

Farshad Khorrami

List of Publications by Year in descending order

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102
papers

2,781
citations

201674

27
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48
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102
all docs

102
docs citations

102
times ranked

1248
citing authors

#	ARTICLE	IF	CITATIONS
1	Decentralized adaptive control of a class of large-scale interconnected nonlinear systems. IEEE Transactions on Automatic Control, 1997, 42, 136-154.	5.7	229
2	Dynamic High-Gain Scaling: State and Output Feedback With Application to Systems With ISS Appended Dynamics Driven by All States. IEEE Transactions on Automatic Control, 2004, 49, 2219-2239.	5.7	163
3	Decentralized adaptive output feedback design for large-scale nonlinear systems. IEEE Transactions on Automatic Control, 1997, 42, 729-735.	5.7	161
4	Modeling and Adaptive Nonlinear Control of Electric Motors. Power Systems, 2003, , .	0.5	143
5	Global output feedback tracking for nonlinear systems in generalized output-feedback canonical form. IEEE Transactions on Automatic Control, 2002, 47, 814-819.	5.7	128
6	Global high-gain-based observer and backstepping controller for generalized output-feedback canonical form. IEEE Transactions on Automatic Control, 2003, 48, 2277-2284.	5.7	116
7	A dynamic high-gain design for prescribed-time regulation of nonlinear systems. Automatica, 2020, 115, 108860.	5.0	116
8	A High-Gain Scaling Technique for Adaptive Output Feedback Control of Feedforward Systems. IEEE Transactions on Automatic Control, 2004, 49, 2286-2292.	5.7	90
9	Feedforward Systems With ISS Appended Dynamics: Adaptive Output-Feedback Stabilization and Disturbance Attenuation. IEEE Transactions on Automatic Control, 2008, 53, 405-412.	5.7	77
10	State-Space Modeling of Proton Exchange Membrane Fuel Cell. IEEE Transactions on Energy Conversion, 2010, 25, 804-813.	5.2	74
11	Experimental results on adaptive nonlinear control and input preshaping for multi-link flexible manipulators. Automatica, 1995, 31, 83-97.	5.0	73
12	Cybersecurity for Control Systems: A Process-Aware Perspective. IEEE Design and Test, 2016, 33, 75-83.	1.2	72
13	High-gain output-feedback control for nonlinear systems based on multiple time scaling. Systems and Control Letters, 2007, 56, 7-15.	2.3	60
14	Generalized State Scaling and Applications to Feedback, Feedforward, and Nontriangular Nonlinear Systems. IEEE Transactions on Automatic Control, 2007, 52, 102-108.	5.7	56
15	Nonlinear adaptive control of direct-drive brushless DC motors and applications to robotic manipulators. IEEE/ASME Transactions on Mechatronics, 1999, 4, 71-81.	5.8	53
16	Dual high-gain-based adaptive output-feedback control for a class of nonlinear systems. International Journal of Adaptive Control and Signal Processing, 2008, 22, 23-42.	4.1	53
17	Machine learning-based defense against process-aware attacks on Industrial Control Systems. , 2016, , .		48
18	Decentralized control and disturbance attenuation for large-scale nonlinear systems in generalized output-feedback canonical form. Automatica, 2003, 39, 1923-1933.	5.0	47

