Moosa Ayati

List of Publications by Citations

65 papers	**607** citations	**12** h-index	**22** g-index
79 ext. papers	**871** ext. citations	**2.8** avg, IF	**4.96** L-index

#	Paper	IF	Citations
65	Magnetic resonance imaging-based brain tumor grades classification and grading via convolutional neural networks and genetic algorithms. *Biocybernetics and Biomedical Engineering*, **2019**, 39, 63-74	5.7	146
64	Disturbance-observer-based fuzzy terminal sliding mode control for MIMO uncertain nonlinear systems. *Applied Mathematical Modelling*, **2019**, 70, 109-127	4.5	39
63	Second-order sliding mode fault-tolerant control of heat recovery steam generator boiler in combined cycle power plants. *Applied Thermal Engineering*, **2013**, 50, 1326-1338	5.8	31
62	Stabilization of nonlinear vibrations of carbon nanotubes using observer-based terminal sliding mode control. *Transactions of the Institute of Measurement and Control*, **2020**, 42, 1047-1058	1.8	28
61	Integral sliding mode control for nonlinear damped model of arch microbeams. *Microsystem Technologies*, **2019**, 25, 57-68	1.7	26
60	Stable chaos synchronisation scheme for non-linear uncertain systems. *IET Control Theory and Applications*, **2010**, 4, 437-447	2.5	20
59	Designing a Novel Adaptive Impulsive Observer for Nonlinear Continuous Systems Using LMIs. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2012**, 59, 179-187	3.9	19
58	Robust actuator and sensor fault reconstruction of wind turbine using modified sliding mode observer. *Transactions of the Institute of Measurement and Control*, **2019**, 41, 1504-1518	1.8	16
57	A stable adaptive synchronization scheme for uncertain chaotic systems via observer. *Chaos, Solitons and Fractals*, **2009**, 42, 2473-2483	9.3	15
56	Simultaneous fault diagnosis of wind turbine using multichannel convolutional neural networks. *ISA Transactions*, **2021**, 108, 230-239	5.5	15
55	AC and DC electrical behavior of MWCNT/epoxy nanocomposite near percolation threshold: Equivalent circuits and percolation limits. *Journal of Applied Physics*, **2018**, 123, 105109	2.5	13
54	Experimental characterization and control of a magnetic shape memory alloy actuator using the modified generalized rate-dependent Prandtl Ishlinskii hysteresis model. *Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering*, **2018**, 232, 506-518	1	13
53	Fault detection and diagnosis of a 12-cylinder trainset diesel engine based on vibration signature analysis and neural network. *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science*, **2019**, 233, 1910-1923	1.3	12
52	Synchronizing chaotic systems with parametric uncertainty via a novel adaptive impulsive observer. *Asian Journal of Control*, **2011**, 13, 809-817	1.7	12
51	Adaptive control of nonlinear in parameters chaotic system via Lyapunov exponents placement. *Chaos, Solitons and Fractals*, **2009**, 41, 1980-1986	9.3	11
50	Finite-Time Disturbance-Observer-Based Integral Terminal Sliding Mode Controller for Three-Phase Synchronous Rectifier. *IEEE Access*, **2020**, 8, 152116-152130	3.5	11
49	Modeling and compensation of asymmetric rate-dependent hysteresis of a miniature pneumatic artificial muscle-based catheter. *Mechanical Systems and Signal Processing*, **2021**, 154, 107532	7.8	11

#	Title	IF	Cites
48	A fuzzy three-level clustering method for lifetime improvement of wireless sensor networks. *Annales Des Telecommunications/Annals of Telecommunications*, **2018**, 73, 535-546	2	10
47	Dynamic modeling and nonlinear tracking control of a novel modified quadrotor. *International Journal of Robust and Nonlinear Control*, **2018**, 28, 552-567	3.6	10
46	Finite time estimation of actuator faults, states, and aerodynamic load of a realistic wind turbine. *Renewable Energy*, **2019**, 130, 256-267	8.1	10
45	Three dimensional target tracking via Underwater Acoustic Wireless Sensor Network **2017**,		10
44	Adaptive estimation of nonlinear parameters of a nonholonomic spherical robot using a modified fuzzy-based speed gradient algorithm. *Regular and Chaotic Dynamics*, **2017**, 22, 226-238	1.6	9
43	Experiment-based hysteresis identification of a shape memory alloy-embedded morphing mechanism via stretched particle swarm optimization algorithm. *Journal of Intelligent Material Systems and Structures*, **2017**, 28, 2781-2792	2.3	8
42	Robust sliding mode position control of a fast response SMA-actuated rotary actuator using temperature and strain feedback. *Sensors and Actuators A: Physical*, **2019**, 292, 158-168	3.9	8
41	Fault detection and approximation for a class of linear impulsive systems using sliding-mode observer. *International Journal of Adaptive Control and Signal Processing*, **2015**, 29, 1427-1441	2.8	7
40	Tracking control of an SMA-driven actuator with rate-dependent behavior using an inverse model of hysteresis. *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, **2020**, 42, 1	2	7
39	Optimization of Taylor spatial frame half-pins diameter for bone deformity correction: Application to femur. *Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine*, **2018**, 232, 673-681	1.7	7
38	Estimation of elbow joint angle by NARX model using EMG data **2015**,		6
37	Adaptive prescribed-time disturbance observer using nonsingular terminal sliding mode control: Extended Kalman filter and particle swarm optimization. *IET Control Theory and Applications*, **2020**, 14, 3301-3311	2.5	6
36	State-dependent impulsive observer design for nonlinear time-delay systems **2017**,		5
35	Classification-Based Fuel Injection Fault Detection of a Trainset Diesel Engine Using Vibration Signature Analysis. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **2020**, 142,	1.6	5
34	Adaptive state-dependent impulsive observer design for nonlinear deterministic and stochastic dynamics with time-delays. *ISA Transactions*, **2020**, 98, 87-100	5.5	5
33	State Estimation of Stochastic Impulsive System Via Stochastic Adaptive Impulsive Observer. *Asian Journal of Control*, **2016**, 18, 514-526	1.7	5
32	Analysis and fuzzy control of chaotic behaviors in buck converter **2016**,		4
31	Maneuvering Target Tracking Method based on Unknown but Bounded Uncertainties. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2011**, 44, 4290-4295		4

