Ahmad Fakharian

List of Publications by Year
in descending order

83 papers	444 citations	933264 10 h-index	996849 15 g-index
83 all docs	83 docs citations	83 times ranked	327 citing authors

#	Article	IF	Citations
1	Trajectory tracking for quadrotor UAV transporting cable-suspended payload in wind presence. Transactions of the Institute of Measurement and Control, 2019, 41, 1243-1255.	1.1	41
2	Tool position tracking control of a nonlinear uncertain flexible robot manipulator by using robust H2/Hâ€ž controller via Tâ€"S fuzzy model. Sadhana - Academy Proceedings in Engineering Sciences, 2015, 40, 307-333.	0.8	23
3	Back-Stepping Integral Sliding Mode Control with Iterative Learning Control Algorithm for Quadrotor UAVs. Journal of Electrical Engineering and Technology, 2019, 14, 2539-2547.	1.2	22
4	Observer-based robust control for flexible-joint robot manipulators: A state-dependent Riccati equation-based approach. Transactions of the Institute of Measurement and Control, 2020, 42, 3135-3155.	1.1	21
5	Solving the Hamiltonâ€"Jacobiâ€"Bellman equation using Adomian decomposition method. International Journal of Computer Mathematics, 2010, 87, 2769-2785.	1.0	20
6	Robust multi-objective H_2/H_∞ tracking control based on the Takagiâ€"Sugeno fuzzy model for a class of nonlinear uncertain drive systems. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2012, 226, 1107-1118.	0.7	19
7	Voltage and frequency control of an islanded microgrid through robust control method and fuzzy droop technique. , 2017, , .		19
8	A critical review on definitions, indices, and uncertainty characterization in resiliencyâ€oriented operation of power systems. International Transactions on Electrical Energy Systems, 2021, 31, e12680.	1.2	16
9	Position and Current Control of an Interior Permanent-Magnet Synchronous Motor by Using Loop-Shaping Methodology: Blending of H_∞ Mixed-Sensitivity Problem and Tâ€"S Fuzzy Model Scheme. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2013, 135, .	0.9	13
10	A novel controller for nonlinear uncertain systems using a combination of SDRE and function approximation technique: Regulation and tracking of flexible-joint manipulators. Journal of the Franklin Institute, 2021, 358, 5185-5212.	1.9	12
11	GA-based optimal droop control approach to improve voltage regulation and equal power sharing for islanded DC microgrids. , 2016, , .		11
12	Optimal Sliding Mode Controller for an Active Transfemoral Prosthesis Using State-Dependent Riccati Equation Approach. Arabian Journal for Science and Engineering, 2020, 45, 6559-6572.	1.7	11
13	Decentralized control of an islanded microgrid based on offline model reference adaptive control. Journal of Renewable and Sustainable Energy, 2018, 10, .	0.8	10
14	Nonlinear Sub-Optimal Controller for Ebola Virus Disease: State-Dependent Riccati Equation Approach. , 2021, , .		9
15	Path tracking and obstacle avoidance of a FPGA-based mobile robot (MRTQ) via fuzzy algorithm. , 2013, , .		8
16	Nonlinear optimal control of air handling unit via State Dependent Riccati Equation approach. , 2017, , .		8
17	Nonlinear observer-based optimal control of an active transfemoral prosthesis. Journal of Central South University, 2021, 28, 140-152.	1.2	8
18	Sub-Optimal Observer-based Controller Design Using the State Dependent Riccati Equation Approach for Air-Handling Unit. , 2019, , .		7

