

Leonid Fridman

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456
papers

11,260
citations

52
h-index

94
g-index

530
ext. papers

14,103
ext. citations

3
avg. IF

6.95
L-index

#	Paper	IF	Citations
456	Sliding Mode Control and Observation. <i>Control Engineering</i> , 2014 ,	1	783
455	Second-order sliding-mode observer for mechanical systems. <i>IEEE Transactions on Automatic Control</i> , 2005 , 50, 1785-1789	5.9	735
454	Analysis and design of integral sliding manifolds for systems with unmatched perturbations. <i>IEEE Transactions on Automatic Control</i> , 2006 , 51, 853-858	5.9	371
453	Uniform Robust Exact Differentiator. <i>IEEE Transactions on Automatic Control</i> , 2011 , 56, 2727-2733	5.9	265
452	Implementation of Super-Twisting Control: Super-Twisting and Higher Order Sliding-Mode Observer-Based Approaches. <i>IEEE Transactions on Industrial Electronics</i> , 2016 , 63, 3677-3685	8.9	252
451	Analysis of chattering in continuous sliding-mode controllers. <i>IEEE Transactions on Automatic Control</i> , 2005 , 50, 1442-1446	5.9	230
450	Higher-order sliding-mode observer for state estimation and input reconstruction in nonlinear systems. <i>International Journal of Robust and Nonlinear Control</i> , 2008 , 18, 399-412	3.6	225
449	Variable Gain Super-Twisting Sliding Mode Control. <i>IEEE Transactions on Automatic Control</i> , 2012 , 57, 2100-2105	5.9	222
448	Stability notions and Lyapunov functions for sliding mode control systems. <i>Journal of the Franklin Institute</i> , 2014 , 351, 1831-1865	4	218
447	Analysis of Chattering in Systems With Second-Order Sliding Modes. <i>IEEE Transactions on Automatic Control</i> , 2007 , 52, 2085-2102	5.9	209
446	Super twisting control algorithm for the attitude tracking of a four rotors UAV. <i>Journal of the Franklin Institute</i> , 2012 , 349, 685-699	4	204
445	High-order sliding-mode observer for a quadrotor UAV. <i>International Journal of Robust and Nonlinear Control</i> , 2008 , 18, 427-440	3.6	176
444	Integral Sliding Mode Control for Nonlinear Systems With Matched and Unmatched Perturbations. <i>IEEE Transactions on Automatic Control</i> , 2011 , 56, 2699-2704	5.9	162
443	. <i>IEEE Transactions on Automatic Control</i> , 2001 , 46, 1260-1265	5.9	160
442	Robust exact uniformly convergent arbitrary order differentiator. <i>Automatica</i> , 2013 , 49, 2489-2495	5.7	152
441	Observation and identification of mechanical systems via second order sliding modes. <i>International Journal of Control</i> , 2006 , 79, 1251-1262	1.5	141
440	Observation of linear systems with unknown inputs via high-order sliding-modes. <i>International Journal of Systems Science</i> , 2007 , 38, 773-791	2.3	140

