

# Kuang-Yow Lian

## List of Publications by Year in descending order

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111  
papers

1,839  
citations

279487

23  
h-index

301761

39  
g-index

113  
all docs

113  
docs citations

113  
times ranked

1298  
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthesis of fuzzy model-based designs to synchronization and secure communications for chaotic systems. IEEE Transactions on Systems, Man, and Cybernetics, 2001, 31, 66-83.	5.5	136
2	LMI-based fuzzy chaotic synchronization and communications. IEEE Transactions on Fuzzy Systems, 2001, 9, 539-553.	6.5	134
3	LMI-based Integral fuzzy control of DC-DC converters. IEEE Transactions on Fuzzy Systems, 2006, 14, 71-80.	6.5	114
4	Output Tracking Control for Fuzzy Systems Via Output Feedback Design. IEEE Transactions on Fuzzy Systems, 2006, 14, 628-639.	6.5	112
5	Adaptive synchronization design for chaotic systems via a scalar driving signal. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2002, 49, 17-27.	0.1	101
6	Controllability of spacecraft systems in a central gravitational field. IEEE Transactions on Automatic Control, 1994, 39, 2426-2441.	3.6	63
7	LMI-Based Sensorless Control of Permanent-Magnet Synchronous Motors. IEEE Transactions on Industrial Electronics, 2007, 54, 2769-2778.	5.2	60
8	Intelligent multi-sensor control system based on innovative technology integration via ZigBee and Wi-Fi networks. Journal of Network and Computer Applications, 2013, 36, 756-767.	5.8	56
9	Semi-decentralized adaptive fuzzy control for cooperative multirobot systems with H <sub>∞</sub> /sup $\hat{z}$ / motion/internal force tracking performance. IEEE Transactions on Systems, Man, and Cybernetics, 2002, 32, 269-280.	5.5	49
10	Secure communications of chaotic systems with robust performance via fuzzy observer-based design. IEEE Transactions on Fuzzy Systems, 2001, 9, 212-220.	6.5	48
11	Sensorless linear induction motor speed tracking using fuzzy observers. IET Electric Power Applications, 2011, 5, 325.	1.1	44
12	Ultrasound-assisted synthesis of 3D flower-like zinc oxide decorated fMWCNTs for sensitive detection of toxic environmental pollutant 4-nitrophenol. Ultrasonics Sonochemistry, 2020, 60, 104798.	3.8	41
13	Sliding-mode motion/force control of constrained robots. IEEE Transactions on Automatic Control, 1998, 43, 1101-1103.	3.6	38
14	Synthesis of a functionalized multi-walled carbon nanotube decorated ruskin michelle-like ZnO nanocomposite and its application in the development of a highly sensitive hydroquinone sensor. Inorganic Chemistry Frontiers, 2018, 5, 1950-1961.	3.0	33
15	Synchronization with message embedded for generalized Lorenz chaotic circuits and its error analysis. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2000, 47, 1418-1424.	0.1	32
16	CHAOTIC CONTROL USING FUZZY MODEL-BASED METHODS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2002, 12, 1827-1841.	0.7	32
17	Fuzzy Virtual Reference Model Sensorless Tracking Control for Linear Induction Motors. IEEE Transactions on Cybernetics, 2013, 43, 970-981.	6.2	32
18	DISCRETE-TIME CHAOTIC SYSTEMS: APPLICATIONS IN SECURE COMMUNICATIONS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2000, 10, 2193-2206.	0.7	31

