Jun-Wei Wang

List of Publications by Year
in descending order

75	2,139	186265	233421
papers	citations	28 h-index	45 g-index

76	76	76	768
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Fuzzy Boundary Control Design for a Class of Nonlinear Parabolic Distributed Parameter Systems. IEEE Transactions on Fuzzy Systems, 2014, 22, 642-652.	9.8	153
2	Static output feedback control via PDE boundary and ODE measurements in linear cascaded ODEâ€“beam systems. Automatica, 2014, 50, 2787-2798.	5.0	134
3	Design of distributed <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si7.gif" display="inline" overflow="scroll"><mml:msub><mml:mrow><mml:mi>H</mml:mi></mml:mrow><mml:mrow><mml:mi>âˆž</mml:mi></mml:mrow></mml:msub></mml:math> fuzzy controllers with constraint for nonlinear hyperbolic PDE systems. Automatica, 2012, 48, 2535-2543.	5.0	122
4	Exponential Pointwise Stabilization of Semilinear Parabolic Distributed Parameter Systems via the Takagiâ€“Sugeno Fuzzy PDE Model. IEEE Transactions on Fuzzy Systems, 2018, 26, 155-173.	9.8	91
5	Distributed Proportionalâ€“Spatial Derivative Control of Nonlinear Parabolic Systems via Fuzzy PDE Modeling Approach. IEEE Transactions on Systems, Man, and Cybernetics, 2012, 42, 927-938.	5.0	87
6	Exponential Stabilization for a Class of Nonlinear Parabolic PDE Systems via Fuzzy Control Approach. IEEE Transactions on Fuzzy Systems, 2012, 20, 318-329.	9.8	87
7	Distributed Fuzzy Control Design of Nonlinear Hyperbolic PDE Systems With Application to Nonisothermal Plug-Flow Reactor. IEEE Transactions on Fuzzy Systems, 2011, 19, 514-526.	9.8	80
8	Spatially Piecewise Fuzzy Control Design for Sampled-Data Exponential Stabilization of Semilinear Parabolic PDE Systems. IEEE Transactions on Fuzzy Systems, 2018, 26, 2967-2980.	9.8	79
9	Some extended Wirtingerâ€™s inequalities and distributed proportional-spatial integral control of distributed parameter systems with multi-time delays. Journal of the Franklin Institute, 2015, 352, 4423-4445.	3.4	71
10	Pointwise exponential stabilization of a linear parabolic PDE system using non-collocated pointwise observation. Automatica, 2018, 93, 197-210.	5.0	71
11	A delay decomposition approach to <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si6.gif" display="inline" overflow="scroll"><mml:msub><mml:mrow><mml:mi mathvariant="script">L</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub><mml:mtext>â€“</mml:mtext><mml:msub><mml:mrow><mml:mi mathvariant="script">L</mml:mi></mml:mrow><mml:mrow><mml:mi>âˆž</mml:mi></mml:mrow></mml:msub></mml:math> filter design for stochastic systems with time-varying delay. Automatica, 2011, 47, 1482-1488.	5.0	69
12	A Membership-Function-Dependent Approach to Design Fuzzy Pointwise State Feedback Controller for Nonlinear Parabolic Distributed Parameter Systems With Spatially Discrete Actuators. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2017, 47, 1486-1499.	9.3	67
13	Robust fuzzy control for uncertain nonlinear Markovian jump systems with time-varying delay. Fuzzy Sets and Systems, 2013, 212, 41-61.	2.7	62
14	Observer design and output feedback stabilization for nonlinear multivariable systems with diffusion PDE-governed sensor dynamics. Nonlinear Dynamics, 2013, 72, 615-628.	5.2	52
15	<inline-formula><tex-math>H_infty</tex-math></inline-formula> Fuzzy Control for a Class of Nonlinear Coupled ODE-PDE Systems With Input Constraint. IEEE Transactions on Fuzzy Systems, 2015, 23, 593-604.	9.8	52
16	Lyapunov-based design of locally collocated controllers for semi-linear parabolic PDE systems. Journal of the Franklin Institute, 2014, 351, 429-441.	3.4	47
17	Stochastically exponential stability and stabilization of uncertain linear hyperbolic PDE systems with Markov jumping parameters. Automatica, 2012, 48, 569-576.	5.0	42
18	Adaptive Neural Boundary Control Design for Nonlinear Flexible Distributed Parameter Systems. IEEE Transactions on Control Systems Technology, 2019, 27, 2085-2099.	5.2	39