439	Lyapunov-Designed Super-Twisting Sliding Mode Control for Wind Energy Conversion Optimization. <i>IEEE Transactions on Industrial Electronics</i> , 2013 , 60, 538-545	8.9	135
438	Interval estimation for LPV systems applying high order sliding mode techniques. <i>Automatica</i> , 2012 , 48, 2365-2371	5.7	133
437	Continuous terminal sliding-mode controller. <i>Automatica</i> , 2016 , 69, 308-314	5.7	124
436	Singularly perturbed analysis of chattering in relay control systems. <i>IEEE Transactions on Automatic Control</i> , 2002 , 47, 2079-2084	5.9	119
435	Chattering analysis in sliding mode systems with inertial sensors. <i>International Journal of Control</i> , 2003 , 76, 906-912	1.5	116
434	Higher order sliding modes as a natural phenomenon in control theory 1996 , 107-133		116
433	Analysis of second-order sliding-mode algorithms in the frequency domain. <i>IEEE Transactions on Automatic Control</i> , 2004 , 49, 946-950	5.9	115
432	Super-twisting adaptive sliding mode control: A Lyapunov design 2010 ,		103
431	. <i>IEEE Transactions on Industrial Electronics</i> , 2008 , 55, 3846-3854	8.9	102
430	High order sliding mode observer for linear systems with unbounded unknown inputs. <i>International Journal of Control</i> , 2010 , 83, 1920-1929	1.5	96
429	Manipulator Fault Diagnosis via Higher Order Sliding-Mode Observers. <i>IEEE Transactions on Industrial Electronics</i> , 2012 , 59, 3979-3986	8.9	88
428	Integral sliding mode design for robust filtering and control of linear stochastic time-delay systems. <i>International Journal of Robust and Nonlinear Control</i> , 2005 , 15, 407-421	3.6	88
427	Barrier function-based adaptive sliding mode control. <i>Automatica</i> , 2018 , 93, 540-544	5.7	85
426	Quasi-continuous HOSM control for systems with unmatched perturbations. <i>Automatica</i> , 2010 , 46, 1916-1919	5.7	81
425	Exact state estimation for linear systems with unknown inputs based on hierarchical super-twisting algorithm. <i>International Journal of Robust and Nonlinear Control</i> , 2007 , 17, 1734-1753	3.6	81
424	Design of Continuous Twisting Algorithm. <i>Automatica</i> , 2017 , 80, 119-126	5.7	76
423	High-order sliding-mode control for blood glucose: Practical relative degree approach. <i>Control Engineering Practice</i> , 2013 , 21, 747-758	3.9	73
422	Twisting sliding mode control with adaptation: Lyapunov design, methodology and application. <i>Automatica</i> , 2017 , 75, 229-235	5.7	71

4 ²¹	Feedback linearization and high order sliding mode observer for a quadrotor UAV		67
4 ²⁰	Robust Control With Exact Uncertainties Compensation: With or Without Chattering?. <i>IEEE Transactions on Control Systems Technology</i> , 2011 , 19, 969-975	4.8	64
4 ¹⁹	Global sliding-mode observer with adjusted gains for locally Lipschitz systems. <i>Automatica</i> , 2011 , 47, 565-570	5.7	64
4 ¹⁸	On adaptive sliding mode control without a priori bounded uncertainty. <i>Automatica</i> , 2020 , 111, 108650	5.7	62
4 ¹⁷	Fault tolerant control allocation via continuous integral sliding-modes: A HOSM-Observer approach. <i>Automatica</i> , 2015 , 51, 318-325	5.7	61
4 ¹⁶	Adaptive continuous twisting algorithm. <i>International Journal of Control</i> , 2016 , 89, 1798-1806	1.5	60
4 ¹⁵	Backlash phenomenon observation and identification in electromechanical system. <i>Control Engineering Practice</i> , 2007 , 15, 447-457	3.9	60
4 ¹⁴	Unknown Input and State Estimation for Unobservable Systems. <i>SIAM Journal on Control and Optimization</i> , 2009 , 48, 1155-1178	1.9	58
4 ¹³	Mini-max integral sliding-mode control for multimodel linear uncertain systems. <i>IEEE Transactions on Automatic Control</i> , 2004 , 49, 97-102	5.9	58
4 ¹²	Robust excitation control design using sliding-mode technique for multimachine power systems. <i>Electric Power Systems Research</i> , 2008 , 78, 1627-1634	3.5	57
4 ¹¹	Steady Modes in Relay Control Systems With Time Delay and Periodic Disturbances. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 2000 , 122, 732-737	1.6	57
4 ¹⁰	A Hybrid Robust Non-Homogeneous Finite-Time Differentiator. <i>IEEE Transactions on Automatic Control</i> , 2011 , 56, 1213-1219	5.9	55
4 ⁰⁹	Optimal and robust control for linear state-delay systems. <i>Journal of the Franklin Institute</i> , 2007 , 344, 830-845	4	55
4 ⁰⁸	Uniform Second-Order Sliding Mode Observer for mechanical systems 2010 ,		52
4 ⁰⁷	High-order sliding-mode observation for linear systems with unknown inputs. <i>Nonlinear Analysis: Hybrid Systems</i> , 2011 , 5, 189-205	4.5	52
4 ⁰⁶	Generating Self-Excited Oscillations via Two-Relay Controller. <i>IEEE Transactions on Automatic Control</i> , 2009 , 54, 416-420	5.9	52
4 ⁰⁵	Design of controllers with arbitrary convergence time. <i>Automatica</i> , 2020 , 112, 108710	5.7	52
4 ⁰⁴	Output tracking of systems subjected to perturbations and a class of actuator faults based on HOSM observation and identification. <i>Automatica</i> , 2015 , 59, 200-205	5.7	51