#	ARTICLE	IF	CITATIONS
19	Neural Network Modeling of Proton Exchange Membrane Fuel Cell. IEEE Transactions on Energy Conversion, 2010, 25, 474-483.	5.2	47
20	Anomaly Detection in Real-Time Multi-Threaded Processes Using Hardware Performance Counters. IEEE Transactions on Information Forensics and Security, 2020, 15, 666-680.	6.9	44
21	Nonlinear control with end-point acceleration feedback for a two-link flexible manipulator: Experimental results. Journal of Field Robotics, 1993, 10, 505-530.	0.7	43
22	Robust adaptive prescribed-time stabilization via output feedback for uncertain nonlinear strict-feedback-like systems. European Journal of Control, 2020, 55, 14-23.	2.6	42
23	Robust decentralized control of power systems utilizing only swing angle measurements. International Journal of Control, 1997, 66, 581-602.	1.9	40
24	A Theoretical Study of Hardware Performance Counters-Based Malware Detection. IEEE Transactions on Information Forensics and Security, 2020, 15, 512-525.	6.9	40
25	Robust adaptive control for non-linear systems in generalized output-feedback canonical form. International Journal of Adaptive Control and Signal Processing, 2003, 17, 285-311.	4.1	39
26	Adaptive output-feedback stabilization in prescribed time for nonlinear systems with unknown parameters coupled with unmeasured states. International Journal of Adaptive Control and Signal Processing, 2021, 35, 184-202.	4.1	38
27	Robust adaptive voltage-fed permanent magnet step motor control without current measurements. IEEE Transactions on Control Systems Technology, 2003, 11, 415-425.	5.2	37
28	Sensor modality fusion with CNNs for UGV autonomous driving in indoor environments. , 2017, , .		35
29	Robust adaptive control of variable reluctance stepper motors. IEEE Transactions on Control Systems Technology, 1999, 7, 212-221.	5.2	33
30	A Singular Perturbation Based Global Dynamic High Gain Scaling Control Design for Systems With Nonlinear Input Uncertainties. IEEE Transactions on Automatic Control, 2013, 58, 2686-2692.	5.7	33
31	Process-Aware Covert Channels Using Physical Instrumentation in Cyber-Physical Systems. IEEE Transactions on Information Forensics and Security, 2018, 13, 2761-2771.	6.9	27
32	Robust Adaptive Control of Sawyer Motors Without Current Measurements. IEEE/ASME Transactions on Mechatronics, 2004, 9, 689-696.	5.8	21
33	A deep learning gated architecture for UGV navigation robust to sensor failures. Robotics and Autonomous Systems, 2019, 116, 80-97.	5.1	21
34	Enhancing Flight Control System Performance Using SDRE Based Controller as an Augmentation Layer. , 2009, , .		20
35	Hardware Trojan Detection Using Controlled Circuit Aging. IEEE Access, 2020, 8, 77415-77434.	4.2	19
36	GODZILA: A Low-resource Algorithm for Path Planning in Unknown Environments. Journal of Intelligent and Robotic Systems: Theory and Applications, 2007, 48, 357-373.	3.4	18

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37	An Analysis of the Effects of Closed-Loop Commutation Delay on Stepper Motor Control and Application to Parameter Estimation. IEEE Transactions on Control Systems Technology, 2008, 16, 70-77.	5.2	18
38	Decentralised dynamic high-gain scaling-based output-feedback control of large-scale non-linear interconnected systems with delays. Journal of Control and Decision, 2014, 1, 257-282.	1.6	18
39	Adversarial Learning-Based On-Line Anomaly Monitoring for Assured Autonomy. , 2018, , .		18
40	Robust Force Control of an SRM-Based Electromechanical Brake and Experimental Results. IEEE Transactions on Control Systems Technology, 2009, 17, 1306-1317.	5.2	17
41	Emerging (un-)reliability based security threats and mitigations for embedded systems. , 2017, , .		17
42	Positioning of unknown flexible payloads for robotic arms using a wrist-mounted force/torque sensor. IEEE Transactions on Control Systems Technology, 1995, 3, 189-201.	5.2	16
43	Adaptive output-feedback control of a general class of uncertain feedforward systems via a dynamic scaling approach. IET Control Theory and Applications, 2011, 5, 681-692.	2.1	16
44	Adaptive Adversarial Videos on Roadside Billboards: Dynamically Modifying Trajectories of Autonomous Vehicles. , 2019, , .		15
45	Adaptive Control Approaches for an Unmanned Aerial Manipulation System. , 2020, , .		15
46	Towards a New Thermal Monitoring Based Framework for Embedded CPS Device Security. IEEE Transactions on Dependable and Secure Computing, 2022, 19, 524-536.	5.4	15
47	Decentralized control of large-scale power systems with unknown interconnections. International Journal of Control, 1996, 63, 591-608.	1.9	14
48	Robust Adaptive Control of Flexible Joint Manipulators. Automatica, 1998, 34, 609-615.	5.0	13
49	Analysis and Design of Actuationâ€“Sensingâ€“Communication Interconnection Structures Toward Secured/Resilient LTI Closed-Loop Systems. IEEE Transactions on Control of Network Systems, 2019, 6, 667-678.	3.7	11
50	Decentralized Inventory Control for Large-Scale Reverse Supply Chains: A Computationally Tractable Approach. IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews, 2008, 38, 551-561.	2.9	10
51	Control Design and Implementation for Sawyer Motors Used in Manufacturing Systems. IEEE Transactions on Control Systems Technology, 2011, 19, 1467-1478.	5.2	9
52	Relative Pose Estimation of Unmanned Aerial Systems. , 2018, , .		9
53	Resilient power grid state estimation under false data injection attacks. , 2018, , .		9
54	Sliding-Window Temporal Attention Based Deep Learning System for Robust Sensor Modality Fusion for UGV Navigation. IEEE Robotics and Automation Letters, 2019, 4, 4216-4223.	5.1	9

