

Okyay Kaynak

List of Publications by Year in descending order

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257
papers

14,279
citations

25034

57
h-index

21540

114
g-index

263
all docs

263
docs citations

263
times ranked

9890
citing authors

#	ARTICLE	IF	CITATIONS
1	Network-Induced Constraints in Networked Control Systemsâ€”A Survey. IEEE Transactions on Industrial Informatics, 2013, 9, 403-416.	11.3	915
2	Data-Based Techniques Focused on Modern Industry: An Overview. IEEE Transactions on Industrial Electronics, 2015, 62, 657-667.	7.9	822
3	Grey system theory-based models in time series prediction. Expert Systems With Applications, 2010, 37, 1784-1789.	7.6	662
4	Improved PLS Focused on Key-Performance-Indicator-Related Fault Diagnosis. IEEE Transactions on Industrial Electronics, 2015, 62, 1651-1658.	7.9	472
5	Sliding-Mode Control With Soft Computing: A Survey. IEEE Transactions on Industrial Electronics, 2009, 56, 3275-3285.	7.9	433
6	Big Data for Modern Industry: Challenges and Trends [Point of View]. Proceedings of the IEEE, 2015, 103, 143-146.	21.3	422
7	Robust and Adaptive Backstepping Control for Nonlinear Systems Using RBF Neural Networks. IEEE Transactions on Neural Networks, 2004, 15, 693-701.	4.2	374
8	Finite Frequency H_{∞} Control for Vehicle Active Suspension Systems. IEEE Transactions on Control Systems Technology, 2011, 19, 416-422.	5.2	370
9	Adaptive Backstepping Control for Active Suspension Systems With Hard Constraints. IEEE/ASME Transactions on Mechatronics, 2013, 18, 1072-1079.	5.8	365
10	Industrial Cyberphysical Systems: A Backbone of the Fourth Industrial Revolution. IEEE Industrial Electronics Magazine, 2017, 11, 6-16.	2.6	275
11	Descriptor reduced-order sliding mode observers design for switched systems with sensor and actuator faults. Automatica, 2017, 76, 282-292.	5.0	255
12	Dynamical Modeling and Boundary Vibration Control of a Rigid-Flexible Wing System. IEEE/ASME Transactions on Mechatronics, 2020, 25, 2711-2721.	5.8	254
13	A Review on Soft Sensors for Monitoring, Control, and Optimization of Industrial Processes. IEEE Sensors Journal, 2021, 21, 12868-12881.	4.7	252
14	The fusion of computationally intelligent methodologies and sliding-mode control-a survey. IEEE Transactions on Industrial Electronics, 2001, 48, 4-17.	7.9	245
15	Rough Deep Neural Architecture for Short-Term Wind Speed Forecasting. IEEE Transactions on Industrial Informatics, 2017, 13, 2770-2779.	11.3	241
16	Fuzzy Wavelet Neural Networks for Identification and Control of Dynamic Plantsâ€”A Novel Structure and a Comparative Study. IEEE Transactions on Industrial Electronics, 2008, 55, 3133-3140.	7.9	224
17	Vibration Isolation for Active Suspensions With Performance Constraints and Actuator Saturation. IEEE/ASME Transactions on Mechatronics, 2015, 20, 675-683.	5.8	220
18	Tracking Control of Robotic Manipulators With Uncertain Kinematics and Dynamics. IEEE Transactions on Industrial Electronics, 2016, 63, 6439-6449.	7.9	216

#	ARTICLE	IF	CITATIONS
19	Sliding Mode Observer-Based FTC for Markovian Jump Systems With Actuator and Sensor Faults. IEEE Transactions on Automatic Control, 2017, 62, 3551-3558.	5.7	208
20	Data-Driven Monitoring and Safety Control of Industrial Cyber-Physical Systems: Basics and Beyond. IEEE Access, 2018, 6, 47374-47384.	4.2	205
21	Adaptive neuro-fuzzy inference system based autonomous flight control of unmanned air vehicles. Expert Systems With Applications, 2010, 37, 1229-1234.	7.6	186
22	Type 2 Fuzzy Neural Structure for Identification and Control of Time-Varying Plants. IEEE Transactions on Industrial Electronics, 2010, 57, 4147-4159.	7.9	186
23	A general backpropagation algorithm for feedforward neural networks learning. IEEE Transactions on Neural Networks, 2002, 13, 251-254.	4.2	149
24	Neuro sliding mode control of robotic manipulators. Mechatronics, 2000, 10, 239-263.	3.3	132
25	An Adaptive NN-Based Approach for Fault-Tolerant Control of Nonlinear Time-Varying Delay Systems With Unmodeled Dynamics. IEEE Transactions on Neural Networks and Learning Systems, 2017, 28, 1902-1913.	11.3	130
26	An Efficient Ant Colony System Based on Receding Horizon Control for the Aircraft Arrival Sequencing and Scheduling Problem. IEEE Transactions on Intelligent Transportation Systems, 2010, 11, 399-412.	8.0	129
27	Computing Gradient Vector and Jacobian Matrix in Arbitrarily Connected Neural Networks. IEEE Transactions on Industrial Electronics, 2008, 55, 3784-3790.	7.9	128
28	Adaptive Indirect Fuzzy Sliding Mode Controller for Networked Control Systems Subject to Time-Varying Network-Induced Time Delay. IEEE Transactions on Fuzzy Systems, 2015, 23, 205-214.	9.8	128
29	A Grey System Modeling Approach for Sliding-Mode Control of Antilock Braking System. IEEE Transactions on Industrial Electronics, 2009, 56, 3244-3252.	7.9	126
30	Extended Kalman Filter Based Learning Algorithm for Type-2 Fuzzy Logic Systems and Its Experimental Evaluation. IEEE Transactions on Industrial Electronics, 2012, 59, 4443-4455.	7.9	124
31	Transient-Performance-Guaranteed Robust Adaptive Control and Its Application to Precision Motion Control Systems. IEEE Transactions on Industrial Electronics, 2016, 63, 6510-6518.	7.9	123
32	Fault Detection for Nonlinear Process With Deterministic Disturbances: A Just-In-Time Learning Based Data Driven Method. IEEE Transactions on Cybernetics, 2017, 47, 3649-3657.	9.5	118
33	Optimizing RFID Network Planning by Using a Particle Swarm Optimization Algorithm With Redundant Reader Elimination. IEEE Transactions on Industrial Informatics, 2012, 8, 900-912.	11.3	114
34	Optimized Design of Parity Relation-Based Residual Generator for Fault Detection: Data-Driven Approaches. IEEE Transactions on Industrial Informatics, 2021, 17, 1449-1458.	11.3	114
35	Industrial applications of digital twins. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200360.	3.4	102
36	Adaptive Fault-Tolerant Control for Nonlinear System With Unknown Control Directions Based on Fuzzy Approximation. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2017, 47, 1909-1918.	9.3	98