403	Finite-time state observation for non-linear uncertain systems via higher-order sliding modes. <i>International Journal of Control</i> , 2009 , 82, 1564-1574	1.5	50
402	When is it reasonable to implement the discontinuous sliding-mode controllers instead of the continuous ones? Frequency domain criteria. <i>International Journal of Robust and Nonlinear Control</i> , 2019 , 29, 810-828	3.6	49
401	Control of a Parametrically Excited Crane: A Vector Lyapunov Approach. <i>IEEE Transactions on Control Systems Technology</i> , 2013 , 21, 2332-2340	4.8	47
400	Integral sliding-mode control for linear time-invariant implicit systems. <i>Automatica</i> , 2014 , 50, 971-975	5.7	46
399	Accuracy of Homogeneous Sliding Modes in the Presence of Fast Actuators. <i>IEEE Transactions on Automatic Control</i> , 2010 , 55, 810-814	5.9	46
398	Parameter tuning of second-order sliding mode controllers for linear plants with dynamic actuators. <i>Automatica</i> , 2006 , 42, 833-839	5.7	46
397	Optimal Lyapunov function selection for reaching time estimation of Super Twisting algorithm 2009 ,		45
396	Global and exact HOSM differentiator with dynamic gains for output-feedback sliding mode control. <i>Automatica</i> , 2017 , 81, 156-163	5.7	44
395	Sliding mode identification and control for linear uncertain stochastic systems. <i>International Journal of Systems Science</i> , 2007 , 38, 861-869	2.3	43
394	Steering Control for Rollover Avoidance of Heavy Vehicles. <i>IEEE Transactions on Vehicular Technology</i> , 2012 , 61, 3499-3509	6.8	42
393	Integral HOSM Semiglobal Controller for Finite-Time Exact Compensation of Unmatched Perturbations. <i>IEEE Transactions on Automatic Control</i> , 2010 , 55, 2645-2649	5.9	42
392	Super-Twisting Algorithm in presence of time and state dependent perturbations. <i>International Journal of Control</i> , 2018 , 91, 2535-2548	1.5	41
391	Experimental results applying second order sliding mode control to a PEM fuel cell based system. <i>Control Engineering Practice</i> , 2013 , 21, 719-726	3.9	41
390	High-order sliding mode observers for nonlinear autonomous switched systems with unknown inputs. <i>Journal of the Franklin Institute</i> , 2012 , 349, 2975-3002	4	41
389	Output-feedback finite-time stabilization of disturbed LTI systems. <i>Automatica</i> , 2012 , 48, 606-611	5.7	38
388	Non-linear sliding surface: towards high performance robust control. <i>IET Control Theory and Applications</i> , 2012 , 6, 235	2.5	38
387	Variable gains super-twisting algorithm: A Lyapunov based design 2010 ,		38
386	Second order sliding-mode observer for estimation of vehicle dynamic parameters. <i>International Journal of Vehicle Design</i> , 2008 , 48, 190	2.4	37