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19	Mixed <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll" id="d1e400" altimg="si7.gif"><mml:msub><mml:mrow><mml:mi>H</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:math>/<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" sampled-data output feedback control design for a semi-linear parabolic PDE in the sense of spatial	5.0	38
20	Dynamic Boundary Fuzzy Control Design of Semilinear Parabolic PDE Systems With Spatially Noncollocated Discrete Observation. IEEE Transactions on Cybernetics, 2019, 49, 3041-3051.	9.5	36
21	Observerâ€based dynamic local piecewise control of a linear parabolic PDE using nonâ€collocated local piecewise observation. IET Control Theory and Applications, 2018, 12, 346-358.	2.1	33
22	Observer-based boundary control of semi-linear parabolic PDEs with non-collocated distributed event-triggered observation. Journal of the Franklin Institute, 2019, 356, 10405-10420.	3.4	33
23	A spatial domain decomposition approach to distributed H _{âˆž} observer design of a linear unstable parabolic distributed parameter system with spatially discrete sensors. International Journal of Control, 2017, 90, 2772-2785.	1.9	32
24	Dynamic Plume Tracking by Cooperative Robots. IEEE/ASME Transactions on Mechatronics, 2019, 24, 609-620.	5.8	32
25	Fuzzy guaranteed cost sampled-data control of nonlinear systems coupled with a scalar reactionâ€“diffusion process. Fuzzy Sets and Systems, 2016, 302, 121-142.	2.7	30
26	Fuzzy Control Design for Nonlinear ODE-Hyperbolic PDE-Cascaded Systems: A Fuzzy and Entropy-Like Lyapunov Function Approach. IEEE Transactions on Fuzzy Systems, 2014, 22, 1313-1324.	9.8	28
27	$H_infty $ Disturbance Attenuation for Nonlinear Coupled Parabolic PDEâ€“ODE Systems via Fuzzy-Model-Based Control Approach. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2017, 47, 1814-1825.	9.3	28
28	Delay-Dependent Exponential Stabilization for Linear Distributed Parameter Systems With Time-Varying Delay. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2018, 140, .	1.6	28
29	Design of Suboptimal Local Piecewise Fuzzy Controller With Multiple Constraints for Quasi-Linear Spatiotemporal Dynamic Systems. IEEE Transactions on Cybernetics, 2021, 51, 2433-2445.	9.5	27
30	Backstepping-based distributed abnormality localization for linear parabolic distributed parameter systems. Automatica, 2022, 135, 109930.	5.0	26
31	Mixed H2/Hâˆž fuzzy proportional-spatial integral control design for a class of nonlinear distributed parameter systems. Fuzzy Sets and Systems, 2017, 306, 26-47.	2.7	25
32	Observerâ€based output feedback compensator design for linear parabolic PDEs with local piecewise control and pointwise observation in space. IET Control Theory and Applications, 2018, 12, 1812-1821.	2.1	25
33	Guaranteed cost distributed fuzzy observerâ€based control for a class of nonlinear spatially distributed processes. AICHE Journal, 2013, 59, 2366-2378.	3.6	23
34	Local exponential stabilization via boundary feedback controllers for a class of unstable semi-linear parabolic distributed parameter processes. Journal of the Franklin Institute, 2017, 354, 5221-5244.	3.4	22
35	Static Collocated Piecewise Fuzzy Control Design of Quasi-Linear Parabolic PDE Systems Subject to Periodic Boundary Conditions. IEEE Transactions on Fuzzy Systems, 2019, 27, 1479-1492.	9.8	22
36	Distributed proportional plus second-order spatial derivative control for distributed parameter systems subject to spatiotemporal uncertainties. Nonlinear Dynamics, 2014, 76, 2041-2058.	5.2	21

