 2008, 57, 733-739.	2.3	90
29	Continuous stirred tank reactors: easy to stabilise?. <i>Automatica</i> , 2003, 39, 1817-1827.	5.0	85
30	Output-feedback stabilization of a class of uncertain non-minimum-phase nonlinear systems. <i>Automatica</i> , 2005, 41, 1609-1615.	5.0	79
31	Design of Positive Linear Observers for Positive Linear Systems via Coordinate Transformations and Positive Realizations. <i>SIAM Journal on Control and Optimization</i> , 2008, 47, 345-373.	2.1	78
32	Discontinuous control of high-order generalized chained systems. <i>Systems and Control Letters</i> , 1999, 37, 309-322.	2.3	75
33	Immersion and invariance adaptive control of linear multivariable systems. <i>Systems and Control Letters</i> , 2003, 49, 37-47.	2.3	75
34	Data-driven model reduction by moment matching for linear and nonlinear systems. <i>Automatica</i> , 2017, 79, 340-351.	5.0	74
35	Dynamic Approximate Solutions of the HJ Inequality and of the HJB Equation for Input-Affine Nonlinear Systems. <i>IEEE Transactions on Automatic Control</i> , 2012, 57, 2490-2503.	5.7	73
36	A tight small-gain theorem for not necessarily ISS systems. <i>Systems and Control Letters</i> , 2007, 56, 87-91.	2.3	70

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37	Model Reduction of Neutral Linear and Nonlinear Time-Invariant Time-Delay Systems With Discrete and Distributed Delays. IEEE Transactions on Automatic Control, 2016, 61, 1438-1451.	5.7	70
38	Two results for adaptive output feedback stabilization of nonlinear systems. Automatica, 2003, 39, 857-866.	5.0	68
39	On feedback equivalence to port controlled Hamiltonian systems. Systems and Control Letters, 2005, 54, 911-917.	2.3	66
40	Global Magnetic Attitude Control of Inertially Pointing Spacecraft. Journal of Guidance, Control, and Dynamics, 2005, 28, 1065-1072.	2.8	66
41	A constructive solution for stabilization via immersion and invariance: The cart and pendulum system. Automatica, 2008, 44, 2352-2357.	5.0	63
42	Lateral Control of an Autonomous Vehicle. IEEE Transactions on Intelligent Vehicles, 2018, 3, 228-237.	12.7	63
43	New Results on Parameter Estimation via Dynamic Regressor Extension and Mixing: Continuous and Discrete-Time Cases. IEEE Transactions on Automatic Control, 2021, 66, 2265-2272.	5.7	62
44	Norm Estimators and Global Output Feedback Stabilization of Nonlinear Systems With ISS Inverse Dynamics. IEEE Transactions on Automatic Control, 2006, 51, 493-498.	5.7	59
45	Global complete observability and output-to-state stability imply the existence of a globally convergent observer. Mathematics of Control, Signals, and Systems, 2006, 18, 32-65.	2.3	59
46	Constructive Interconnection and Damping Assignment for Port-Controlled Hamiltonian Systems. IEEE Transactions on Automatic Control, 2015, 60, 2350-2361.	5.7	58
47	Set-point regulation of an anaerobic digestion process with bounded output feedback. IEEE Transactions on Control Systems Technology, 2003, 11, 495-504.	5.2	56
48	Energy-maximising control of wave energy converters using a moment-domain representation. Control Engineering Practice, 2018, 81, 85-96.	5.5	54
49	Families of moment matching based, low order approximations for linear systems. Systems and Control Letters, 2014, 64, 47-56.	2.3	53
50	Constructive ϵ -Nash Equilibria for Nonzero-Sum Differential Games. IEEE Transactions on Automatic Control, 2015, 60, 950-965.	5.7	53
51	Control of HIV Infection Dynamics. IEEE Control Systems, 2008, 28, 28-39.	0.8	52
52	Further constructive results on interconnection and damping assignment control of mechanical systems: the Acrobot example. International Journal of Robust and Nonlinear Control, 2006, 16, 671-685.	3.7	50
53	Discontinuous Control of the Brockett Integrator. European Journal of Control, 1998, 4, 49-63.	2.6	49
54	Nonlinear PI control of uncertain systems: an alternative to parameter adaptation. Systems and Control Letters, 2002, 47, 259-278.	2.3	49

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55	Input-to-state stability for discrete-time time-varying systems with applications to robust stabilization of systems in power form. <i>Automatica</i> , 2005, 41, 1891-1903.	5.0	49
