

Hua O Wang

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/11007504/publications.pdf>

Version: 2024-02-01

122
papers

5,121
citations

236833

25
h-index

197736

49
g-index

125
all docs

125
docs citations

125
times ranked

2178
citing authors

#	ARTICLE	IF	CITATIONS
1	A Sum-of-Squares Approach to Modeling and Control of Nonlinear Dynamical Systems With Polynomial Fuzzy Systems. IEEE Transactions on Fuzzy Systems, 2009, 17, 911-922.	6.5	399
2	BIFURCATION CONTROL: THEORIES, METHODS, AND APPLICATIONS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2000, 10, 511-548.	0.7	318
3	A Descriptor System Approach to Fuzzy Control System Design via Fuzzy Lyapunov Functions. IEEE Transactions on Fuzzy Systems, 2007, 15, 333-341.	6.5	303
4	Bifurcation control of a chaotic system. Automatica, 1995, 31, 1213-1226.	3.0	179
5	Guaranteed Cost Control of Polynomial Fuzzy Systems via a Sum of Squares Approach. IEEE Transactions on Systems, Man, and Cybernetics, 2009, 39, 561-567.	5.5	153
6	Synchronization of complex dynamical networks under recoverable attacks. Automatica, 2010, 46, 197-203.	3.0	131
7	Switching fuzzy controller design based on switching Lyapunov function for a class of nonlinear systems. IEEE Transactions on Systems, Man, and Cybernetics, 2006, 36, 13-23.	5.5	107
8	Polynomial Fuzzy Observer Designs: A Sum-of-Squares Approach. IEEE Transactions on Systems, Man, and Cybernetics, 2012, 42, 1330-1342.	5.5	93
9	Passive stability and synchronization of complex spatio-temporal switching networks with time delays. Automatica, 2009, 45, 1721-1728.	3.0	91
10	Robust Stabilization of Complex Switched Networks With Parametric Uncertainties and Delays Via Impulsive Control. IEEE Transactions on Circuits and Systems I: Regular Papers, 2009, 56, 2100-2108.	3.5	88
11	Impulsive synchronization for Takagi-Sugeno fuzzy model and its application to continuous chaotic system. Physics Letters, Section A: General, Atomic and Solid State Physics, 2005, 339, 325-332.	0.9	72
12	A New Sum-of-Squares Design Framework for Robust Control of Polynomial Fuzzy Systems With Uncertainties. IEEE Transactions on Fuzzy Systems, 2016, 24, 94-110.	6.5	69
13	A Sum of Squares Approach to Stability Analysis of Polynomial Fuzzy Systems. Proceedings of the American Control Conference, 2007, , .	0.0	68
14	Fuzzy modeling via sector nonlinearity concept. Integrated Computer-Aided Engineering, 2003, 10, 333-341.	2.5	67
15	LMI-based fuzzy stability and synchronization of Chen's system. Physics Letters, Section A: General, Atomic and Solid State Physics, 2003, 320, 154-159.	0.9	60
16	Robust synchronization of impulsively-coupled complex switched networks with parametric uncertainties and time-varying delays. Nonlinear Analysis: Real World Applications, 2010, 11, 3008-3020.	0.9	60
17	Stabilization of Polynomial Fuzzy Systems via a Sum of Squares Approach. , 2007, , .		54
18	Stability Analysis and Region-of-Attraction Estimation Using Piecewise Polynomial Lyapunov Functions: Polynomial Fuzzy Model Approach. IEEE Transactions on Fuzzy Systems, 2015, 23, 1314-1322.	6.5	52

