Xiaogang Xiong

List of Publications by Year
in descending order

66 papers	609 citations	759233 12 h-index	677142 22 g-index
66 all docs	66 docs citations	66 times ranked	479 citing authors

#	Article	IF	Citations
1	Multilayer Hybrid Deep-Learning Method for Waste Classification and Recycling. Computational Intelligence and Neuroscience, 2018, 2018, 1-9.	1.7	145
2	Implicit-Euler Implementation of Super-Twisting Observer and Twisting Controller for Second-Order Systems. IEEE Transactions on Circuits and Systems II: Express Briefs, 2020, 67, 2607-2611.	3.0	33
3	Free-Will Arbitrary Time Consensus for Multiagent Systems. IEEE Transactions on Cybernetics, 2022, 52, 4636-4646.	9.5	31
4	Switched-LC Based High Gain Converter With Lower Component Count. IEEE Transactions on Industry Applications, 2020, 56, 2816-2827.	4.9	29
5	A High Voltage Gain DC–DC Converter With Common Grounding for Fuel Cell Vehicle. IEEE Transactions on Vehicular Technology, 2020, 69, 8290-8304.	6.3	26
6	A Wide Voltage Gain Bidirectional DC–DC Converter Based on Quasi Z-Source and Switched Capacitor Network. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 1353-1357.	3.0	21
7	Adaptive gains of dual level to super‐twisting algorithm for sliding mode design. IET Control Theory and Applications, 2018, 12, 2347-2356.	2.1	19
8	Adaptive gains to super‐twisting technique for sliding mode design. Asian Journal of Control, 2021, 23, 362-373.	3.0	17
9	A Generalized Switched Inductor Cell Modular Multilevel Inverter. IEEE Transactions on Industry Applications, 2020, 56, 507-518.	4.9	15
10	An Ultra High Gain Quasi Z-Source Inverter Consisting Active Switched Network. IEEE Transactions on Circuits and Systems II: Express Briefs, 2020, 67, 3207-3211.	3.0	15
11	A Multistate Friction Model Described by Continuous Differential Equations. Tribology Letters, 2013, 51, 513-523.	2.6	14
12	A New Quick-Response Sliding Mode Tracking Differentiator With its Chattering-Free Discrete-Time Implementation. IEEE Access, 2019, 7, 130236-130245.	4.2	13
13	High Gain Quasi-Switched Boost Inverter With Optimal Performance Parameters. IEEE Transactions on Transportation Electrification, 2020, 6, 554-567.	7.8	13
14	Influence of a Soft Robotic Suit on Metabolic Cost in Long-Distance Level and Inclined Walking. Applied Bionics and Biomechanics, 2018, 2018, 1-8.	1.1	12
15	Toward UL-DL Rate Balancing: Joint Resource Allocation and Hybrid-Mode Multiple Access for UAV-BS-Assisted Communication Systems. IEEE Transactions on Communications, 2022, 70, 2757-2771.	7.8	12
16	Long-Term Effects of a Soft Robotic Suit on Gait Characteristics in Healthy Elderly Persons. Applied Sciences (Switzerland), 2019, 9, 1957.	2.5	11
17	A $[K, KL]$ sector based control design for nonlinear system. ISA Transactions, 2019, 89, 77-83.	5.7	11
18	Discrete‐time sector based hands‐off control for nonlinear system. International Journal of Robust and Nonlinear Control, 2020, 30, 2443-2460.	3.7	11

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19	Discrete-Time Super-Twisting Fractional-Order Differentiator With Implicit Euler Method. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 1238-1242.	3.0	11
20	A Differential Algebraic Method to Approximate Nonsmooth Mechanical Systems by Ordinary Differential Equations. Journal of Applied Mathematics, 2013, 2013, 1-13.	0.9	9
21	Discrete-Time Sliding Mode Filter with Adaptive Gain. Applied Sciences (Switzerland), 2016, 6, 400.	2.5	9
22	Backward-Euler Discretization of Second-Order Sliding Mode Control and Super-Twisting Observer for Accurate Position Control. , 2013, , .		7
23	Quasi-Impedance-Source-Network-Based Nonisolated High-Step-Up DC–DC Converter. IEEE Transactions on Industry Applications, 2021, 57, 6405-6416.	4.9	7
24	A Soft Wearable Robotic Suit for Ankle and Hip Assistance: a Preliminary Study. , 2018, 2018, 1867-1870.		6
25	Implicit Discrete-Time Adaptive First-Order Sliding Mode Control With Predefined Convergence Time. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 3562-3566.	3.0	6
26	Implicit Discrete-Time Terminal Sliding Mode Control for Second-Order Systems. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 2508-2512.	3.0	6
27	Discrete-Time Adaptive Super-Twisting Observer With Predefined Arbitrary Convergence Time. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 2057-2061.	3.0	6
28	Consensus problems in multiagent systems: A vector based contraction approach. IET Control Theory and Applications, 2021, 15, 2195-2209.	2.1	6
29	Modeling and Observation of Rate-Dependent Hysteresis and Creep Phenomena in Magnetorheological Clutch. IEEE/ASME Transactions on Mechatronics, 2022, 27, 2053-2061.	5.8	6
30	High Gain Quasi-Mutually Coupled Active Impedance Source Converter Utilizing Reduced Components Count. IEEE Transactions on Industry Applications, 2019, 55, 6376-6388.	4.9	5
31	Discrete-Time Super-Twisting Observer With Implicit Euler Method. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 1288-1292.	3.0	5
32	DNN-Aided Codebook Based Beamforming for FDD Millimeter-Wave Massive MIMO Systems Under Multipath. IEEE Transactions on Vehicular Technology, 2022, 71, 437-452.	6.3	5
33	Implicit Euler simulation of one-dimensional Burridge-Knopoff model of earthquakes with set-valued friction laws. Advances in Computational Mathematics, 2015, 41, 1039-1057.	1.6	4
34	Enhanced Discrete-Time Sliding Mode Filter for Removing Noise. Mathematical Problems in Engineering, 2017, 2017, 1-12.	1.1	4
35	A Variable Gain Sliding Mode Tracking Differentiator for Derivative Estimation of Noisy Signals. IEEE Access, 2020, 8, 148500-148509.	4.2	4
36	A Chattering-Free Sliding Mode Filter Enhanced by First Order Derivative Feedforward. IEEE Access, 2020, 8, 41175-41185.	4.2	4