#	ARTICLE	IF	CITATIONS
19	Fuzzy gain scheduling for parallel parking a car-like robot. IEEE Transactions on Control Systems Technology, 2005, 13, 1084-1092.	3.2	28
20	Ultrasensitive detection of cytotoxic food preservative tert-butylhydroquinone using 3D cupric oxide nanoflowers embedded functionalized carbon nanotubes. Journal of Hazardous Materials, 2021, 406, 124792.	6.5	28
21	Robust adaptive motion/force tracking control design for uncertain constrained robot manipulators. Automatica, 2004, 40, 2111-2119.	3.0	26
22	Hybrid Fuzzy Model-Based Control of Nonholonomic Systems: A Unified Viewpoint. IEEE Transactions on Fuzzy Systems, 2008, 16, 85-96.	6.5	25
23	Ecofriendly synthesized reduced graphene oxide embellished marsh marigold-like zinc oxide nanocomposite based on ultrasonication technique for the sensitive detection of environmental pollutant hydroquinone. Ultrasonics Sonochemistry, 2019, 58, 104650.	3.8	25
24	Steady motions of gyrostat satellites and their stability. IEEE Transactions on Automatic Control, 1995, 40, 1732-1743.	3.6	24
25	Stability Conditions for LMI-Based Fuzzy Control From Viewpoint of Membership Functions. IEEE Transactions on Fuzzy Systems, 2006, 14, 874-884.	6.5	24
26	Performance Enhancement for Tâ€™S Fuzzy Control Using Neural Networks. IEEE Transactions on Fuzzy Systems, 2006, 14, 619-627.	6.5	23
27	Robust Adaptive Control of Linear Induction Motors With Unknown End-Effect and Secondary Resistance. IEEE Transactions on Energy Conversion, 2008, 23, 412-422.	3.7	23
28	Air quality warning system based on a localized PM2.5 soft sensor using a novel approach of Bayesian regularized neural network via forward feature selection. Ecotoxicology and Environmental Safety, 2019, 182, 109386.	2.9	23
29	Ultrasensitive detection of food colorant sunset yellow using nickel nanoparticles promoted lettuce-like spinel Co3O4 anchored GO nanosheets. Food and Chemical Toxicology, 2022, 159, 112725.	1.8	22
30	Mobile Monitoring and Embedded Control System for Factory Environment. Sensors, 2013, 13, 17379-17413.	2.1	21
31	Wearable armband for real time hand gesture recognition. , 2017, , .		20
32	Bi-functional renewable biopolymer wrapped CNFs/Ag doped spinel cobalt oxide as a sensitive platform for highly toxic nitroaromatic compound detection and degradation. Chemosphere, 2022, 291, 132998.	4.2	20
33	A sensitive and economical electrochemical platform for detection of food additive tert-butylhydroquinone based on porous Co3O4 nanorods embellished chemically oxidized carbon black. Food Control, 2022, 136, 108844.	2.8	19
34	Adaptive force control of single-link mechanism with joint flexibility. IEEE Transactions on Automation Science and Engineering, 1991, 7, 540-545.	2.4	18
35	Nonlinear autopilot and guidance for a highly maneuverable missile. , 0, , .		17
36	Robust output tracking for nonlinear systems with weakly non-minimum phase. International Journal of Control, 1993, 58, 301-316.	1.2	16

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37	Globally valid adaptive controllers of mechanical systems. IEEE Transactions on Automatic Control, 1997, 42, 1149-1154.	3.6	16
38	Sensor-less adaptive fuel concentration control for direct methanol fuel cells under varying load. Journal of Power Sources, 2013, 231, 239-245.	4.0	16
39	Induction Motor Control With Friction Compensation: An Approach of Virtual-Desired-Variable Synthesis. IEEE Transactions on Power Electronics, 2005, 20, 1066-1074.	5.4	15
40	Multi-constrained Fuzzy Control for Perturbed Tâ€™S Fuzzy Singular Systems by Proportional-Plus-Derivative State Feedback Method. International Journal of Fuzzy Systems, 2021, 23, 1972-1985.	2.3	15
41	Parallel parking a car-like robot using fuzzy gain scheduling. , 0, , .		14
42	Global Attitude Representation and its Lie Bracket. , 1993, , .		13
43	LMI-based fuzzy chaotic synchronization and communication. , 0, , .		13
44	Smart home safety handwriting pattern recognition with innovative technology. Computers and Electrical Engineering, 2014, 40, 1123-1142.	3.0	13
45	Surface functionalization of CNTs with amine group and decoration of begonia-like ZnO for detection of antipyretic drug acetaminophen. Applied Surface Science, 2021, 559, 149981.	3.1	13
46	Adaptive control of holonomic constrained systems: a feedforward fuzzy approximation-based approach. IEEE Transactions on Control Systems Technology, 2006, 14, 456-466.	3.2	9
47	FUZZY MODEL-BASED APPROACH TO CHAOTIC ENCRYPTION USING SYNCHRONIZATION. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2003, 13, 215-225.	0.7	8
48	Realization of maximum power tracking approach for photovoltaic array systems based on T -S fuzzy method. , 2008, , .		8
49	Adaptive motion/force tracking control of holonomic constrained mechanical systems: a unified viewpoint. International Journal of Adaptive Control and Signal Processing, 2007, 21, 415-433.	2.3	7
50	LMI-Based Adaptive Tracking Control for Parametric Strict-Feedback Systems. IEEE Transactions on Fuzzy Systems, 2008, 16, 1245-1258.	6.5	7
51	Fish-eye cameras calibration for vehicle around view monitoring system. , 2014, , .		6
52	Employing Cross-Platform Smart Home Control System with IOT Technology Based. , 2016, , .		6
53	Actual measurement on regenerative elevator drive and energy saving benefits. , 2017, , .		6
54	A novel soft sensor based warning system for hazardous ground-level ozone using advanced damped least squares neural network. Ecotoxicology and Environmental Safety, 2020, 205, 111168.	2.9	6