56	Passivity and robust PI control of the air supply system of a PEM fuel cell model. <i>Automatica</i> , 2011, 47, 2554-2561.	5.0	49
57	Adaptive Control for Systems With Time-Varying Parameters. <i>IEEE Transactions on Automatic Control</i> , 2021, 66, 1986-2001.	5.7	47
58	Output feedback stabilization of the angular velocity of a rigid body. <i>Systems and Control Letters</i> , 1999, 36, 181-192.	2.3	43
59	Stabilization and Disturbance Attenuation of Nonlinear Systems Using Dissipativity Theory. <i>European Journal of Control</i> , 2002, 8, 408-431.	2.6	43
60	State and output feedback stabilization of multiple chained systems with discontinuous control. <i>Systems and Control Letters</i> , 1997, 32, 49-56.	2.3	42
61	Asymptotic stabilization of some equilibria of an underactuated underwater vehicle. <i>Systems and Control Letters</i> , 2002, 45, 193-206.	2.3	42
62	A Geometric Characterization of the Persistence of Excitation Condition for the Solutions of Autonomous Systems. <i>IEEE Transactions on Automatic Control</i> , 2017, 62, 5666-5677.	5.7	41
63	Nonlinear Model Reduction by Moment Matching. <i>Foundations and Trends in Systems and Control</i> , 2017, 4, 224-409.	7.5	41
64	Robust stabilization of the angular velocity of a rigid body. <i>Systems and Control Letters</i> , 1998, 34, 257-264.	2.3	40
65	Global asymptotic stabilization of the attitude and the angular rates of an underactuated non-symmetric rigid body. <i>Automatica</i> , 2008, 44, 1781-1789.	5.0	40
66	Model Reduction by Matching the Steady-State Response of Explicit Signal Generators. <i>IEEE Transactions on Automatic Control</i> , 2016, 61, 1995-2000.	5.7	40
67	A note on asymptotic stabilization of linear systems by periodic, piecewise constant, output feedback. <i>Automatica</i> , 2005, 41, 339-344.	5.0	39
68	An experimental comparison of several PWM controllers for a single-phase AC-DC converter. <i>IEEE Transactions on Control Systems Technology</i> , 2003, 11, 940-947.	5.2	35
69	Towards applied nonlinear adaptive control. <i>Annual Reviews in Control</i> , 2008, 32, 136-148.	7.9	35
70	Existence, stability and robustness analysis of limit cycles in hybrid anti-lock braking systems. <i>International Journal of Control</i> , 2009, 82, 659-678.	1.9	35
71	A new look at model reduction by moment matching for linear systems. , 2007, , .		32
72	Energy shaping control for buck-boost converters with unknown constant power load. <i>Control Engineering Practice</i> , 2018, 74, 33-43.	5.5	32

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73	Nonlinear Moment Matching-Based Model Order Reduction. IEEE Transactions on Automatic Control, 2016, 61, 2837-2847.	5.7	31
74	Construction of discrete-time models for port-controlled Hamiltonian systems with applications. Systems and Control Letters, 2006, 55, 673-680.	2.3	30
75	Shared Control for the Kinematic and Dynamic Models of a Mobile Robot. IEEE Transactions on Control Systems Technology, 2016, 24, 2112-2124.	5.2	30
76	Immersion and invariance adaptive control for discrete time systems in strict feedback form. Systems and Control Letters, 2012, 61, 1132-1137.	2.3	29
77	Hamiltonian-Based Clustering: Algorithms for Static and Dynamic Clustering in Data Mining and Image Processing. IEEE Control Systems, 2012, 32, 74-91.	0.8	29
78	Families of moment matching based, structure preserving approximations for linear port Hamiltonian systems. Automatica, 2013, 49, 2424-2434.	5.0	29
79	Robust balancing control of flexible inverted-pendulum systems. Mechanism and Machine Theory, 2018, 130, 539-551.	4.5	28
80	Adaptive Formation Tracking Control for First-Order Agents With a Time-Varying Flow Parameter. IEEE Transactions on Automatic Control, 2022, 67, 2481-2488.	5.7	27
81	Observer design for a class of nonlinear systems using dynamic scaling with application to adaptive control. , 2008, , .		26
82	Asymptotic stabilization via control by interconnection of port-Hamiltonian systems. Automatica, 2009, 45, 1611-1618.	5.0	26