385	Higher order super-twisting algorithm 2014 ,		36
384	Continuous Nested Algorithms : The Fifth Generation of Sliding Mode Controllers. <i>Studies in Systems, Decision and Control</i> , 2015 , 5-35	0.8	36
383	Output integral sliding mode control based on algebraic hierarchical observer. <i>International Journal of Control</i> , 2007 , 80, 443-453	1.5	35
382	A Novel Method to Estimate the Reaching Time of the Super-Twisting Algorithm. <i>IEEE Transactions on Automatic Control</i> , 2018 , 63, 4301-4308	5.9	34
381	Unmatched uncertainties compensation based on high-order sliding mode observation. <i>International Journal of Robust and Nonlinear Control</i> , 2013 , 23, 754-764	3.6	34
380	Super twisting control of a parametrically excited overhead crane. <i>Journal of the Franklin Institute</i> , 2014 , 351, 2283-2298	4	33
379	Control of discrete time systems based on recurrent Super-Twisting-like algorithm. <i>ISA Transactions</i> , 2016 , 64, 47-55	5.5	33
378	Design of super-twisting control gains: A describing function based methodology. <i>Automatica</i> , 2019 , 99, 175-180	5.7	33
377	High-Order Block Sliding-Mode Controller for a Synchronous Generator With an Exciter System. <i>IEEE Transactions on Industrial Electronics</i> , 2011 , 58, 337-347	8.9	32
376	OPTIMAL AND ROBUST SLIDING MODE CONTROL FOR LINEAR SYSTEMS WITH MULTIPLE TIME DELAYS IN CONTROL INPUT. <i>Asian Journal of Control</i> , 2008 , 5, 557-567	1.7	32
375	Robust Output LQ Optimal Control via Integral Sliding Modes 2014 ,		31
374	State exact reconstruction for switched linear systems via a super-twisting algorithm. <i>International Journal of Systems Science</i> , 2011 , 42, 717-724	2.3	31
373	Performance Analysis of Second-Order Sliding-Mode Control Systems With Fast Actuators. <i>IEEE Transactions on Automatic Control</i> , 2007 , 52, 1053-1059	5.9	31
372	Second order sliding mode tracking controller for inertia wheel pendulum. <i>Journal of the Franklin Institute</i> , 2013 , 350, 92-106	4	30
371	Robust observation and identification of nDOF Lagrangian systems. <i>International Journal of Robust and Nonlinear Control</i> , 2007 , 17, 842-861	3.6	28
370	Output-feedback finite-time stabilization of disturbed feedback linearizable nonlinear systems. <i>Automatica</i> , 2013 , 49, 2767-2773	5.7	27
369	Discrete-time non-linear state observer based on a super twisting-like algorithm. <i>IET Control Theory and Applications</i> , 2014 , 8, 803-812	2.5	26
368	The problem of chattering: an averaging approach 1999 , 363-386		26

367	Sliding Mode Based Analysis and Identification of Vehicle Dynamics. <i>Lecture Notes in Control and Information Sciences</i> , 2011 ,	0.5	25
366	How to implement Super-Twisting Controller based on sliding mode observer? 2014 ,		24
365	Finite-time convergence analysis for Twisting Controller via a strict Lyapunov function 2010 ,		24
364	Adaptive twist sliding mode control: A Lyapunov design 2011 ,		24
363	Hierarchical second-order sliding-mode observer for linear time invariant systems with unknown inputs. <i>International Journal of Systems Science</i> , 2007 , 38, 793-802	2.3	24
362	State Observation for Nonlinear Switched Systems Using Nonhomogeneous High-Order Sliding Mode Observers. <i>Asian Journal of Control</i> , 2012 , 14, 911-923	1.7	23
361	Uniform sliding mode controllers and uniform sliding surfaces. <i>IMA Journal of Mathematical Control and Information</i> , 2012 , 29, 491-505	1.1	23
360	Dissipative approach to sliding mode observers design for uncertain mechanical systems. <i>Automatica</i> , 2018 , 87, 330-336	5.7	23
359	Delayed sliding mode control. <i>Automatica</i> , 2016 , 64, 37-43	5.7	22
358	Output integral sliding mode control to stabilize position of a Stewart platform. <i>Journal of the Franklin Institute</i> , 2012 , 349, 1526-1542	4	22
357	Robust exact finite-time output based control using high-order sliding modes. <i>International Journal of Systems Science</i> , 2011 , 42, 1847-1857	2.3	22
356	Two-Stage Neural Observer for Mechanical Systems. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2008 , 55, 1076-1080	3.5	22
355	Second order sliding mode observer for estimation of velocities, wheel sleep, radius and stiffness 2006 ,		22
354	Wheel Slip Control for the Electric Vehicle With In-Wheel Motors: Variable Structure and Sliding Mode Methods. <i>IEEE Transactions on Industrial Electronics</i> , 2020 , 67, 8535-8544	8.9	22
353	Nonlinear sliding mode control design: An LMI approach. <i>Systems and Control Letters</i> , 2017 , 104, 38-44	2.4	21
352	Time-Varying Gain Differentiator: A Mobile Hydraulic System Case Study. <i>IEEE Transactions on Control Systems Technology</i> , 2016 , 24, 1740-1750	4.8	21
351	Position stabilization of a Stewart platform: High-order sliding mode observers based approach. <i>Journal of the Franklin Institute</i> , 2012 , 349, 441-455	4	21
350	Robust Semiglobal Stabilization of the Second Order System by Relay Feedback with an Uncertain Variable Time Delay. <i>SIAM Journal on Control and Optimization</i> , 2008 , 47, 196-217	1.9	21

