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	Improved Stabilization of Nonlinear DC Microgrids: Cubature Kalman Filter Approach. IEEE Transactions on Industry Applications, 2018, 54, 5104-5112.	4.9	81
2	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
3	Nonlinear system identification based on Takagi-Sugeno fuzzy modeling and unscented Kalman filter. ISA Transactions, 2018, 74, 134-143.	5.7	53
4	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
5	Attitude Estimation By Separate-Bias Kalman Filter-Based Data Fusion. Journal of Navigation, 2004, 57, 261-273.	1.7	49
6	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
7	PMU Ranking Based on Singular Value Decomposition of Dynamic Stability Matrix. IEEE Transactions on Power Systems, 2013, 28, 2263-2270.	6.5	38
8	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
9	Model predictive-based reset gain-scheduling dynamic control law for polytopic LPV systems. ISA Transactions, 2018, 81, 132-140.	5.7	35
10	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
11	Effective Voltage Flicker Calculation Based on Multiresolution S-Transform. IEEE Transactions on Power Delivery, 2012, 27, 521-530.	4.3	33
12	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
13	Reset law design based on robust model predictive strategy for uncertain systems. Journal of Process Control, 2014, 24, 261-268.	3.3	31
14	Stabilisation and transient performance improvement of DC MGs with CPLs: non‐linear reset control approach. IET Generation, Transmission and Distribution, 2019, 13, 3169-3176.	2.5	25
15	Neural network solution for forward kinematics problem of HEXA parallel robot. , 2008, , .		24
16	Intelligent identification of flicker source in distribution systems. IET Generation, Transmission and Distribution, 2010, 4, 1016.	2.5	24
17	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
18	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

#	Article	IF	Citations
19	Attitude Estimation By Divided Difference Filter-Based Sensor Fusion. Journal of Navigation, 2007, 60, 119-128.	1.7	21
20	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
21	Attitude estimation by divided difference filter in quaternion space. Acta Astronautica, 2012, 75, 95-107.	3.2	19
22	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
23	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
24	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
25	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
26	Conservatism reduction in simultaneous output feedback stabilisation of linear systems. IET Control Theory and Applications, 2016, 10, 2243-2250.	2.1	16
27	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
28	Deadâ€Zone Model Based Adaptive Backstepping Control for a Class of Uncertain Saturated Systems. Asian Journal of Control, 2016, 18, 1395-1405.	3.0	15
29	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
30	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
31	Nonâ€iterative SOSâ€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
32	Multirate modeling and control design for switched-mode power converters. IEEE Transactions on Automatic Control, 1994, 39, 1848-1852.	5.7	13
33	Evaluation of Solid-State Accelerometer for Positioning of Vehicle. , 0, , .		13
34	Neural Network Solutions for Forward Kinematics Problem of HEXA Parallel Robot. , 2008, , .		13
35	A characterization of integral input-to-state stability for hybrid systems. Mathematics of Control, Signals, and Systems, 2017, 29, 1.	2.3	12
36	Vision-based calibration of a Hexa parallel robot. Industrial Robot, 2014, 41, 296-310.	2.1	10

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37	TS-based sampled-data model predictive controller for continuous-time nonlinear systems. International Journal of Systems Science, 2018, 49, 3284-3295.	5.5	10
38	Optimal robust model predictive reset control design for performance improvement of uncertain linear system. ISA Transactions, 2020, 107, 78-89.	5.7	10
39	Feedback control of linear systems by multirate pulse-width modulation. IEEE Transactions on Automatic Control, 1994, 39, 1292-1297.	5.7	9
40	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
41	Backstepping position control of two-mass systems with unknown backlash. , 2013, , .		8
42	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
43	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
44	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
45	Fast convergence to Nash equilibria without steady-state oscillation. Systems and Control Letters, 2019, 123, 124-133.	2.3	6
46	Adaptive backstepping control of rigid-link electrically driven robots with uncertain kinematics and dynamics. , 2011, , .		5
47	Boundary Control of Temperature Distribution in a Rectangular Functionally Graded Material Plate. Journal of Heat Transfer, 2011, 133, .	2.1	5
48	Identification and adaptive position control of two mass systems with unknown backlash. , 2013, , .		5
49	Constrained RMPC algorithms for time delay systems with parametric uncertainties: Application to the cancer combined therapy. , 2016, , .		5
50	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
51	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
52	Simultaneous stabilization of polynomial nonlinear systems via density functions. Journal of the Franklin Institute, 2020, 357, 1690-1706.	3.4	5
53	Feedback Control of Linear Continuous Systems by Pulse-Width Modulation. , 1992, , .		4
54	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