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55	Exposing Hardware Trojans in Embedded Platforms via Short-Term Aging. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2020, 39, 3519-3530.	2.7	9
56	Machine Learning for NetFlow Anomaly Detection With Human-Readable Annotations. IEEE Transactions on Network and Service Management, 2021, 18, 1885-1898.	4.9	9
57	Detecting Hardware Trojans in PCBs Using Side Channel Loopbacks. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2022, 30, 926-937.	3.1	9
58	TAINT: Tool for Automated INsertion of Trojans. , 2017, , .		8
59	Optimal Sensor Placement for Monitoring of Spatial Networks. IEEE Transactions on Automation Science and Engineering, 2018, 15, 33-44.	5.2	8
60	Neural network design with genetic learning for control of a single link flexible manipulator. Journal of Intelligent and Robotic Systems: Theory and Applications, 1996, 15, 135-151.	3.4	7
61	Stealthy Rootkits in Smart Grid Controllers. , 2019, , .		7
62	Aerial Worker for Skyscraper Fire Fighting using a Water-Jetpack Inspired Approach. , 2020, , .		7
63	Learning-Based Real-Time Process-Aware Anomaly Monitoring for Assured Autonomy. IEEE Transactions on Intelligent Vehicles, 2020, 5, 659-669.	12.7	7
64	Adaptive Nonlinear Control and Input Preshaping for Flexible-Link Manipulators; Control/Robotics Research Laboratory (CRRL). , 1993, , .		6
65	Process-aware side channel monitoring for embedded control system security. , 2017, , .		6
66	A Game Theoretic Approach to Design a Resilient Controller For a Nonlinear Discrete System. IFAC-PapersOnLine, 2017, 50, 387-392.	0.9	6
67	Special Session: Machine Learning for Semiconductor Test and Reliability. , 2021, , .		6
68	State Constrained Stochastic Optimal Control Using LSTMs. , 2021, , .		6
69	A Feature-Based On-Line Detector to Remove Adversarial-Backdoors by Iterative Demarcation. IEEE Access, 2022, 10, 5545-5558.	4.2	6
70	Fuzzy Neural Network Control for a Single Flexible-Link Manipulator. Journal of Intelligent and Fuzzy Systems, 1993, 1, 319-334.	1.4	5
71	Estimating Weight of Unknown Objects Using Active Thermography. Robotics, 2019, 8, 92.	3.5	5
72	Overriding Autonomous Driving Systems Using Adaptive Adversarial Billboards. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 11386-11396.	8.0	5