#	ARTICLE	IF	CITATIONS
19	A polynomial-fuzzy-model-based synchronization methodology for the multi-scroll Chen chaotic secure communication system. <i>Engineering Applications of Artificial Intelligence</i> , 2020, 87, 103251.	4.3	46
20	Global synchronization of complex dynamical networks with network failures. <i>International Journal of Robust and Nonlinear Control</i> , 2010, 20, 1667-1677.	2.1	44
21	ON IMPULSIVE CONTROL AND ITS APPLICATION TO CHEN'S CHAOTIC SYSTEM. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2002, 12, 1191-1197.	0.7	41
22	Hopf bifurcation control in the XCP for the Internet congestion control system. <i>Nonlinear Analysis: Real World Applications</i> , 2012, 13, 1466-1479.	0.9	39
23	An SOS-Based Control Lyapunov Function Design for Polynomial Fuzzy Control of Nonlinear Systems. <i>IEEE Transactions on Fuzzy Systems</i> , 2017, 25, 775-787.	6.5	37
24	Synchronization of Complex Dynamical Networks with Switching Topology via Adaptive Control. , 2006, , .		33
25	Discrete polynomial fuzzy systems control. <i>IET Control Theory and Applications</i> , 2014, 8, 288-296.	1.2	33
26	Containment control for coupled harmonic oscillators with multiple leaders under directed topology. <i>International Journal of Control</i> , 2015, 88, 248-255.	1.2	32
27	Wireless Vision-Based Stabilization of Indoor Microhelicopter. <i>IEEE/ASME Transactions on Mechatronics</i> , 2012, 17, 519-524.	3.7	26
28	Controlling bifurcations and chaos in TCPâ€“UDPâ€“RED. <i>Nonlinear Analysis: Real World Applications</i> , 2010, 11, 1491-1501.	0.9	24
29	A nonmonotonically decreasing relaxation approach of Lyapunov functions to guaranteed cost control for discrete fuzzy systems. <i>IET Control Theory and Applications</i> , 2014, 8, 1716-1722.	1.2	24
30	Sensor Reduction for Backing-Up Control of a Vehicle With Triple Trailers. <i>IEEE Transactions on Industrial Electronics</i> , 2009, 56, 497-509.	5.2	20
31	Stability and Hopf bifurcation analysis in a TCP fluid model. <i>Nonlinear Analysis: Real World Applications</i> , 2011, 12, 353-363.	0.9	18
32	Guaranteed cost control of polynomial fuzzy systems via a sum of squares approach. , 2007, , .		17
33	Takagi-Sugeno Fuzzy Model-Based Flight Control and Failure Stabilization. <i>Journal of Guidance, Control, and Dynamics</i> , 2011, 34, 1543-1555.	1.6	17
34	3-D Flight Path Tracking Control for Unmanned Aerial Vehicles Under Wind Environments. <i>IEEE Transactions on Vehicular Technology</i> , 2019, 68, 11621-11634.	3.9	17
35	An SOS-based stable control of polynomial discrete fuzzy systems. , 2008, , .		16
36	Stability Analysis and Bifurcation Control of a Delayed Incommensurate Fractional-Order Gene Regulatory Network. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2020, 30, 2050089.	0.7	16

#	ARTICLE	IF	CITATIONS
37	Fuzzy model-based servo control for nonlinear systems with input constraint. , 2009, , .		15
38	Polynomial fuzzy observer design: A sum of squares approach. , 2009, , .		15
39	Practical Model Construction and Stable Control of an Unmanned Aerial Vehicle With a Parafoil-Type Wing. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2019, 49, 1291-1297.	5.9	15
40	IMPULSIVE CONTROL FOR Tâ€™S FUZZY SYSTEM AND ITS APPLICATION TO CHAOTIC SYSTEMS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2006, 16, 2417-2423.	0.7	14
41	Fuzzy Modeling and Control of Chaotic Systems. , 2006, , 45-80.		14
42	Development of a Cyclogyro-Based Flying Robot With Variable Attack Angle Mechanisms. IEEE/ASME Transactions on Mechatronics, 2007, 12, 565-570.	3.7	12
43	Impulsive control of bifurcations. Mathematics and Computers in Simulation, 2009, 79, 2180-2191.	2.4	12
44	Synchronization of leaderâ€™follower networks with coupling delays via variable structure control. Asian Journal of Control, 2009, 11, 407-410.	1.9	12
45	A Rational Polynomial Tracking Control Approach to a Common System Representation for Unmanned Aerial Vehicles. IEEE/ASME Transactions on Mechatronics, 2020, 25, 919-930.	3.7	11
46	Stability of Internet-Based Control Systems with Uncertainties and Multiple Time-Varying Delays. , 2006, , .		10
47	Development of a Cyclogyro-based Flying Robot with Variable Attack Angle Mechanisms. , 2006, , .		10
48	An SOS-based observer design for polynomial fuzzy systems. , 2011, , .		10
49	Shared Nonlinear Control in Wireless-Based Remote Stabilization: A Theoretical Approach. IEEE/ASME Transactions on Mechatronics, 2012, 17, 443-453.	3.7	10
50	Development of a Flying Robot With a Pantograph-Based Variable Wing Mechanism. IEEE Transactions on Robotics, 2009, 25, 79-87.	7.3	9
51	A Waypoint Following Control Design for a Paraglider Model With Aerodynamic Uncertainty. IEEE/ASME Transactions on Mechatronics, 2018, 23, 518-523.	3.7	9
52	A Novel Path-Following-Method-Based Polynomial Fuzzy Control Design. IEEE Transactions on Cybernetics, 2021, 51, 2993-3003.	6.2	8
53	Dynamic feedback control of bifurcations. , 0, , .		6
54	Fuzzy Observer Design. , 0, , 83-96.		6

