Jaime A Moreno

List of Publications by Year
in descending order

269 papers	7,114 citations	159358 30 h-index	95083 68 g-index
272 all docs	272 docs citations	272 times ranked	3180 citing authors

#	Article	IF	Citations
1	Strict Lyapunov Functions for the Super-Twisting Algorithm. IEEE Transactions on Automatic Control, 2012, 57, 1035-1040.	3.6	972
2	A Lyapunov approach to second-order sliding mode controllers and observers. , 2008, , .		618
3	Uniform Robust Exact Differentiator. IEEE Transactions on Automatic Control, 2011, 56, 2727-2733.	3.6	410
4	Implementation of Super-Twisting Control: Super-Twisting and Higher Order Sliding-Mode Observer-Based Approaches. IEEE Transactions on Industrial Electronics, 2016, 63, 3677-3685.	5.2	394
5	Variable Gain Super-Twisting Sliding Mode Control. IEEE Transactions on Automatic Control, 2012, 57, 2100-2105.	3.6	313
6	Robust exact uniformly convergent arbitrary order differentiator. Automatica, 2013, 49, 2489-2495.	3.0	214
7	Continuous terminal sliding-mode controller. Automatica, 2016, 69, 308-314.	3.0	164
8	Super-twisting adaptive sliding mode control: A Lyapunov design. , 2010, , .		160
9	A linear framework for the robust stability analysis of a Generalized Super-Twisting Algorithm. , 2009, , .		126
10	Twisting sliding mode control with adaptation: Lyapunov design, methodology and application. Automatica, 2017, 75, 229-235.	3.0	121
11	Homogeneous High Order Sliding Mode design: A Lyapunov approach. Automatica, 2017, 80, 232-238.	3.0	114
12	Global observability analysis of sensorless induction motors. Automatica, 2004, 40, 1079-1085.	3.0	106
13	Design of Continuous Twisting Algorithm. Automatica, 2017, 80, 119-126.	3.0	105
14	Lyapunov Approach for Analysis and Design of Second Order Sliding Mode Algorithms. Lecture Notes in Control and Information Sciences, 2011, , 113-149.	0.6	93
15	Levant's Arbitrary-Order Exact Differentiator: A Lyapunov Approach. IEEE Transactions on Automatic Control, 2019, 64, 3034-3039.	3.6	81
16	Time-Varying Parameter Identification Algorithms: Finite and Fixed-Time Convergence. IEEE Transactions on Automatic Control, 2017, 62, 3671-3678.	3.6	79
17	Adaptive continuous twisting algorithm. International Journal of Control, 2016, 89, 1798-1806.	1.2	76
18	Uniform Second-Order Sliding Mode Observer for mechanical systems. , 2010, , .		65

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19	Optimal Lyapunov function selection for reaching time estimation of Super Twisting algorithm. , 2009, , .		64
20	Super-Twisting Algorithm in presence of time and state dependent perturbations. International Journal of Control, 2018, 91, 2535-2548.	1.2	63
21	Evaluation of two control strategies for a sequencing batch reactor degrading high concentration peaks of 4-chlorophenol. Water Research, 2005, 39, 1015-1024.	5.3	62
22	Continuous Nested Algorithms : The Fifth Generation of Sliding Mode Controllers. Studies in Systems, Decision and Control, 2015, , 5-35.	0.8	62
23	Higher order super-twisting algorithm. , 2014, , .		60
24	On strict Lyapunov functions for some non-homogeneous super-twisting algorithms. Journal of the Franklin Institute, 2014, 351, 1902-1919.	1.9	59
25	Optimal time control of bioreactors for the wastewater treatment. Optimal Control Applications and Methods, 1999, 20, 145-164.	1.3	58
26	Secondâ€order sliding mode output feedback controller with adaptation. International Journal of Adaptive Control and Signal Processing, 2016, 30, 1523-1543.	2.3	57
27	Lyapunov Functions for Continuous and Discontinuous Differentiators. IFAC-PapersOnLine, 2016, 49, 660-665.	0.5	51
28	Fundamental limitations of network reconstruction from temporal data. Journal of the Royal Society Interface, 2017, 14, 20160966.	1.5	51
29	Variable gains super-twisting algorithm: A Lyapunov based design. , 2010, , .		49
30	Global observability and detectability analysis of uncertain reaction systems and observer design. International Journal of Control, 2008, 81, 1062-1070.	1.2	43
31	Lyapunov function for Levant's Second Order Differentiator. , 2012, , .		43
32	A Lyapunov approach to output feedback control using second-order sliding modes. IMA Journal of Mathematical Control and Information, 2012, 29, 291-308.	1.1	41
33	Superâ€twisting observer for secondâ€order systems with timeâ€varying coefficient. IET Control Theory and Applications, 2015, 9, 553-562.	1.2	38
34	A constructive Lyapunov function design method for a class of homogeneous systems. , 2014, , .		36
35	Dissipative design of unknown input observers for systems with sector nonlinearities. International Journal of Robust and Nonlinear Control, 2011, 21, 1623-1644.	2.1	35
36	Output-feedback finite-time stabilization of disturbed feedback linearizable nonlinear systems. Automatica, 2013, 49, 2767-2773.	3.0	35

