Leonid Fridman

List of Publications by Year
in descending order

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512	16,313	24978	22764
papers	citations	57 h-index	112 g-index

530	530	530	5575
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Sliding Mode Control and Observation. Control Engineering, 2014, , .	0.3	1,377
2	Second-order sliding-mode observer for mechanical systems. IEEE Transactions on Automatic Control, 2005, 50, 1785-1789.	3.6	964
3	Analysis and Design of Integral Sliding Manifolds for Systems With Unmatched Perturbations. IEEE Transactions on Automatic Control, 2006, 51, 853-858.	3.6	512
4	Uniform Robust Exact Differentiator. IEEE Transactions on Automatic Control, 2011, 56, 2727-2733.	3.6	410
5	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
6	Stability notions and Lyapunov functions for sliding mode control systems. Journal of the Franklin Institute, 2014, 351, 1831-1865.	1.9	316
7	Variable Gain Super-Twisting Sliding Mode Control. IEEE Transactions on Automatic Control, 2012, 57, 2100-2105.	3.6	313
8	Analysis of chattering in continuous sliding-mode controllers. IEEE Transactions on Automatic Control, 2005, 50, 1442-1446.	3.6	307
9	Analysis of Chattering in Systems With Second-Order Sliding Modes. IEEE Transactions on Automatic Control, 2007, 52, 2085-2102.	3.6	305
10	Higher-order sliding-mode observer for state estimation and input reconstruction in nonlinear systems. International Journal of Robust and Nonlinear Control, 2008, 18, 399-412.	2.1	297
11	Super twisting control algorithm for the attitude tracking of a four rotors UAV. Journal of the Franklin Institute, 2012, 349, 685-699.	1.9	277
12	High-order sliding-mode observer for a quadrotor UAV. International Journal of Robust and Nonlinear Control, 2008, 18, 427-440.	2.1	233
13	Integral Sliding Mode Control for Nonlinear Systems With Matched and Unmatched Perturbations. IEEE Transactions on Automatic Control, 2011, 56, 2699-2704.	3.6	229
14	Higher order sliding modes. International Journal of Robust and Nonlinear Control, 2008, 18, 381-384.	2.1	220
15	Robust exact uniformly convergent arbitrary order differentiator. Automatica, 2013, 49, 2489-2495.	3.0	214
16	An averaging approach to chattering. IEEE Transactions on Automatic Control, 2001, 46, 1260-1265.	3.6	202
17	Observation of linear systems with unknown inputs via high-order sliding-modes. International Journal of Systems Science, 2007, 38, 773-791.	3.7	193
18	Observation and identification of mechanical systems via second order sliding modes. International Journal of Control, 2006, 79, 1251-1262.	1.2	184

#	Article	IF	Citations
19	Higher order sliding modes as a natural phenomenon in control theory. , 1996, , 107-133.		176
20	Lyapunov-Designed Super-Twisting Sliding Mode Control for Wind Energy Conversion Optimization. IEEE Transactions on Industrial Electronics, 2013, 60, 538-545.	5.2	175
21	Interval estimation for LPV systems applying high order sliding mode techniques. Automatica, 2012, 48, 2365-2371.	3.0	171
22	Barrier function-based adaptive sliding mode control. Automatica, 2018, 93, 540-544.	3.0	169
23	Continuous terminal sliding-mode controller. Automatica, 2016, 69, 308-314.	3.0	164
24	Super-twisting adaptive sliding mode control: A Lyapunov design. , 2010, , .		160
25	Singularly perturbed analysis of chattering in relay control systems. IEEE Transactions on Automatic Control, 2002, 47, 2079-2084.	3.6	145
26	Analysis of Second-Order Sliding-Mode Algorithms in the Frequency Domain. IEEE Transactions on Automatic Control, 2004, 49, 946-950.	3.6	140
27	On adaptive sliding mode control without a priori bounded uncertainty. Automatica, 2020, 111, 108650.	3.0	140
28	Chattering analysis in sliding mode systems with inertial sensors. International Journal of Control, 2003, 76, 906-912.	1.2	134
29	Cascade Control of PM DC Drives Via Second-Order Sliding-Mode Technique. IEEE Transactions on Industrial Electronics, 2008, 55, 3846-3854.	5.2	134
30	Design of controllers with arbitrary convergence time. Automatica, 2020, 112, 108710.	3.0	133
31	Manipulator Fault Diagnosis via Higher Order Sliding-Mode Observers. IEEE Transactions on Industrial Electronics, 2012, 59, 3979-3986.	5.2	126
32	Twisting sliding mode control with adaptation: Lyapunov design, methodology and application. Automatica, 2017, 75, 229-235.	3.0	121
33	High order sliding mode observer for linear systems with unbounded unknown inputs. International Journal of Control, 2010, 83, 1920-1929.	1.2	116
34	Quasi-continuous HOSM control for systems with unmatched perturbations. Automatica, 2010, 46, 1916-1919.	3.0	108
35	Design of Continuous Twisting Algorithm. Automatica, 2017, 80, 119-126.	3.0	105
36	Integral sliding mode design for robust filtering and control of linear stochastic time-delay systems. International Journal of Robust and Nonlinear Control, 2005, 15, 407-421.	2.1	101

