

Arie Levant

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/6072704/arie-levant-publications-by-year.pdf>

Version: 2024-04-11

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

88 papers	11,106 citations	27 h-index	93 g-index
93 ext. papers	13,840 ext. citations	3 avg, IF	7.21 L-index

#	Paper	IF	Citations
88	Development of Relative Degree Based Aerospace Sliding Mode Control MATLAB Toolbox with Case Studies. <i>IEEE Aerospace and Electronic Systems Magazine</i> , 2022 , 1-1	2.4	0
87	Homogeneous Sliding Modes in Noisy Environments. <i>Studies in Systems, Decision and Control</i> , 2021 , 1-46	0.8	0
86	Filtering homogeneous observers in control of integrator chains. <i>International Journal of Robust and Nonlinear Control</i> , 2021 , 31, 3658-3685	3.6	6
85	Low-chattering discretization of homogeneous differentiators. <i>IEEE Transactions on Automatic Control</i> , 2021 , 1-1	5.9	0
84	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
83	Homogeneous Output-Feedback Control. <i>IFAC-PapersOnLine</i> , 2020 , 53, 5081-5086	0.7	0
82	New Homogeneous Controllers and Differentiators. <i>Studies in Systems, Decision and Control</i> , 2020 , 3-28	0.8	2
81	Non-chattering discrete differentiators based on sliding modes 2020 ,		3
80	Discrete differentiators based on sliding modes. <i>Automatica</i> , 2020 , 112, 108633	5.7	21
79	Robust exact filtering differentiators. <i>European Journal of Control</i> , 2020 , 55, 33-44	2.5	19
78	Homogeneous filtering and differentiation based on sliding modes 2019 ,		2
77	Sliding-Mode-Based Differentiation and Filtering. <i>IEEE Transactions on Automatic Control</i> , 2018 , 63, 3061-3067	5.9	37
76	Quasi-Continuous MIMO Sliding-Mode Control. <i>IEEE Transactions on Automatic Control</i> , 2018 , 63, 3068-3074	5.9	21
75	Delay estimation via sliding mode for nonlinear time-delay systems. <i>Automatica</i> , 2018 , 89, 266-273	5.7	21
74	Globally convergent differentiators with variable gains. <i>International Journal of Control</i> , 2018 , 91, 1994-2008	2.9	38
73	Supervisory acceleration of convergence for homogeneous systems. <i>International Journal of Control</i> , 2018 , 91, 2524-2534	1.5	3
72	Acceleration of finite-time stable homogeneous systems. <i>International Journal of Robust and Nonlinear Control</i> , 2018 , 28, 1757-1777	3.6	7

71	Filtering Differentiators and Observers 2018 ,		12
70	Realization and Discretization of Asymptotically Stable Homogeneous Systems. <i>IEEE Transactions on Automatic Control</i> , 2017 , 62, 5962-5969	5.9	39
69	Sliding-Mode-Based Differentiation and Its Application. <i>IFAC-PapersOnLine</i> , 2017 , 50, 1699-1704	0.7	18
68	Switched gain differentiator with fixed-time convergence. <i>IFAC-PapersOnLine</i> , 2017 , 50, 7145-7150	0.7	2
67	Non-Lyapunov homogeneous SISO control design 2017 ,		6
66	Weighted homogeneity and robustness of sliding mode control. <i>Automatica</i> , 2016 , 72, 186-193	5.7	56
65	Simple homogeneous sliding-mode controller. <i>Automatica</i> , 2016 , 67, 22-32	5.7	148
64	Adaptive second-order sliding mode control with uncertainty compensation. <i>International Journal of Control</i> , 2016 , 89, 1747-1758	1.5	28
63	Stability and robustness of homogeneous differential inclusions 2016 ,		17
62	Delay estimation for nonlinear time-delay systems 2016 ,		1
61	Uncertain disturbances attenuation by homogeneous multi-input multi-output sliding mode control and its discretisation. <i>IET Control Theory and Applications</i> , 2015 , 9, 515-525	2.5	24
60	New families of high-order sliding-mode controllers 2015 ,		5
59	Homogeneity of differential inclusions: Application to sliding modes 2015 ,		3
58	Accelerated Twisting Algorithm. <i>IEEE Transactions on Automatic Control</i> , 2015 , 60, 2803-2807	5.9	22
57	Sliding Mode Control and Observation. <i>Control Engineering</i> , 2014 ,	1	783
56	Accuracy of disturbed homogeneous sliding modes 2014 ,		8
55	Globally convergent fast exact differentiator with variable gains 2014 ,		27
54	Proper discretization of homogeneous differentiators. <i>Automatica</i> , 2014 , 50, 2007-2014	5.7	54