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37	An LWPR-Based Data-Driven Fault Detection Approach for Nonlinear Process Monitoring. IEEE Transactions on Industrial Informatics, 2014, 10, 2016-2023.	11.3	97
38	Discrete-time sliding mode control in the presence of system uncertainty. International Journal of Control, 1993, 57, 1177-1189.	1.9	95
39	On Deployment of Wireless Sensors on 3-D Terrains to Maximize Sensing Coverage by Utilizing Cat Swarm Optimization With Wavelet Transform. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2014, 44, 111-120.	9.3	91
40	Disturbance Observer-Based Neural Network Control of Cooperative Multiple Manipulators With Input Saturation. IEEE Transactions on Neural Networks and Learning Systems, 2020, 31, 1735-1746.	11.3	91
41	A type-2 neuro-fuzzy system based on clustering and gradient techniques applied to system identification and channel equalization. Applied Soft Computing Journal, 2011, 11, 1396-1406.	7.2	85
42	Towards Agrobots: Trajectory Control of an Autonomous Tractor Using Type-2 Fuzzy Logic Controllers. IEEE/ASME Transactions on Mechatronics, 2015, 20, 287-298.	5.8	83
43	Performance Supervised Plant-Wide Process Monitoring in Industry 4.0: A Roadmap. IEEE Open Journal of the Industrial Electronics Society, 2021, 2, 21-35.	6.8	82
44	Analysis of the Noise Reduction Property of Type-2 Fuzzy Logic Systems Using a Novel Type-2 Membership Function. IEEE Transactions on Systems, Man, and Cybernetics, 2011, 41, 1395-1406.	5.0	81
45	A study on robustness property of sliding-mode controllers: a novel design and experimental investigations. IEEE Transactions on Industrial Electronics, 1999, 46, 1012-1018.	7.9	79
46	Asymptotic stability and stabilisation of uncertain delta operator systems with time-varying delays. IET Control Theory and Applications, 2013, 7, 1071-1078.	2.1	79
47	Fuzzy Logic Based Approach to Design of Flight Control and Navigation Tasks for Autonomous Unmanned Aerial Vehicles. Journal of Intelligent and Robotic Systems: Theory and Applications, 2009, 54, 229-244.	3.4	75
48	Quo vadis artificial intelligence?. Discover Artificial Intelligence, 2022, 2, 1.	3.1	75
49	Oil well diagnosis by sensing terminal characteristics of the induction motor. IEEE Transactions on Industrial Electronics, 2000, 47, 1100-1107.	7.9	72
50	Optimal Design of a Fractional-Order Proportional-Integer-Differential Controller for a Pneumatic Position Servo System. IEEE Transactions on Industrial Electronics, 2019, 66, 6220-6229.	7.9	69
51	Data-Driven Control and Process Monitoring for Industrial Applications—Part I. IEEE Transactions on Industrial Electronics, 2014, 61, 6356-6359.	7.9	68
52	Sliding Mode Neuro-Adaptive Control of Electric Drives. IEEE Transactions on Industrial Electronics, 2007, 54, 671-679.	7.9	67
53	A Dynamic Method to Forecast the Wheel Slip for Antilock Braking System and Its Experimental Evaluation. IEEE Transactions on Systems, Man, and Cybernetics, 2009, 39, 551-560.	5.0	67
54	Sliding Mode Control Approach for Online Learning as Applied to Type-2 Fuzzy Neural Networks and Its Experimental Evaluation. IEEE Transactions on Industrial Electronics, 2012, 59, 3510-3520.	7.9	67