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37	A dynamical interpretation of strong observability and detectability concepts for nonlinear systems with unknown inputs: application to biochemical processes. Bioprocess and Biosystems Engineering, 2014, 37, 37-49.	1.7	35
38	Finite-time convergence analysis for “Twisting” controller via a strict Lyapunov function. , 2010, , .		34
39	Design of a prescribed convergence time uniform Robust Exact Observer in the presence of measurement noise. , 2012, , .		33
40	Uniform sliding mode controllers and uniform sliding surfaces. IMA Journal of Mathematical Control and Information, 2012, 29, 491-505.	1.1	33
41	Discontinuous integral action for arbitrary relative degree in sliding-mode control. Automatica, 2020, 118, 109018.	3.0	33
42	Dissipative approach to sliding mode observers design for uncertain mechanical systems. Automatica, 2018, 87, 330-336.	3.0	32
43	How to implement Super-Twisting Controller based on sliding mode observer?. , 2014, , .		31
44	A weighted variable gain super-twisting observer for the estimation of kinetic rates in biological systems. Journal of Process Control, 2014, 24, 957-965.	1.7	29
45	Discontinuous integral control for mechanical systems. , 2016, , .		29
46	Adaptive twist sliding mode control: A Lyapunov design. , 2011, , .		28
47	Matrix inequality-based observer design for a class of distributed transport-reaction systems. International Journal of Robust and Nonlinear Control, 2014, 24, 2213-2230.	2.1	27
48	Saturated Super-Twisting Algorithm: Lyapunov based approach. , 2016, , .		27
49	Continuous Twisting Algorithm for Third-Order Systems. IEEE Transactions on Automatic Control, 2020, 65, 2814-2825.	3.6	27
50	A simple criterion to design optimal non-pharmaceutical interventions for mitigating epidemic outbreaks. Journal of the Royal Society Interface, 2021, 18, 20200803.	1.5	26
51	Exact differentiator with varying gains. International Journal of Control, 2018, 91, 1983-1993.	1.2	25
52	On Discontinuous Observers for Second Order Systems: Properties, Analysis and Design. Lecture Notes in Control and Information Sciences, 2013, , 243-265.	0.6	24
53	Discontinuous Integral Control for Systems with Relative Degree Two. , 2018, , 187-218.		24
54	Output feedback Continuous Twisting Algorithm. Automatica, 2018, 96, 298-305.	3.0	24

