Alireza Khayatian

List of Publications by Year
in descending order

106 papers	1,184 citations	394421 19 h-index	454955 30 g-index
106 all docs	106 docs citations	106 times ranked	1072 citing authors

#	Article	IF	Citations
1	Event-Triggered Fuzzy Adaptive Leader-Following Tracking Control of Nonaffine Multiagent Systems With Finite-Time Output Constraint and Input Saturation. IEEE Transactions on Fuzzy Systems, 2022, 30, 933-944.	9.8	41
2	Designing an Optimal Reset Controller for TS Fuzzy Systems. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2022, 52, 4033-4044.	9.3	2
3	Investigation of Wind Energy Impact on Power Systems Stability Using Lyapunov Exponents. Lecture Notes in Networks and Systems, 2021, , 12-22.	0.7	0
4	Fault Detection of Induction Motors Using Just In Time Classifiers. , 2021, , .		0
5	Extended state observer-based control of heartbeat described by heterogeneous coupled oscillator model. Communications in Nonlinear Science and Numerical Simulation, 2021, 101, 105884.	3.3	4
6	TS Fuzzy Model-Based Controller Design for a Class of Nonlinear Systems Including Nonsmooth Functions. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2020, 50, 233-244.	9.3	21
7	Stochastic boundedness of state trajectories of stable LTI systems in the presence of non-vanishing stochastic perturbation. IMA Journal of Mathematical Control and Information, 2020, 37, 718-729.	1.7	1
8	Robust sliding mode observer design for simultaneous fault reconstruction in perturbed Takagi-Sugeno fuzzy systems using non-quadratic stability analysis. JVC/Journal of Vibration and Control, 2020, 26, 1092-1105.	2.6	19
9	Optimal reset unknown input observer design for fault and state estimation in a class of nonlinear uncertain systems. Journal of the Franklin Institute, 2020, 357, 2978-2996.	3.4	22
10	Simultaneous stabilization of polynomial nonlinear systems via density functions. Journal of the Franklin Institute, 2020, 357, 1690-1706.	3.4	5
11	Optimal robust model predictive reset control design for performance improvement of uncertain linear system. ISA Transactions, 2020, 107, 78-89.	5.7	10
12	Performance improvement by optimal reset dynamic output feedback control based on model predictive strategy. Journal of Process Control, 2020, 88, 78-85.	3.3	7
13	Observer-Based Fuzzy Adaptive Dynamic Surface Control of Uncertain Nonstrict Feedback Systems With Unknown Control Direction and Unknown Dead-Zone. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2019, 49, 2340-2351.	9.3	60
14	Three Axis Fluxgate Magnetometer Sensor Calibration. , 2019, , .		2
15	Uncertainty decomposition of quantum networks in SLH framework. International Journal of Robust and Nonlinear Control, 2019, 29, 6542-6554.	3.7	2
16	Lyapunov Exponent based Stability Assessment of Power Systems. , 2019, , .		2
17	Stabilisation and transient performance improvement of DC MGs with CPLs: nonâ€linear reset control approach. IET Generation, Transmission and Distribution, 2019, 13, 3169-3176.	2.5	25
18	Fast convergence to Nash equilibria without steady-state oscillation. Systems and Control Letters, 2019, 123, 124-133.	2.3	6