#	ARTICLE	IF	CITATIONS
55	Fuzzy Model-based Servo Control for a Class of Nonlinear Systems. , 2007, , .		6
56	Delay independent synchronization of complex network via hybrid control. , 2008, , .		6
57	Fuzzy model-based servo control for discrete-time nonlinear systems. , 2008, , .		6
58	Development of an autonomous flying robot and its verification via flight control experiment. , 2013, , .		6
59	Takagi-Sugeno Fuzzy Model and Parallel Distributed Compensation. , 0, , 5-48.		5
60	LMI Control Performance Conditions and Designs. , 0, , 49-82.		5
61	Development of a Flying Robot with Pantograph-based Variable Wing Mechanism. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	5
62	Piecewise Fuzzy Model Construction and Controller Design based on Piecewise Lyapunov Function. Proceedings of the American Control Conference, 2007, , .	0.0	4
63	Switching fuzzy model construction based on optimal dividing planes. , 2009, , .		4
64	Stability analysis for the polynomial fuzzy systems by utilizing equality constraints of sum-of-squares program. , 2010, , .		4
65	Nonconvex stabilization criterion for polynomial fuzzy systems. , 2013, , .		4
66	Stabilization analysis of single-input polynomial fuzzy systems using control Lyapunov functions. , 2014, , .		4
67	Stability Analysis and Bifurcation Control For a Fractional Order SIR Epidemic Model with Delay. , 2020, , .		4
68	Impulsive Control of Bifurcation in Nonlinear System. , 2006, , .		3
69	Impulsive Control Bifurcation and Chaos in Internet TCP-RED Congestion Control System. , 2007, , .		3
70	Guaranteed cost control of T-S fuzzy systems using piecewise Lyapunov function based switching fuzzy controller. , 2009, , .		3
71	Relaxed stabilization conditions of T-S fuzzy systems using piecewise lyapunov function based switching fuzzy controller. , 2009, , .		3
72	Wireless control of a board robot using a sensing glove. , 2014, , .		3

#	ARTICLE	IF	CITATIONS
73	Fuzzy Control of Nonlinear Time-Delay Systems. , 0, , 291-302.		2
74	T-S Fuzzy Model as Universal Approximator. , 0, , 277-289.		2
75	Adaptive Spanning-tree on Changing Topologies: Towards Emergent Behaviors in Autonomous Multi-Agent Systems. Proceedings of the American Control Conference, 2007, , .	0.0	2
76	The Kalman filtering for a class of local strongly coupled systems. , 2011, , .		2
77	Stability analysis and control of bifurcation in a TCP fluid flow model of Wireless Networks. , 2012, , .		2
78	Stability and bifurcation of genetic regulatory networks with delays. , 2014, , .		2
79	A Simple Passive Attitude Stabilizer for Palm-size Aerial Vehicles. IEEE/ASME Transactions on Mechatronics, 2015, , 1-1.	3.7	2
80	Research on path planning of robot based on deep reinforcement learning. , 2020, , .		2
81	Robust Adaptive Control of Nonlinear Output Feedback Systems Under Disturbances With Unknown Bounds. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2004, 126, 229-235.	0.9	2
82	Nonlinear Model Following Control. , 0, , 217-228.		1
83	New Stability Conditions and Dynamic Feedback Designs. , 0, , 229-257.		1
84	Robust-Optimal Fuzzy Control. , 0, , 121-131.		1
85	Construction of simulation model of a flying robot with variable attack angle mechanism. , 2007, , .		1
86	Stabilization of complex switched networks with two types of delays via impulsive control. , 2009, , .		1
87	Improvement of simulation model and development of control mechanism of force direction for a flying robot with cyclogyro wing. , 2009, , .		1
88	Robust stabilization of uncertain complex singular dynamical networks via impulsive control. , 2009, , .		1
89	Robust synchronization of impulsively-coupled complex dynamical networks with parametric uncertainties and delays. , 2009, , .		1
90	Consensus of multi-agent system with communication delays by self-delay PD control. , 2010, , .		1