83	A discrete-time observer design for spacecraft attitude determination using an orthogonality-preserving algorithm. Automatica, 2011, 47, 975-980.	5.0	26
84	Model reduction by moment matching for nonlinear systems. , 2008, , .		25
85	A globally exponentially convergent immersion and invariance speed observer for n degrees of freedom mechanical systems. , 2009, , .		25
86	Nonlinear Energy-Maximizing Optimal Control of Wave Energy Systems: A Moment-Based Approach. IEEE Transactions on Control Systems Technology, 2021, 29, 2533-2547.	5.2	25
87	Asymptotic stabilization of passive systems without damping injection: A sampled integral technique. Automatica, 2011, 47, 262-271.	5.0	24
88	Observer design for range and orientation identification. Automatica, 2010, 46, 1369-1375.	5.0	23
89	On the stabilization of feedforward systems with bounded control. Systems and Control Letters, 2005, 54, 263-270.	2.3	22
90	Moment-Based Discontinuous Phasor Transform and its Application to the Steady-State Analysis of Inverters and Wireless Power Transfer Systems. IEEE Transactions on Power Electronics, 2016, 31, 8448-8460.	7.9	22

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91	Stabilization of a Class of Underactuated Nonlinear Systems via Underactuated Back-Stepping. IEEE Transactions on Automatic Control, 2021, 66, 5429-5435.	5.7	22
92	Control of a planar system with quantized and saturated input/output. IEEE Transactions on Circuits and Systems I: Regular Papers, 2008, 55, 932-942.	5.4	21
93	Contraction and observer design on cones. , 2011, , .		21
94	A minimal dimension observer for global frequency estimation. , 2008, , .		20
95	Asymptotic tracking of a reference trajectory by output-feedback for a class of non linear systems. Systems and Control Letters, 2009, 58, 652-663.	2.3	20
96	Dynamic Lyapunov functions. Automatica, 2013, 49, 1058-1067.	5.0	20
97	Hybrid Observer for Global Frequency Estimation of Saturated Signals. IEEE Transactions on Automatic Control, 2009, 54, 2461-2464.	5.7	19
98	Activation of Immune Response in Disease Dynamics via Controlled Drug Scheduling. IEEE Transactions on Automation Science and Engineering, 2009, 6, 248-255.	5.2	19
99	Characterization of the moments of a linear system driven by explicit signal generators. , 2015, , .		19
100	State and Output-Feedback Shared-Control for a Class of Linear Constrained Systems. IEEE Transactions on Automatic Control, 2016, 61, 3209-3214.	5.7	19
101	Practical L2 disturbance attenuation for nonlinear systems. Automatica, 2002, 38, 139-145.	5.0	18
102	Switching-Driving Lyapunov Function and the Stabilization of the Ball-and-Plate System. IEEE Transactions on Automatic Control, 2009, 54, 1881-1886.	5.7	18
103	A solution to the problem of transient stability of multimachine power systems. , 2012, , .		18
104	Model reduction for hybrid systems with state-dependent jumps. IFAC-PapersOnLine, 2016, 49, 850-855.	0.9	18
105	Backstepping PDE Design: A Convex Optimization Approach. IEEE Transactions on Automatic Control, 2018, 63, 1943-1958.	5.7	18
106	Adaptive Formation Tracking Control of Directed Networked Vehicles in a Time-Varying Flowfield. Journal of Guidance, Control, and Dynamics, 2021, 44, 1883-1891.	2.8	18
107	Model reduction for linear systems and linear time-delay systems from input/output data. , 2015, , .		17
108	Shared-Control for a Rear-Wheel Drive Car: Dynamic Environments and Disturbance Rejection. IEEE Transactions on Human-Machine Systems, 2017, 47, 723-734.	3.5	17

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109	Adaptive Control for Systems with Varying Parameters. , 2018, , .		17
110	Adaptive Control of Linear Systems with Time-Varying Parameters. , 2018, , .		17
111	Orbital stabilization of nonlinear systems via the immersion and invariance technique. International Journal of Robust and Nonlinear Control, 2020, 30, 1850-1871.	3.7	17
112	Adaptive Energy Shaping Control of a Class of Nonlinear Soft Continuum Manipulators. IEEE/ASME Transactions on Mechatronics, 2022, 27, 280-291.	5.8	17
