Wen-Jer Chang

List of Publications by Year
in descending order

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122	1,119	430754	526166
papers	citations	18	27
		h-index	g-index

122	122	122	490
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Robust fuzzy control for uncertain stochastic time-delay Takagiâ€“Sugeno fuzzy models for achieving passivity. Fuzzy Sets and Systems, 2010, 161, 2012-2032.	1.6	58
2	Constrained fuzzy controller design of discrete Takagiâ€“Sugeno fuzzy models. Fuzzy Sets and Systems, 2003, 133, 37-55.	1.6	54
3	Sliding mode fuzzy control for Takagiâ€“Sugeno fuzzy systems with bilinear consequent part subject to multiple constraints. Information Sciences, 2016, 327, 258-271.	4.0	40
4	Passive fuzzy controller design for nonlinear systems with multiplicative noises. Journal of the Franklin Institute, 2010, 347, 732-750.	1.9	39
5	Observer-based proportional derivative fuzzy control for singular Takagi-Sugeno fuzzy systems. Information Sciences, 2021, 570, 815-830.	4.0	39
6	Covariance control with variance constraints for continuous perturbed stochastic systems. Systems and Control Letters, 1992, 19, 413-417.	1.3	33
7	PDC and Non-PDC fuzzy control with relaxed stability conditions for contintuous-time multiplicative noised fuzzy systems. Journal of the Franklin Institute, 2012, 349, 2664-2686.	1.9	32
8	Fuzzy control of multiplicative noised nonlinear systems subject to actuator saturation and Hâˆž performance constraints. Neurocomputing, 2015, 148, 512-520.	3.5	31
9	Sliding mode fuzzy control for nonlinear stochastic systems subject to pole assignment and variance constraint. Information Sciences, 2018, 432, 133-145.	4.0	31
10	constrained fuzzy control via state observer feedback for discrete-time Takagiâ€“Sugeno fuzzy systems with multiplicative noises. ISA Transactions, 2011, 50, 37-43.	3.1	30
11	AQM router design for TCP network via input constrained fuzzy control of time-delay affine Takagiâ€“Sugeno fuzzy models. International Journal of Systems Science, 2012, 43, 2297-2313.	3.7	30
12	Continuous Fuzzy Controller Design Subject to Minimizing Control Input Energy with Output Variance Constraints. European Journal of Control, 2005, 11, 269-277.	1.6	28
13	Fuzzy controller design for passive continuous-time affine Tâ€“S fuzzy models with relaxed stability conditions. ISA Transactions, 2009, 48, 295-303.	3.1	28
14	A Covariance Controller Design Incorporating Optimal Estimation for Nonlinear Stochastic Systems. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 1996, 118, 346-349.	0.9	26
15	Analysis and synthesis of discrete nonlinear passive systems via affine Tâ€“S fuzzy models. International Journal of Systems Science, 2008, 39, 809-821.	3.7	25
16	Covariance control for stochastic multivariable systems with hysteresis nonlinearity. International Journal of Systems Science, 1997, 28, 731-736.	3.7	24
17	Model-Based Fuzzy Controller Design With Common Observability Gramian Assignment. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2001, 123, 113-116.	0.9	23
18	Synthesis of nonlinear discrete control systems via time-delay affine Takagi-Sugeno fuzzy models. ISA Transactions, 2005, 44, 243-257.	3.1	23