#	Article	IF	Citations
37	Feedback Linearization and High Order Sliding Mode Observer For A Quadrotor UAV. , 0, , .		97
38	Exact state estimation for linear systems with unknown inputs based on hierarchical super-twisting algorithm. International Journal of Robust and Nonlinear Control, 2007, 17, 1734-1753.	2.1	97
39	High-order sliding-mode control for blood glucose: Practical relative degree approach. Control Engineering Practice, 2013, 21, 747-758.	3.2	88
40	Robust Control With Exact Uncertainties Compensation: With or Without Chattering?. IEEE Transactions on Control Systems Technology, 2011, 19, 969-975.	3.2	84
41	Fault tolerant control allocation via continuous integral sliding-modes: A HOSM-Observer approach. Automatica, 2015, 51, 318-325.	3.0	84
42	Miniâ€“Max Integral Sliding-Mode Control for Multimodel Linear Uncertain Systems. IEEE Transactions on Automatic Control, 2004, 49, 97-102.	3.6	81
43	Robust excitation control design using sliding-mode technique for multimachine power systems. Electric Power Systems Research, 2008, 78, 1627-1634.	2.1	79
44	When is it reasonable to implement the discontinuous slidingâ€mode controllers instead of the continuous ones? Frequency domain criteria. International Journal of Robust and Nonlinear Control, 2019, 29, 810-828.	2.1	79
45	Adaptive continuous twisting algorithm. International Journal of Control, 2016, 89, 1798-1806.	1.2	76
46	Steady Modes in Relay Control Systems With Time Delay and Periodic Disturbances. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2000, 122, 732-737.	0.9	75
47	Global sliding-mode observer with adjusted gains for locally Lipschitz systems. Automatica, 2011, 47, 565-570.	3.0	74
48	Unknown Input and State Estimation for Unobservable Systems. SIAM Journal on Control and Optimization, 2009, 48, 1155-1178.	1.1	72
49	Backlash phenomenon observation and identification in electromechanical system. Control Engineering Practice, 2007, 15, 447-457.	3.2	70
50	High-order sliding-mode observation for linear systems with unknown inputs. Nonlinear Analysis: Hybrid Systems, 2011, 5, 189-205.	2.1	68
51	A Hybrid Robust Non-Homogeneous Finite-Time Differentiator. IEEE Transactions on Automatic Control, 2011, 56, 1213-1219.	3.6	67
52	Output tracking of systems subjected to perturbations and a class of actuator faults based on HOSM observation and identification. Automatica, 2015, 59, 200-205.	3.0	66
53	Optimal and robust control for linear state-delay systems. Journal of the Franklin Institute, 2007, 344, 830-845.	1.9	65
54	Uniform Second-Order Sliding Mode Observer for mechanical systems. , 2010, , .		65

