

Xiangwei Bu

List of Publications by Year in descending order

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Version: 2024-02-01

52
papers

2,199
citations

201674

27
h-index

223800

46
g-index

54
all docs

54
docs citations

54
times ranked

1207
citing authors

#	ARTICLE	IF	CITATIONS
1	Self-Driven One-Step Oil Removal from Oil Spill on Water via Selective-Wettability Steel Mesh. ACS Applied Materials & Interfaces, 2014, 6, 19858-19865.	8.0	226
2	Tracking differentiator design for the robust backstepping control of a flexible air-breathing hypersonic vehicle. Journal of the Franklin Institute, 2015, 352, 1739-1765.	3.4	172
3	Air-Breathing Hypersonic Vehicles Funnel Control Using Neural Approximation of Non-affine Dynamics. IEEE/ASME Transactions on Mechatronics, 2018, 23, 2099-2108.	5.8	121
4	Novel prescribed performance neural control of a flexible air-breathing hypersonic vehicle with unknown initial errors. ISA Transactions, 2015, 59, 149-159.	5.7	107
5	An Adaptive Critic Design-Based Fuzzy Neural Controller for Hypersonic Vehicles: Predefined Behavioral Nonaffine Control. IEEE/ASME Transactions on Mechatronics, 2019, 24, 1871-1881.	5.8	97
6	Fuzzy Optimal Tracking Control of Hypersonic Flight Vehicles via Single-Network Adaptive Critic Design. IEEE Transactions on Fuzzy Systems, 2022, 30, 270-278.	9.8	97
7	A Simplified Finite-Time Fuzzy Neural Controller With Prescribed Performance Applied to Waverider Aircraft. IEEE Transactions on Fuzzy Systems, 2022, 30, 2529-2537.	9.8	82
8	Nonfragile Quantitative Prescribed Performance Control of Waverider Vehicles With Actuator Saturation. IEEE Transactions on Aerospace and Electronic Systems, 2022, 58, 3538-3548.	4.7	81
9	Tracking control of air-breathing hypersonic vehicles with non-affine dynamics via improved neural back-stepping design. ISA Transactions, 2018, 75, 88-100.	5.7	79
10	Neural-approximation-based robust adaptive control of flexible air-breathing hypersonic vehicles with parametric uncertainties and control input constraints. Information Sciences, 2016, 346-347, 29-43.	6.9	75
11	A prescribed performance control approach guaranteeing small overshoot for air-breathing hypersonic vehicles via neural approximation. Aerospace Science and Technology, 2017, 71, 485-498.	4.8	71
12	Design of a class of new nonlinear disturbance observers based on tracking differentiators for uncertain dynamic systems. International Journal of Control, Automation and Systems, 2015, 13, 595-602.	2.7	66
13	Minimal-learning-parameter based simplified adaptive neural back-stepping control of flexible air-breathing hypersonic vehicles without virtual controllers. Neurocomputing, 2016, 175, 816-825.	5.9	63
14	A guaranteed transient performance-based adaptive neural control scheme with low-complexity computation for flexible air-breathing hypersonic vehicles. Nonlinear Dynamics, 2016, 84, 2175-2194.	5.2	63
15	High-order tracking differentiator based adaptive neural control of a flexible air-breathing hypersonic vehicle subject to actuators constraints. ISA Transactions, 2015, 58, 237-247.	5.7	59
16	Guaranteeing prescribed output tracking performance for air-breathing hypersonic vehicles via non-affine back-stepping control design. Nonlinear Dynamics, 2018, 91, 525-538.	5.2	59
17	Robust estimation-free prescribed performance back-stepping control of air-breathing hypersonic vehicles without affine models. International Journal of Control, 2016, 89, 2185-2200.	1.9	54
18	Nonsingular direct neural control of air-breathing hypersonic vehicle via back-stepping. Neurocomputing, 2015, 153, 164-173.	5.9	44