349	Slow periodic motions with internal sliding modes in variable structure systems. <i>International Journal of Control</i> , 2002 , 75, 524-537	1.5	21
348	Adaptive sliding mode control and observation. <i>International Journal of Control</i> , 2016 , 89, 1743-1746	1.5	21
347	Barrier Function-Based Adaptive Super-Twisting Controller. <i>IEEE Transactions on Automatic Control</i> , 2020 , 65, 4928-4933	5.9	20
346	Chattering Analysis of HOSM Controlled Systems: Frequency Domain Approach. <i>IEEE Transactions on Automatic Control</i> , 2017 , 62, 4109-4115	5.9	20
345	Combined backstepping and HOSM control design for a class of nonlinear MIMO systems. <i>International Journal of Robust and Nonlinear Control</i> , 2017 , 27, 566-581	3.6	20
344	High-Order Sliding-Mode Observation and Identification for Linear Systems with Unknown Inputs 2006 ,		20
343	Nonlocal stabilization via delayed relay control rejecting uncertainty in a time delay. <i>International Journal of Robust and Nonlinear Control</i> , 2004 , 14, 15-37	3.6	20
342	Optimal and robust integral sliding mode filter design for systems with continuous and delayed measurements	2.0	
341	Looking for "indicants" in the differential diagnosis of jaundice. <i>Medical Decision Making</i> , 1986 , 6, 36-41	2.5	20
340	Second-Order Sliding Mode Control of a Perturbed-Crane. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 2015 , 137,	1.6	19
339	Dynamic switching surfaces for output sliding mode control: An . <i>Automatica</i> , 2011 , 47, 1957-1961	5.7	19
338	Output Integral Sliding Mode for Min-Max Optimization of Multi-Plant Linear Uncertain Systems. <i>IEEE Transactions on Automatic Control</i> , 2009 , 54, 2611-2620	5.9	19
337	On the Transfer Properties of the Generalized Sub-Optimal Second-Order Sliding Mode Control Algorithm. <i>IEEE Transactions on Automatic Control</i> , 2009 , 54, 399-403	5.9	19
336	Road profile estimation in heavy vehicle dynamics simulation. <i>International Journal of Vehicle Design</i> , 2008 , 47, 234	2.4	19
335	Sliding Mode Observers for the Estimation of Vehicle Parameters, Forces and States of the Center of Gravity 2006 ,		19
334	Saturated Super-Twisting Algorithm: Lyapunov based approach 2016 ,		18
333	Output feedback Continuous Twisting Algorithm. <i>Automatica</i> , 2018 , 96, 298-305	5.7	18
332	Design of a prescribed convergence time uniform Robust Exact Observer in the presence of measurement noise 2012 ,		18