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55	Optimal Lyapunov function selection for reaching time estimation of Super Twisting algorithm. , 2009, , .		64
56	Barrier Function-Based Adaptive Super-Twisting Controller. IEEE Transactions on Automatic Control, 2020, 65, 4928-4933.	3.6	64
57	Generating Self-Excited Oscillations via Two-Relay Controller. IEEE Transactions on Automatic Control, 2009, 54, 416-420.	3.6	63
58	Super-Twisting Algorithm in presence of time and state dependent perturbations. International Journal of Control, 2018, 91, 2535-2548.	1.2	63
59	Continuous Nested Algorithms : The Fifth Generation of Sliding Mode Controllers. Studies in Systems, Decision and Control, 2015, , 5-35.	0.8	62
60	Accuracy of Homogeneous Sliding Modes in the Presence of Fast Actuators. IEEE Transactions on Automatic Control, 2010, 55, 810-814.	3.6	60
61	Higher order super-twisting algorithm. , 2014, , .		60
62	Parameter tuning of second-order sliding mode controllers for linear plants with dynamic actuators. Automatica, 2006, 42, 833-839.	3.0	58
63	Finite-time state observation for non-linear uncertain systems via higher-order sliding modes. International Journal of Control, 2009, 82, 1564-1574.	1.2	58
64	Control of a Parametrically Excited Crane: A Vector Lyapunov Approach. IEEE Transactions on Control Systems Technology, 2013, 21, 2332-2340.	3.2	58
65	A Novel Method to Estimate the Reaching Time of the Super-Twisting Algorithm. IEEE Transactions on Automatic Control, 2018, 63, 4301-4308.	3.6	58
66	Global and exact HOSM differentiator with dynamic gains for output-feedback sliding mode control. Automatica, 2017, 81, 156-163.	3.0	56
67	High-order sliding mode observers for nonlinear autonomous switched systems with unknown inputs. Journal of the Franklin Institute, 2012, 349, 2975-3002.	1.9	53
68	Second order sliding-mode observer for estimation of vehicle dynamic parameters. International Journal of Vehicle Design, 2008, 48, 190.	0.1	51
69	Integral HOSM Semiglobal Controller for Finite-Time Exact Compensation of Unmatched Perturbations. IEEE Transactions on Automatic Control, 2010, 55, 2645-2649.	3.6	51
70	Steering Control for Rollover Avoidance of Heavy Vehicles. IEEE Transactions on Vehicular Technology, 2012, 61, 3499-3509.	3.9	51
71	Integral sliding-mode control for linear time-invariant implicit systems. Automatica, 2014, 50, 971-975.	3.0	51
72	Variable gains super-twisting algorithm: A Lyapunov based design. , 2010, , .		49

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73	Sliding mode identification and control for linear uncertain stochastic systems. International Journal of Systems Science, 2007, 38, 861-869.	3.7	48
74	High-Order Block Sliding-Mode Controller for a Synchronous Generator With an Exciter System. IEEE Transactions on Industrial Electronics, 2011, 58, 337-347.	5.2	48
75	Barrier function-based adaptive higher order sliding mode controllers. Automatica, 2021, 123, 109355.	3.0	48
76	Experimental results applying second order sliding mode control to a PEM fuel cell based system. Control Engineering Practice, 2013, 21, 719-726.	3.2	46
77	Non-linear sliding surface: towards high performance robust control. IET Control Theory and Applications, 2012, 6, 235.	1.2	45
78	Control of discrete time systems based on recurrent Super-Twisting-like algorithm. ISA Transactions, 2016, 64, 47-55.	3.1	45
79	Design of super-twisting control gains: A describing function based methodology. Automatica, 2019, 99, 175-180.	3.0	45
80	Output integral sliding mode control based on algebraic hierarchical observer. International Journal of Control, 2007, 80, 443-453.	1.2	44
81	Output-feedback finite-time stabilization of disturbed LTI systems. Automatica, 2012, 48, 606-611.	3.0	43
82	Second order sliding mode tracking controller for inertia wheel pendulum. Journal of the Franklin Institute, 2013, 350, 92-106.	1.9	43
83	Robust Output LQ Optimal Control via Integral Sliding Modes. Systems and Control: Foundations and Applications, 2014, , .	0.1	43
84	Adaptive sliding mode control and observation. International Journal of Control, 2016, 89, 1743-1746.	1.2	43
85	Wheel Slip Control for the Electric Vehicle With In-Wheel Motors: Variable Structure and Sliding Mode Methods. IEEE Transactions on Industrial Electronics, 2020, 67, 8535-8544.	5.2	43
86	OPTIMAL AND ROBUST SLIDING MODE CONTROL FOR LINEAR SYSTEMS WITH MULTIPLE TIME DELAYS IN CONTROL INPUT. Asian Journal of Control, 2003, 5, 557-567.	1.9	42
87	Unmatched uncertainties compensation based on highâ€order sliding mode observation. International Journal of Robust and Nonlinear Control, 2013, 23, 754-764.	2.1	42
88	State exact reconstruction for switched linear systems via a super-twisting algorithm. International Journal of Systems Science, 2011, 42, 717-724.	3.7	41
89	Super twisting control of a parametrically excited overhead crane. Journal of the Franklin Institute, 2014, 351, 2283-2298.	1.9	41
90	Second order sliding mode observer for estimation of velocities, wheel sleep, radius and stiffness. , 2006, , .		38