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19	LMIâ€based reset unknown input observer for state estimation of linear uncertain systems. IET Control Theory and Applications, 2019, 13, 1872-1881.	2.1	19
20	Nonlinear system identification based on Takagi-Sugeno fuzzy modeling and unscented Kalman filter. ISA Transactions, 2018, 74, 134-143.	5.7	53
21	Performance Recovery of Voltage Source Converters With Application to Grid-Connected Fuel Cell DGs. IEEE Transactions on Smart Grid, 2018, 9, 1197-1204.	9.0	34
22	Robust <inline-formula> <tex-math notation="LaTeX">${L_1}$</tex-math> </inline-formula> Observer-Based Non-PDC Controller Design for Persistent Bounded Disturbed TS Fuzzy Systems. IEEE Transactions on Fuzzy Systems, 2018, 26, 1401-1413.	9.8	52
23	Sumâ€ofâ€Squaresâ€Based Finiteâ€Time Adaptive Sliding Mode Control of Uncertain Polynomial Systems With Input Nonlinearities. Asian Journal of Control, 2018, 20, 1658-1662.	3.0	16
24	Transient performance improvement of model reference adaptive control: LMIâ€based resetting. International Journal of Adaptive Control and Signal Processing, 2018, 32, 390-402.	4.1	1
25	Design of Robust Double-Fuzzy-Summation Nonparallel Distributed Compensation Controller for Chaotic Power Systems. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2018, 140, .	1.6	15
26	TS-based sampled-data model predictive controller for continuous-time nonlinear systems. International Journal of Systems Science, 2018, 49, 3284-3295.	5.5	10
27	Fast Seeking of Nash Equilibria without Steady-State Oscillation in Games with Non-Quadratic Payoffs. , 2018, , .		2
28	Improved Stabilization of Nonlinear DC Microgrids: Cubature Kalman Filter Approach. IEEE Transactions on Industry Applications, 2018, 54, 5104-5112.	4.9	81
29	A solution for enhancement of transient performance in nonlinear adaptive control: Optimal adaptive reset based on barrier Lyapunov function. ISA Transactions, 2018, 80, 169-175.	5.7	15
30	Reset observer design for time-varying dynamics: Application to WIG crafts. Aerospace Science and Technology, 2018, 81, 32-40.	4.8	2
31	Secure communication for non-ideal channel via robust TS fuzzy observer-based hyperchaotic synchronization. Chaos, Solitons and Fractals, 2018, 112, 116-124.	5.1	38
32	Model predictive-based reset gain-scheduling dynamic control law for polytopic LPV systems. ISA Transactions, 2018, 81, 132-140.	5.7	35
33	Transient performance improvement in indirect model reference adaptive control using perturbationâ€based extremum seeking identifier. International Journal of Adaptive Control and Signal Processing, 2017, 31, 1152-1161.	4.1	2
34	Stability analysis for time-varying WIG craft dynamics in the presence of wavy boundary and gust. Ocean Engineering, 2017, 145, 148-157.	4.3	9
35	TS fuzzy robust L 1 control for nonlinear systems with persistent bounded disturbances. Journal of the Franklin Institute, 2017, 354, 5854-5876.	3.4	32
36	Optimal adaptive reset control with guaranteed transient and steady state tracking error bounds. Journal of the Franklin Institute, 2017, 354, 5949-5963.	3.4	5

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37	Expectational boundedness of stable LTI systems in the presence of nonvanishing stochastic perturbation. , 2017, , .		2
38	Simultaneous fault reconstruction of TS fuzzy systems using robust sliding mode observer and non-quadratic stability analysis. , 2017, , .		3
39	Convergence without oscillation to Nash equilibria in non-cooperative games with quadratic payoffs. , 2017, , .		2
40	A characterization of integral input-to-state stability for hybrid systems. Mathematics of Control, Signals, and Systems, 2017, 29, 1.	2.3	12
41	Identification and Adaptive Position Control of Uncertain Two-Mass Systems with Backlash Hard Nonlinearity. Iranian Journal of Science and Technology - Transactions of Mechanical Engineering, 2017, 41, 197-207.	1.3	5
42	Non-iterative SOS-based approach for guaranteed cost control design of polynomial systems with input saturation. IET Control Theory and Applications, 2017, 11, 2724-2730.	2.1	14
43	On integral input-to-state stability for a feedback interconnection of parameterised discrete-time systems. International Journal of Systems Science, 2016, 47, 1598-1614.	5.5	8
44	Adaptive Friction Compensation: Modular Design with Passive Identifier. Asian Journal of Control, 2016, 18, 2100-2108.	3.0	2
45	Exploiting vector extremum seeking control for simultaneous optimization of net power and lifespan enhancement of PEM fuel cells. , 2016, , .		1
46	Constrained RMPC algorithms for time delay systems with parametric uncertainties: Application to the cancer combined therapy. , 2016, , .		5
47	LPV modeling and position control of two mass systems with variable backlash using LMIs. , 2016, , .		1
48	Robust delay dependent fault estimation for a class of interconnected nonlinear time delay systems. International Journal of Control, Automation and Systems, 2016, 14, 569-578.	2.7	8
49	Time scale separation in control of a single-link flexible-joint robot manipulator. IMA Journal of Mathematical Control and Information, 2016, , dnw052.	1.7	2
50	Conservatism reduction in simultaneous output feedback stabilisation of linear systems. IET Control Theory and Applications, 2016, 10, 2243-2250.	2.1	16
51	Performance recovery in the presence of uncertainty for soft landing on asteroids. , 2016, , .		0
52	Dead-Zone Model Based Adaptive Backstepping Control for a Class of Uncertain Saturated Systems. Asian Journal of Control, 2016, 18, 1395-1405.	3.0	15
53	A Reset-Time Dependent Approach for Stability Analysis of Nonlinear Reset Control Systems. Asian Journal of Control, 2016, 18, 1856-1866.	3.0	4
54	Simultaneous Optimization of Net Power and Enhancement of PEM Fuel Cell Lifespan Using Extremum Seeking and Sliding Mode Control Techniques. IEEE Transactions on Energy Conversion, 2016, 31, 688-696.	5.2	19

