Mohammad Reza Homaeinezhad

List of Publications by Year in Descending Order

55 papers	832 citations	15 h-index	27 g-index
63 ext. papers	991 ext. citations	2.9 avg, IF	5.15 L-index

#	Paper	IF	Citations
55	Discrete-time sliding-surface based control of parametrically uncertain nonlinear systems with unknown time-delay and inaccessible switching mode detection. *International Journal of Control*, **2021**, 94, 623-642	1.5	20
54	Optimally designed Lyapunov–Krasovskii terminal costs for robust stable feasible model predictive control of uncertain time-delay nonlinear dynamical systems. *Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering*, **2021**, 235, 664-679	1	3
53	Active predictive vibration suppression algorithm for structural stability and tracking control of nonlinear multivariable continuum-mechanics mobile systems. *Optimal Control Applications and Methods*, **2021**, 42, 503-525	1.7	3
52	Simultaneous path-following and vibration control for uncertain nonlinear flexible mechanical systems without dependency on oscillatory mathematical model. *Multibody System Dynamics*, **2021**, 51, 279-303	2.8	1
51	Parameter-disturbance-robust model predictive control of input-saturated MIMO fractional systems. *International Journal of Dynamics and Control*, **2021**, 9, 1117-1131	1.7	2
50	Switching position-torque control system for increasing servo PMDC positioning precision in presence of intense external disturbance loading. *Mechanical Systems and Signal Processing*, **2021**, 158, 107816	7.8	3
49	Friction-Tracker-Embedded Discrete Finite-Time Sliding Mode Control Algorithm for Precise Motion Control of Worm-Gear Reducers Under Unknown Switched Assistive/Resistive Loading. *Journal of Control, Automation and Electrical Systems*, **2020**, 31, 743-759	1.5	8
48	Two-sided linear matrix inequality solution of affine input matrix for feasible discrete finite-time sliding mode control of uncertain nonlinear mechanical machines. *JVC/Journal of Vibration and Control*, **2020**, 26, 2243-2260	2	10
47	Fractional order actuation systems: Theoretical foundation and application in feedback control of mechanical systems. *Applied Mathematical Modelling*, **2020**, 87, 625-639	4.5	9
46	Control of MIMO mechanical systems interacting with actuators through viscoelastic linkages. *Mechanism and Machine Theory*, **2020**, 147, 103763	4	19
45	High-performance modeling and discrete-time sliding mode control of uncertain non-commensurate linear time invariant MIMO fractional order dynamic systems. *Communications in Nonlinear Science and Numerical Simulation*, **2020**, 84, 105200	3.7	7
44	Solving predictive control problem of fast-varying multivariable systems by incorporating unknown active dynamics generated by real-time adaptive learning machine. *Expert Systems*, **2020**, 37, e12567	2.1	3
43	Adaptive Fuzzy-Wavelet Neural Network identification core for reinforced control of general arbitrarily switched nonlinear Multi Input-Multi Output Dynamic Systems. *Applied Soft Computing Journal*, **2020**, 91, 106265	7.5	12
42	Analytical single-mode sliding predictive control of arbitrarily switched nonlinear systems incorporating dynamical variations. *Nonlinear Analysis: Hybrid Systems*, **2020**, 38, 100937	4.5	7
41	Controlling uncertain nonlinear structural vibrations of moving continuum system by embedding a vibration monitoring unit to feedback algorithm. *Structural Control and Health Monitoring*, **2020**, 27, e2626	4.5	3
40	Nonlinear model predictive acceleration synchronization technique for rigid-model-based tracking control of multi-DOF flexible systems. *Proceedings of the Institution of Mechanical Engineers, Part K: Journal of Multi-body Dynamics*, **2020**, 234, 585-606	0.9	4
39	FEA based discrete-time sliding mode control of uncertain continuum mechanics MIMO vibrational systems. *Journal of Sound and Vibration*, **2019**, 460, 114902	3.9	20