#	ARTICLE	IF	CITATIONS
55	Fuzzy Approximation-Based Finite-Time Control for a Robot With Actuator Saturation Under Time-Varying Constraints of Work Space. IEEE Transactions on Cybernetics, 2021, 51, 4873-4884.	9.5	66
56	A comparative study of neural network structures in identification of nonlinear systems. Mechatronics, 1999, 9, 287-300.	3.3	62
57	Neuro-fuzzy control of antilock braking system using sliding mode incremental learning algorithm. Neurocomputing, 2011, 74, 1883-1893.	5.9	61
58	Optimal Selection of Parameters for Nonuniform Embedding of Chaotic Time Series Using Ant Colony Optimization. IEEE Transactions on Cybernetics, 2013, 43, 790-802.	9.5	60
59	A Data-Driven Fuzzy Information Granulation Approach for Freight Volume Forecasting. IEEE Transactions on Industrial Electronics, 2017, 64, 1447-1456.	7.9	59
60	A novel general type-2 fuzzy controller for fractional-order multi-agent systems under unknown time-varying topology. Journal of the Franklin Institute, 2019, 356, 5151-5171.	3.4	57
61	Secure Data Transmission and Trustworthiness Judgement Approaches Against Cyber-Physical Attacks in an Integrated Data-Driven Framework. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2022, 52, 7799-7809.	9.3	56
62	Attitude Stabilization Control of Flexible Satellites With High Accuracy: An Estimator-Based Approach. IEEE/ASME Transactions on Mechatronics, 2017, 22, 349-358.	5.8	55
63	Direct Model Reference Takagi-Sugeno Fuzzy Control of SISO Nonlinear Systems. IEEE Transactions on Fuzzy Systems, 2011, 19, 914-924.	9.8	54
64	Sliding Mode Control of a Three Degrees of Freedom Anthropoid Robot by Driving the Controller Parameters to an Equivalent Regime. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2000, 122, 632-640.	1.6	53
65	Variable structure control of a class of uncertain systems. Automatica, 2004, 40, 59-64.	5.0	51
66	Fuzzy modeling based on generalized conjunction operations. IEEE Transactions on Fuzzy Systems, 2002, 10, 678-683.	9.8	50
67	A type-2 fuzzy wavelet neural network for system identification and control. Journal of the Franklin Institute, 2013, 350, 1658-1685.	3.4	50
68	Neural Network-Based Adaptive Fault-Tolerant Control for Markovian Jump Systems With Nonlinearity and Actuator Faults. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 3687-3698.	9.3	50
69	Fuzzy adaptive sliding mode control of a direct drive robot. Robotics and Autonomous Systems, 1996, 19, 215-227.	5.1	49
70	Data-Driven Control and Process Monitoring for Industrial Applications—Part II. IEEE Transactions on Industrial Electronics, 2015, 62, 583-586.	7.9	49
71	Robust H_∞ -Based Synchronization of the Fractional-Order Chaotic Systems by Using New Self-Evolving Nonsingleton Type-2 Fuzzy Neural Networks. IEEE Transactions on Fuzzy Systems, 2016, 24, 1544-1554.	9.8	49
72	Parametric classes of generalized conjunction and disjunction operations for fuzzy modeling. IEEE Transactions on Fuzzy Systems, 1999, 7, 586-596.	9.8	48

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73	Coordination Task Triggered Formation Control Algorithm for Multiple Marine Vessels. IEEE Transactions on Industrial Electronics, 2017, 64, 4984-4993.	7.9	48
74	Robust Identification of LPV Time-Delay System With Randomly Missing Measurements. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2018, 48, 2198-2208.	9.3	48
75	A Robust Data-Driven Fault Detection Approach for Rolling Mills With Unknown Roll Eccentricity. IEEE Transactions on Control Systems Technology, 2020, 28, 2641-2648.	5.2	48
76	Online learning in adaptive neurocontrol schemes with a sliding mode algorithm. IEEE Transactions on Systems, Man, and Cybernetics, 2001, 31, 445-450.	5.0	47
77	Feedback Error Learning Control of Magnetic Satellites Using Type-2 Fuzzy Neural Networks With Elliptic Membership Functions. IEEE Transactions on Cybernetics, 2015, 45, 858-868.	9.5	47
78	Fractional order sliding mode control of a pneumatic position servo system. Journal of the Franklin Institute, 2019, 356, 6160-6174.	3.4	47
79	A servo system control with time-varying and nonlinear load conditions using type-2 TSK fuzzy neural system. Applied Soft Computing Journal, 2011, 11, 5735-5744.	7.2	43
80	Nonlinear Robust Attitude Tracking Control of a Table-Mount Experimental Helicopter Using Output Feedback. IEEE Transactions on Industrial Electronics, 2015, 62, 5665-5676.	7.9	42
81	Event-Triggered Fuzzy Adaptive Leader-Following Tracking Control of Nonaffine Multiagent Systems With Finite-Time Output Constraint and Input Saturation. IEEE Transactions on Fuzzy Systems, 2022, 30, 933-944.	9.8	41
82	Robust predictive synchronization of uncertain fractional-order time-delayed chaotic systems. Soft Computing, 2019, 23, 6883-6898.	3.6	40
83	A novel deep neural network architecture for real-time water demand forecasting. Journal of Hydrology, 2021, 599, 126353.	5.4	40
84	Two-mode Indirect Adaptive Control Approach for the Synchronization of Uncertain Chaotic Systems by the Use of a Hierarchical Interval Type-2 Fuzzy Neural Network. IEEE Transactions on Fuzzy Systems, 2014, 22, 1301-1312.	9.8	39
85	Stable training of computationally intelligent systems by using variable structure systems technique. IEEE Transactions on Industrial Electronics, 2000, 47, 487-496.	7.9	38
86	Use of adaptive fuzzy systems in parameter tuning of sliding-mode controllers. IEEE/ASME Transactions on Mechatronics, 2001, 6, 474-482.	5.8	38
87	Adaptive Robust Finite-Time Nonlinear Control of a Typical Autonomous Underwater Vehicle With Saturated Inputs and Uncertainties. IEEE/ASME Transactions on Mechatronics, 2021, 26, 2517-2527.	5.8	37
88	Robust Model Predictive Control Under Saturations and Packet Dropouts With Application to Networked Flotation Processes. IEEE Transactions on Automation Science and Engineering, 2014, 11, 1056-1064.	5.2	36
89	Observer-based method for synchronization of uncertain fractional order chaotic systems by the use of a general type-2 fuzzy system. Applied Soft Computing Journal, 2016, 49, 544-560.	7.2	36
90	Neural network modeling and control of cement mills using a variable structure systems theory based on-line learning mechanism. Journal of Process Control, 2004, 14, 581-589.	3.3	35