113	DISCRETE-TIME IDA-PBC DESIGN FOR SEPARABLE HAMILTONIAN SYSTEMS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 838-843.	0.4	16
114	Dynamic extension is unnecessary for stabilization via interconnection and damping assignment passivity-based control. Systems and Control Letters, 2009, 58, 133-135.	2.3	15
115	Moment-based constrained optimal control of an array of wave energy converters. , 2019, , .		15
116	Robust dynamic state feedback for underactuated systems with linearly parameterized disturbances. International Journal of Robust and Nonlinear Control, 2020, 30, 4112-4128.	3.7	15
117	Energy Management and Control of Photovoltaic and Storage Systems in Active Distribution Grids. IEEE Transactions on Power Systems, 2022, 37, 1956-1968.	6.5	15
118	A Condition for Certainty Equivalence Output Feedback Stabilization of Nonlinear Systems. IEEE Transactions on Automatic Control, 2010, 55, 1180-1185.	5.7	13
119	Nonlinear Model Reduction in the Loewner Framework. IEEE Transactions on Automatic Control, 2021, 66, 5711-5726.	5.7	13
120	Trading robustness with optimality in nonlinear control. Automatica, 2001, 37, 1961-1969.	5.0	12
121	A Local Separation Principle via Dynamic Approximate Feedback and Observer Linearization for a Class of Nonlinear Systems. IEEE Transactions on Automatic Control, 2019, 64, 111-126.	5.7	12
122	On the Approximation of Moments for Nonlinear Systems. IEEE Transactions on Automatic Control, 2021, 66, 5538-5545.	5.7	12
123	Speed and load torque observer for rotating machines. , 2009, , .		11
124	Characterization of Exponential Divergence of the Kalman Filter for Time-Varying Systems. SIAM Journal on Control and Optimization, 2010, 48, 2917-2944.	2.1	11
125	Global stabilization of non-globally linearizable triangular systems: Application to transient stability of power systems. , 2011, , .		11
126	Dynamic generalized controllability and observability functions with applications to model reduction and sensor deployment. Automatica, 2014, 50, 1349-1359.	5.0	11

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127	Energyâ€maximising momentâ€based constrained optimal control of ocean wave energy farms. IET Renewable Power Generation, 2021, 15, 3395-3408.	3.1	11
128	Reduced-order observer design for systems with non-monotonic nonlinearities. , 2006, , .		10
129	TOWARDS APPLIED NONLINEAR ADAPTIVE CONTROL. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 298-309.	0.4	10
130	On the stability of the recursive Kalman filter for linear time-invariant systems. , 2008, , .		10
131	Voltage Regulation of a Boost Converter in Discontinuous Conduction Mode: A Simple Robust Adaptive Feedback Controller. IEEE Control Systems, 2013, 33, 55-65.	0.8	10
132	Passivity-based control of AC drives: theory for the user and application examples. International Journal of Control, 2013, 86, 625-635.	1.9	10
133	Shared-control for fully actuated linear mechanical systems. , 2013, , .		10
134	Stability of Synchronized Motions of Inverterâ€Based Microgrids Under Droop Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 6361-6367.	0.4	10
135	A geometric characterisation of persistently exciting signals generated by continuous-time autonomous systems. IFAC-PapersOnLine, 2016, 49, 826-831.	0.9	10
136	Crowd-Averse Robust Mean-Field Games: Approximation via State Space Extension. IEEE Transactions on Automatic Control, 2016, 61, 1882-1894.	5.7	10
137	A lateral control assistant for the dynamic model of vehicles subject to state constraints. , 2017, , .		10
138	An algebraic approach to dynamic optimisation of nonlinear systems: a survey and some new results. Journal of Control and Decision, 2019, 6, 1-29.	1.6	10
139	Combining Pontryagin's Principle and Dynamic Programming for Linear and Nonlinear Systems. IEEE Transactions on Automatic Control, 2020, 65, 5312-5327.	5.7	10
140	Adaptive energy shaping control of robotic needle insertion. Mechanism and Machine Theory, 2021, 155, 104060.	4.5	10
141	Position regulation in Cartesian space of a class of inextensible soft continuum manipulators with pneumatic actuation. Mechatronics, 2021, 76, 102573.	3.3	10