53	Disturbance Observer Based Control: Aerospace Applications. <i>Control Engineering</i> , 2014 , 291-320	1	2
52	Observation and Identification via HOSM Observers. <i>Control Engineering</i> , 2014 , 251-290	1	2
51	Higher-Order Sliding Mode Controllers and Differentiators. <i>Control Engineering</i> , 2014 , 213-249	1	15
50	Finite-time stabilization of uncertain MIMO systems 2014 ,		3
49	Second-Order Sliding Mode Controllers and Differentiators. <i>Control Engineering</i> , 2014 , 143-182	1	7
48	High-order sliding-mode control for blood glucose: Practical relative degree approach. <i>Control Engineering Practice</i> , 2013 , 21, 747-758	3.9	73
47	Discrete-Time Sliding-Mode-Based Differentiation. <i>Lecture Notes in Control and Information Sciences</i> , 2013 , 299-312	0.5	4
46	Practical Relative Degree Approach in Sliding-Mode Control. <i>Lecture Notes in Control and Information Sciences</i> , 2013 , 97-115	0.5	8
45	Homogeneous discrete differentiation of functions with unbounded higher derivatives 2013 ,		4
44	Output-feedback finite-time stabilization of disturbed LTI systems. <i>Automatica</i> , 2012 , 48, 606-611	5.7	38
43	Exact Differentiation of Signals With Unbounded Higher Derivatives. <i>IEEE Transactions on Automatic Control</i> , 2012 , 57, 1076-1080	5.9	84
42	Practical relative degree in black-box control 2012 ,		3
41	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
40	High-order sliding-mode observation for linear systems with unknown inputs. <i>Nonlinear Analysis: Hybrid Systems</i> , 2011 , 5, 189-205	4.5	52
39	Twisting-controller gain adaptation 2011 ,		6
38	High-Order Sliding-Mode control of blood glucose concentration via practical relative degree identification 2011 ,		3
37	Finite-Time Stability and High Relative Degrees in Sliding-Mode Control. <i>Lecture Notes in Control and Information Sciences</i> , 2011 , 59-92	0.5	8
36	Gain-scheduled high-order MIMO sliding mode control 2010 ,		2

35	Chattering Analysis. <i>IEEE Transactions on Automatic Control</i> , 2010 , 55, 1380-1389	5.9	282
34	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
33	Ultimate robustness of homogeneous sliding modes 2010 ,		5
32	Non-homogeneous finite-time-convergent differentiator 2009 ,		22
31	Adjustment of high-order sliding-mode controllers. <i>International Journal of Robust and Nonlinear Control</i> , 2009 , 19, 1657-1672	3.6	70
30	Homogeneous High-Order Sliding Modes. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2009 , 42, 210-215		2
29	Robustness of Homogeneous Sliding Modes to Relative Degree Fluctuations. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2009 , 42, 167-172		7
28	On Robust Output Based Finite-Time Control of LTI systems using HOSMs. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2009 , 42, 222-227		0
27	UNIVERSAL OUTPUT-FEEDBACK SISO CONTROLLERS. <i>Asian Journal of Control</i> , 2008 , 5, 484-497	1.7	7
26	High-order sliding modes observation 2008 ,		2
25	High-order sliding observation and fault detection 2008 ,		2
24	Homogeneous High-Order Sliding Modes. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2008 , 41, 3799-3810		2
23	Generalized homogeneous quasi-continuous controllers. <i>International Journal of Robust and Nonlinear Control</i> , 2008 , 18, 385-398	3.6	41
22	Discontinuous Homogeneous Control 2008 , 71-95		1
21	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
20	High-order sliding-mode observation and fault detection via weakly unobservable subspace reconstruction 2007 ,		4
19	Principles of 2-sliding mode design. <i>Automatica</i> , 2007 , 43, 576-586	5.7	564
18	Smooth second-order sliding modes: Missile guidance application. <i>Automatica</i> , 2007 , 43, 1470-1476	5.7	419

17	Finite-time stabilization of uncertain SISO systems 2007 ,	5
16	High-order sliding-mode observation and fault detection 2007 ,	12
15	High-Order Sliding-Mode Observation and Identification for Linear Systems with Unknown Inputs 2006 ,	20
14	Exact Differentiation of Signals with Unbounded Higher Derivatives 2006 ,	31
13	High-Order Sliding-Mode Observer for Linear Systems with Unknown Inputs 2006 ,	4
12	Quasi-continuous high-order sliding-mode controllers. <i>IEEE Transactions on Automatic Control</i> , 2005 , 50, 1812-1816	5.9 395
11	Second-order sliding-mode observer for mechanical systems. <i>IEEE Transactions on Automatic Control</i> , 2005 , 50, 1785-1789	5.9 735
10	Homogeneity approach to high-order sliding mode design. <i>Automatica</i> , 2005 , 41, 823-830	5.7 646
9	ADJUSTMENT OF HIGH-ORDER SLIDING-MODE CONTROLLERS. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2005 , 38, 866-871	2
8	Higher-order sliding modes, differentiation and output-feedback control. <i>International Journal of Control</i> , 2003 , 76, 924-941	1.5 2285
7	Aircraft Pitch Control via Second-Order Sliding Technique. <i>Journal of Guidance, Control, and Dynamics</i> , 2000 , 23, 586-594	2.1 104
6	Robust exact differentiation via sliding mode technique. <i>Automatica</i> , 1998 , 34, 379-384	5.7 1480
5	Sliding order and sliding accuracy in sliding mode control. <i>International Journal of Control</i> , 1993 , 58, 1247-1263	1.5 1954
4	High-Order Sliding-Mode Observer for Linear Systems with Unknown Inputs	8
3	Output-feedback control of the contact-force in high-speed-train pantographs	8
2	Speed regulation of induction motors: a sliding mode observer-differentiator based control scheme	3
1	Construction principles of output-feedback 2-sliding mode design	12