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55	Arbitrary-Order Fixed-Time Differentiators. IEEE Transactions on Automatic Control, 2022, 67, 1543-1549.	3.6	24
56	Practical optimal control of fed-batch bioreactors for the waste water treatment. International Journal of Robust and Nonlinear Control, 2006, 16, 173-190.	2.1	21
57	Smooth Lyapunov function and gain design for a Second Order Differentiator. , 2015, , .		21
58	An SOS method for the design of continuous and discontinuous differentiators. International Journal of Control, 2018, 91, 2597-2614.	1.2	21
59	Approximate Observer Error Linearization by Dissipativity Methods. , 0, , 35-51.		20
60	Continuous Twisting Algorithm. , 2015, , .		20
61	Saturated Super-Twisting Algorithm based on Perturbation Estimator. , 2016, , .		20
62	Observer Design for Nonlinear Systems: A Dissipative Approach. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 681-686.	0.4	19
63	Dissipativity-based observer and feedback control design for a class of chemical reactors. Journal of Process Control, 2008, 18, 896-905.	1.7	19
64	Homogeneity Based Uniform Stability Analysis for Time-Varying Systems. IEEE Transactions on Automatic Control, 2016, 61, 725-734.	3.6	19
65	Generalised multivariable supertwisting algorithm. International Journal of Robust and Nonlinear Control, 2019, 29, 634-660.	2.1	19
66	Optimal biodegradation of phenol and municipal wastewater using a controlled sequencing batch reactor. Water Science and Technology, 2006, 54, 273-280.	1.2	18
67	The differentiation error of noisy signals using the Generalized Super-Twisting differentiator. , 2012, , .		18
68	Design of Lyapunov functions for a class of homogeneous systems: Generalized forms approach. International Journal of Robust and Nonlinear Control, 2019, 29, 661-681.	2.1	18
69	Higher Order Sliding Mode Control Using Discontinuous Integral Action. IEEE Transactions on Automatic Control, 2020, 65, 4316-4323.	3.6	18
70	Event-driven time-optimal control for a class of discontinuous bioreactors. Biotechnology and Bioengineering, 2006, 94, 803-814.	1.7	17
71	Application of super-twisting observers to the estimation of state and unknown inputs in an anaerobic digestion system. Water Science and Technology, 2014, 69, 414-421.	1.2	16
72	Super-twisting estimation of a virtual output for extremum-seeking output feedback control of bioreactors. Journal of Process Control, 2015, 35, 41-49.	1.7	16

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73	Discrete sliding mode control for systems with arbitrary relative degree output. , 2016, , .		16
74	Strict Lyapunov functions for homogeneous finite-time second-order systems. , 2018, , .		16
75	Dissipative observers for coupled diffusionâ€“convectionâ€“reaction systems. Automatica, 2018, 94, 307-314.	3.0	16
76	Super-Twisting Observer-Based Output Feedback Control of a Class of Continuous Exothermic Chemical Reactors. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 727-732.	0.4	15
77	Observer design for a class of parabolic PDE via sliding modes and backstepping. , 2010, , .		15
78	Output feedback adaptive twisting control: A Lyapunov design. , 2012, , .		15
79	A simple observer scheme for a class of 1-D semi-linear parabolic distributed parameter systems. , 2015, , .		15
80	State-estimation for a class of tubular reactors using a pointwise innovation scheme. Journal of Process Control, 2017, 60, 104-114.	1.7	15
81	Lyapunovâ€based design for a class of variableâ€gain 2ndâ€sliding controllers with the desired convergence rate. International Journal of Robust and Nonlinear Control, 2018, 28, 5279-5296.	2.1	15
82	Gramian-based uniform convergent observer for stable LTV systems with delayed measurements. International Journal of Control, 2020, 93, 226-237.	1.2	15
83	Construction of Lyapunov Functions for a Class of Higher Order Sliding Modes algorithms. , 2012, , .		14
84	Feedforward output-feedback control for continuous exothermic reactors with isotonic kinetics. Journal of Process Control, 2012, 22, 303-320.	1.7	14
85	Special issue on nonlinear modeling, estimation and control of biological systems. Bioprocess and Biosystems Engineering, 2014, 37, 1-3.	1.7	14
86	Preserving order observers for nonlinear systems. International Journal of Robust and Nonlinear Control, 2014, 24, 2153-2178.	2.1	14
87	Global Sliding Mode Observers for Some Uncertain Mechanical Systems. IEEE Transactions on Automatic Control, 2020, 65, 1348-1355.	3.6	14
88	On the estimation problem of a class of continuous bioreactors with unknown input. Journal of Process Control, 2015, 30, 34-49.	1.7	13
89	Dissipativity-based observer design for a class of coupled 1-D semi-linear parabolic PDE systems. IFAC-PapersOnLine, 2016, 49, 98-103.	0.5	13
90	An idea for Lyapunov function design for arbitrary order continuous twisting algorithms. , 2017, , .		13