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55	Nonlinear adaptive coulomb friction compensation based on passive identifier. , 2015, , .		1
56	Integral input-to-state stability for interconnected hybrid systems. , 2015, , .		0
57	Semiglobal practical integral input-to-state stability for a family of parameterized discrete-time interconnected systems with application to sampled-data control systems. Nonlinear Analysis: Hybrid Systems, 2015, 17, 10-24.	3.5	23
58	Time‐scale separation redesign for stabilisation and performance recovery of sampled‐data non‐linear systems. IET Control Theory and Applications, 2015, 9, 801-810.	2.1	3
59	Stability analysis and performance improvement of uncertain linear systems with designing of a suitable reset law. IET Control Theory and Applications, 2015, 9, 2532-2540.	2.1	18
60	Adaptive control of rigid-link electrically driven robots with parametric uncertainties in kinematics and dynamics and without acceleration measurements. Robotica, 2014, 32, 1153-1169.	1.9	4
61	Reset law design based on robust model predictive strategy for uncertain systems. Journal of Process Control, 2014, 24, 261-268.	3.3	31
62	Vision-based calibration of a Hexa parallel robot. Industrial Robot, 2014, 41, 296-310.	2.1	10
63	Development of a Real-Time Model-Prediction-Based Framework for Reset Controller Design. Industrial & Engineering Chemistry Research, 2014, 53, 14755-14764.	3.7	1
64	Derivative-integral terminal sliding-mode control strategy for DC-DC buck converters. , 2014, , .		0
65	Time-scale separation redesign for performance recovery of boost converters, a new approach. , 2013, , .		1
66	PMU Ranking Based on Singular Value Decomposition of Dynamic Stability Matrix. IEEE Transactions on Power Systems, 2013, 28, 2263-2270.	6.5	38
67	Adaptive Control for a Class of Hysteretic Systems. Journal of Computational and Nonlinear Dynamics, 2013, 8, .	1.2	2
68	Backstepping position control of two-mass systems with unknown backlash. , 2013, , .		8
69	Localization of an Autonomous Underwater Vehicle using a decentralized fusion architecture. , 2013, , .		0
70	Immersion and invariance adaptive control of a class of nonlinear systems with unknown control direction. International Journal of Systems Science, 2013, 44, 2287-2294.	5.5	3
71	Combined gradient and Iterative Learning Control method for magnetostatic inverse problem. , 2013, , .		0
72	Identification and adaptive position control of two mass systems with unknown backlash. , 2013, , .		5