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55	SYNCHRONIZATION AND SECURE COMMUNICATION FOR CHAOTIC SYSTEMS: THE MODULATED FUZZY SYSTEM DESIGN. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2001, 11, 1397-1410.	0.7	5
56	ROBUST DEAD-BEAT SYNCHRONIZATION AND COMMUNICATION FOR DISCRETE-TIME CHAOTIC SYSTEMS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2002, 12, 835-846.	0.7	5
57	Adaptive speed control for induction motors based on a semi-current-fed model. International Journal of Control, 2008, 81, 307-316.	1.2	5
58	A fuzzy decision maker for portfolio problems. , 2010, , .		5
59	Home safety handwriting pattern recognition system. , 2012, , .		5
60	Adaptive Robust Autopilot Design for Bank-to-Turn Aircraft. , 1993, , .		5
61	SMOOTH SLIDING MODE CONTROL FOR CONSTRAINED MANIPULATOR WITH JOINT FLEXIBILITY. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 91-96.	0.4	4
62	Sensorless Control for Induction Motors via Fuzzy Observer Design. , 2006, , .		4
63	Fuzzy Model and Control for Hybrid Systems Using Averaging Techniques. , 2006, , .		4
64	Sensorless linear induction motor control using fuzzy observers for speed tracking. , 2010, , .		4
65	Simplified robust fuzzy output regulator design for discrete-time nonlinear systems. Journal of Intelligent and Fuzzy Systems, 2016, 31, 1499-1511.	0.8	4
66	LMI-based Sensorless Speed Control of Permanent Magnet Synchronous Motors. , 2006, , .		3
67	A stabilization criterion for matrices. Linear Algebra and Its Applications, 2007, 422, 22-28.	0.4	3
68	Partitioning Technique for Relaxed Stability Criteria of Discrete-Time Systems with Interval Time-Varying Delay. Discrete Dynamics in Nature and Society, 2014, 2014, 1-6.	0.5	3
69	A Real-Time Wearable Assist System for Upper Extremity Throwing Action Based on Accelerometers. Sensors, 2020, 20, 1344.	2.1	3
70	Current Sensorless Regulation for Converters via Integral Fuzzy Control. IEICE Transactions on Electronics, 2007, E90-C, 507-514.	0.3	3
71	Fuzzy Model Based Chaotic Cryptosystems. , 2006, , 507-525.		3
72	Robust output feedback control for fuzzy descriptor systems. , 0, , .		2