142	Adaptive Control for Nonlinear Systems with Time-Varying Parameters and Control Coefficient. IFAC-PapersOnLine, 2020, 53, 3829-3834.	0.9	10
143	New Results on the Global Stabilization of Minimum-Phase Nonlinear Systems. Automatica, 1998, 34, 783-788.	5.0	9
144	Stabilization of Uncertain Nonlinear Systems via Immersion and Invariance. European Journal of Control, 2007, 13, 204-220.	2.6	9

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145	Invariance-Like Theorems and ϵ -Convergence Properties. IEEE Transactions on Automatic Control, 2016, 61, 648-661.	5.7	9
146	Robust Moment-Based Energy-Maximising Optimal Control of Wave Energy Converters. , 2019, , .		9
147	Trends in nonlinear control. , 2008, , .		8
148	A LaSalle version of Matrosov theorem. , 2011, , .		8
149	Shared-control for the kinematic model of a mobile robot. , 2014, , .		8
150	Model reduction by moment matching for nonlinear time-delay systems. , 2014, , .		8
151	Semi-Global Multi-Frequency Estimation in the Presence of Deadzone and Saturation. IEEE Transactions on Automatic Control, 2014, 59, 1913-1918.	5.7	8
152	An Interconnection-Based Interpretation of the Loewner Matrices. , 2019, , .		8
153	Loewner Functions for Linear Time-Varying Systems with Applications to Model Reduction. IFAC-PapersOnLine, 2020, 53, 5623-5628.	0.9	8
154	Existence Conditions and a Constructive Design of Positive Linear Observers for Positive Linear Systems. , 2006, , .		7
155	Finite-time control of cross-chained nonholomic systems by switched state feedback. , 2008, , .		7
156	Extremum seeking without external dithering and its application to plasma RF heating on FTU. , 2008, , .		7
157	Model reduction by moment matching for switched power converters. , 2009, , .		7
158	Discrete time immersion and invariance adaptive control for systems in strict feedback form. , 2011, , .		7
159	A weak version of the small-gain theorem. , 2012, , .		7
160	Constrained optimal reduced-order models from input/output data. , 2016, , .		7
161	Model reduction by moment matching at isolated singularities for linear systems: a complex analytic approach. IFAC-PapersOnLine, 2017, 50, 6350-6354.	0.9	7
162	Model reduction by moment matching at isolated singularities for linear systems: A geometric approach. , 2017, , .		7

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163	Optimality and Passivity of Input-Quadratic Nonlinear Systems. IEEE Transactions on Automatic Control, 2020, 65, 3229-3240.	5.7	7
164	Hankel/Toeplitz matrices and the static output feedback stabilization problem. Mathematics of Control, Signals, and Systems, 2005, 17, 231-268.	2.3	6
165	Robust Nonlinear Proportional-Integral Control for Active Braking Control Systems. , 2006, , .		6
166	Positive Linear Observer Design via Positive Realization. Proceedings of the American Control Conference, 2007, , .	0.0	6
167	A NOTE ON A PIECEWISE-LINEAR DUFFING-TYPE SYSTEM. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2007, 17, 4425-4429.	1.7	6
168	Reduced-order observer design for nonlinear systems. , 2007, , .		6
169	A Hamiltonian-based algorithm for measurements clustering. , 2008, , .		6
170	A necessary and sufficient condition for semi-stability of the recursive Kalman filter. , 2008, , .		6
171	Hybrid Observer for multi-frequency signals. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 43-48.	0.4	6
172	Moment matching for nonlinear port Hamiltonian and gradient systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 395-399.	0.4	6
173	Model reduction for nonlinear systems and nonlinear time-delay systems from input/output data. , 2015, , .		6
174	Shared-control for the kinematic model of a rear-wheel drive car. , 2015, , .		6
175	Stability of nonlinear differential-algebraic systems via additive identity. IEEE/CAA Journal of Automatica Sinica, 2020, 7, 929-941.	13.1	6
176	An Adaptive Observer-Based Controller Design for Active Damping of a DC Network With a Constant Power Load. IEEE Transactions on Control Systems Technology, 2021, 29, 2312-2324.	5.2	6