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91	Saturated Lipschitz Continuous Sliding Mode Controller for Perturbed Systems With Uncertain Control Coefficient. IEEE Transactions on Automatic Control, 2021, 66, 3885-3891.	3.6	13
92	Multivariable Super-Twisting Algorithm for Systems With Uncertain Input Matrix and Perturbations. IEEE Transactions on Automatic Control, 2022, 67, 6716-6722.	3.6	13
93	Simultaneous observation of linear systems: a state-space interpretation. IEEE Transactions on Automatic Control, 2005, 50, 1021-1025.	3.6	12
94	On functional observers for linear systems with unknown inputs and HOSM differentiators. Journal of the Franklin Institute, 2014, 351, 1982-1994.	1.9	12
95	Fixed-time parameter estimation in polynomial systems through modulating functions. , 2016, , .		12
96	Discontinuous gradient algorithm for finite-time estimation of time-varying parameters. International Journal of Control, 2016, 89, 1838-1848.	1.2	12
97	Homogeneous Lyapunov Functions: From Converse Design to Numerical Implementation. SIAM Journal on Control and Optimization, 2018, 56, 3454-3477.	1.1	12
98	A homogeneity property of discreteâ€time systems: Stability and convergence rates. International Journal of Robust and Nonlinear Control, 2019, 29, 2406-2421.	2.1	12
99	Highâ€order slidingâ€mode control design homogeneous in the biâ€limit. International Journal of Robust and Nonlinear Control, 2021, 31, 3380-3416.	2.1	12
100	Robust global stabilization of a class of underactuated mechanical systems of two degrees of freedom. International Journal of Robust and Nonlinear Control, 2021, 31, 3908-3928.	2.1	12
101	Lyapunovâ€based finiteâ€time control of robot manipulators. International Journal of Robust and Nonlinear Control, 2021, 31, 3090-3114.	2.1	12
102	Optimal degradation of inhibitory wastewaters in a fed-batch bioreactor. Journal of Chemical Technology and Biotechnology, 2006, 81, 713-720.	1.6	11
103	A Separation Property of Dissipative Observers for Nonlinear Systems. , 2006, , .		11
104	Uniform Robust Exact Differentiator. , 2010, , .		11
105	Adaptive Gains Super-Twisting Algorithm for Systems with Growing Perturbations. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 3039-3044.	0.4	11
106	State and Input Estimation of an Anaerobic Digestion Reactor using a Continuous-discrete Unknown Input Observerâˆ—â€”The authors gratefully acknowledge the support of FNRS and CONACYT in the framework of a bilateral research agreement. This paper presents research results of the Belgian Network DYSCO (Dynamical Systems, Control, and Optimization), funded by the Interuniversity Attraction Poles Programme, initiated by the Belgian State, Science Policy Office. The scientific responsibility rests with its authors.. IFAC-PapersOnLine, 2015, 48, 129-134.	0.5	11
107	Construction of a Smooth Lyapunov Function for the Robust and Exact Second-Order Differentiator. Mathematical Problems in Engineering, 2016, 2016, 1-12.	0.6	11
108	Spherical gyroscopic moment stabilizer for attitude control of microsatellites. Acta Astronautica, 2018, 143, 9-15.	1.7	11