38	Third-order leader-following consensus protocol of traffic flow formed by cooperative vehicular platoons by considering time delay: constant spacing strategy. *Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering*, **2018**, 232, 285-298	1	14
37	Autonomous path following by fuzzy adaptive curvature-based point selection algorithm for four-wheel-steering car-like mobile robot. *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science*, **2018**, 232, 2655-2665	1.3	9
36	Attitude determination by combining arrays of MEMS accelerometers, gyros, and magnetometers via quaternion-based complementary filter. *International Journal of Numerical Modelling: Electronic Networks, Devices and Fields*, **2018**, 31, e2282	1	13
35	Stable control of a heterogeneous platoon of vehicles with switched interaction topology, time-varying communication delay and lag of actuator. *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science*, **2017**, 231, 4197-4208	1.3	12
34	Variable Structure Feedback Construction Algorithm for controlling measurement-imploded leaderFollower ground robots. *Control Engineering Practice*, **2017**, 68, 71-88	3.9	4
33	Intelligent path following of articulated eight-wheeled mobile robot with nonholonomic constraints **2016**,		1
32	Electrocardiogram signal quality assessment using an artificially reconstructed target lead. *Computer Methods in Biomechanics and Biomedical Engineering*, **2015**, 18, 1126-1141	2.1	21
31	Short-Time Linear Quadratic Form Technique for Estimating Fast-Varying Parameters in Feedback Loops. *Asian Journal of Control*, **2015**, 17, 2289-2302	1.7	8
30	Precise angular speed control of permanent magnet DC motors in presence of high modeling uncertainties via sliding mode observer-based model reference adaptive algorithm. *Mechatronics*, **2015**, 28, 79-95	3	31
29	A correlation analysis-based detection and delineation of ECG characteristic events using template waveforms extracted by ensemble averaging of clustered heart cycles. *Computers in Biology and Medicine*, **2014**, 44, 66-75	7	26
28	Improving measurement quality of a MEMS-based gyro-free inertial navigation system. *Sensors and Actuators A: Physical*, **2014**, 207, 10-19	3.9	35
27	Real-time electrocardiogram P-QRS-T detection-delineation algorithm based on quality-supported analysis of characteristic templates. *Computers in Biology and Medicine*, **2014**, 52, 153-65	7	71
26	Designing a 2-DOF passive mechanism for dynamical calibration of MEMS-based motion sensors **2014**,		2
25	A unified procedure for detecting, quantifying, and validating electrocardiogram T-wave alternans. *Medical and Biological Engineering and Computing*, **2013**, 51, 1031-42	3.1	9
24	Detection and boundary identification of phonocardiogram sounds using an expert frequency-energy based metric. *Annals of Biomedical Engineering*, **2013**, 41, 279-92	4.7	65
23	Noise/spike detection in phonocardiogram signal as a cyclic random process with non-stationary period interval. *Computers in Biology and Medicine*, **2013**, 43, 1205-13	7	24
22	An expert electrocardiogram quality evaluation algorithm based on signal mobility factors. *Journal of Medical Engineering and Technology*, **2013**, 37, 282-91	1.8	4
21	ECG arrhythmia recognition via a neuro-SVMKNN hybrid classifier with virtual QRS image-based geometrical features. *Expert Systems With Applications*, **2012**, 39, 2047-2058	7.8	107

20	Parametric modelling of cardiac system multiple measurement signals: an open-source computer framework for performance evaluation of ECG, PCG and ABP event detectors. *Journal of Medical Engineering and Technology*, **2012**, 36, 117-34	1.8	9
19	A high-speed C++/MEX solution for long-duration arterial blood pressure characteristic locations detection. *Biomedical Signal Processing and Control*, **2012**, 7, 151-172	4.9	6
18	Computerized quality assessment of phonocardiogram signal measurement-acquisition parameters. *Journal of Medical Engineering and Technology*, **2012**, 36, 308-18	1.8	24
17	High-Accuracy Characterization of Ambulatory Holter Electrocardiogram Events. *International Journal of Systems Biology and Biomedical Technologies*, **2012**, 1, 40-71		2
16	. *Journal of Medical and Biological Engineering*, **2012**, 32, 381	2.2	3
15	Ambulatory Holter ECG individual events delineation via segmentation of a wavelet-based information-optimized 1-D feature. *Scientia Iranica*, **2011**, 18, 86-104	1.5	4
14	Novel Method on Using Evolutionary Algorithms for PD Optimal Tuning. *Applied Mechanics and Materials*, **2011**, 110-116, 4977-4984	0.3	4
13	Parallel processing of ECG and blood pressure waveforms for detection of acute hypotensive episodes: a simulation study using a risk scoring model. *Computer Methods in Biomechanics and Biomedical Engineering*, **2010**, 13, 197-213	2.1	19
12	Finding events of electrocardiogram and arterial blood pressure signals via discrete wavelet transform with modified scales. *Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine*, **2010**, 224, 27-42	1.7	9
11	Discrete wavelet-aided delineation of PCG signal events via analysis of an area curve length-based decision statistic. *Cardiovascular Engineering (Dordrecht, Netherlands)*, **2010**, 10, 218-34		3
10	Segmentation of holter ECG waves via analysis of a discrete wavelet-derived multiple skewness-kurtosis based metric. *Annals of Biomedical Engineering*, **2010**, 38, 1497-510	4.7	46
9	A methodology for prediction of acute hypotensive episodes in ICU via a risk scoring model including analysis of ST-segment variations. *Cardiovascular Engineering (Dordrecht, Netherlands)*, **2010**, 10, 12-29		8
8	Optimal delineation of ambulatory holter ECG events via false-alarm bounded segmentation of a wavelet-based principal components analyzed decision statistic. *Cardiovascular Engineering (Dordrecht, Netherlands)*, **2010**, 10, 136-56		4
7	An open-source applied simulation framework for performance evaluation of QRS complex detectors. *Simulation Modelling Practice and Theory*, **2010**, 18, 860-880	3.9	7
6	A robust wavelet-based multi-lead Electrocardiogram delineation algorithm. *Medical Engineering and Physics*, **2009**, 31, 1219-27	2.4	85
5	Detecting and quantifying T-wave alternans using the correlation method and comparison with the FFT-based method **2008**,		9
4	Algorithm for the torque sensorless worm gearbox servo application based on kinetic motion/friction realization. *Simulation*,003754972110179	1.2	0
3	Model predictive tracking control of uncertain moving structures with nonaffine saturated actuation: Rotating control force. *Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering*,095441002110412	0.9	

2	FEA-based tracking control of flexible body switching dynamic structure. *Robotica*,1-20	2.1	0
1	Robust nonlinear model predictive sliding mode control algorithm for saturated uncertain multivariable mechanical systems. *JVC/Journal of Vibration and Control*,107754632110658	2	0