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19	Fuzzy Control with Pole Assignment and Variance Constraints for Continuous-time Perturbed Takagi-Sugeno Fuzzy Models: Application to Ship Steering Systems. International Journal of Control, Automation and Systems, 2019, 17, 2677-2692.	1.6	20
20	Upper bound covariance control of discrete perturbed systems. Systems and Control Letters, 1992, 19, 493-498.	1.3	19
21	Robust Fuzzy Control with Transient and Steady-State Performance Constraints for Ship Fin Stabilizing Systems. International Journal of Fuzzy Systems, 2019, 21, 518-531.	2.3	19
22	Actuator Saturated Fuzzy Controller Design for Interval Type-2 Takagi-Sugeno Fuzzy Models with Multiplicative Noises. Processes, 2021, 9, 823.	1.3	18
23	Fuzzy Controller Design via the Inverse Solution of Lyapunov Equations. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2003, 125, 42-47.	0.9	17
24	Discrete Fuzzy Controller Design for Achieving Common State Covariance Assignment. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2004, 126, 627-632.	0.9	17
25	Passive fuzzy controller design via observer feedback for stochastic Takagi-Sugeno fuzzy models with multiplicative noises. International Journal of Control, Automation and Systems, 2011, 9, 550-557.	1.6	17
26	Robust fuzzy control subject to state variance and passivity constraints for perturbed nonlinear systems with multiplicative noises. ISA Transactions, 2014, 53, 1787-1795.	3.1	17
27	Robust fuzzy control for discrete perturbed time-delay affine Takagi-Sugeno fuzzy models. International Journal of Control, Automation and Systems, 2011, 9, 86-97.	1.6	16
28	Passive Fuzzy Control via Fuzzy Integral Lyapunov Function for Nonlinear Ship Drum-Boiler Systems. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2015, 137, .	0.9	16
29	A study of Hâˆžnorm and variance-constrained design using dynamic output feedback for linear discrete systems. International Journal of Control, 1993, 57, 473-483.	1.2	15
30	Intelligent fuzzy control with imperfect premise matching concept for complex nonlinear multiplicative noised systems. Neurocomputing, 2015, 154, 276-283.	3.5	15
31	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
32	Complex performance control using sliding mode fuzzy approach for discrete-time nonlinear systems via T-S fuzzy model with bilinear consequent part. International Journal of Control, Automation and Systems, 2017, 15, 1901-1915.	1.6	14
33	Robust covariance control for discrete system by Takagi-Sugeno fuzzy controllers. ISA Transactions, 2004, 43, 377-387.	3.1	13
34	Mamdani and Takagi-Sugeno fuzzy controller design for ship fin stabilizing systems. , 2015, , .		13
35	Observer-Based Fuzzy Controller Design for Nonlinear Discrete-Time Singular Systems via Proportional Derivative Feedback Scheme. Applied Sciences (Switzerland), 2021, 11, 2833.	1.3	13
36	Passive Decentralized Fuzzy Control for Takagi-Sugeno Fuzzy Model Based Large-Scale Descriptor Systems. IEEE Access, 2022, 10, 28656-28669.	2.6	13