No.	Title	IF	Cit.
30	Terminal sliding mode observers for uncertain linear systems with matched disturbance. *Asian Journal of Control*, **2019**, 21, 377-386	1.7	4
29	Development of a cascade position control system for an SMA-actuated rotary actuator with improved experimental tracking results. *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, **2019**, 41, 1	2	3
28	Three dimensional fuzzy carrot-chasing path following algorithm for fixed-wing vehicles **2015**,		3
27	Adaptive Fuzzy Control of Nonlinear in Parameters Uncertain Chaotic Systems Using Improved Speed Gradient Method. *Circuits, Systems, and Signal Processing*, **2012**, 31, 911-926	2.2	3
26	New scheme for discrete observer design with estimation error covariance assignment. *International Journal of Systems Science*, **2010**, 41, 1369-1381	2.3	3
25	On the Development of Terminal Sliding Mode Observers **2018**,		3
24	Development of myoelectric interface based on pattern recognition and regression based models **2016**,		2
23	Chaos control in buck converter using fuzzy delayed-feedback controller **2016**,		2
22	Hysteresis modeling for a shape memory alloy actuator using adaptive neuro-fuzzy inference system **2015**,		2
21	Design of state-dependent impulsive observer for non-linear time-delay systems. *IET Control Theory and Applications*, **2019**, 13, 3155-3163	2.5	2
20	A computational approach to evaluate the nonlinear and noisy DC electrical response in carbon nanotube/polymer nanocomposites near the percolation threshold. *Computational Materials Science*, **2020**, 173, 109439	3.2	2
19	Performance of Low-Cost Air-Data Sensors for Airspeed and Angle of Attack Measurements in a Flapping-Wing Robot. *Journal of Aerospace Engineering*, **2019**, 32, 04019018	1.4	1
18	A Generalized Recursive Identification Algorithm Compensated by Orthogonal Weighted Kernel for Tracking Time-Variant Systems. *Circuits, Systems, and Signal Processing*, **2020**, 39, 4903-4929	2.2	1
17	Chaos control of boost converter via the fuzzy delayed-feedback method **2016**,		1
16	Design of Adaptive State-Dependent Impulsive Observer for Nonlinear Time-Delay Systems **2019**,		1
15	Designing adaptive impulsive observer for a class of chaotic systems via linear matrix inequalities **2011**,		1
14	Novel Approach for Nonlinear Maneuvering Target Tracking Based on Input Estimation. *Applied Mechanics and Materials*, **2011**, 110-116, 4415-4423	0.3	1
13	A Simplified Model, Dynamic Analysis and Force Estimation for a Large-scale Orinthopter in Forward Flight Based on Flight Data. *Journal of Bionic Engineering*, **2020**, 17, 989-1008	2.7	1

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12	Fuzzy PSO-based algorithm for controlling base station movements in a wireless sensor network. *Turkish Journal of Electrical Engineering and Computer Sciences*, **2016**, 24, 5068-5077	0.9	1
11	Design of a novel three degrees of freedom ankle prosthesis inspired by human anatomy **2016**,		1
10	Design and implementation of PI and fuzzy PID supervisory controllers for a flexible link robot **2016** ,		1
9	Impedance Control of a Knee Prosthesis with Frictional Torque Estimation **2019**,		1
8	Development of Hybrid Prandtl-Ishlinskii and Constitutive Models for Hysteresis of Shape-Memory-Alloy-Driven Actuators. *Robotica*,1-15	2.1	1
7	Bumpless stabilisation of uncertain switched positive linear systems under synchronous and asynchronous switching. *International Journal of Systems Science*,1-12	2.3	0
6	Intelligent Monitoring System Based on Noise-Assisted Multivariate Empirical Mode Decomposition Feature Extraction and Neural Networks.. *Computational Intelligence and Neuroscience*, **2022**, 2022, 2698498	3	0
5	Sub-optimal Estimation of HIV Time-delay Model using State-Dependent Impulsive Observer with Time-varying Impulse Interval: Application to Continuous-time and Impulsive Inputs. *Journal of Control*, **2021**, 15, 21-34	0.1	0
4	Development of a frequency-dependent constitutive model for hysteresis of shape memory alloys. *Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications*, **2020**, 234, 1535-1549	1.3	
3	Sensor fusion approach for shape estimation of a base-excited cantilever beam. *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science*,095440622110046	1.3	
2	Developing and studying the dynamical behavior of a nonlinear mathematical model for cancers with tumor by considering immune system role. *International Journal of Biomathematics*, **2021**, 14, 2050056	1.8	
1	Fault-tolerant control of a rotary shape memory alloy actuator using a terminal sliding mode controller. *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science*,095440622110467	1.3	