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91	Performance Analysis of Second-Order Sliding-Mode Control Systems With Fast Actuators. IEEE Transactions on Automatic Control, 2007, 52, 1053-1059.	3.6	38
92	Output-feedback finite-time stabilization of disturbed feedback linearizable nonlinear systems. Automatica, 2013, 49, 2767-2773.	3.0	35
93	Discreteâ€time nonâ€linear state observer based on a super twistingâ€like algorithm. IET Control Theory and Applications, 2014, 8, 803-812.	1.2	35
94	The problem of chattering: an averaging approach. , 1999, , 363-386.		34
95	Finite-time convergence analysis for “Twisting” controller via a strict Lyapunov function. , 2010, , .		34
96	Static Sliding Mode Control of Systems With Arbitrary Relative Degree by Using Artificial Delay. IEEE Transactions on Automatic Control, 2020, 65, 5464-5471.	3.6	34
97	Robust observation and identification ofnDOF Lagrangian systems. International Journal of Robust and Nonlinear Control, 2007, 17, 842-861.	2.1	33
98	Design of a prescribed convergence time uniform Robust Exact Observer in the presence of measurement noise. , 2012, , .		33
99	Uniform sliding mode controllers and uniform sliding surfaces. IMA Journal of Mathematical Control and Information, 2012, 29, 491-505.	1.1	33
100	A New Varying-Gain-Exponent-Based Differentiator/Observer: An Efficient Balance Between Linear and Sliding-Mode Algorithms. IEEE Transactions on Automatic Control, 2020, 65, 5407-5414.	3.6	33
101	Delayed sliding mode control. Automatica, 2016, 64, 37-43.	3.0	32
102	Dissipative approach to sliding mode observers design for uncertain mechanical systems. Automatica, 2018, 87, 330-336.	3.0	32
103	Vibration damping in elastic robotic structures via sliding modes. Journal of Field Robotics, 1997, 14, 675-696.	0.7	31
104	How to implement Super-Twisting Controller based on sliding mode observer?. , 2014, , .		31
105	Robust exact differentiators with predefined convergence time. Automatica, 2021, 134, 109858.	3.0	31
106	Nonlinear sliding mode control design: An LMI approach. Systems and Control Letters, 2017, 104, 38-44.	1.3	30
107	Chattering Analysis of HOSM Controlled Systems: Frequency Domain Approach. IEEE Transactions on Automatic Control, 2017, 62, 4109-4115.	3.6	30
108	Discrete-Time Implementation of Homogeneous Differentiators. IEEE Transactions on Automatic Control, 2020, 65, 757-762.	3.6	30