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55	Wavelet Based Neural Network Solution for Forward Kinematics Problem of HEXA Parallel Robot. , 2008, , .		4
56	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
57	A Reset–Time Dependent Approach for Stability Analysis of Nonlinear Reset Control Systems. Asian Journal of Control, 2016, 18, 1856-1866.	3.0	4
58	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
59	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
60	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
61	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
62	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
63	Simultaneous fault reconstruction of TS fuzzy systems using robust sliding mode observer and non-quadratic stability analysis. , 2017, , .		3
64	Frequency Weighted Controller Order Reduction (Part I). Journal of Electrical Engineering, 2010, 61, 141-148.	0.7	3
65	Modeling and Identification of a Pilot Distillation Column for Control and Estimation using Genetic Algorithms. , 2007, , .		2
66	Orientation Estimation by Error-State Extended Kalman Filter in Quaternion vector space. , 2007, , .		2
67	A neural network controller for diving of a variable mass autonomous underwater vehicle. , 2008, , .		2
68	Boundary Control of Vibration Of General Composite Laminated Plate. , 2008, , .		2
69	Boundary Control of Temperature Distribution in a Spherical Shell With Spatially Varying Parameters. Journal of Heat Transfer, 2012, 134, .	2.1	2
70	Adaptive Control for a Class of Hysteretic Systems. Journal of Computational and Nonlinear Dynamics, 2013, 8, .	1.2	2
71	Adaptive task-space control of rigid-link robots with uncertain kinematics and dynamics and without acceleration measurements. , 2013, , .		2
72	Adaptive Friction Compensation: Modular Design with Passive Identifier. Asian Journal of Control, 2016, 18, 2100-2108.	3.0	2

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73	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
74	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
75	Expectational boundedness of stable LTI systems in the presence of nonvanishing stochastic perturbation. , 2017, , .		2
76	Convergence without oscillation to Nash equilibria in non-cooperative games with quadratic payoffs. , 2017, , .		2
77	Fast Seeking of Nash Equilibria without Steady-State Oscillation in Games with Non-Quadratic Payoffs. , 2018, , .		2
78	Reset observer design for time-varying dynamics: Application to WIG crafts. Aerospace Science and Technology, 2018, 81, 32-40.	4.8	2
79	Three Axis Fluxgate Magnetometer Sensor Calibration. , 2019, , .		2
80	Uncertainty decomposition of quantum networks in SLH framework. International Journal of Robust and Nonlinear Control, 2019, 29, 6542-6554.	3.7	2
81	Lyapunov Exponent based Stability Assessment of Power Systems. , 2019, , .		2
82	Designing an Optimal Reset Controller for TS Fuzzy Systems. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2022, 52, 4033-4044.	9.3	2
83	Multirate operation of switched-mode power converters. , 0, , .		1
84	Boundary Control of a Vibrating FGM Rectangular Plate. , 2008, , .		1
85	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
86	Adaptive Backstepping Stabilization of Uncertain Switched Nonlinear Systems in Parametric Strict-Feedback Form. , 2010, , .		1
87	Time-scale separation redesign for performance recovery of boost converters, a new approach. , 2013, , .		1
88	Development of a Real-Time Model-Prediction-Based Framework for Reset Controller Design. Industrial & Engineering Chemistry Research, 2014, 53, 14755-14764.	3.7	1
89	Nonlinear adaptive coulomb friction compensation based on passive identifier. , 2015, , .		1
90	Exploiting vector extremum seeking control for simultaneous optimization of net power and lifespan enhancement of PEM fuel cells. , 2016, , .		1

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91	LPV modeling and position control of two mass systems with variable backlash using LMIs. , 2016, , .		1
92	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
93	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
94	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
95	Sampled-Data Modeling and Control Design for Nonlinear Pulse-Width Modulated Systems. , 1993, , .		1
96	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
97	Backstepping control of uncertain strict-feedback system based on time-scale separation. , 2011, , .		0
98	A constructive proof of nonlinear small-gain theorem for hybrid systems. , 2012, , .		0
99	A MWPCA-based fault detection in federated no reset mode filter. , 2012, , .		0
100	Localization of an Autonomous Underwater Vehicle using a decentralized fusion architecture. , 2013, , .		0
101	Combined gradient and Iterative Learning Control method for magnetostatic inverse problem. , 2013, , .		0
102	Derivative-integral terminal sliding-mode control strategy for DC-DC buck converters. , 2014, , .		0
103	Integral input-to-state stability for interconnected hybrid systems. , 2015, , .		0
104	Performance recovery in the presence of uncertainty for soft landing on asteroids. , 2016, , .		0
105	Investigation of Wind Energy Impact on Power Systems Stability Using Lyapunov Exponents. Lecture Notes in Networks and Systems, 2021, , 12-22.	0.7	0
106	Fault Detection of Induction Motors Using Just In Time Classifiers. , 2021, , .		0