177	Model Reduction by Moment Matching: Beyond Linearity A Review of the Last 10 Years. , 2020, , .		6
178	Loewner Functions and Model Order Reduction for Nonlinear Input-Affine Descriptor Systems. , 2021, , .		6
179	Integrator forwarding without PDEs. , 2009, , .		5
180	Partial Stability for a Class of Nonlinear Systems. SIAM Journal on Control and Optimization, 2009, 47, 3203-3219.	2.1	5

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181	Sampled-data adaptive control for a class of nonlinear systems with parametric uncertainties. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 1261-1266.	0.4	5
182	Moment matching for linear systems – overview and new results*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 12739-12744.	0.4	5
183	Solution to the multi-machine transient stability problem and simulated validation in realistic scenarios. IET Generation, Transmission and Distribution, 2014, 8, 1392-1405.	2.5	5
184	Towards deterministic subspace identification for autonomous nonlinear systems. , 2015, , .		5
185	An adaptive observer for a class of parabolic PDEs based on a convex optimization approach for backstepping PDE design. , 2016, , .		5
186	Nonlinear system identification for autonomous systems via functional equations methods. , 2016, , .		5
187	Model reduction for linear differential inclusions: moment-set and time-variance. , 2017, , .		5
188	Eigenvalues and poles of nonlinear systems: A geometric approach. , 2017, , .		5
189	Under-Actuated Back-Stepping: An Introduction. , 2018, , .		5
190	Output-Feedback I&I Adaptive Control for Linear Systems with Time-Varying Parameters. , 2019, , .		5
191	Output-Feedback Adaptive Control for Systems with Time-Varying Parameters. IFAC-PapersOnLine, 2019, 52, 586-591.	0.9	5
192	Data-driven constrained optimal model reduction. European Journal of Control, 2020, 53, 68-78.	2.6	5
193	Singularities and Moments of Nonlinear Systems. IEEE Transactions on Automatic Control, 2020, 65, 3647-3654.	5.7	5
194	A Direct Bounded Control Method for Transient Stability Assessment. IFAC-PapersOnLine, 2021, 54, 294-301.	0.9	5
195	Robust end-point optimizing feedback for nonlinear dynamic processes. International Journal of Control, 1996, 65, 995-1014.	1.9	4
196	CONTROL OF NONHOLONOMIC SYSTEMS: A SIMPLE STABILIZING TIME-SWITCHING STRATEGY. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 634-639.	0.4	4
197	Transformations of Nonlinear Systems to High-Order Generalized Chained Forms. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2005, 127, 729-733.	1.6	4
198	Direct Discrete-Time Design for Sampled-Data Hamiltonian Control Systems. , 2007, , 87-98.		4

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199	A bound for the error covariance of the recursive Kalman filter with Markov jump parameters. , 2008, , .		4
200	Homogeneity in the bi-limit as a tool for observer and feedback design. , 2009, , .		4
201	The Design and Control of a Bipedal Robot with Sensory Feedback. International Journal of Advanced Robotic Systems, 2013, 10, 277.	2.1	4
202	Shared-control for a UAV operating in the 3D space. , 2015, , .		4
203	A Note on Delay Coordinates for Locally Observable Analytic Systems. IEEE Transactions on Automatic Control, 2016, 61, 1409-1412.	5.7	4
204	A note on the stability of nonlinear differential-algebraic systems * *This work was supported in part by Imperial College London under the Junior Research Fellowship Scheme.. IFAC-PapersOnLine, 2017, 50, 7421-7426.	0.9	4
205	On the stability of constrained mechanical systems. , 2017, , .		4
206	A Globally Stable Algorithm for the Integration of High-Index Differential-Algebraic Systems. IEEE Transactions on Automatic Control, 2020, 65, 2107-2122.	5.7	4
207	On the Dynamics of Inherent Balancing of Modular Multilevel DC-AC-DC Converters. IEEE Transactions on Power Electronics, 2021, 36, 34-40.	7.9	4
208	Robust traffic wave damping via shared control. Transportation Research Part C: Emerging Technologies, 2021, 128, 103110.	7.6	4