#	ARTICLE	IF	CITATIONS
91	Stability analysis and impulsive control of bifurcation and chaos in fluid flow model for TCP/AQM networks. , 2010, , .		1
92	Fuzzy model-based servo control with constraints on both of inputs and states. , 2010, , .		1
93	Stability analysis of nonlinear systems via multiple mixed max-min based Lyapunov functions. , 2010, , .		1
94	An improved approach to fuzzy model construction and servo control with constraints based on error dynamics. , 2011, , .		1
95	Distributed filtering basing consensus for the local strongly coupled systems. , 2012, , .		1
96	A Takagi-Sugeno fuzzy model approach to vision-based control of a micro helicopter. , 2012, , .		1
97	A descriptor system approach to servo control for nonlinear systems. , 2012, , .		1
98	Stability and stabilization conditions for Takagi-Sugeno fuzzy model via polyhedral Lyapunov functions. , 2013, , .		1
99	Stability region analysis for polynomial fuzzy systems by polynomial Lyapunov functions. , 2014, , .		1
100	The evolutionary ultimatum game on multiplex networks. , 2016, , .		1
101	A Practical SSVEP-Based Algorithm for Perceptual Dominance Estimation in Binocular Rivalry. IEEE Transactions on Cognitive and Developmental Systems, 2018, 10, 476-482.	2.6	1
102	Stability Analysis and Hopf Bifurcation Control for a Wireless Network Model. Journal of Advanced Computational Intelligence and Intelligent Informatics, 2016, 20, 212-222.	0.5	1
103	Optimal Fuzzy Control. , 0, , 109-120.		0
104	Fuzzy Modeling and Control of Chaotic Systems. , 0, , 153-193.		0
105	Fuzzy Descriptor Systems and Control. , 0, , 195-215.		0
106	Multiobjective Control via Dynamic Parallel Distributed Compensation. , 0, , 259-275.		0
107	Robust Fuzzy Control. , 0, , 97-108.		0
108	Trajectory Control of a Vehicle with Multiple Trailers. , 0, , 133-152.		0

#	ARTICLE	IF	CITATIONS
109	Wiener-Typed Nonlinear Systems' Output Feedback Control Algorithm Based on Dual-Mode Method. , 2006, , .		0
110	Control of Bifurcations and Chaos in Small-World Networks. Proceedings of the American Control Conference, 2007, , .	0.0	0
111	Stochastic controlling tolerable fault of Network Control Systems. , 2008, , .		0
112	Fuzzy Model-based Model Following Control for a Class of Nonlinear Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 6850-6854.	0.4	0
113	Improved controller design for switching fuzzy model-based control. , 2009, , .		0
114	H<inf>∞</inf> control of T-S fuzzy systems using piecewise Lyapunov function based switching fuzzy controller. , 2009, , .		0
115	Passive synchronization of complex spatio-temporal switching networks with coupling delays. , 2009, , .		0
116	Delay-dependent stability of discrete-time complex networks with mode-dependent uncertain parameters and time delays. , 2009, , .		0
117	Analysis and control of bifurcation in TCP fluid model. , 2010, , .		0
118	Robust filtering for networked systems with random transmission delays and packet dropouts. , 2011, , .		0
119	Piecewise polynomial lyapunov functions based stability analysis for polynomial fuzzy systems. , 2013, , .		0
120	Design and application of consensus-based filtering for Local Strongly Coupled & constrained systems. , 2014, , .		0
121	Stability and Neimark-Sacker Bifurcation Analysis for Single Gene Discrete System with Delay. , 2018, , .		0
122	Impulsive Synchronization of Fractional-order Delayed Gene Regulatory Network Based on Comparative System Method. , 2020, , .		0