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73	Mobile Device Monitoring System in the Plant by an Innovative Approach. Applied Mechanics and Materials, 2013, 418, 104-107.	0.2	2
74	A New Searching Method of Splitting Threshold Values for Continuous Attribute Decision Tree Problems. , 2015, , .		2
75	Robust Double-Integral T- $\epsilon$ Fuzzy Output Regulation for Nonlinear Systems. Asian Journal of Control, 2018, 20, 1182-1193.	1.9	2
76	Fuzzy Chaotic Synchronization and Communication - Signal Masking and Encryption. Studies in Fuzziness and Soft Computing, 2004, , 269-291.	0.6	2
77	Controllability of spacecraft systems in a central gravitational field. , 0, , .		1
78	A skew-symmetric property of rigid-body systems. Systems and Control Letters, 1998, 33, 187-197.	1.3	1
79	ADAPTIVE SPEED CONTROL WITH FRICTION COMPENSATION FOR SEMI-CURRENT-FED INDUCTION MOTORS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 205-210.	0.4	1
80	Cellular Neural Field and Its Convergence Analysis. IEEE Transactions on Neural Networks, 2006, 17, 1639-1641.	4.8	1
81	LMI-based fuzzy stabilization for multiple networked systems. , 2007, , .		1
82	LMI-based adaptive tracking control for a class of nonlinear stochastic systems. , 2008, , .		1
83	Linear Induction Motor Sensorless Speed Control Based on T-S Fuzzy Design. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 5456-5461.	0.4	1
84	Real-Time Recognition of Hand-Drawn Patterns Using an Innovative Web-Based Approach. , 2016, , .		1
85	A fast searching algorithm for real-time sound source localization. , 2017, , .		1
86	Leader-Follower Mobile Robots Control Based on Light Source Detection. IEEE Sensors Journal, 2019, 19, 11142-11150.	2.4	1
87	Unique Methods for Determining the Attenuation and Delay in Blind Source Separation Based on the Degenerate Unmixing Estimation Technique. IEEE Access, 2021, 9, 129460-129470.	2.6	1
88	Hamiltonian dynamics of a rigid body with momentum wheels in a central gravitational field. , 1993, , .		0
89	Adaptive tracking control for both constrained and coordinated manipulator systems. , 0, , .		0
90	Robust chaotic fuzzy output feedback tracking control. , 0, , .		0

#	ARTICLE	IF	CITATIONS
91	Adaptive speed control for linear induction motors considering end effect. , 2003, , .		0
92	LOW EFFORT CONTROL FOR CHAOTIC SYSTEMS VIA A FUZZY MODEL-BASED APPROACH. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 251-256.	0.4	0
93	TCP Congestion Control Using Fuzzy Regulation Approach. , 2006, , .		0
94	Fuzzy Observer-Based Output Tracking Control of Nonlinear Systems via Model Predictive Control Approach. Control Applications (CCA), Proceedings of the IEEE International Conference on, 2007, , .	0.0	0
95	Stabilization at almost arbitrary points for chaotic systems. Chaos, Solitons and Fractals, 2008, 36, 452-459.	2.5	0
96	Realization of fuzzy congestion control on linux platform. , 2008, , .		0
97	CHAOTIC CONTROL AND CHAOTIFICATION USING FUZZY APPROACH. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2008, 18, 263-274.	0.7	0
98	Simple Realization of Integral Fuzzy Control for Isolated AHPFC Converters. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 6015-6020.	0.4	0
99	Synchronization design of complex coupled systems using fuzzy approach. , 2009, , .		0
100	Output regulation using integral fuzzy predictive control with piecewise Lyapunov functions. , 2011, , .		0
101	Method of 3-step switching for tri-ped robot using piezo actuator. , 2012, , .		0
102	Indirect Adaptive Fuzzy Controller for LEGO Mindstorms NXT Two-Wheeled Robot. Applied Mechanics and Materials, 2013, 278-280, 561-567.	0.2	0
103	Intelligent Remote Medical Care System by Use of a Multiple of Network Protocol Integration. Applied Mechanics and Materials, 2013, 404, 707-712.	0.2	0
104	Employing Remote Mobile Scheme to Control Work Area via an Integrated Wireless Network. Applied Mechanics and Materials, 2013, 423-426, 2419-2422.	0.2	0
105	Gesture Recognition Using Improved Hierarchical Hidden Markov Algorithm. , 2013, , .		0
106	Image recognition system with predicting flying object path using 3D sensors. , 2014, , .		0
107	Wheeled robot control for catching up flying objects using RGB-D sensors. , 2015, , .		0
108	Control Performance of Discrete-Time Fuzzy Systems Improved by Neural Networks. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2006, E89-A, 1446-1453.	0.2	0

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109	High-efficiency Handwriting Recognition Online Shopping Systemby Mobile Devices. , 0, , .		0
110	Output Tracking Control of Nonlinear Systems with Weakly Non-minimum Phase. , 1992, , .		0
111	Fuzzy Model Based Chaotic Cryptosystems. , 0, , 507-525.		0