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91	A novel type-2 fuzzy membership function: application to the prediction of noisy data. , 2010, , .		35
92	Software-Based Control Flow Checking Against Transient Faults in Industrial Environments. IEEE Transactions on Industrial Informatics, 2014, 10, 481-490.	11.3	35
93	A comparative study of soft-computing methodologies in identification of robotic manipulators. Robotics and Autonomous Systems, 2000, 30, 221-230.	5.1	33
94	A Line-Based-Clustering Approach for Ball Grid Array Component Inspection in Surface-Mount Technology. IEEE Transactions on Industrial Electronics, 2017, 64, 3030-3038.	7.9	33
95	Improving the Speed of Center of Sets Type Reduction in Interval Type-2 Fuzzy Systems by Eliminating the Need for Sorting. IEEE Transactions on Fuzzy Systems, 2017, 25, 1193-1206.	9.8	33
96	Guest editorial special section on computationally intelligent methodologies and sliding-mode control. IEEE Transactions on Industrial Electronics, 2001, 48, 2-3.	7.9	32
97	A novel analysis and design of a neural network assisted nonlinear controller for a bioreactor. International Journal of Robust and Nonlinear Control, 1999, 9, 799-815.	3.7	30
98	Sliding mode control theoryâ€based algorithm for online learning in typeâ€2 fuzzy neural networks: application to velocity control of an electro hydraulic servo system. International Journal of Adaptive Control and Signal Processing, 2012, 26, 645-659.	4.1	30
99	Variable structure systems theory applied to sub-time optimal position control with an invariant trajectory.. IEEJ Transactions on Power and Energy, 1984, 104, 610-614.	0.2	29
100	Adaptive Neural Network Control of Underwater Robotic Manipulators Tuned by a Genetic Algorithm. Journal of Intelligent and Robotic Systems: Theory and Applications, 2020, 97, 657-672.	3.4	29
101	Stabilizing and robustifying the learning mechanisms of artificial neural networks in control engineering applications. International Journal of Intelligent Systems, 2000, 15, 365-388.	5.7	27
102	Neural Network Trainer with Second Order Learning Algorithms. , 2007, , .		27
103	Spatiotemporal Behind-the-Meter Load and PV Power Forecasting via Deep Graph Dictionary Learning. IEEE Transactions on Neural Networks and Learning Systems, 2021, 32, 4713-4727.	11.3	27
104	Entropy-based operations on fuzzy sets. IEEE Transactions on Fuzzy Systems, 1998, 6, 33-40.	9.8	26
105	<i>H</i>_{âˆž}control of switched delayed systems with average dwell time. International Journal of Control, 2013, 86, 2146-2158.	1.9	26
106	Optimal tracking control based on reinforcement learning value iteration algorithm for time-delayed nonlinear systems with external disturbances and input constraints. Information Sciences, 2021, 554, 84-98.	6.9	26
107	An integrated data-driven scheme for the defense of typical cyberâ€physical attacks. Reliability Engineering and System Safety, 2022, 220, 108257.	8.9	25
108	When medical images meet generative adversarial network: recent development and research opportunities. Discover Artificial Intelligence, 2021, 1, 1.	3.1	24