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19	Optimal Operation of Unbalanced Microgrid Utilizing Copula-Based Stochastic Simultaneous Unit Commitment and Distribution Feeder Reconfiguration Approach. Arabian Journal for Science and Engineering, 2021, 46, 1287-1311.	1.7	7
20	Fuzzy adaptive PI control of omni-directional mobile robot. , 2013, , .		6
21	Optimal trajectory planning for an omni-directional mobile robot with static obstacles: a polynomial based approach. , 2015, , .		6
22	An intelligent droop control for improve voltage regulation and equal power sharing in islanded DC microgrids. , 2017, , .		6
23	Energy efficiency in the robot arm using genetic algorithm. , 2018, , .		6
24	Robust mixed-sensitivity H&#x221E; control for a class of MIMO uncertain nonlinear IPM synchronous motor via T-S fuzzy model. , 2012, , .		5
25	Fuzzy integral backstepping control approach in attitude stabilization of a quadrotor UAV. , 2013, , .		5
26	Optimal trajectory planning for Omni-directional mobile robots using direct solution of optimal control problem. , 2016, , .		5
27	Fractional order sliding mode guidance law: Improving performance and robustness. , 2016, , .		5
28	Output Feedback Robust Siding Mode Controller Design for Wind Turbine. Journal of Electrical Engineering and Technology, 2019, 14, 2477-2485.	1.2	5
29	A Coordinated Performance of Power System Operated with Participants in Demand Response Programs Considering Environmental Pollution Constraints. Journal of Electrical Engineering and Technology, 2021, 16, 15-29.	1.2	5
30	Optimal controller design for DC microgrid based on state-dependent Riccati Equation (SDRE) approach. Cyber-Physical Systems, 2021, 7, 41-72.	1.6	5
31	Integral Backstepping Sliding Mode Guidance Law with Finite Time Convergence. International Journal of Control and Automation, 2014, 7, 19-30.	0.3	4
32	Trajectory tracking via adaptive nonlinear control approach for a quadrotor MAV. , 2015, , .		4
33	Polynomial based optimal trajectory planning and obstacle avoidance for an omni-directional robot. , 2015, , .		4
34	Attitude control and trajectory tracking of an autonomous miniature aerial vehicle. , 2015, , .		4
35	Pressure control in gas oil pipeline: A supervisory model predictive control approach. , 2016, , .		4
36	A nonlinear robust optimal controller for an active transfemoral prosthesis: An estimator-based state-dependent Riccati equation approach. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2021, 235, 313-329.	0.7	4

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37	Fault-Tolerant Control of Quadrotor UAVs Based on Back-Stepping Integral Sliding Mode Approach and Iterative Learning Algorithm. Mathematical Problems in Engineering, 2021, 2021, 1-15.	0.6	4
38	An Adaptive Nonsingular Fast Terminal Sliding Mode Controller for Dynamic Walking of a 5-Link Planar Biped Robot in Both Single and Double Support Phases. Mathematical Problems in Engineering, 2022, 2022, 1-15.	0.6	4
39	Precise hybrid motion detection and tracking in dynamic background. , 2011, , .		3
40	Nonlinear Electrical Circuit Oscillator Control Based on Backstepping Method: A Genetic Algorithm Approach. Mathematical Problems in Engineering, 2012, 2012, 1-14.	0.6	3
41	Robust Mixed-Sensitivity Gain-Scheduled H<inf>&#x221E;</inf> tracking control of a nonlinear Time-Varying IPMSM via a T-S fuzzy model. , 2012, , .		3
42	Model-based predictive control of wheeled omni-directional robots considering nonlinear dynamical constraints and input delay. , 2014, , .		3
43	LQG controller based on fuzzy logic to control the power of wind turbine. , 2015, , .		3
44	A combination of 3-phase and d-q techniques for controlling the islanded microgrid system: New schemes. , 2015, , .		3
45	Adaptive optimal control via reinforcement learning for omni-directional wheeled robots. , 2016, , .		3
46	A new control approach for islanded microgrid system: Based on correlative techniques. , 2016, , .		3
47	An optimal power management system for automatic connection of DC and AC resources of hybrid-microgrid systems. , 2017, , .		3
48	Online Policy Iteration-Based Tracking Control of Four Wheeled Omni-Directional Robots. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2018, 140, .	0.9	3
49	A new modified polynomial-based optimal control design approach. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2021, 235, 355-370.	0.7	3
50	A hybrid approach based on IGDTâ€MOCMAâ€ŒS method for optimal operation of smart distribution network under severe uncertainties. International Journal of Energy Research, 2021, 45, 9463-9491.	2.2	3
51	Robust Control of Islanded DC Microgrid for Voltage Regulation Based on Polytopic Model and Load Sharing. Iranian Journal of Science and Technology - Transactions of Electrical Engineering, 2022, 46, 171-186.	1.5	3
52	Mathematical Modeling of the Novel Coronavirus Pandemic in Iran: A Model With Vaccination. , 2022, , .		3
53	Nonlinear Sub-optimal Control Design for Suppressing HIV Replication. Iranian Journal of Science and Technology - Transactions of Electrical Engineering, 2022, 46, 805-818.	1.5	3
54	H<inf>2</inf> static state feedback control of linear singular perturbation systems: A new approach. , 2011, , .		2