331	Vibration damping in elastic robotic structures via sliding modes. <i>Journal of Field Robotics</i> , 1997 , 14, 675-696		18
330	Vehicle parameter estimation and stability enhancement using sliding modes techniques. <i>International Journal of Vehicle Design</i> , 2008 , 48, 230	2.4	18
329	Quasi-continuous high-order sliding-mode controllers for reduced-order chaos synchronization. <i>International Journal of Non-Linear Mechanics</i> , 2008 , 43, 948-961	2.8	18
328	Continuous Twisting Algorithm for Third-Order Systems. <i>IEEE Transactions on Automatic Control</i> , 2020 , 65, 2814-2825	5.9	18
327	Generalized Model Reference Adaptive Control by Means of Global HOSM Differentiators. <i>IEEE Transactions on Automatic Control</i> , 2019 , 64, 2053-2060	5.9	17
326	High-order sliding-mode observer for linear time-varying systems with unknown inputs. <i>International Journal of Robust and Nonlinear Control</i> , 2017 , 27, 2338-2356	3.6	17
325	Continuous Twisting Algorithm 2015 ,		17
324	Generating oscillations in inertia wheel pendulum via two-relay controller. <i>International Journal of Robust and Nonlinear Control</i> , 2012 , 22, 318-330	3.6	17
323	Super twisting control algorithm for the four rotors helicopter attitude tracking problem 2010 ,		17
322	Decomposition of the minmax multi-model problem via integral sliding mode. <i>International Journal of Robust and Nonlinear Control</i> , 2005 , 15, 559-574	3.6	17
321	High-order sliding-mode observerBased input-output linearization. <i>International Journal of Robust and Nonlinear Control</i> , 2019 , 29, 3183-3199	3.6	16
320	Fault detection and isolation for nonlinear systems via high-order-sliding-mode multiple-observer. <i>International Journal of Robust and Nonlinear Control</i> , 2015 , 25, 2871-2893	3.6	16
319	Static Sliding Mode Control of Systems With Arbitrary Relative Degree by Using Artificial Delay. <i>IEEE Transactions on Automatic Control</i> , 2020 , 65, 5464-5471	5.9	16
318	Continuous output integral sliding mode control for switched linear systems. <i>Nonlinear Analysis: Hybrid Systems</i> , 2016 , 22, 284-305	4.5	16
317	Saturated Super-Twisting Algorithm based on Perturbation Estimator 2016 ,		16
316	Integral Sliding-Mode Observation and Control for Switched Uncertain Linear Time Invariant Systems: a Robustifying Strategy. <i>Asian Journal of Control</i> , 2018 , 20, 1551-1565	1.7	16
315	Higher-Order Sliding Mode Controllers and Differentiators. <i>Control Engineering</i> , 2014 , 213-249	1	15
314	Synchronization in reduced-order of chaotic systems via control approaches based on high-order sliding-mode observer. <i>Chaos, Solitons and Fractals</i> , 2009 , 42, 3219-3233	9.3	15

313	Exact compensation of unmatched perturbation via quasi-continuous HOSM 2008 ,		15
312	Variable structure control of synchronous generator: singularly perturbed analysis. <i>International Journal of Control</i> , 2006 , 79, 1-13	1.5	15
311	Slow periodic motions in variable structure systems. <i>International Journal of Systems Science</i> , 2002 , 33, 1145-1155	2.3	15
310	Finite frequency H ∞ control of singularly perturbed Euler-Lagrange systems: An artificial delay approach. <i>International Journal of Robust and Nonlinear Control</i> , 2019 , 29, 353-374	3.6	15
309	Barrier function-based adaptive higher order sliding mode controllers. <i>Automatica</i> , 2021 , 123, 109355	5.7	15
308	Self-Oscillations in Dynamic Systems. <i>Systems and Control: Foundations and Applications</i> , 2015 ,	0.3	14
307	. <i>IEEE Transactions on Automatic Control</i> , 2016 , 61, 725-734	5.9	14
306	Optimal sliding mode algorithms for dynamic systems. <i>Journal of the Franklin Institute</i> , 2012 , 349, 1317-1322		14
305	Analysis of response of second-order sliding mode controllers to external inputs in frequency domain. <i>International Journal of Robust and Nonlinear Control</i> , 2008 , 18, 502-514	3.6	14
304	Nested backward compensation of unmatched perturbations via HOSM observation. <i>Journal of the Franklin Institute</i> , 2014 , 351, 2397-2410	4	13
303	History-dependent modified sliding mode interception strategies with maximal capture zone. <i>Journal of the Franklin Institute</i> , 2012 , 349, 638-657	4	13
302	Advances in Guidance and Control of Aerospace Vehicles using Sliding Mode Control and Observation Techniques. <i>Journal of the Franklin Institute</i> , 2012 , 349, 391-396	4	13
301	The differentiation error of noisy signals using the Generalized Super-Twisting differentiator 2012 ,		13
300	Observation and Identification of Mechanical Systems via Second Order Sliding Modes		13
299	Stabilization of amplitude of oscillations via relay delay control. <i>International Journal of Control</i> , 2003 , 76, 770-780	1.5	13
298	Semiglobal Finite-Time Trajectory Tracking Realization for Disturbed Nonlinear Systems via Higher-Order Sliding Modes. <i>IEEE Transactions on Automatic Control</i> , 2020 , 65, 2185-2191	5.9	13
297	Discrete-Time Implementation of Homogeneous Differentiators. <i>IEEE Transactions on Automatic Control</i> , 2020 , 65, 757-762	5.9	13
296	Continuous sliding-mode control for singular systems. <i>International Journal of Robust and Nonlinear Control</i> , 2018 , 28, 3454-3474	3.6	12