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109	A new variable structure controller for affine nonlinear systems with non-matching uncertainties. International Journal of Control, 1995, 62, 917-939.	1.9	22
110	Trajectory tracking of a 2-DOF helicopter system using neuro-fuzzy system with parameterized conjunctors. , 2014, , .		22
111	Simulated and experimental study of antilock braking system using grey sliding mode control. , 2007, , .		21
112	An adaptive grey PID-type fuzzy controller design for a non-linear liquid level system. Transactions of the Institute of Measurement and Control, 2009, 31, 33-49.	1.7	21
113	Sliding mode incremental learning algorithm for interval type-2 Takagiâ€“Sugenoâ€“Kang fuzzy neural networks. Evolving Systems, 2012, 3, 179-188.	3.9	21
114	Control and synchronization of chaotic systems using a novel indirect model reference fuzzy controller. Soft Computing, 2012, 16, 1253-1265.	3.6	21
115	Industrial Cyberâ€“Physical Systems [Scanning the Issue]. Proceedings of the IEEE, 2016, 104, 899-903.	21.3	21
116	Sliding Mode Control Made Smarter: A Computational Intelligence Perspective. IEEE Systems, Man, and Cybernetics Magazine, 2017, 3, 31-34.	1.4	21
117	Uncertainty and Disturbance Estimator-Based Control of a Flapping-Wing Aerial Vehicle With Unknown Backlash-Like Hysteresis. IEEE Transactions on Industrial Electronics, 2020, 67, 4826-4835.	7.9	21
118	On the philosophical, cognitive and mathematical foundations of symbiotic autonomous systems. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200362.	3.4	21
119	Provident control of an electro-hydraulic servo with experimental results. Mechatronics, 1996, 6, 249-260.	3.3	20
120	On stabilization of gradient-based training strategies for computationally intelligent systems. IEEE Transactions on Fuzzy Systems, 2000, 8, 564-575.	9.8	20
121	Levenberg marquardt algorithm for the training of type-2 fuzzy neuro systems with a novel type-2 fuzzy membership function. , 2011, , .		20
122	Single-step ahead prediction based on the principle of concatenation using grey predictors. Expert Systems With Applications, 2011, 38, 9499-9505.	7.6	20
123	Comparative Results on Stabilization of the Quad-rotor Rotorcraft Using Bounded Feedback Controllers. Journal of Intelligent and Robotic Systems: Theory and Applications, 2012, 65, 389-408.	3.4	20
124	Control of a direct drive robot using fuzzy spiking neural networks with variable structure systems-based learning algorithm. Neurocomputing, 2015, 149, 690-699.	5.9	20
125	Robust adaptive control of nonâ€“linear timeâ€“delay systems with saturation constraints. IET Control Theory and Applications, 2015, 9, 103-113.	2.1	19
126	Direct Model Reference Adaptive Fuzzy Control of Networked SISO Nonlinear Systems. IEEE/ASME Transactions on Mechatronics, 2015, , 1-1.	5.8	19

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127	An Internet-assisted experimental environment suitable for the reinforcement of undergraduate teaching of advanced control techniques. IEEE Transactions on Education, 2001, 44, 24-28.	2.4	18
128	Design of an adaptive interval type-2 fuzzy logic controller for the position control of a servo system with an intelligent sensor. , 2010, , .		18
129	A Partial Least Squares Aided Intelligent Model Predictive Control Approach. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2018, 48, 2013-2021.	9.3	18
130	Identification and Control of Dynamic Plants Using Fuzzy Wavelet Neural Networks. , 2008, , .		17
131	Fuzzy Logic Based Approach to Design of Autonomous Landing System for Unmanned Aerial Vehicles. Journal of Intelligent and Robotic Systems: Theory and Applications, 2011, 61, 239-250.	3.4	17
132	A Locally Weighted Project Regression Approach-Aided Nonlinear Constrained Tracking Control. IEEE Transactions on Neural Networks and Learning Systems, 2018, 29, 5870-5879.	11.3	17
133	A novel fractional-order fuzzy control method based on immersion and invariance approach. Applied Soft Computing Journal, 2020, 88, 106043.	7.2	17
134	A 70-Year Industrial Electronics Society Evolution Through Industrial Revolutions: The Rise and Flourishing of Information and Communication Technologies. IEEE Industrial Electronics Magazine, 2021, 15, 115-126.	2.6	17
135	Gain adaptation in sliding mode control of robotic manipulators. International Journal of Systems Science, 2000, 31, 1099-1106.	5.5	16
136	A novel optimization procedure for training of fuzzy inference systems by combining variable structure systems technique and Levenbergâ€“Marquardt algorithm. Fuzzy Sets and Systems, 2001, 122, 153-165.	2.7	16
137	Method of computing gradient vector and Jacobean matrix in arbitrarily connected neural networks. , 2007, , .		16
138	Neuroâ€“adaptive slidingâ€“mode tracking control of robot manipulators. International Journal of Adaptive Control and Signal Processing, 2007, 21, 674-691.	4.1	16
139	Adaptive Backstepping Control of a Pneumatic System With Unknown Model Parameters and Control Direction. IEEE Access, 2019, 7, 64471-64482.	4.2	16
140	Grey Prediction Based Control of a Non-Linear Liquid Level System Using PID Type Fuzzy Controller. , 2006, , .		14
141	Chaos suppression in speed control for permanent-magnet-synchronous-motor drive system. Journal of the Franklin Institute, 2020, 357, 13283-13303.	3.4	14
142	Proportional integral derivative booster for neural networks-based time-series prediction: Case of water demand prediction. Engineering Applications of Artificial Intelligence, 2022, 108, 104570.	8.1	14
143	Potential field-based navigation task for autonomous flight control of unmanned aerial vehicles. International Journal of Automation and Control, 2011, 5, 1.	0.5	13
144	Control of an AUV with completely unknown dynamics and multi-asymmetric input constraints via off-policy reinforcement learning. Neural Computing and Applications, 2022, 34, 5255-5265.	5.6	13