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37	Dynamic Compensator Design of Linear Parabolic MIMO PDEs in N-Dimensional Spatial Domain. IEEE Transactions on Automatic Control, 2021, 66, 1399-1406.	5.7	16
38	Fuzzy Control With Guaranteed Cost for Nonlinear Coupled Parabolic PDE-ODE Systems via PDE Static Output Feedback and ODE State Feedback. IEEE Transactions on Fuzzy Systems, 2018, 26, 1844-1853.	9.8	15
39	Robust H_{âˆž} Control for Nonlinear Hyperbolic PDE Systems Based on the Polynomial Fuzzy Model. IEEE Transactions on Cybernetics, 2021, 51, 3789-3801.	9.5	15
40	Static output feedback control design for linear MIMO systems with actuator dynamics governed by diffusion PDEs. International Journal of Control, 2014, 87, 90-100.	1.9	14
41	Fuzzy output tracking control of semi-linear first-order hyperbolic PDE systems with matched perturbations. Fuzzy Sets and Systems, 2014, 254, 47-66.	2.7	13
42	Exponential synchronization for a class of networked linear parabolic PDE systems via boundary control. , 2014, , .		12
43	A unified Lyapunov-based design for a dynamic compensator of linear parabolic MIMO PDEs. International Journal of Control, 2021, 94, 1804-1811.	1.9	12
44	Exponentially Stabilizing Observer-Based Feedback Control of a Sampled-Data Linear Parabolic Multiple-Inputâ€“Multiple-Output PDE. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 5742-5751.	9.3	11
45	Observer-based output feedback fuzzy control for nonlinear parabolic PDE-ODE coupled systems. Fuzzy Sets and Systems, 2021, 402, 105-123.	2.7	11
46	Robust attitude control of an indoor micro quadrotor with input delay. , 2014, , .		10
47	Exponentially stabilizing fuzzy controller design for a nonlinear ODE-beam cascaded system and its application to flexible air-breathing hypersonic vehicle. Fuzzy Sets and Systems, 2020, 385, 127-147.	2.7	10
48	Adaptive Fuzzy Control for a Hybrid Spacecraft System With Spatial Motion and Communication Constraints. IEEE Transactions on Fuzzy Systems, 2022, 30, 3247-3256.	9.8	10
49	Robust<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="M1"><mml:mrow><mml:msub><mml:mrow><mml:mi>H</mml:mi></mml:mrow><mml:mrow><mml:mi>âˆž</mml:mi></mml:mrow> for a Class of Nonlinear Distributed Parameter Systems via Proportional-Spatial Derivative Control Approach. Abstract and Applied Analysis, 2014, 2014, 1-8.	0.7	9
50	Mixed H₂/H_{âˆž} decentralized fuzzy tracking control design for a flexible air-breathing hypersonic vehicle. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2015, 229, 388-405.	1.0	8
51	Mixed H_2/H_infty Fuzzy Control Plus Mobile Actuator/Sensor Guidance for Semilinear Parabolic Distributed Parameter Systems. IEEE Transactions on Fuzzy Systems, 2021, 29, 1874-1884.	9.8	6
52	Abnormal spatioâ€temporal source estimation for a linear unstable parabolic distributed parameter system: An adaptive PDE observer perspective. Journal of the Franklin Institute, 2021, 358, 1656-1672.	3.4	6
53	Robust H_{âˆž} Control for Semilinear Parabolic Distributed Parameter Systems With External Disturbances via Mobile Actuators and Sensors. IEEE Transactions on Cybernetics, 2023, 53, 4880-4893.	9.5	5
54	Stochastic Stability and Stabilization of Uncertain Jump Linear Delay Systems via Delay Decomposition. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2011, 133, .	1.6	4

#	Article	IF	Citations
55	Luenberger observer design for state estimation of a linear parabolic distributed parameter system with discrete measurement sensors. , 2016, , .		4
56	A Lyapunov-based design of dynamic feedback compensator for linear parabolic MIMO PDEs. IMA Journal of Mathematical Control and Information, 2020, 37, 455-474.	1.7	4
57	Parameterâ€dependent observerâ€based feedback compensator design of a spaceâ€timeâ€varying PDE with application to a class of steelmaking processes. International Journal of Robust and Nonlinear Control, 2021, 31, 7640.	3.7	4
58	Distributed-parameter Luenberger observer for semi-linear parabolic PDE systems with a mobile pointwise sensor. , 2016, , .		3
59	Leaderless cooperative control of robotic sensor networks for monitoring dynamic pollutant plumes. IET Control Theory and Applications, 2019, 13, 2670-2680.	2.1	3
60	Spatial domain decomposition approach to dynamic compensator design for linear spaceâ€varying parabolic MIMO PDEs. IET Control Theory and Applications, 2020, 14, 39-51.	2.1	3
61	Guaranteed cost distributed fuzzy control design for a class of nonlinear first-order hyperbolic PDE systems. , 2012, , .		2
62	Multi-model soft switching tracking control and robust least-squares weighted control allocation for near space interceptor. , 2014, , .		2
63	Distributed fuzzy proportional-spatial integral control design for a class of nonlinear distributed parameter systems. , 2014, , .		2
64	Dynamic pollutant plume front tracking and monitoring by a single mobile robot. , 2017, , .		2
65	Spatioâ€temporal fault localization for nonlinear spatially distributed processes: A spatial mapping filterâ€based framework. International Journal of Robust and Nonlinear Control, 2021, 31, 6953-6971.	3.7	2
66	Spatiotemporally asynchronous sampled-data control of a linear parabolic PDE on a hypercube. International Journal of Control, 2022, 95, 3326-3335.	1.9	2
67	Adaptive neural boundary control design for a class of nonlinear spatially distributed systems. , 2011, , .		1
68	A PDE-based approach to formation control design for a large vehicular platoon. , 2015, , .		1
69	Multi-model soft switching tracking control for near-space interceptor based on the disturbance observer. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2016, 230, 1077-1092.	1.0	1
70	Observer-based dynamic local piecewise control of a linear parabolic PDE system with non-collocated pointwise measurements. , 2017, , .		1
71	Local Piecewise Fuzzy Control of Quasi-Linear Parabolic PDE Systems with Space-Varying Coefficients. , 2018, , .		1
72	Indirect Adaptive Distributed Fuzzy Control of Semi-linear Parabolic PDE Systems. , 2020, , .		1

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73	Output Feedback Fuzzy Control of Nonlinear Hyperbolic PDE Systems Based on Polynomial-Fuzzy-Model-Based Control Approach. , 2018, , .		0
74	Event-Triggered Steering Control for Semiautonomous Vehicles with a Stochastic Driver Model. , 2019, , .		0
75	Parameter-Dependent Feedback Compensator Design for a Space-Varying PDE and its Application in Steelmaking Processes. , 2020, , .		0