Reza Tafreshi

List of Publications by Year
in descending order

65	1,147	516710	454955
papers	citations	16	30
		h-index	g-index

65	65	65	1266
all docs	docs citations	times ranked	citing authors

#	ARTICLE	IF	CITATIONS
1	Automated Real-Time Epileptic Seizure Detection in Scalp EEG Recordings Using an Algorithm Based on Wavelet Packet Transform. IEEE Transactions on Biomedical Engineering, 2010, 57, 1639-1651.	4.2	175
2	Predicting Epileptic Seizures in Scalp EEG Based on a Variational Bayesian Gaussian Mixture Model of Zero-Crossing Intervals. IEEE Transactions on Biomedical Engineering, 2013, 60, 1401-1413.	4.2	139
3	Subject-independent hand gesture recognition using normalization and machine learning algorithms. Journal of Computational Science, 2018, 27, 69-76.	2.9	67
4	A parameter-varying filtered PID strategy for air–fuel ratio control of spark ignition engines. Control Engineering Practice, 2012, 20, 805-815.	5.5	60
5	Effects of alumina phases as nickel supports on deep reactive adsorption of (4,6-dimethyl) dibenzothiophene: Comparison between Î³, Î´, and Î¸-alumina. Applied Catalysis B: Environmental, 2016, 180, 312-323.	20.2	47
6	A Multi-Window Majority Voting Strategy to Improve Hand Gesture Recognition Accuracies Using Electromyography Signal. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 427-436.	4.9	43
7	Design and kinematic analysis of a novel upper limb exoskeleton for rehabilitation of stroke patients. , 2017, 2017, 759-764.		42
8	Automated analysis of ECG waveforms with atypical QRS complex morphologies. Biomedical Signal Processing and Control, 2014, 10, 41-49.	5.7	34
9	An automatic sleep spindle detector based on wavelets and the teager energy operator. , 2009, 2009, 2596-9.		31
10	Second-Order Sliding Mode Strategy for Air–Fuel Ratio Control of Lean-Burn SI Engines. IEEE Transactions on Control Systems Technology, 2014, 22, 1374-1384.	5.2	30
11	Designing a Surrogate Fuel for Gas-to-Liquid Derived Diesel. Energy & Fuels, 2017, 31, 11266-11279.	5.1	24
12	Fuzzy Sliding–mode Strategy for Air–fuel Ratio Control of Lean–burn Spark Ignition Engines. Asian Journal of Control, 2018, 20, 149-158.	3.0	24
13	Specific change in spectral power of fetal heart rate variability related to fetal acidemia during labor: Comparison between preterm and term fetuses. Early Human Development, 2012, 88, 203-207.	1.8	23
14	An entropy-based approach to predict seizures in temporal lobe epilepsy using scalp EEG. , 2009, 2009, 228-31.		21
15	Linear dynamic parameter–varying sliding manifold for air–fuel ratio control in lean–burn engines. IET Control Theory and Applications, 2013, 7, 1319-1329.	2.1	21
16	An intelligent approach to optimize multiphase subsea oil fields lifted by electrical submersible pumps. Journal of Computational Science, 2016, 15, 50-59.	2.9	20
17	Kinematic Design Optimization of an Eight Degree-of-Freedom Upper-Limb Exoskeleton. Robotica, 2019, 37, 2073-2086.	1.9	20
18	Modelling of petroleum multiphase flow in electrical submersible pumps with shallow artificial neural networks. Ships and Offshore Structures, 2020, 15, 174-183.	1.9	20

#	Article	IF	Citations
19	Detection of Epileptic Seizures in Scalp Electroencephalogram. Journal of Clinical Neurophysiology, 2012, 29, 1-16.	1.7	18
20	Predicting temporal lobe epileptic seizures based on zero-crossing interval analysis in scalp EEG. , 2010, 2010, 5537-40.		17
21	CLEVERarm: A Lightweight and Compact Exoskeleton for Upper-Limb Rehabilitation. IEEE Robotics and Automation Letters, 2022, 7, 1880-1887.	5.1	17
22	Real-Time Detection of Myocardial Infarction by Evaluation of ST-Segment in Digital ECG. Journal of Medical Imaging and Health Informatics, 2011, 1, 225-230.	0.3	16
23	A performance comparison of hand motion EMG classification. , 2014, , .		16
24	Enhanced automated sleep spindle detection algorithm based on synchrosqueezing. Medical and Biological Engineering and Computing, 2015, 53, 635-644.	2.8	16
25	A dynamic feedback control strategy for control loops with time-varying delay. International Journal of Control, 2014, 87, 887-897.	1.9	14
26	Improved spindle detection through intuitive pre-processing of electroencephalogram. Journal of Neuroscience Methods, 2014, 233, 1-12.	2.5	14
27	Airâ€"fuel ratio control of leanâ€"burn SI engines using the LPVâ€"based fuzzy technique. IET Control Theory and Applications, 2018, 12, 1414-1420.	2.1	14
28	A Performance Comparison of EMG Classification Methods for Hand and Finger Motion. , 2014, , .		12
29	Low-Dimensional Modeling of Transient Two-Phase Flow in Pipelines. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2016, 138, .	1.6	12
30	EMG and IMU based real-time HCI using dynamic hand gestures for a multiple-DoF robot arm. Journal of Intelligent and Fuzzy Systems, 2018, 35, 861-876.	1.4	12
31	A novel wavelet-based index to detect epileptic seizures using scalp EEG signals. , 2008, 2008, 919-22.		11
32	Robustness of Using Dynamic Motions and Template Matching to the Limb Position Effect in Myoelectric Classification. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2016, 138, .	1.6	11
33	An efficient approach to recognize hand gestures using machine-learning algorithms. , 2018, , .		10
34	Local discriminant bases in machine fault diagnosis using vibration signals. Integrated Computer-Aided Engineering, 2005, 12, 147-158.	4.6	9
35	Observer-based internal model airâ€"fuel ratio control of lean-burn SI engines. IFAC Journal of Systems and Control, 2019, 9, 100065.	1.7	9
36	Acquiring and analyzing electrocardiograms via smartphone to detect cardiovascular abnormalities. , 2014, , .		7