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109	Stabilization of the Reaction Wheel Pendulum via a Third Order Discontinuous Integral Sliding Mode Algorithm. , 2018, , .		11
110	Sensorless PBC of induction motors: a separation principle from ISS properties. , 2007, , .		10
111	A New Recursive Finite-Time Convergent Parameter Estimation Algorithm. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 3439-3444.	0.4	10
112	An exact and uniformly convergent arbitrary order differentiator. , 2011, , .		10
113	A new class of fast finite-time discontinuous controllers. , 2014, , .		10
114	On the Finite-Time Regulation of Eulerâ€“Lagrange Systems Without Velocity Measurements. IEEE Transactions on Automatic Control, 2018, 63, 4309-4316.	3.6	10
115	Continuous finite-time regulation of Euler-Lagrange systems via energy shaping. International Journal of Control, 2020, 93, 2931-2940.	1.2	10
116	Asymptotic tracking and disturbance rejection of time-varying signals with a discontinuous PID controller. Journal of Process Control, 2020, 87, 79-90.	1.7	10
117	Robust finite-time stabilisation of an arbitrary-order nonholonomic system in chained form. Automatica, 2022, 135, 109956.	3.0	10
118	Global Observability and Detectability Analysis for a Class of Nonlinear Models of Biological Processes with Bad Inputs. , 0, , .		9
119	DYNAMICAL ANALYSIS OF GLOBAL OBSERVABILITY PROPERTIES FOR A CLASS OF BIOLOGICAL REACTORS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 213-218.	0.4	9
120	Observer design for bioprocesses using a dissipative approach. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 15559-15564.	0.4	9
121	Cooperative observers for nonlinear systems. , 2009, , .		9
122	Improved Convergence Rate of Discontinuous Finite-Time Controllers. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 8636-8641.	0.4	9
123	Interval Observer Design for Nonlinear Systems: Stability Radii Approach. IEEE Access, 2018, 6, 52801-52813.	2.6	9
124	Finiteâ€time consensus of Eulerâ€Lagrange agents without velocity measurements via energy shaping. International Journal of Robust and Nonlinear Control, 2019, 29, 6006-6030.	2.1	9
125	Semi-implicit Discretization of the Uniform Robust Exact Differentiator. , 2019, , .		9
126	Dissipative interval observer design for discreteâ€time nonlinear systems. Asian Journal of Control, 2020, 22, 1422-1436.	1.9	9

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127	Approximate high-gain observers for non-Lipschitz observability forms. International Journal of Control, 2005, 78, 247-253.	1.2	8
128	Proportional-Integral Observer design for nonlinear systems. , 2008, , .		8
129	Lyapunov analysis of non homogeneous Super-Twisting algorithms. , 2010, , .		8
130	A new finite-time convergent and robust direct model reference adaptive control for SISO linear time invariant systems. , 2011, , .		8
131	A Biogas-Based Switching Control Policy for Anaerobic Digestion Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 603-608.	0.4	8
132	Fast second-order Sliding Mode Control design based on Lyapunov function. , 2013, , .		8
133	Fault detection using adaptive thresholds for nonlinear systems: A Preserving order observer approach. IFAC-PapersOnLine, 2016, 49, 885-890.	0.5	8
134	Levantâ€™s Arbitrary Order Differentiator with Varying Gain. IFAC-PapersOnLine, 2017, 50, 1705-1710.	0.5	8
135	Lyapunov-stability for the sliding-mode control of a turbocharger subject to state constraints. , 2017, , .		8
136	Full and Partial State Discontinuous Integral Control. IFAC-PapersOnLine, 2018, 51, 573-578.	0.5	8
137	Dissipative observers for discrete-time nonlinear systems. Journal of the Franklin Institute, 2018, 355, 5759-5770.	1.9	8
138	Modeling for the optimal biodegradation of toxic wastewater in a discontinuous reactor. Bioprocess and Biosystems Engineering, 2008, 31, 307-313.	1.7	7
139	Sampled output based continuous second order sliding mode observer. , 2010, , .		7
140	An equivalent control based sliding mode observer using high order uniform robust sliding operators. , 2012, , .		7
141	Lyapunov functions for Twisting and Terminal controllers. , 2014, , .		7
142	Higher order sliding-mode observers with scaled dissipative stabilisers. International Journal of Control, 2018, 91, 2511-2523.	1.2	7
143	Finite-Time Estimation of Time-Varying Frequency Signals in Low-Inertia Power Systems. , 2019, , .		7
144	Integral Control Design using the Implicit Lyapunov Function Approach. , 2019, , .		7

