Jun-Wei Wang

List of Publications by Year
in descending order

75 papers	2,139 citations	186265 28 h-index	233421 45 g-index
76 all docs	76 docs citations	76 times ranked	768 citing authors

#	Article	IF	Citations
1	Robust H_∞ 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
2	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
3	Spatiotemporally asynchronous sampled-data control of a linear parabolic PDE on a hypercube. International Journal of Control, 2022, 95, 3326-3335.	1.9	2
4	Backstepping-based distributed abnormality localization for linear parabolic distributed parameter systems. Automatica, 2022, 135, 109930.	5.0	26
5	Robust H_∞ Control for Nonlinear Hyperbolic PDE Systems Based on the Polynomial Fuzzy Model. IEEE Transactions on Cybernetics, 2021, 51, 3789-3801.	9.5	15
6	Mixed H_2/H_∞ 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
7	Exponentially Stabilizing Observer-Based Feedback Control of a Sampled-Data Linear Parabolic Multiple-Input–Multiple-Output PDE. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 5742-5751.	9.3	11
8	Observer-based output feedback fuzzy control for nonlinear parabolic PDE-ODE coupled systems. Fuzzy Sets and Systems, 2021, 402, 105-123.	2.7	11
9	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
10	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
11	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
12	Spatio‐temporal fault localization for nonlinear spatially distributed processes: A spatial mapping filter‐based framework. International Journal of Robust and Nonlinear Control, 2021, 31, 6953-6971.	3.7	2
13	Parameter‐dependent observer‐based feedback compensator design of a space‐time‐varying PDE with application to a class of steelmaking processes. International Journal of Robust and Nonlinear Control, 2021, 31, 7640.	3.7	4
14	Abnormal spatio‐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
15	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
16	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
17	Spatial domain decomposition approach to dynamic compensator design for linear space‐varying parabolic MIMO PDEs. IET Control Theory and Applications, 2020, 14, 39-51.	2.1	3
18	Parameter-Dependent Feedback Compensator Design for a Space-Varying PDE and its Application in Steelmaking Processes. , 2020, , .		0

#	ARTICLE	IF	CITATIONS
19	Indirect Adaptive Distributed Fuzzy Control of Semi-linear Parabolic PDE Systems. , 2020, , .		1
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	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
22	Adaptive Neural Boundary Control Design for Nonlinear Flexible Distributed Parameter Systems. IEEE Transactions on Control Systems Technology, 2019, 27, 2085-2099.	5.2	39
23	Dynamic Plume Tracking by Cooperative Robots. IEEE/ASME Transactions on Mechatronics, 2019, 24, 609-620.	5.8	32
24	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:mrow></mm sampled-data output feedback control design for a semi-linear parabolic PDE in the sense of spatial <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML">. Automatica, 2019, 103, 282-293.	5.0	38
25	Leaderless cooperative control of robotic sensor networks for monitoring dynamic pollutant plumes. IET Control Theory and Applications, 2019, 13, 2670-2680.	2.1	3
26	Event-Triggered Steering Control for Semiautonomous Vehicles with a Stochastic Driver Model. , 2019, , .		0
27	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
28	Pointwise exponential stabilization of a linear parabolic PDE system using non-collocated pointwise observation. Automatica, 2018, 93, 197-210.	5.0	71
29	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
30	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
31	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
32	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
33	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
34	Output Feedback Fuzzy Control of Nonlinear Hyperbolic PDE Systems Based on Polynomial-Fuzzy-Model-Based Control Approach. , 2018, , .		0
35	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
36	Local Piecewise Fuzzy Control of Quasi-Linear Parabolic PDE Systems with Space-Varying Coefficients. , 2018, , .		1

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37	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
38	$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
39	A spatial domain decomposition approach to distributed <i>H</i> _{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
40	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
41	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
42	Observer-based dynamic local piecewise control of a linear parabolic PDE system with non-collocated pointwise measurements. , 2017, , .		1
43	Dynamic pollutant plume front tracking and monitoring by a single mobile robot. , 2017, , .		2
44	Distributed-parameter Luenberger observer for semi-linear parabolic PDE systems with a mobile pointwise sensor. , 2016, , .		3
45	Luenberger observer design for state estimation of a linear parabolic distributed parameter system with discrete measurement sensors. , 2016, , .		4
46	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
47	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
48	A PDE-based approach to formation control design for a large vehicular platoon. , 2015, , .		1
49	Mixed <i>H</i>₂<i>/H</i>_{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
50	Some extended Wirtinger×³s 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
51	<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
52	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
53	Multi-model soft switching tracking control and robust least-squares weighted control allocation for near space interceptor. , 2014, , .		2
54	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

#	ARTICLE	IF	CITATIONS
55	Distributed fuzzy proportional-spatial integral control design for a class of nonlinear distributed parameter systems. , 2014, , .		2
56	Exponential synchronization for a class of networked linear parabolic PDE systems via boundary control. , 2014, , .		12
57	Robust attitude control of an indoor micro quadrotor with input delay. , 2014, , .		10
58	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
59	Static output feedback control via PDE boundary and ODE measurements in linear cascaded ODE–beam systems. Automatica, 2014, 50, 2787-2798.	5.0	134
60	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
61	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
62	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
63	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
64	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
65	Robust fuzzy control for uncertain nonlinear Markovian jump systems with time-varying delay. Fuzzy Sets and Systems, 2013, 212, 41-61.	2.7	62
66	Guaranteed cost distributed fuzzy observer–based control for a class of nonlinear spatially distributed processes. AICHE Journal, 2013, 59, 2366-2378.	3.6	23
67	Distributed Proportional–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
68	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>∞</mml:mi></mml:mrow></mml:msub></m fuzzy controllers with constraint for nonlinear hyperbolic PDE systems. Automatica, 2012, 48, 2535-2543.	5.0	122
69	Guaranteed cost distributed fuzzy control design for a class of nonlinear first-order hyperbolic PDE systems. , 2012, , .		2
70	Stochastically exponential stability and stabilization of uncertain linear hyperbolic PDE systems with Markov jumping parameters. Automatica, 2012, 48, 569-576.	5.0	42
71	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
72	Adaptive neural boundary control design for a class of nonlinear spatially distributed systems. , 2011, , .		1

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73	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
74	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
75	A delay decomposition approach to $\mathscr{L}_2 \text{—} \mathscr{L}_\infty$ filter design for stochastic systems with time-varying delay. Automatica, 2011, 47, 1482-1488.	6.4	162