#	ARTICLE	IF	CITATIONS
73	<title>New integrated piezoelectric-dielectric microstrip antenna for dual wireless actuation and sensing functions</title>. , 1998, , .		4
74	A Dynamic Scaling Based Control Redesign Procedure for Uncertain Nonlinear Systems with Input Unmodeled Dynamics. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 3708-3713.	0.4	4
75	Reducing Operator Workload for Indoor Navigation of Autonomous Robots via Multimodal Sensor Fusion. , 2017, , .		4
76	Tightly Coupled Semantic RGB-D Inertial Odometry for Accurate Long-Term Localization and Mapping. , 2019, , .		4
77	Anomaly Detection in Embedded Systems Using Power and Memory Side Channels. , 2020, , .		4
78	Functional Replicas of Proprietary Three-Axis Attitude Sensors via LSTM Neural Networks. , 2020, , .		4
79	Resilient redundancy-based control of cyber-physical systems through adaptive randomized switching. Systems and Control Letters, 2021, 158, 105066.	2.3	4
80	Trojan Detection in Embedded Systems With FinFET Technology. IEEE Transactions on Computers, 2022, 71, 3061-3071.	3.4	4
81	A Control Design for Quad Rotor UAVs with Input Unmodeled Dynamics. IFAC-PapersOnLine, 2015, 48, 227-232.	0.9	3
82	Global output-feedback control of systems with dynamic nonlinear input uncertainties through singular perturbation-based dynamic scaling. International Journal of Adaptive Control and Signal Processing, 2016, 30, 690-714.	4.1	3
83	UAV-deployment for city-wide area coverage and computation of optimal response trajectories. , 2020, , .		3
84	Robust adaptive control of permanent magnet stepper motors. , 1997, , .		2
85	TriM: An Ultra-Accurate High-Speed Six Degree-of-Freedom Manipulator Using Planar Stepper Motors. Journal of Intelligent and Robotic Systems: Theory and Applications, 2008, 51, 137-157.	3.4	2
86	First-Order Short-Range Mover Prediction Model (SRMPM). , 2011, , .		2
87	Overriding Learning-based Perception Systems for Control of Autonomous Unmanned Aerial Vehicles. , 2021, , .		2
88	Decentralized swarming beliefs of distributed autonomous heterogeneous system. , 2011, , .		1
89	Multi-ordered short-range mover prediction models for tracking and avoidance. , 2012, , .		1
90	Trunk stabilization of multi-legged robots using on-line learning via a NARX neural network compensator. , 2015, , .		1

#	ARTICLE	IF	CITATIONS
91	Explaining and Interpreting Machine Learning CAD Decisions: An IC Testing Case Study. , 2020, , .		1
92	HPC-Based Malware Detectors Actually Work: Transition to Practice After a Decade of Research. IEEE Design and Test, 2022, 39, 23-32.	1.2	1
93	<title>Microstrip antennas for wireless communication in smart structures and active damping</title>. , 1997, , .		0
94	A Wiener-Hopf approach to trade-offs between stability margin and performance in two- and three-degree-of-freedom multivariable control systems. International Journal of Control, 1997, 68, 1337-1366.	1.9	0
95	Novel Double-Parallelogram Motion Constraining Mechanisms for Vibration Isolation Systems. , 2007, , .		0
96	Belief convergence to facilitate cooperative behaviors. , 2012, , .		0
97	Decentralized Output-Feedback for Delayed Large-Scale Interconnected Nonlinear Systems via Dynamic High-Gain Scaling. IFAC-PapersOnLine, 2015, 48, 247-252.	0.9	0
98	A Distributed Monitoring Approach for Human Interaction with Multi-Robot Systems. , 2017, , .		0
99	An Optimal Defense Strategy Against Data Integrity Attacks In Smart Grids. , 2019, , .		0
100	An Approach to Estimate Emissivity For Thermography-based Material Recognition. , 2019, , .		0
101	Texture Estimation Using Thermography and Machine Learning. , 2019, , .		0
102	An approximate factorization approach to multi-jammer location and range estimation from peer-to-peer connectivity measurements. Computer Networks, 2021, 196, 108268.	5.1	0