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145	The Exhilarating Journey from Industrial Electronics to Industrial Informatics. IEEE Transactions on Industrial Informatics, 2005, 1, 73-73.	11.3	11
146	Sliding Mode Control and Observation for Complex Industrial Systemsâ€™Part I. IEEE Transactions on Industrial Electronics, 2017, 64, 6680-6683.	7.9	11
147	Genetic Algorithm for the Mutual Information-Based Feature Selection in Univariate Time Series Data. IEEE Access, 2020, 8, 9597-9609.	4.2	11
148	New Types of Generalized Operations. , 1998, , 128-156.		11
149	Intelligent control of a tractor-implement system using type-2 fuzzy neural networks. , 2012, , .		10
150	Observer-based indirect model reference fuzzy control system with application to control of chaotic systems. Journal of the Franklin Institute, 2013, 350, 419-436.	3.4	10
151	Variable-structure-systems based approach for online learning of spiking neural networks and its experimental evaluation. Journal of the Franklin Institute, 2014, 351, 3269-3285.	3.4	10
152	A Novel Bias-Eliminated Subspace Identification Approach for Closed-Loop Systems. IEEE Transactions on Industrial Electronics, 2021, 68, 5197-5205.	7.9	10
153	Time-Domain Frequency Estimation With Application to Fault Diagnosis of the Unmanned Aerial Vehiclesâ€™ Blade Damage. IEEE Transactions on Industrial Electronics, 2022, 69, 5257-5266.	7.9	10
154	The golden age of Artificial Intelligence. Discover Artificial Intelligence, 2021, 1, 1.	3.1	10
155	Fractional Order Integral Sliding Mode Controller Based on Neural Network: Theory and Electro-Hydraulic Benchmark Test. IEEE/ASME Transactions on Mechatronics, 2022, 27, 1457-1466.	5.8	10
156	A recursive modified partial least square aided data-driven predictive control with application to continuous stirred tank heater. Journal of Process Control, 2020, 89, 108-118.	3.3	10
157	Optimal sliding mode type-2 TSK fuzzy control of a 2-DOF helicopter. , 2015, , .		9
158	PCA and KPCA integrated Support Vector Machine for multi-fault classification. , 2016, , .		9
159	Real-Time Implementation of Plug-and-Play Process Monitoring and Control on an Experimental Three-Tank System. IEEE Transactions on Industrial Informatics, 2021, 17, 6448-6456.	11.3	9
160	Applications of VSC in motion control systems. , 1994, , 365-387.		8
161	A comparison of fuzzy methods for modeling. , 2008, , .		8
162	A novel training method based on variable structure systems approach for interval type-2 fuzzy neural networks. , 2011, , .		8

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163	Spiking neural networks for identification and control of dynamic plants. , 2012, , .		8
164	Guest Editorial A Look Into the Past and a Perspective on the Future. IEEE/ASME Transactions on Mechatronics, 2017, 22, 1-2.	5.8	8
165	A Novel Control-Performance-Oriented Data-Driven Fault Classification Approach. IEEE Systems Journal, 2020, 14, 1830-1839.	4.6	8
166	A Novel Subspace-Aided Fault Detection Approach for the Drive Systems of Rolling Mills. IEEE Transactions on Control Systems Technology, 2022, 30, 1742-1749.	5.2	8
167	Adaptive control of electric drives using sliding-mode learning neural networks. , 2005, , .		7
168	On-line Deflection Estimation of X-axis Beam on Positioning Machine. IEEE/ASME Transactions on Mechatronics, 2015, , 1-1.	5.8	7
169	A Robust Identification Technique for Time-Varying ARMA Processes Based on Variable Structure Systems Theory. Mathematical and Computer Modelling of Dynamical Systems, 2002, 8, 185-198.	2.2	6
170	Guest Editorial Advances in Theories and Industrial Applications of Networked Control Systems. IEEE Transactions on Industrial Informatics, 2013, 9, 303-305.	11.3	6
171	Sliding Mode Control and Observation for Complex Industrial Systemsâ€™Part II. IEEE Transactions on Industrial Electronics, 2018, 65, 830-833.	7.9	6
172	A Data-Driven Process Monitoring Approach with Disturbance Decoupling. , 2018, , .		6
173	Adaptive SMO-Based Fault Estimation for Markov Jump Systems With Simultaneous Additive and Multiplicative Actuator Faults. IEEE Systems Journal, 2021, 15, 607-616.	4.6	6
174	Sliding Mode Algorithm for Online Learning in Analog Multilayer Feedforward Neural Networks. Lecture Notes in Computer Science, 2003, , 1064-1072.	1.3	6
175	Variable Structure Systems Theory in Computational Intelligence. , 2002, , 365-390.		6
176	Trajectory control of unmanned aerial vehicle using neural nets with a stable learning algorithm. , 2009, , .		5
177	Neuro-Fuzzy Control of Antilock Braking System Using Variable-Structure-Systems-Based Learning Algorithm. , 2009, , .		5
178	Design of a fuzzy variable structure controller for controlling satellite attitude suffering from sensor data delay. , 2011, , .		5
179	Spiking Neural Networks for the control of a servo system. , 2013, , .		5
180	Stabilization of uncertain discrete time-delayed systems via delta operator approach. , 2013, , .		5