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145	Homogeneous integral controllers for a magnetic suspension system. Control Engineering Practice, 2020, 97, 104325.	3.2	7
146	Reaction wheel pendulum control using fourthâ€order discontinuous integral algorithm. International Journal of Robust and Nonlinear Control, 2021, 31, 185-206.	2.1	7
147	Robust trajectoryâ€tracking in finiteâ€time for robot manipulators using nonlinear proportionalâ€derivative control plus feedâ€forward compensation. International Journal of Robust and Nonlinear Control, 2021, 31, 3878-3907.	2.1	7
148	Arbitrary order differentiator with varying homogeneity degree. Automatica, 2022, 138, 110111.	3.0	7
149	GLOBAL OBSERVABILITY AND DETECTABILITY ANALYSIS OF UNCERTAIN REACTION SYSTEMS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 37-42.	0.4	6
150	Output feedback design for exact state stability of flat nonlinear systems. , 2010, , .		6
151	Second-order uniform exact sliding mode control with uniform sliding surface. , 2011, , .		6
152	Observer design for a class of hyperbolic PDE equation based on a Distributed Super Twisting Algorithm. , 2012, , .		6
153	Finite time converging input observers for nonlinear second-order systems. , 2013, , .		6
154	On a sign controller for the triple integrator. , 2013, , .		6
155	Finite-Time Regulation of Robots: a Strict Lyapunov Function Approach. IFAC-PapersOnLine, 2018, 51, 279-284.	0.5	6
156	Indirect Adaptive Control for Higher Order Sliding Mode. IFAC-PapersOnLine, 2018, 51, 591-596.	0.5	6
157	Design Concept and Development of a New Spherical Attitude Stabilizer for Small Satellites. IEEE Access, 2018, 6, 57353-57365.	2.6	6
158	Respirometry based optimal control of an aerobic bioreactor for the industrial waste water treatment. Water Science and Technology, 1998, 38, 219-226.	1.2	6
159	Oxidation-Reduction Potential as a Control Variable for the Anaerobic Stage during Anaerobic-Aerobic p-Nitrophenol Degradation. Biotechnology Progress, 2003, 19, 1822-1827.	1.3	5
160	Event-Driven Control for Treating Toxicants in Aerobic Sequencing Batch Bioreactors. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 457-462.	0.4	5
161	Optimal gain for the Super-Twisting differentiator in the presence of measurement noise. , 2012, , .		5
162	Observability/detectability analysis for nonlinear systems with unknown inputs - application to biochemical processes. , 2012, , .		5

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163	Adaptive output feedback second order sliding mode control with unknown bound of perturbation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 10832-10837.	0.4	5
164	On-line maximization of biogas production in an anaerobic reactor using a pseudo-super-twisting controllerâˆ—âˆ—Project financed by PAPIIT-UNAM IN112114 and CONACYT 245954.. IFAC-PapersOnLine, 2015, 48, 14-19.	0.5	5
165	Qualitative differences of two classes of multivariable super-twisting algorithms. , 2015, , .		5
166	A homogeneity property of a class of discrete-time systems. , 2017, , .		5
167	Adaptive Continuous Twisting Algorithm of Third Order. , 2018, , .		5
168	Multipleâ€input multipleâ€output homogeneous integral control design using the implicit Lyapunov function approach. International Journal of Robust and Nonlinear Control, 2021, 31, 3417-3438.	2.1	5
169	Event Software Sensor and Adaptive Extremum Seeking Alternatives for Optimizing a Class of Fed-Batch Bioreactors. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 1007-1012.	0.4	4
170	Spectral dissipativity observer for a class of tubular reactors. , 2008, , .		4
171	Dissipative design of adaptive observers for systems with multivalued nonlinearities. , 2010, , .		4
172	Output-feedback IDA stabilisation of an SMIB system using a TCSC. International Journal of Control, 2010, 83, 2471-2482.	1.2	4
173	Asymptotic stabilization in fixed time via sliding mode control. , 2012, , .		4
174	Identification and observation in the anode line of PEM fuel cell stacks. , 2013, , .		4
175	Application of Super-twisting-like observers for bioprocesses. , 2014, , .		4
176	Observer Design for a class of complex networks with unknown topoloy. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 2812-2817.	0.4	4
177	Non-linear gradient algorithm for parameter estimation. , 2015, , .		4
178	Fixed-time adaptive observer for linear time-invariant systems. , 2016, , .		4
179	On the practical estimation of unknown inputs for polytopic LTI systems. IET Control Theory and Applications, 2018, 12, 466-476.	1.2	4
180	Lyapunov-Based Design of Homogeneous High-Order Sliding Modes. Studies in Systems, Decision and Control, 2018, , 3-38.	0.8	4