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37	Multivariable performance-constrained sliding mode control for ship yaw-motion systems with perturbations. International Journal of Adaptive Control and Signal Processing, 2000, 14, 393-409.	2.3	12
38	Discrete <formula formulatype="inline"><tex>H_{2}/H_{infty}</tex> </formula> Nonlinear Controller Design Based on Fuzzy Region Concept and Takagi–Sugeno Fuzzy Framework. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2006, 53, 2838-2848.	0.1	12
39	Variance and passivity constrained sliding mode fuzzy control for continuous stochastic non-linear systems. Neurocomputing, 2016, 201, 29-39.	3.5	12
40	Mixed sliding mode fuzzy control for discreteâ€time nonâ€linear stochastic systems subject to variance and passivity constraints. IET Control Theory and Applications, 2015, 9, 2369-2376.	1.2	11
41	Fuzzy controller design for nonlinear singular systems with external noises subject to passivity constraints. Asian Journal of Control, 2021, 23, 1195-1211.	1.9	10
42	Covariance control with observed-state feedback gains for continuous nonlinear systems using T-S fuzzy models. ISA Transactions, 2004, 43, 389-398.	3.1	9
43	Tâ€“S region-based fuzzy control with multiple performance constraints. ISA Transactions, 2007, 46, 85-93.	3.1	9
44	Passive fuzzy controller design for a model car via discrete T-S fuzzy model with multiplicative noise. , 2009, , .		9
45	Solving the Formation and Containment Control Problem of Nonlinear Multi-Boiler Systems Based on Interval Type-2 Takagiâ€“Sugeno Fuzzy Models. Processes, 2022, 10, 1216.	1.3	9
46	DISCRETE OUTPUT FUZZY CONTROLLER DESIGN FOR ACHIEVING COMMON CONTROLLABILITY GRAMIAN. Asian Journal of Control, 2000, 2, 284-289.	1.9	8
47	Variance and Passivity Constrained Fuzzy Control for Nonlinear Ship Steering Systems with State Multiplicative Noises. Mathematical Problems in Engineering, 2013, 2013, 1-10.	0.6	8
48	State variance constrained fuzzy controller design for nonlinear TORA systems with minimizing control input energy. , 0, , .		7
49	Robust fuzzy control for continuous perturbed timeâ€delay affine takagiâ€“sugeno fuzzy models. Asian Journal of Control, 2011, 13, 818-830.	1.9	7
50	Multi-constrained fuzzy intelligent control for uncertain discrete systems with complex noises: an application to ship steering systems. Journal of Marine Engineering and Technology, 2017, 16, 11-21.	1.9	6
51	Novel Delay-Dependent Stabilization for Fuzzy Stochastic Systems with Multiplicative Noise Subject to Passivity Constraint. Processes, 2021, 9, 1445.	1.3	6
52	Upper bound covariance control for continuous fuzzy stochastic systems with structured perturbations. , 0, , .		5
53	Passive estimated state feedback fuzzy controller design for discrete perturbed fuzzy systems with multiplicative noises. Journal of the Chinese Institute of Engineers, Transactions of the Chinese Institute of Engineers,Series A/Chung-kuo Kung Ch'eng Hsuch K'an, 2013, 36, 684-695.	0.6	5
54	Fuzzy Stabilization for Nonlinear Discrete Ship Steering Stochastic Systems Subject to State Variance and Passivity Constraints. Mathematical Problems in Engineering, 2014, 2014, 1-12.	0.6	5

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55	Delayâ€dependent robust control of stochastic systems with convex polynomial uncertainty. Optimal Control Applications and Methods, 2020, 41, 2213-2224.	1.3	5
56	Discrete-time robust fuzzy control synthesis for discretized and perturbed ship fin stabilizing systems subject to variance and pole location constraints. Journal of Marine Science and Technology, 2021, 26, 201-215.	1.3	5
57	Pole Location and Input Constrained Robust Fuzzy Control for T-S Fuzzy Models Subject to Passivity and Variance Requirements. Processes, 2021, 9, 787.	1.3	5
58	Design of Takagi-Sugeno fuzzy-region controller based on fuzzy-region concept, rule reduction and robust control technique. , 0, , .		4
59	Robust Fuzzy-Based Sliding Mode Control for Uncertain Discrete Nonlinear Systems for Achieving Performance Requirements. International Journal of Fuzzy Systems, 2018, 20, 246-258.	2.3	4
60	Stabilization for Truck-Trailer Mobile Robot System via Discrete LPV T-S Fuzzy Models. Advances in Intelligent Systems and Computing, 2013, , 209-217.	0.5	4
61	Extending covariance control for a class of discrete fuzzy stochastic systems. , 0, , .		3
62	Design of Takagi-Sugeno Fuzzy Region Controller Based on Rule Reduction, Robust Control, and Switching Concept. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2007, 129, 163-170.	0.9	3
63	Actuator Saturation Constrained Fuzzy Control for Discrete Stochastic Fuzzy Systems with Multiplicative Noises. Mathematical Problems in Engineering, 2013, 2013, 1-9.	0.6	3
64	Robust and Passive Constrained Fuzzy Control for Discrete Fuzzy Systems with Multiplicative Noises and Interval Time Delay. Mathematical Problems in Engineering, 2013, 2013, 1-12.	0.6	3
65	Robust sliding mode fuzzy control forÂperturbed nonlinear stochastic systems subject to input and state requirements. Journal of Intelligent and Fuzzy Systems, 2017, 32, 4285-4297.	0.8	3
66	Intelligent Fuzzy Control with State-Derivative Feedback for Takagi-Sugeno Fuzzy Stochastic Singular Systems. Journal of Marine Science and Technology, 2021, 29, 305-318.	0.1	3
67	Development of Fuzzy Observer Gain Design Algorithm for Ship Path Estimation Based on AIS Data. Processes, 2022, 10, 33.	1.3	3
68	Design the T-S fuzzy controller for a class of T-S fuzzy models via genetic algorithm. , 0, , .		2
69	Fuzzy control of continuous time-delay affine T-S fuzzy systems. , 0, , .		2
70	Fuzzy controller design for discrete time-delay affine Takagi-Sugeno fuzzy systems. , 0, , .		2
71	Robust fuzzy control for passive Continuous Stirred Tank Reactor system with multiplicative noise. , 2009, , .		2
72	Fuzzy control for two-link arm robot via LPV T-S fuzzy models. , 2011, , .		2