#	ARTICLE	IF	CITATIONS
181	Fusion of Computational Intelligence Techniques and Their Practical Applications. Computational Intelligence and Neuroscience, 2015, 2015, 1-3.	1.7	5
182	Multi dimensional second order defuzzification algorithm (M-SODA). , 0, , .		4
183	Neuro-adaptive modeling and control of a cement mill using a sliding mode learning mechanism. , 2004, , .		4
184	A neuro-fuzzy adaptive sliding mode controller: Application to second-order chaotic system. , 2008, , .		4
185	Identification and control of time-varying plants using type-2 fuzzy neural system. , 2009, , .		4
186	Vibration suppression of vehicle active suspension systems in finite frequency domain. , 2009, , .		4
187	An adaptive neuro-fuzzy architecture for intelligent control of a servo system and its experimental evaluation. , 2010, , .		4
188	An Investigation into Soft Error Detection Efficiency at Operating System Level. Scientific World Journal, The, 2014, 2014, 1-8.	2.1	4
189	Improved Karnik-Mendel algorithm: Eliminating the need for sorting. , 2014, , .		4
190	Recurrent interval type-2 neuro-fuzzy control of an electro hydraulic servo system. , 2016, , .		4
191	IEEE Access Special Section Editorial: Data-Driven Monitoring, Fault Diagnosis and Control of Cyber-Physical Systems. IEEE Access, 2020, 8, 54110-54114.	4.2	4
192	A Frugal Fuzzy Logic Based Approach for Autonomous Flight Control of Unmanned Aerial Vehicles. Lecture Notes in Computer Science, 2005, , 1155-1163.	1.3	4
193	A Grey Sliding Mode Controller Design for Antilock Braking System. , 2007, , 267.		3
194	A novel training method based on variable structure systems theory for fuzzy neural networks. , 2011, , .		3
195	Slip control of a quarter car model based on type-1 fuzzy neural system with parameterized conjunctions. , 2012, , .		3
196	Statistical results to show the superiority of type two fuzzy logic systems over type one counterparts under noisy conditions. , 2012, , .		3
197	An Extended Sliding Mode Learning Algorithm for Type-2 Fuzzy Neural Networks. Lecture Notes in Computer Science, 2011, , 52-63.	1.3	3
198	A robust on-line learning algorithm for intelligent control systems. International Journal of Adaptive Control and Signal Processing, 2003, 17, 489-500.	4.1	2

#	ARTICLE	IF	CITATIONS
199	Variable structure systems approach for on-line learning in multilayer artificial neural networks. , 0, , .		2
200	ROBUST NEURAL IDENTIFICATION OF ROBOTIC MANIPULATORS USING DISCRETE TIME ADAPTIVE SLIDING MODE LEARNING. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 336-341.	0.4	2
201	Adaptive Neuro-Fuzzy Inference System Based Autonomous Flight Control of Unmanned Air Vehicles. Lecture Notes in Computer Science, 2007, , 14-21.	1.3	2
202	Sliding Mode Algorithm for On-line Learning in Fuzzy Rule-based Neural Networks. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 12793-12798.	0.4	2
203	Looking Back at 60 Years of IES [Historical]. IEEE Industrial Electronics Magazine, 2011, 5, 64-68.	2.6	2
204	Stabilizing multiple sliding surface control of quad-rotor rotorcraft. , 2013, , .		2
205	Fuzzy Interval TSK Type-2 Modeling with Parameterized Conjunctors. Asian Journal of Control, 2015, 17, 963-976.	3.0	2
206	An Identification Approach for the Data-Driven SIR in the PnP Monitoring and Control Architecture. , 2018, , .		2
207	A Data-Driven Fault Detection Approach for Periodic Rectangular Wave Disturbance. , 2018, , .		2
208	Fuzzy Logic Based Approach to Design of Autonomous Landing System for Unmanned Aerial Vehicles. , 2010, , 239-250.		2
209	Recent advances in mechatronics. Robotics and Autonomous Systems, 1996, 19, 113-116.	5.1	1
210	Neural Network Closed-Loop Control Using Sliding Mode Feedback-Error-Learning. Lecture Notes in Computer Science, 2004, , 269-274.	1.3	1
211	Adaptive Control of Antilock Braking System Using Grey Multilayer Feedforward Neural Networks. , 2008, , .		1
212	Neuro-adaptive Approach for Controlling a Quad-rotor Helicopter Using Sliding Mode Learning Algorithm. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 94-99.	0.4	1
213	Identification of interval fuzzy models using recursive least square method. , 2010, , .		1
214	Experimental evaluation of a type-2 fuzzy control algorithm on an Anti-Lock Braking System. , 2011, , .		1
215	Guest Editorial Focused Section on Aerospace Mechatronics. IEEE/ASME Transactions on Mechatronics, 2013, 18, 1233-1236.	5.8	1
216	Nonlinear function approximation based on fuzzy algorithms with parameterized conjunctors. , 2013, , .		1