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55	Fuzzy control for rotor speed of power plant gas turbine. , 2013, , .		2
56	Robust H-infinity control for the pH Neutralization process based on fuzzy models. , 2013, , .		2
57	Mobile robot navigation using sonar vision algorithm applied to omnidirectional vision. , 2015, , .		2
58	Path following of an omni-directional four-wheeled mobile robot. , 2016, , .		2
59	Side sonar vision applied to Omni-directional images to navigate mobile robots. , 2017, , .		2
60	Active fault-tolerant control system for a swash mass helicopter using back-stepping approach. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2022, 236, 39-53.	0.7	2
61	Design of Robust Model Reference Adaptive Controller for a Wider Class of Nonlinear Systems. Iranian Journal of Science and Technology - Transactions of Electrical Engineering, 2022, 46, 127-139.	1.5	2
62	Speed and torque control of induction motor by using robust $H\infty$ mixed-sensitivity problem via T-S Fuzzy model. , 2012, , .		1
63	Adaptive control of a wind turbine based on neural networks. , 2013, , .		1
64	Robust H_2/H_∞ control for a robot manipulator fuzzy system. , 2013, , .		1
65	An experimental LTI model for open loop Nao navigation. , 2013, , .		1
66	A novel method for connecting the PV unit to hybrid microgrid systems based on smart controlling structure. , 2016, , .		1
67	Robust path following of a car-like robot in the presence of sliding effect based on LMI formulation. , 2017, , .		1
68	$\mathcal{H}_{\infty}$ Robust Control Design for Three-Element Industrial Boiler Supervisory System. , 2022, , .		1
69	A new approach on H_∞ control of linear singular perturbation systems. , 2011, , .		0
70	An iterative-LMI based H_2 control of singular perturbation systems. , 2011, , .		0
71	A new prediction algorithm to improve training the neural networks and its application in mobile robot control system. , 2011, , .		0
72	Simulation and assessment of wireless fieldbus networks over IEEE802.11. , 2011, , .		0

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73	Design of Switching Multiobjective Controller: A New Approach. Mathematical Problems in Engineering, 2011, 2011, 1-12.	0.6	0
74	Fuzzy robust control of MIMO nonlinear uncertain systems. , 2013, , .		0
75	Consensus in multi-agent networked system using adaptive neuro-fuzzy inference system. , 2013, , .		0
76	Fast and precise positioning of wheeled Omni-directional robot with input delay using model-based predictive control. , 2014, , .		0
77	Design and implementation of a controller with two-degrees of freedom using neural networks based on FPGA. , 2015, , .		0
78	Implementation of a frequency FIR filter as 2D-FIR filter based on FPGA. , 2015, , .		0
79	Temperature control of distillation column in Hydro-alkylation of toluene: A supervisory predictive approach. , 2016, , .		0
80	An experimental system identification modeling and robust control for NAO humanoid robot. , 2016, , .		0
81	H<inf>â^ž</inf> output feedback controller design for flexible needles guidance. , 2016, , .		0
82	Multivariable Nonlinear Model Predictive Controller Design for Air-Handling Unit with Single Zone in Variable Air Volume. , 2021, , .		0
83	Multivariable Nonlinear Control of Air-Handling Unit in HVAC System: Robust Sliding Mode Control. , 2022, , .		0