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109	Optimal and robust integral sliding mode filter design for systems with continuous and delayed measurements. , 0, , .		29
110	State Observation for Nonlinear Switched Systems Using Nonhomogeneous Highâ€Order Sliding Mode Observers. Asian Journal of Control, 2012, 14, 911-923.	1.9	29
111	Sliding Mode Observers for the Estimation of Vehicle Parameters, Forces and States of the Center of Gravity. , 2006, , .		28
112	Hierarchical second-order sliding-mode observer for linear time invariant systems with unknown inputs. International Journal of Systems Science, 2007, 38, 793-802.	3.7	28
113	On the Transfer Properties of the â€œGeneralized Sub-Optimalâ€•Second-Order Sliding Mode Control Algorithm. IEEE Transactions on Automatic Control, 2009, 54, 399-403.	3.6	28
114	Adaptive twist sliding mode control: A Lyapunov design. , 2011, , .		28
115	Semiglobal Finite-Time Trajectory Tracking Realization for Disturbed Nonlinear Systems via Higher-Order Sliding Modes. IEEE Transactions on Automatic Control, 2020, 65, 2185-2191.	3.6	28
116	Super twisting control algorithm for the four rotors helicopter attitude tracking problem. , 2010, , .		27
117	Higher-Order Sliding Mode Controllers and Differentiators. Control Engineering, 2014, , 213-249.	0.3	27
118	Saturated Super-Twisting Algorithm: Lyapunov based approach. , 2016, , .		27
119	Time-Varying Gain Differentiator: A Mobile Hydraulic System Case Study. IEEE Transactions on Control Systems Technology, 2016, 24, 1740-1750.	3.2	27
120	Continuous Twisting Algorithm for Third-Order Systems. IEEE Transactions on Automatic Control, 2020, 65, 2814-2825.	3.6	27
121	Output Integral Sliding Mode for Min-Max Optimization of Multi-Plant Linear Uncertain Systems. IEEE Transactions on Automatic Control, 2009, 54, 2611-2620.	3.6	26
122	Robust exact finite-time output based control using high-order sliding modes. International Journal of Systems Science, 2011, 42, 1847-1857.	3.7	26
123	Output integral sliding mode control to stabilize position of a Stewart platform. Journal of the Franklin Institute, 2012, 349, 1526-1542.	1.9	26
124	Highâ€order slidingâ€mode observer for linear timeâ€varying systems with unknown inputs. International Journal of Robust and Nonlinear Control, 2017, 27, 2338-2356.	2.1	26
125	Two-Stage Neural Observer for Mechanical Systems. IEEE Transactions on Circuits and Systems II: Express Briefs, 2008, 55, 1076-1080.	2.2	25
126	Slow periodic motions with internal sliding modes in variable structure systems. International Journal of Control, 2002, 75, 524-537.	1.2	24

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127	Nonlocal stabilization via delayed relay control rejecting uncertainty in a time delay. International Journal of Robust and Nonlinear Control, 2004, 14, 15-37.	2.1	24
128	Robust Semiglobal Stabilization of the Second Order System by Relay Feedback with an Uncertain Variable Time Delay. SIAM Journal on Control and Optimization, 2008, 47, 196-217.	1.1	24
129	Output feedback Continuous Twisting Algorithm. Automatica, 2018, 96, 298-305.	3.0	24
130	Highâ€order slidingâ€mode observerâ€“based inputâ€output linearization. International Journal of Robust and Nonlinear Control, 2019, 29, 3183-3199.	2.1	24
131	Robust eigenvalue assignment for uncertain delay control systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2001, 34, 213-218.	0.4	23
132	High-Order Sliding-Mode Observation and Identification for Linear Systems with Unknown Inputs. , 2006, , .		23
133	Dynamic switching surfaces for output sliding mode control: An <mml:math altimg="si8.gif" display="inline" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/...	3.0	23
134	Position stabilization of a Stewart platform: High-order sliding mode observers based approach. Journal of the Franklin Institute, 2012, 349, 441-455.	1.9	23
135	Fault detection and isolation for nonlinear systems via highâ€orderâ€slidingâ€mode multipleâ€observer. International Journal of Robust and Nonlinear Control, 2015, 25, 2871-2893.	2.1	23
136	Continuous output integral sliding mode control for switched linear systems. Nonlinear Analysis: Hybrid Systems, 2016, 22, 284-305.	2.1	23
137	Combined backstepping and HOSM control design for a class of nonlinear MIMO systems. International Journal of Robust and Nonlinear Control, 2017, 27, 566-581.	2.1	23
138	Generalized Model Reference Adaptive Control by Means of Global HOSM Differentiators. IEEE Transactions on Automatic Control, 2019, 64, 2053-2060.	3.6	23
139	Second-Order Sliding Mode Control of a Perturbed-Crane. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2015, 137, .	0.9	22
140	Looking for "Indicants" in the Differential Diagnosis of Jaundice. Medical Decision Making, 1986, 6, 36-41.	1.2	21
141	Quasi-continuous high-order sliding-mode controllers for reduced-order chaos synchronization. International Journal of Non-Linear Mechanics, 2008, 43, 948-961.	1.4	21
142	Vehicle parameter estimation and stability enhancement using sliding modes techniques. International Journal of Vehicle Design, 2008, 48, 230.	0.1	21
143	Generating oscillations in inertia wheel pendulum via twoâ€relay controller. International Journal of Robust and Nonlinear Control, 2012, 22, 318-330.	2.1	21
144	Continuous slidingâ€mode control for singular systems. International Journal of Robust and Nonlinear Control, 2018, 28, 3454-3474.	2.1	21