#	ARTICLE	IF	CITATIONS
217	Sliding mode online learning algorithm for type-2 fuzzy CMAC networks. , 2013, , .		1
218	Sliding mode type-2 fuzzy control of robotic arm using ellipsoidal membership functions. , 2013, , .		1
219	Control of Antilock Braking System using Spiking Neural Networks. , 2013, , .		1
220	AN EFFECTIVE CONTROL FLOW CHECKING METHOD FOR MULTITASK PROCESSING IN HARSH ENVIRONMENTS. Journal of Circuits, Systems and Computers, 2013, 22, 1350067.	1.5	1
221	A novel unmanned aerial surveillance scheme. , 2014, , .		1
222	A data-based KPI prediction approach for wastewater treatment processes. , 2015, , .		1
223	Adaptive configuration technique for decentralized plug-and-play process monitoring system. , 2017, , .		1
224	Plug-and-Play Process Control System Design for Three-tank System with Online Tracking Performance Optimization. , 2019, , .		1
225	Data-driven adaptive residual generator design using sliding window. , 2019, , .		1
226	Guest Editorial Special Issue on Fault Diagnosis and Adaptive Fault-Tolerant Control for Automatic Control Systems. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2020, 50, 3330-3332.	9.3	1
227	Towards symbiotic autonomous systems. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200359.	3.4	1
228	Guest Editorial: Data-Driven Management of Complex Systems Through Plant-Wide Performance Supervision. IEEE Transactions on Industrial Informatics, 2021, 17, 6324-6328.	11.3	1
229	Discrete-Time Quasi-Sliding Mode Feedback-Error-Learning Neurocontrol of a Class of Uncertain Systems. Lecture Notes in Computer Science, 2005, , 1124-1133.	1.3	1
230	Diffusion of New Technologies Through Appropriate Education and Training. NATO ASI Series Partnership Sub-series 4, Science and Technology Policy, 1996, , 99-107.	0.1	1
231	An on-line and robust identification scheme for time-varying ARMA processes. , 0, , .		0
232	Applications of computational intelligence methodologies in sliding mode control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1999, 32, 8613-8618.	0.4	0
233	A Stabilizing and Robustifying Training Scheme for Artificial Neural Networks Used in Control of Complex Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2000, 33, 687-692.	0.4	0
234	Derivation of a parameter stabilizing training criterion for adaptive neuro-fuzzy inference systems in motion control. International Journal of Systems Science, 2001, 32, 513-521.	5.5	0

#	ARTICLE	IF	CITATIONS
235	Scalable Super-Resolution Imaging. , 2006, , .		0
236	A Type-2 Fuzzy Planner with Semi Qualitative World Model for Robocup Domain. , 2007, , .		0
237	The Exhilarating Journey from Industrial Electronics to Industrial Informatics. , 2007, , .		0
238	Guest Editorial Plagiarism. IEEE Transactions on Education, 2008, 51, 149-151.	2.4	0
239	Accelerated Evolutionary Algorithm with Second-order Enhancement. , 2008, , .		0
240	EditorialIntroduction for the Special Issue on Sensors for Microfluidic Analysis Systems. IEEE Sensors Journal, 2008, 8, 427-429.	4.7	0
241	FOREWORD: A Message from the General Chair. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, i.	0.4	0
242	FUZZY LOGIC BASED AUTONOMOUS LANDING SYSTEM FOR UNMANNED AERIAL VEHICLES. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 63-70.	0.4	0
243	Error modification of grey models using principle of concatenation. , 2010, , .		0
244	A servo system control with time-varying load using type-2 fuzzy neural system. , 2010, , .		0
245	Guest Editorial Special Section on Soft Computing in Industrial Informatics. IEEE Transactions on Industrial Informatics, 2012, 8, 731-732.	11.3	0
246	On pinning impulsive control of complex dynamical networks. , 2012, , .		0
247	H control of stochastic switched nonlinear systems with average dwell time. , 2015, , .		0
248	Observer-based control for robotic manipulations with uncertain kinematics and dynamics. , 2016, , .		0
249	Wheel slip regulation using fuzzy spiking neural networks. , 2016, , .		0
250	The entanglement of control and IT in 21 st century: Intelligent systems. , 2017, , .		0
251	A Study of PnP Process Monitoring Technique on Three-Tank System. , 2019, , .		0
252	An Online Recursive Computational Approach for the Closed-Loop Stability Margin of the PnP Process Monitoring and Control Structure. , 2019, , .		0

#	ARTICLE	IF	CITATIONS
253	Rule-Based Sliding-Mode Fuzzy Logic Control. Studies in Systems, Decision and Control, 2021, , 89-102.	1.0	0
254	Guest Editorial Focused Section on Mechatronics in Unmanned Systems. IEEE/ASME Transactions on Mechatronics, 2021, 26, 595-599.	5.8	0
255	Intelligent Optimization of Sliding-Mode Fuzzy Logic Controllers. Studies in Systems, Decision and Control, 2021, , 213-234.	1.0	0
256	Fuzzy Logic Systems. Studies in Systems, Decision and Control, 2021, , 57-87.	1.0	0
257	An Intelligent Fault Classification Method Based on Data-Driven Stability Margin. , 2020, , .		0