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37	Discrete-Time Implementation of Super-Twisting Control With Semi-Implicit Euler Method. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 99-103.	3.0	4
38	Delayed output feedback based leader–follower and leaderless consensus control of uncertain multiagent systems. IET Control Theory and Applications, 2021, 15, 1956-1970.	2.1	4
39	Tuning Guidelines for an Adaptive-Gain Parabolic Sliding Mode Filter. Applied Sciences (Switzerland), 2017, 7, 209.	2.5	3
40	Discrete-Time Implementation of Continuous Terminal Algorithm With Implicit-Euler Method. IEEE Access, 2019, 7, 175940-175946.	4.2	3
41	Investigation of a Liquid-Phase Electrode for Micro-Electro-Discharge Machining. Micromachines, 2020, 11, 935.	2.9	3
42	Investigation of multielectrode multiloop with series capacitance pulse generator for EDM. International Journal of Advanced Manufacturing Technology, 2020, 109, 143-154.	3.0	3
43	Quantized–feedback hands–off control for nonlinear systems. IET Control Theory and Applications, 2021, 15, 1364-1374.	2.1	3
44	A Differential-Algebraic Multistate Friction Model. Lecture Notes in Computer Science, 2012, , 77-88.	1.3	3
45	Discrete-Time Super-Twisting Fractional-Order Observer With Implicit Euler Method. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 2787-2791.	3.0	3
46	A Contact Force Model With Nonlinear Compliance and Residual Indentation1. Journal of Applied Mechanics, Transactions ASME, 2014, 81, .	2.2	2
47	Frequency Domain Analysis for An Adaptive Windowing Parabolic Sliding Mode Filter. MATEC Web of Conferences, 2017, 95, 14005.	0.2	2
48	Sliding Mode Control of Quasi-Static Micro Mirrors with Implicit-Euler Implementation. , 2018, , .		2
49	A High Gain DC-DC Converter based on Switched Capacitor/Switched Inductor Arrangement. , 2018, , .		2
50	A Double Stage EKF-based Stereo Visual Inertial Odometry. , 2019, , .		2
51	Liquid alloy electrode for no-wear micro electrical discharge machining. International Journal of Advanced Manufacturing Technology, 2020, 106, 1281-1290.	3.0	2
52	Nonsmooth PI Controller for Uncertain Systems. IEEE Access, 2020, 8, 124792-124801.	4.2	2
53	Multi-State Modelling and Observation of Magneto-Rheological Clutch With Rate-Dependent Hysteresis Characteristic. IEEE Robotics and Automation Letters, 2021, 6, 2445-2452.	5.1	2
54	Implicit–Euler based digital implementation for constrained stabilization of second–order systems. International Journal of Robust and Nonlinear Control, 2021, 31, 5086-5100.	3.7	2

#	Article	IF	Citations
55	Research on the nonlinearity correction method for the piezoelectric optical scanner in a lidar system. , 2010, , .		1
56	A noise attenuating sliding mode filter with improved sliding surface. , 2020, , .		1
57	Interval observer design for nonlinear systems using simplified contraction theory. IET Control Theory and Applications, 2022, 16, 935-944.	2.1	1
58	Discrete-Time Multivariable Super-Twisting Algorithm With Semi-Implicit Euler Method. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 4443-4447.	3.0	1
59	An analog notch filter for piezoelectric optical scanner. Frontiers of Optoelectronics in China, 2010, 3, 370-375.	0.2	0
60	A Differential-Algebraic Contact Model With Nonlinear Compliance. , 2012, , .		0
61	Parabolic Sliding Mode Filtering with Feed-Forward Compensation. , 2018, , .		0
62	An Enhanced Hysteresis Filtering for Removing Impulsive Noise. , 2018, , .		0
63	A Discrete-time Sliding Mode Estimator with Adaptive Sliding Surface. , 2018, , .		0
64	Discrete-Time Algorithms of a Parabolic Sliding Mode Filter: A Comparative Review. , 2018, , .		0
65	A Family of Novel Fast Algorithms to Improve Computing Efficiency of Set-Based Direct Visual Servoing. IEEE Access, 2020, 8, 108260-108269.	4.2	0
66	Discrete-Time Sliding Mode Filter with Parameter adaptation. , 2020, , .		0