295	Approximability of nonlinear affine control systems. <i>Nonlinear Analysis: Hybrid Systems</i> , 2011 , 5, 275-288	4.5	12
294	Generating self-excited oscillations for underactuated mechanical systems via two-relay controller. <i>International Journal of Control</i> , 2009 , 82, 1678-1691	1.5	12
293	High-order sliding-mode observation and fault detection 2007 ,		12
292	Cheap Suboptimal Control of an Integral Sliding Mode for Uncertain Systems With Delays. <i>IEEE Transactions on Automatic Control</i> , 2007 , 52, 1892-1898	5.9	12
291	Frequency Domain Input/Output Analysis of Sliding-Mode Observers. <i>IEEE Transactions on Automatic Control</i> , 2006 , 51, 1798-1803	5.9	12
290	Frequency Domain Analysis of Second Order Sliding Modes	125-142	12
289	On nonlinear H _∞ sliding mode control for a class of nonlinear cascade systems. <i>International Journal of Systems Science</i> , 2005 , 36, 983-992	2.3	12
288	Fault detection and isolation for nonlinear non-affine uncertain systems via sliding-mode techniques. <i>International Journal of Control</i> , 2017 , 90, 218-230	1.5	11
287	Identification of vehicle parameters and estimation of vertical forces. <i>International Journal of Systems Science</i> , 2015 , 46, 2996-3009	2.3	11
286	Closing Gaps for Aircraft Attitude Higher Order Sliding Mode Control Certification via Practical Stability Margins Identification. <i>IEEE Transactions on Control Systems Technology</i> , 2018 , 26, 2020-2034	4.8	11
285	Decentralised control for complex systems - an invited survey. <i>International Journal of Modelling, Identification and Control</i> , 2014 , 22, 285	0.6	11
284	2017 ,		11
283	Non-minimum phase switched systems: HOSM-based fault detection and fault identification via Volterra integral equation. <i>International Journal of Adaptive Control and Signal Processing</i> , 2014 , 28, 1372-1397	2.8	11
282	Output feedback adaptive twisting control: A Lyapunov design 2012 ,		11
281	Observer for Linear Time Invariant Systems with Unknown Inputs based on the Hierarchical Super-Twisting Concept		11
280	State Estimation and Input Reconstruction in Nonlinear Systems via Higher Order Sliding Mode Observer. <i>Proceedings of the American Control Conference</i> , 2007 ,	1.2	11
279	Fault Reconstruction in a Leader/Follower Spacecraft System Using Higher Order Sliding Mode Observers. <i>Proceedings of the American Control Conference</i> , 2007 ,	1.2	11
278	Analysis of chattering in continuous sliding mode control		11

277	Global Sliding Mode Observers for Some Uncertain Mechanical Systems. <i>IEEE Transactions on Automatic Control</i> , 2020 , 65, 1348-1355	5.9	11
276	Lyapunov-based design for a class of variable-gain 2nd-sliding controllers with the desired convergence rate. <i>International Journal of Robust and Nonlinear Control</i> , 2018 , 28, 5279-5296	3.6	11
275	A New Varying-Gain-Exponent-Based Differentiator/Observer: An Efficient Balance Between Linear and Sliding-Mode Algorithms. <i>IEEE Transactions on Automatic Control</i> , 2020 , 65, 5407-5414	5.9	10
274	. <i>IEEE Transactions on Vehicular Technology</i> , 2014 , 63, 3116-3127	6.8	10
273	An exact and uniformly convergent arbitrary order differentiator 2011 ,		10
272	Sliding Mode Enforcement after 1990: Main Results and Some Open Problems. <i>Lecture Notes in Control and Information Sciences</i> , 2011 , 3-57	0.5	10
271	Adaptation of Levant's differentiator based on barrier function. <i>International Journal of Control</i> , 2018 , 91, 2019-2027	1.5	10
270	Robustification of time varying linear quadratic optimal control based on output integral sliding modes. <i>IET Control Theory and Applications</i> , 2015 , 9, 563-572	2.5	9
269	Chattering measurement in SMC and HOSMC 2016 ,		9
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