209	Discontinuous control of the nonholonomic integrator. , 1997, , .		4
210	Spatiotemporal dynamics in spiking recurrent neural networks using modified-full-FORCE on EEG signals. Scientific Reports, 2022, 12, 2896.	3.3	4
211	A numerical algorithm as an observer for spacecraft attitude determination. , 2006, , .		3
212	Transient Stabilization of Multimachine Power Systems. , 2006, , 367-386.		3
213	Magnetic attitude control of spacecraft with flexible appendages. , 2006, , .		3
214	A Remark on an Example By Teel- <i>Hespanha</i> With Applications to Cascaded Systems. IEEE Transactions on Automatic Control, 2007, 52, 289-293.	5.7	3
215	A Globally Stabilizing Time-switching Control Strategy for an Underactuated Rigid Body. Proceedings of the American Control Conference, 2007, , .	0.0	3
216	Stabilization of a class of non-holonomic systems by means of switching control laws. , 2008, , .		3

#	ARTICLE	IF	CITATIONS
217	Estimation of the dynamics of two-dimensional clusters. , 2009, , .		3
218	Stochastic Detectability and Mean Bounded Error Covariance of the Recursive Kalman Filter with Markov Jump Parameters. Stochastic Analysis and Applications, 2010, 28, 190-201.	1.5	3
219	A stochastic approach to distributed power frequency control by means of smart appliances. , 2012, , .		3
220	Model reduction by moment matching for ZIP systems. , 2014, , .		3
221	Backstepping PDE design, Volterra and Fredholm operators: A convex optimization approach. , 2015, , .		3
222	Editorial A New Beginning Within a Solid Tradition. IEEE Transactions on Automatic Control, 2018, 63, 1-2.	5.7	3
223	A globally stable convergent algorithm for the integration of constrained mechanical systems. , 2018, , .		3
224	Active Damping of a DC Network with a Constant Power Load: An Adaptive Observer-based Design. , 2019, , .		3
225	Optimal Control for Continuous-time Nonlinear Systems based on a Linear-like Policy Iteration. , 2019, , .		3
226	Simulation-driven fixed-order controller tuning via moment matching. , 2019, , .		3
227	On the Active Nodes of Network Systems. , 2020, , .		3
228	Closed-Loop Frequency Analysis of Reset Control Systems. IEEE Transactions on Automatic Control, 2023, 68, 1146-1153.	5.7	3
229	Controlled Invariant Manifolds: a Normally-Hyperbolic Viewpoint. , 2006, , .		2
230	Robust observer design for a class of nonlinear systems using filtering and dynamic scaling. , 2009, , .		2
231	Output-feedback shared-control for fully actuated linear mechanical systems. , 2014, , .		2
232	A two-point boundary value formulation of a mean-field crowd-averse game. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 7819-7824.	0.4	2
233	Mean-field games and two-point boundary value problems. , 2014, , .		2
234	Some results on disturbance attenuation for Hamiltonian systems via direct discrete-time design. International Journal of Robust and Nonlinear Control, 2015, 25, 1927-1940.	3.7	2

#	ARTICLE	IF	CITATIONS
235	Dimension estimation for autonomous nonlinear systems. , 2015, , .		2
236	Robust H ∞ Control for Autonomous Scooters. IFAC-PapersOnLine, 2017, 50, 297-302.	0.9	2
237	Shared-Control for the Lateral Motion of Vehicles. , 2018, , .		2
238	A Disturbance Attenuation Approach for the Control of Differential-Algebraic Systems. , 2018, , .		2
239	Discretization schemes for constraint stabilization in nonlinear differential-algebraic systems. , 2018, , .		2
240	Traffic Wave Damping: A Shared Control Approach. , 2019, , .		2
241	Stabilization of differential-algebraic systems with Lipschitz nonlinearities via feedback decomposition. , 2019, , .		2
242	A Fixed-Point Characterization of the Optimal Costate in Finite-Horizon Optimal Control Problems. IEEE Transactions on Automatic Control, 2021, 66, 3562-3574.	5.7	2
243	Switching-Based Lyapunov Function and the Stabilization of a Class of Non-holonomic Systems. , 2007, , 664-667.		2
244	Robust Shared-Control for Rear-Wheel Drive Cars. , 2017, , 15-40.		2
245	Adaptive state feedback design via immersion and invariance. , 2007, , .		1