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145	Decomposition of the min-max multi-model problem via integral sliding mode. International Journal of Robust and Nonlinear Control, 2005, 15, 559-574.	2.1	20
146	Variable structure control of synchronous generator: singularly perturbed analysis. International Journal of Control, 2006, 79, 1-13.	1.2	20
147	Observation and Identification of Mechanical Systems via Second Order Sliding Modes. , 0, , .		20
148	Observer for Linear Time Invariant Systems with Unknown Inputs based on the Hierarchical Super-Twisting Concept. , 0, , .		20
149	Analysis of response of second-order sliding mode controllers to external inputs in frequency domain. International Journal of Robust and Nonlinear Control, 2008, 18, 502-514.	2.1	20
150	Road profile estimation in heavy vehicle dynamics simulation. International Journal of Vehicle Design, 2008, 47, 234.	0.1	20
151	Optimal sliding mode algorithms for dynamic systems. Journal of the Franklin Institute, 2012, 349, 1317-1322.	1.9	20
152	An Unknown-Input HOSM Approach to Estimate Lean and Steering Motorcycle Dynamics. IEEE Transactions on Vehicular Technology, 2014, 63, 3116-3127.	3.9	20
153	Continuous Twisting Algorithm. , 2015, , .		20
154	Self-Oscillations in Dynamic Systems. Systems and Control: Foundations and Applications, 2015, , .	0.1	20
155	Saturated Super-Twisting Algorithm based on Perturbation Estimator. , 2016, , .		20
156	Adaptation of Levant's differentiator based on barrier function. International Journal of Control, 2018, 91, 2019-2027.	1.2	20
157	State Estimation and Input Reconstruction in Nonlinear Systems via Higher Order Sliding Mode Observer. Proceedings of the American Control Conference, 2007, , .	0.0	19
158	High-order sliding-mode observation and fault detection. , 2007, , .		19
159	Exact compensation of unmatched perturbation via quasi-continuous HOSM. , 2008, , .		19
160	Generating self-excited oscillations for underactuated mechanical systems via two-relay controller. International Journal of Control, 2009, 82, 1678-1691.	1.2	19
161	Nonâ€minimum phase switched systems: HOSMâ€based fault detection and fault identification via Volterra integral equation. International Journal of Adaptive Control and Signal Processing, 2014, 28, 1372-1397.	2.3	19
162	Homogeneity Based Uniform Stability Analysis for Time-Varying Systems. IEEE Transactions on Automatic Control, 2016, 61, 725-734.	3.6	19