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73	Stabilization of large-scale fuzzy systems with time-varying interconnection. , 2011, , .		2
74	An approach to robust fuzzy control for TORA systems with Takagi-Sugeno fuzzy model subject to multiple constraints. , 2017, , .		2
75	Robust fuzzy control for nonlinear discrete-time systems with internal and external noises subject to multi-variance constraints and pole location constraints. Journal of Intelligent and Fuzzy Systems, 2020, 38, 4959-4975.	0.8	2
76	<scp>Gainâ€scheduled</scp> controller design for linear parameter varying systems subject to <scp>pole assignment</scp>. Optimal Control Applications and Methods, 2020, 41, 1439-1450.	1.3	2
77	Dynamic positioning of ships based on robust fuzzy observer. Journal of Engineering, 2020, 2020, 228-238.	0.6	2
78	New H _{â^ž} observerâ€based control for delayed LPV stochastic system. IET Control Theory and Applications, 2022, 16, 353-365.	1.2	2
79	Common observability Gramian assignment using discrete fuzzy control. , 1999, , .		1
80	GA-based robust S-stability output feedback controller design algorithm with hierarchical fitness function structure. , 2003, , .		1
81	Input and state constrained fuzzy controller design for ship steering systems with structured perturbations. , 0, , .		1
82	Constrained discrete fuzzy control for a perturbed trailer type mobile robot stochastic system. , 0, , .		1
83	GA-based robust H/sub 2/ controller design approach for active suspension systems. , 0, , .		1
84	Synthesis of Discrete Nonlinear Passive Systems via Affine T-S Fuzzy Models with Input Energy Constraints. , 2007, , .		1
85	Fuzzy Control of Inverter Pendulum Robot via Perturbed Time-Delay Affine T-S Fuzzy Models. , 2008, , .		1
86	Fuzzy controller design for singular affine T-S fuzzy models. , 2008, , .		1
87	Observer-based H<inf>∞</inf> fuzzy control design for discrete-time stochastic T-S fuzzy model with multiplicative noise. , 2009, , .		1
88	Observer-based robust fuzzy controller design for uncertain stochastic T-S fuzzy model with passivity performance. , 2009, , .		1
89	Fuzzy control with relaxed nonquadratic stability conditions for inverted pendulum robot system with multiplicative noise. , 2010, , .		1
90	Stabilization of fuzzy stochastic systems with multiplicative noise subject to actuator saturation. , 2010, , .		1