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181	Output Feedback Discontinuous Integral Controller for SISO Nonlinear Systems. , 2018, , .		4
182	Fixed-Time Homogeneous Integral Controller. IFAC-PapersOnLine, 2018, 51, 377-382.	0.5	4
183	Fast Extremum Seeking for Bioreactors using a Variable Structure Control Approach. , 2018, , .		4
184	Kinematics Analysis of a New 3DOF Parallel Manipulator as Walking Rehabilitation Device. , 2018, , .		4
185	Homogeneous Discrete-Time Approximation. IFAC-PapersOnLine, 2019, 52, 19-24.	0.5	4
186	Homogeneous outputâ€feedback control with disturbanceâ€observer for a class of nonlinear systems. International Journal of Robust and Nonlinear Control, 2021, 31, 3686-3707.	2.1	4
187	An adaptive speed observer for a class of nonlinear mechanical systems: Theory and experiments. Automatica, 2021, 130, 109710.	3.0	4
188	Discontinuous Integral Control for Systems with Arbitrary Relative Degree. Studies in Systems, Decision and Control, 2020, , 29-69.	0.8	4
189	GLOBAL OBSERVABILITY ANALYSIS OF INDUCTION MOTORS UNDER SENSORLESS CONDITIONS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 351-356.	0.4	3
190	Biodegradation of high 4-chlorophenol concentrations in a discontinuous reactor fed with an optimally controlled influent flow rate. Water Science and Technology, 2006, 53, 261-268.	1.2	3
191	INTERLACED ESTIMATOR-CONTROL DESIGN FOR CONTINUOUS EXOTHERMIC REACTORS WITH NON-MONOTONIC KINETICS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 41-46.	0.4	3
192	Optimal control of biological SBRs for the treatment of dairy and toxic wastewaters. Mathematical and Computer Modelling of Dynamical Systems, 2008, 14, 39-52.	1.4	3
193	Dissipativity-based Globally Convergent Observer Design for a Class of Tubular Reactors. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 4554-4559.	0.4	3
194	Acclimatization model of an aerobic bioreactor for the treatment of toxic wastewater. Simulation Modelling Practice and Theory, 2009, 17, 680-691.	2.2	3
195	Design of mixed Luenberger and sliding continuous mode observer using sampled output information. , 2010, , .		3
196	A Bivalued Observer for a Class of Uncertain Reactors. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 261-266.	0.4	3
197	Observability analysis and software sensor design for an animal cell culture in perfusion mode. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 255-260.	0.4	3
198	Unmeasured Concentrations and Reaction Rates Estimation in CSTRs. IFAC-PapersOnLine, 2016, 49, 224-229.	0.5	3

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199	LMI-Based Sliding Mode Control of an Underactuated Control Moment Gyroscope System. IFAC-PapersOnLine, 2018, 51, 291-296.	0.5	3
200	Anti-Chattering Strategy using Twisting Controller. IFAC-PapersOnLine, 2018, 51, 384-389.	0.5	3
201	High-Order Sliding Mode Observer for Outflow Reconstruction in a Branched Pipeline. , 2018, , .		3
202	On the Boundary Conditions in a Non-Linear Dissipative Observer for Tubular Reactors. Processes, 2019, 7, 8.	1.3	3
203	On multi-valued observers for a class of single-valued systems. Automatica, 2021, 123, 109334.	3.0	3
204	Joint swing-up and stabilization of the Reaction Wheel Pendulum using Discontinuous Integral algorithm. Nonlinear Analysis: Hybrid Systems, 2021, 41, 101042.	2.1	3
205	Control of Fully Actuated Mechanical Systems via Super-twisting Based Lyapunov Redesign. IFAC-PapersOnLine, 2020, 53, 5117-5121.	0.5	3
206	Stability Radii-Based Interval Observers for Discrete-Time Nonlinear Systems. IEEE Access, 2022, 10, 3216-3227.	2.6	3
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