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73	Adaptive task-space control of rigid-link robots with uncertain kinematics and dynamics and without acceleration measurements. , 2013, , .		2
74	A constructive proof of nonlinear small-gain theorem for hybrid systems. , 2012, , .		0
75	Boundary Control of Temperature Distribution in a Spherical Shell With Spatially Varying Parameters. Journal of Heat Transfer, 2012, 134, .	2.1	2
76	A MWPCA-based fault detection in federated no reset mode filter. , 2012, , .		0
77	Effective Voltage Flicker Calculation Based on Multiresolution S-Transform. IEEE Transactions on Power Delivery, 2012, 27, 521-530.	4.3	33
78	Attitude estimation by divided difference filter in quaternion space. Acta Astronautica, 2012, 75, 95-107.	3.2	19
79	Backstepping control of uncertain strict-feedback system based on time-scale separation. , 2011, , .		0
80	Adaptive backstepping control of rigid-link electrically driven robots with uncertain kinematics and dynamics. , 2011, , .		5
81	Boundary Control of Temperature Distribution in a Rectangular Functionally Graded Material Plate. Journal of Heat Transfer, 2011, 133, .	2.1	5
82	Boundary Control of Large Amplitude Vibration of Anisotropic Composite Laminated Plates. Journal of Vibration and Acoustics, Transactions of the ASME, 2010, 132, .	1.6	1
83	Adaptive Backstepping Stabilization of Uncertain Switched Nonlinear Systems in Parametric Strict-Feedback Form. , 2010, , .		1
84	Intelligent identification of flicker source in distribution systems. IET Generation, Transmission and Distribution, 2010, 4, 1016.	2.5	24
85	Frequency Weighted Controller Order Reduction (Part I). Journal of Electrical Engineering, 2010, 61, 141-148.	0.7	3
86	Real-Time Control and Identification of a Thermal Process Based on Multiple-Modeling Approach. Asia-Pacific Journal of Chemical Engineering, 2008, 13, 221-232.	0.0	0
87	A new hybrid approach in the estimation of end-states of a tubular plug-flow reactor by Kalman filter. Chemical Engineering and Processing: Process Intensification, 2008, 47, 770-779.	3.6	3
88	A neural network controller for diving of a variable mass autonomous underwater vehicle. , 2008, , .		2
89	Boundary Control of Vibration Of General Composite Laminated Plate. , 2008, , .		2
90	Wavelet Based Neural Network Solution for Forward Kinematics Problem of HEXA Parallel Robot. , 2008, , .		4

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91	Neural network solution for forward kinematics problem of HEXA parallel robot. , 2008, , .		24
92	Boundary Control of a Vibrating FGM Rectangular Plate. , 2008, , .		1
93	Boundary control of vibration of symmetric composite laminated plate. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 11847-11852.	0.4	3
94	Neural Network Solutions for Forward Kinematics Problem of HEXA Parallel Robot. , 2008, , .		13
95	Modeling and Identification of a Pilot Distillation Column for Control and Estimation using Genetic Algorithms. , 2007, , .		2
96	Attitude Estimation By Divided Difference Filter-Based Sensor Fusion. Journal of Navigation, 2007, 60, 119-128.	1.7	21
97	Orientation Estimation by Error-State Extended Kalman Filter in Quaternion vector space. , 2007, , .		2
98	Experimental Study of Dynamic Based Feedback Linearization for Trajectory Tracking of a Four-Wheel Autonomous Ground Vehicle. Autonomous Robots, 2005, 19, 27-40.	4.8	4
99	Attitude Estimation By Separate-Bias Kalman Filter-Based Data Fusion. Journal of Navigation, 2004, 57, 261-273.	1.7	49
100	Multirate modeling and control design for switched-mode power converters. IEEE Transactions on Automatic Control, 1994, 39, 1848-1852.	5.7	13
101	Feedback control of linear systems by multirate pulse-width modulation. IEEE Transactions on Automatic Control, 1994, 39, 1292-1297.	5.7	9
102	Sampled-Data Modeling and Control Design for Nonlinear Pulse-Width Modulated Systems. , 1993, , .		1
103	Feedback Control of Linear Continuous Systems by Pulse-Width Modulation. , 1992, , .		4
104	Multirate operation of switched-mode power converters. , 0, , .		1
105	Evaluation of Solid-State Accelerometer for Positioning of Vehicle. , 0, , .		13
106	Fault estimation for a class of interconnected non-linear systems with time-varying delay using robust adaptive unknown input observers. IMA Journal of Mathematical Control and Information, 0, , dnw046.	1.7	1