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37	TAMU CLEVERarm: A novel exoskeleton for rehabilitation of upper limb impairments. , 2017, , .		7
38	Seizure Detection by a Novel Wavelet Packet Method. , 2006, 2006, 6141-4.		6
39	Myoelectric pattern recognition using dynamic motions with limb position changes. , 2016, , .		6
40	A portable 12-lead ECG wireless medical system for continuous cardiac-activity monitoring. , 2014, , .		5
41	An Expert System for Differential Diagnosis of Myocardial Infarction. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2016, 138, .	1.6	5
42	Active Tuned Mass Damper. , 2015, , .		4
43	Real-time EMG-based Human Machine Interface using dynamic hand gestures. , 2017, , .		4
44	Electroconvulsive Therapy: A Model for Seizure Detection by a Wavelet Packet Algorithm. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 1916-9.	0.5	3
45	A Comprehensive Algorithm for the Analysis of ECG Waveforms. , 2012, , .		3
46	Subsea Production Two-Phase Flow Modeling and Control of Pipeline and Manifold Assemblies. , 2014, , .		3
47	Neuroâ€Predictive Control of an Infrared Dryer with a Feedforwardâ€Feedback Approach. Asian Journal of Control, 2015, 17, 1972-1977.	3.0	3
48	Model-based early gas kick and well loss detection. , 2016, , .		3
49	Identification of Air-Fuel Ratio Dynamics in SI Engines using Linear Parameter Varying Techniques. , 2011, , .		3
50	Epileptic seizure prediction using variational mixture of Gaussians. , 2011, 2011, 7549-52.		2
51	A Predictive Strategy to Control Time-Varying Delay Systems: Lean-Burn Engines. , 2015, , .		2
52	Output Tracking in First-Order Time-Delay Systems: A Dynamic Control Approach. IFAC-PapersOnLine, 2015, 48, 269-274.	0.9	2
53	Evaluation of the induced voltage in driven electrodes of piezoelectric tube actuators for sensorless nanopositioning. , 2015, , .		2
54	Liquid Holdup Discretized Solution's Existence and Uniqueness Using a Simplified Averaged One-Dimensional Upward Two-Phase Flow Transient Model. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2017, 139, .	1.6	2

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55	A computational approach for human-like motion generation in upper limb exoskeletons supporting scapulohumeral rhythms. , 2017, , .		2
56	The Future of Automatic EEG Monitoring in the Intensive Care. , 2008, , .		1
57	A Physics-Based Modeling Approach of a Natural Gas HCCI Engine. , 2012, , .		1
58	Numerical Evaluation of Pressure Drop Across Orifices for Different Gas-Liquid Mixtures. , 2018, , .		1
59	Using the wavelet packet transform in automatic sleep analysis. IFMBE Proceedings, 2009, , 397-401.	0.3	1
60	Stabilizing dynamic control design for systems with time-varying delay in control loop. , 2014, , .		0
61	Effect of resistive inspiratory and expiratory loading on cardio-respiratory interaction in healthy subjects. , 2014, 2014, 710-3.		0
62	Detection of cardiovascular abnormalities through 5-lead system algorithm. , 2016, , .		0
63	Model-based design and analysis of a subsea high integrity pressure protection system (HIPPS). , 2016, , .		0
64	Digital fuzzy sliding-mode control for a linear parameter-varying air–fuel ratio system. Advances in Mechanical Engineering, 2019, 11, 168781401882210.	1.6	0
65	Full- and Reduced-Order Fault Detection Filter Design With Application in Flow Transmission Lines. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2019, 141, .	1.6	0