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91	Fuzzy integral Lyapunov function based fuzzy control for Takagi-Sugeno fuzzy systems with passive constraints. , 2013, , .		1
92	Imperfect premise matching based fuzzy control with passive constraints for discrete time-delay multiplicative noised stochastic nonlinear systems. International Journal of Control, Automation and Systems, 2013, 11, 614-623.	1.6	1
93	Passive fuzzy controller design with variance constraint for nonlinear synchronous generator systems. , 2013, , .		1
94	Fuzzy control of nonlinear stochastic systems with actuator saturation and performance constraints. , 2014, , .		1
95	Output feedback synchronization control for supply vessels during underway replenishment with unknown dynamics and disturbances under input saturation. Ships and Offshore Structures, 2022, 17, 1764-1774.	0.9	1
96	Fuzzy Control for Discrete Passive Affine T-S Fuzzy Systems with Observer Feedback. , 2007, , 623-631.		1
97	Authorsâ€™ reply to comments on â€œConstrained controller design of discrete Takagi-Sugeno Fuzzy modelsâ€• Fuzzy Sets and Systems, 2004, 146, 477.	1.6	0
98	Discrete observed-state feedback fuzzy control with common state covariance assignment. , 0, , .		0
99	H/sub â^ž/ fuzzy control for discrete affine Takagi-Sugeno fuzzy models with time delay effect. , 0, , .		0
100	Fuzzy Control with Passivity Constraint for Discrete Affine T-S Fuzzy Systems. , 0, , .		0
101	Fuzzy Control of Inverted Robot Arm with Perturbed Time-Delay Affine Takagi-Sugeno Fuzzy Model. , 2007, , .		0
102	Delay dependent passive fuzzy control design for synchronous generator with multiplicative noise. , 2008, , .		0
103	Imperfect Premise Matching fuzzy control for nonlinear stochastic ship steering systems. , 2011, , .		0
104	Observer-based robust passive fuzzy control for discrete Takagi-Sugeno fuzzy systems. , 2011, , .		0
105	Passive fuzzy control for uncertain nonlinear stochastic inverted pendulum robot system. , 2011, , .		0
106	Fuzzy controller design under imperfect premise matching for discrete-time inverted pendulum robot systems. , 2011, , .		0
107	Passive and individual variance constrained fuzzy control for discrete-time fuzzy systems with multiplicative noise. , 2013, , .		0
108	Marine Engineering and Applications. Mathematical Problems in Engineering, 2013, 2013, 1-2.	0.6	0

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109	Individual state variance constrained fuzzy control for discrete nonlinear stochastic systems. , 2013, , .		0
110	Passive fuzzy control for ball and beam systems via Takagi-Sugeno fuzzy model with multiplicative noises. , 2013, , .		0
111	Performance constrained fuzzy control for discrete nonlinear stochastic systems with multiplicative noises and perturbations. , 2014, , .		0
112	Variance and passivity constrained fuzzy control for continuous perturbed fuzzy systems with multiplicative noises. , 2014, , .		0
113	Designing mixed fuzzy controller for uncertain stochastic discrete nonlinear systems. , 2016, , .		0
114	An optimal synthesis of stochastic fuzzy systems subject to pole placement and output constraints. , 2016, , .		0
115	Robust fuzzy controller design for model-based discrete ship steering systems subject to multiple variance constraints. , 2017, , .		0
116	Intelligent Fuzzy Control for Nonlinear Two-Link Robot System with Input Energy Constrained Disturbance Rejection and Pole Placement. , 2017, , .		0
117	Multi-variance Performance Constrained Robust Fuzzy Control for Fuzzy Model-Based Discrete-time Stochastic Systems. , 2019, , .		0
118	Derivative-based Fuzzy Control Synthesis for Singular Takagi-Sugeno Fuzzy Systems with Perturbations. , 2021, , .		0
119	Intelligent Fuzzy Control with Multiple Constraints for a Model Car System with Multiplicative Disturbance. Lecture Notes in Computer Science, 2014, , 1-12.	1.0	0
120	Robust D-Stable Pole Assignment Fuzzy Control of Nonlinear Systems Subject to Bounded Input Bounded Output Constraints. , 2017, , .		0
121	Robust Decentralized Fuzzy Controller Design for Nonlinear Large-Scale Interconnected Descriptor Systems. Journal of Physics: Conference Series, 2022, 2213, 012006.	0.3	0
122	Observer-Based Proportional Derivative Robust Fuzzy Control for Nonlinear Singular Systems. , 2022, , .		0