246	Interconnection and Damping Assignment Passivity-Based Control: Static vs dynamic state-feedback. , 2008, , .		1
247	Asymptotic stabilization of passive systems without damping injection: A sampled integral-approximation technique. , 2009, , .		1
248	Bounds related to the Riccati difference equation for linear time varying systems. , 2009, , .		1
249	Partial stability for a class of nonlinear systems. , 2009, , .		1
250	A Hamiltonian approach to moments-based font recognition. , 2009, , .		1
251	Theory for the user and application examples of the passivity-based control for AC electric machines. , 2012, , .		1
252	Sensorless Estimation and Nonlinear Control of a Rotational Energy Harvester. Journal of Physics: Conference Series, 2013, 476, 012052.	0.4	1

#	ARTICLE	IF	CITATIONS
253	A small-gain-like theorem for large-scale systems. , 2013, , .		1
254	Application of Hamiltonian dynamics to manipulator control in constrained workspace. , 2013, , .		1
255	A geometric characterisation of the persistence of excitation condition for sequences generated by discrete-time autonomous systems. , 2016, , .		1
256	Backstepping PDE-based adaptive observer for a Single Particle Model of Lithium-Ion Batteries. , 2016, , .		1
257	A note on the electrical equivalent of the moment theory. , 2016, , .		1
258	Moments of random variables: A system-theoretic interpretation. , 2017, , .		1
259	Moments of Random Variables: A Systems-Theoretic Interpretation. IEEE Transactions on Automatic Control, 2019, 64, 4407-4422.	5.7	1
260	Model Matching and Passivation of MIMO Linear Systems via Dynamic Output Feedback and Feedforward. IEEE Transactions on Automatic Control, 2020, 65, 4016-4030.	5.7	1
261	Optimal Control for Nonlinear Systems Driven by a Known Exogenous Signal. IEEE Transactions on Automatic Control, 2022, 67, 3678-3684.	5.7	1
262	Adaptive Control for Systems with Time-Varying Parametersâ€”A Survey. Lecture Notes in Control and Information Sciences, 2022, , 217-247.	1.0	1
263	Constructive design of open-loop Nash equilibrium strategies that admit a feedback synthesis in LQ games. Automatica, 2021, 133, 109840.	5.0	1
264	Feedback Stabilization of Nonlinear Systems. , 2020, , 1-10.		1
265	Online Estimation of the Loewner Matrices. , 2020, , .		1
266	Identification-based Adaptive Control for Systems with Time-varying Parameters. , 2021, , .		1
267	Attitude Regulation With Bounded Control in the Presence of Large Disturbances With Bounded Moving Average. IEEE/CAA Journal of Automatica Sinica, 2022, 9, 834-846.	13.1	1
268	On the analysis of open-loop Nash equilibria admitting a feedback synthesis in nonlinear differential games. Automatica, 2022, 142, 110389.	5.0	1
269	On the Control of a Class of Electromechanical Systems 1. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 165-170.	0.4	0
270	On the stabilization of feedforward systems with bounded control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 165-170.	0.4	0

#	ARTICLE	IF	CITATIONS
271	Optimising the braking performance via nonlinear analysis and bifurcation theory. , 2008, , .		0
272	Partial Semi-Stability for a Class of Nonlinear Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 1442-1447.	0.4	0
273	Characterization of exponential divergence of the Kalman filter for time-varying systems. , 2010, , .		0
274	Special issue on "periodic systems and robust control" dedicated to Osvaldo Maria Grasselli. International Journal of Control, 2013, 86, 1201-1206.	1.9	0
275	A Review on Model Reduction by Moment Matching for Nonlinear Systems. Lecture Notes in Control and Information Sciences, 2017, , 29-52.	1.0	0
276	The Dimension Estimation Problem for Nonlinear Systems. , 2018, , .		0
277	Feedback Stabilization of Nonlinear Systems. , 2021, , 794-803.		0
278	Approximate Solution of HJBE and Optimal Control in Internal Combustion Engines. Lecture Notes in Control and Information Sciences, 2014, , 59-73.	1.0	0
279	Dynamics of Autoimmune Diseases. , 2014, , 491-500.		0
280	Immune Response Enhancement Strategy via Hybrid Control Perspective. Lecture Notes in Computer Science, 2015, , 1-26.	1.3	0