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163	Cheap Suboptimal Control of an Integral Sliding Mode for Uncertain Systems With Delays. IEEE Transactions on Automatic Control, 2007, 52, 1892-1898.	3.6	18
164	The differentiation error of noisy signals using the Generalized Super-Twisting differentiator. , 2012, , .		18
165	Closing Gaps for Aircraft Attitude Higher Order Sliding Mode Control Certification via Practical Stability Margins Identification. IEEE Transactions on Control Systems Technology, 2018, 26, 2020-2034.	3.2	18
166	Integral Slidingâ€Mode Observation and Control for Switched Uncertain Linear Time Invariant Systems: a Robustifying Strategy. Asian Journal of Control, 2018, 20, 1551-1565.	1.9	18
167	Slow periodic motions in variable structure systems. International Journal of Systems Science, 2002, 33, 1145-1155.	3.7	17
168	Synchronization in reduced-order of chaotic systems via control approaches based on high-order sliding-mode observer. Chaos, Solitons and Fractals, 2009, 42, 3219-3233.	2.5	17
169	Sliding Mode Enforcement after 1990: Main Results and Some Open Problems. Lecture Notes in Control and Information Sciences, 2011, , 3-57.	0.6	17
170	Finite frequency H_{âˆž} control of singularly perturbed Eulerâ€Lagrange systems: An artificial delay approach. International Journal of Robust and Nonlinear Control, 2019, 29, 353-374.	2.1	17
171	Adaptive sliding mode control with guaranteed performance based on monitoring and barrier functions. International Journal of Adaptive Control and Signal Processing, 2022, 36, 1252-1271.	2.3	17
172	Stabilization of amplitude of oscillations via relay delay control. International Journal of Control, 2003, 76, 770-780.	1.2	16
173	Nested backward compensation of unmatched perturbations via HOSM observation. Journal of the Franklin Institute, 2014, 351, 2397-2410.	1.9	16
174	Discrete sliding mode control for systems with arbitrary relative degree output. , 2016, , .		16
175	Fault detection and isolation for nonlinear non-affine uncertain systems via sliding-mode techniques. International Journal of Control, 2017, 90, 218-230.	1.2	16
176	Robust output tracking of constrained perturbed linear systems via model predictive sliding mode control. International Journal of Robust and Nonlinear Control, 2020, 30, 1258-1274.	2.1	16
177	Continuous Sliding-Mode Output-Feedback Control for Stabilization of a Class of Underactuated Systems. IEEE Transactions on Automatic Control, 2022, 67, 986-992.	3.6	16
178	Frequency Domain Inputâ€“Output Analysis of Sliding-Mode Observers. IEEE Transactions on Automatic Control, 2006, 51, 1798-1803.	3.6	15
179	Generalized Super-Twisting Observer for Nonlinear Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 14353-14358.	0.4	15
180	Output feedback adaptive twisting control: A Lyapunov design. , 2012, , .		15

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181	Advances in Guidance and Control of Aerospace Vehicles using Sliding Mode Control and Observation Techniques. Journal of the Franklin Institute, 2012, 349, 391-396.	1.9	15
182	Identification of vehicle parameters and estimation of vertical forces. International Journal of Systems Science, 2015, 46, 2996-3009.	3.7	15
183	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
184	On nonlinearHâˆžsliding mode control for a class of nonlinear cascade systems. International Journal of Systems Science, 2005, 36, 983-992.	3.7	14
185	High-Order Sliding-Mode Observer for Linear Systems with Unknown Inputs. , 0, , .		14
186	Frequency Domain Analysis of Second Order Sliding Modes. , 0, , 125-142.		14
187	Approximability of nonlinear affine control systems. Nonlinear Analysis: Hybrid Systems, 2011, 5, 275-288.	2.1	14
188	History-dependent modified sliding mode interception strategies with maximal capture zone. Journal of the Franklin Institute, 2012, 349, 638-657.	1.9	14
189	Robustification of time varying linear quadratic optimal control based on output integral sliding modes. IET Control Theory and Applications, 2015, 9, 563-572.	1.2	14
190	Chattering measurement in SMC and HOSMC. , 2016, , .		14
191	A second order sliding mode differentiator with a variable exponent. , 2017, , .		14
192	Output-feedback variable gain super-twisting algorithm for arbitrary relative degree systems. International Journal of Control, 2018, 91, 2043-2059.	1.2	14
193	Global Sliding Mode Observers for Some Uncertain Mechanical Systems. IEEE Transactions on Automatic Control, 2020, 65, 1348-1355.	3.6	14
194	Analysis of second order sliding mode algorithms in the frequency domain. , 0, , .		13
195	Analysis of chattering in continuous sliding mode control. , 0, , .		13
196	Fault Reconstruction in a Leader/Follower Spacecraft System Using Higher Order Sliding Mode Observers. Proceedings of the American Control Conference, 2007, , .	0.0	13
197	Quasi-continuous high order sliding modes controllers applied to glucose-insulin regulatory system models. , 2008, , .		13
198	Continuity Properties of Nonlinear Affine Control Systems: Applications to Hybrid and Sliding Mode Dynamics. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 204-209.	0.4	13

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