#	ARTICLE	IF	CITATIONS
19	Novel adaptive neural control of flexible air-breathing hypersonic vehicles based on sliding mode differentiator. <i>Chinese Journal of Aeronautics</i> , 2015, 28, 1209-1216.	5.3	43
20	A new prescribed performance control approach for uncertain nonlinear dynamic systems via back-stepping. <i>Journal of the Franklin Institute</i> , 2018, 355, 8510-8536.	3.4	40
21	A benign preparation of sec-butanol via transesterification from sec-butyl acetate using the acidic imidazolium ionic liquids as catalysts. <i>Chemical Engineering Journal</i> , 2014, 246, 366-372.	12.7	37
22	Guaranteeing preselected tracking quality for air-breathing hypersonic non-affine models with an unknown control direction via concise neural control. <i>Journal of the Franklin Institute</i> , 2016, 353, 3207-3232.	3.4	36
23	Novel adaptive neural control design for a constrained flexible air-breathing hypersonic vehicle based on actuator compensation. <i>Acta Astronautica</i> , 2016, 120, 75-86.	3.2	36
24	Novel auxiliary error compensation design for the adaptive neural control of a constrained flexible air-breathing hypersonic vehicle. <i>Neurocomputing</i> , 2016, 171, 313-324.	5.9	35
25	Guaranteeing prescribed performance for air-breathing hypersonic vehicles via an adaptive non-affine tracking controller. <i>Acta Astronautica</i> , 2018, 151, 368-379.	3.2	34
26	Envelope-constraint-based tracking control of air-breathing hypersonic vehicles. <i>Aerospace Science and Technology</i> , 2019, 95, 105429.	4.8	32
27	A fuzzy wavelet neural network-based approach to hypersonic flight vehicle direct nonaffine hybrid control. <i>Nonlinear Dynamics</i> , 2018, 94, 1657-1668.	5.2	30
28	A robust constrained control approach for flexible air-breathing hypersonic vehicles. <i>International Journal of Robust and Nonlinear Control</i> , 2020, 30, 2752-2776.	3.7	28
29	Two controller designs of hypersonic flight vehicle under actuator dynamics and AOA constraint. <i>Aerospace Science and Technology</i> , 2018, 80, 11-19.	4.8	21
30	Robust tracking control of hypersonic flight vehicles: A continuous model-free control approach. <i>Acta Astronautica</i> , 2019, 161, 234-240.	3.2	20
31	Adaptive dynamic programming design for the neural control of hypersonic flight vehicles. <i>Journal of the Franklin Institute</i> , 2021, 358, 8169-8192.	3.4	20
32	Prescribed performance control approaches, applications and challenges: A comprehensive survey. <i>Asian Journal of Control</i> , 2023, 25, 241-261.	3.0	20
33	A neural approximation-based novel back-stepping control scheme for air-breathing hypersonic vehicles with uncertain parameters. <i>Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering</i> , 2016, 230, 231-243.	1.0	18
34	Adaptive Fuzzy Back-stepping Control of a Flexible Air-breathing Hypersonic Vehicle Subject to Input Constraints. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2017, 87, 565-582.	3.4	18
35	Backstepping Sliding Mode Control for Radar Seeker Servo System Considering Guidance and Control System. <i>Sensors</i> , 2018, 18, 2927.	3.8	17
36	Prescribed performance-based low-computational cost fuzzy control of a hypersonic vehicle using non-affine models. <i>Advances in Mechanical Engineering</i> , 2018, 10, 168781401875726.	1.6	12

#	ARTICLE	IF	CITATIONS
37	Actor-Critic Reinforcement Learning Control of Non-Strict Feedback Nonaffine Dynamic Systems. IEEE Access, 2019, 7, 65569-65578.	4.2	12
38	An improvement of single-network adaptive critic design for nonlinear systems with asymmetry constraints. Journal of the Franklin Institute, 2019, 356, 9646-9664.	3.4	12
39	A Sensor Deployment Approach Using Improved Virtual Force Algorithm Based on Area Intensity for Multisensor Networks. Mathematical Problems in Engineering, 2019, 2019, 1-9.	1.1	10
40	Synthesis of Methacrylic Anhydride by Batch Reactive Distillation: Reaction Kinetics and Process. Industrial & Engineering Chemistry Research, 2014, 53, 17317-17324.	3.7	9
41	Concise Neural Nonaffine Control of Air-Breathing Hypersonic Vehicles Subject to Parametric Uncertainties. International Journal of Aerospace Engineering, 2017, 2017, 1-16.	0.9	7
42	Neural network-based nonaffine control of air-breathing hypersonic vehicles with prescribed performance. International Journal of Advanced Robotic Systems, 2018, 15, 172988141875524.	2.1	6
43	Non-fragile tracking control of constrained Waverider Vehicles with readjusting prescribed performance. Nonlinear Dynamics, 2022, 108, 3657-3669.	5.2	6
44	Adaptive fuzzy tracking control for a constrained flexible air-breathing hypersonic vehicle based on actuator compensation. International Journal of Advanced Robotic Systems, 2016, 13, 172988141667111.	2.1	5
45	Adaptive back-stepping control of high-order uncertain nonlinear systems that a funnel control scheme with uncertain dynamics. , 2020, , .		5
46	Prescribed Performance Tracking Control for Hypersonic Flight Vehicles with Model Uncertainties. International Journal of Aerospace Engineering, 2019, 2019, 1-11.	0.9	4
47	EMMD-Prony approach for dynamic validation of simulation models. Journal of Systems Engineering and Electronics, 2015, 26, 172-181.	2.2	2
48	Guaranteeing Prescribed Performance Control for Gyrostabilized Platform with Unknown Control Direction Preceded by Hysteresis. International Journal of Aerospace Engineering, 2019, 2019, 1-12.	0.9	2
49	A folate/RGD-dual-functionalized mesoporous silica nanoparticles targeting GABA α 38 MAPK α MRTFs/SRF signaling pathway in rheumatoid arthritis. Clinical and Translational Medicine, 2021, 11, e408.	4.0	1
50	Adaptive neural tracking control of constrained waverider vehicles via single-network adaptive dynamic programming. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2023, 237, 304-321.	1.3	1
51	Adaptive neural back-stepping control of flexible air-breathing hypersonic vehicles with parametric uncertainties. Advances in Mechanical Engineering, 2018, 10, 168781401878284.	1.6	0
52	Funnel Control of Uncertain Flexible Air-breathing Hypersonic Vehicles. , 2020, , .		0