Rami N Khushaba

List of Publications by Year
in descending order

74 papers	3,207 citations	361413 20 h-index	330143 37 g-index
76 all docs	76 docs citations	76 times ranked	2733 citing authors

#	Article	IF	Citations
1	Driver Drowsiness Classification Using Fuzzy Wavelet-Packet-Based Feature-Extraction Algorithm. IEEE Transactions on Biomedical Engineering, 2011, 58, 121-131.	4.2	407
2	Consumer neuroscience: Assessing the brain response to marketing stimuli using electroencephalogram (EEG) and eye tracking. Expert Systems With Applications, 2013, 40, 3803-3812.	7.6	348
3	Toward improved control of prosthetic fingers using surface electromyogram (EMG) signals. Expert Systems With Applications, 2012, 39, 10731-10738.	7.6	258
4	Improving the Performance Against Force Variation of EMG Controlled Multifunctional Upper-Limb Prostheses for Transradial Amputees. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2016, 24, 650-661.	4.9	231
5	Feature Extraction and Selection for Myoelectric Control Based on Wearable EMG Sensors. Sensors, 2018, 18, 1615.	3.8	206
6	Feature subset selection using differential evolution and a statistical repair mechanism. Expert Systems With Applications, 2011, 38, 11515-11526.	7.6	179
7	Towards limb position invariant myoelectric pattern recognition using time-dependent spectral features. Neural Networks, 2014, 55, 42-58.	5.9	153
8	Combined influence of forearm orientation and muscular contraction on EMG pattern recognition. Expert Systems With Applications, 2016, 61, 154-161.	7.6	140
9	Feature subset selection using differential evolution and a wheel based search strategy. Swarm and Evolutionary Computation, 2013, 9, 15-26.	8.1	113
10	A Framework of Temporal-Spatial Descriptors-Based Feature Extraction for Improved Myoelectric Pattern Recognition. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 1821-1831.	4.9	101
11	Orthogonal Fuzzy Neighborhood Discriminant Analysis for Multifunction Myoelectric Hand Control. IEEE Transactions on Biomedical Engineering, 2010, 57, 1410-1419.	4.2	91
12	Choice modeling and the brain: A study on the Electroencephalogram (EEG) of preferences. Expert Systems With Applications, 2012, 39, 12378-12388.	7.6	88
13	Correlation Analysis of Electromyogram Signals for Multiuser Myoelectric Interfaces. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2014, 22, 745-755.	4.9	87
14	Electromyogram (EMG) feature reduction using Mutual Components Analysis for multifunction prosthetic fingers control. , 2012, , .		65
15	Navigating features: a topologically informed chart of electromyographic features space. Journal of the Royal Society Interface, 2017, 14, 20170734.	3.4	55
16	Muscle computer interfaces for driver distraction reduction. Computer Methods and Programs in Biomedicine, 2013, 110, 137-149.	4.7	54
17	Novel feature extraction method based on fuzzy entropy and wavelet packet transform for myoelectric Control. , 2007, , .		47
18	A Combined Ant Colony and Differential Evolution Feature Selection Algorithm. Lecture Notes in Computer Science, 2008, , 1-12.	1.3	43

#	Article	IF	Citations
19	Differential evolution based feature subset selection. , 2008, , .		37
20	EMG-Based Hand Gesture Classification with Long Short-Term Memory Deep Recurrent Neural Networks. , 2020, 2020, 3302-3305.		33
21	Uncorrelated fuzzy neighborhood preserving analysis based feature projection for driver drowsiness recognition. Fuzzy Sets and Systems, 2013, 221, 90-111.	2.7	29
22	Evolutionary fuzzy discriminant analysis feature projection technique in myoelectric control. Pattern Recognition Letters, 2009, 30, 699-707.	4.2	27
23	A Novel Hybrid System for Skin Lesion Detection. , 2007, , .		25
24	Decoding HD-EMG Signals for Myoelectric Control - How Small Can the Analysis Window Size be?. IEEE Robotics and Automation Letters, 2021, 6, 8569-8574.	5.1	25
25	A fusion of time-domain descriptors for improved myoelectric hand control. , 2016, , .		24
26	Development and validation of a novel nonâ€contact monitor of nocturnal respiration for identifying sleepâ€disordered breathing in patients with heart failure. ESC Heart Failure, 2016, 3, 212-219.	3.1	24
27	Two-channel surface electromyography for individual and combined finger movements. , 2013, 2013, 4961-4.		21
28	Channel and Feature Selection in Multifunction Myoelectric Control. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 5182-5.	0.5	18
29	Time-dependent spectral features for limb position invariant myoelectric pattern recognition. , 2012, , .		16
30	Recursive Multi-Signal Temporal Fusions With Attention Mechanism Improves EMG Feature Extraction. IEEE Transactions on Artificial Intelligence, 2020, 1, 139-150.	4.7	16
31	Differences in EMG Feature Space between Able-Bodied and Amputee Subjects for Myoelectric Control. , 2019, , .		15
32	A long short-term recurrent spatial-temporal fusion for myoelectric pattern recognition. Expert Systems With Applications, 2021, 178, 114977.	7.6	14
33	A dynamic channel selection algorithm for the classification of EEG and EMG data. , 2016, , .		13
34	Radar-Based Materials Classification Using Deep Wavelet Scattering Transform: A Comparison of Centimeter vs. Millimeter Wave Units. IEEE Robotics and Automation Letters, 2022, 7, 2016-2022.	5.1	12
35	Optimizing the k-NN metric weights using differential evolution. , 2010, , .		10
36	Electromyogram (EMG) based fingers movement recognition using neighborhood preserving analysis with QR-decomposition. , 2011, , .		10

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37	Myoelectric feature extraction using temporal-spatial descriptors for multifunction prosthetic hand control. , 2016, 2016, 1696-1699.		10
38	Electromyogram (EMG) based fingers movement recognition using Neighborhood Preserving Analysis with QR-decomposition. , 2011, , .		9
39	A neuroscientific approach to choice modeling: Electroencephalogram (EEG) and user preferences. , 2012, , .		9
40	Influence of multiple dynamic factors on the performance of myoelectric pattern recognition. , 2015, 2015, 1679-82.		9
41	Enhancing the diversity of genetic algorithm for improved feature selection. , 2010, , .		8
42	Intelligent driver drowsiness detection system using Uncorrelated Fuzzy Locality Preserving Analysis. , 2011, , .		8
43	Myoelectric Control With Fixed Convolution-Based Time-Domain Feature Extraction: Exploring the Spatio–Temporal Interaction. IEEE Transactions on Human-Machine Systems, 2022, 52, 1247-1257.	3.5	8
44	Swarm Intelligence based Dimensionality Reduction for Myoelectric Control. , 2007, , .		7
45	A novel swarm based feature selection algorithm in multifunction myoelectric control. Journal of Intelligent and Fuzzy Systems, 2009, 20, 175-185.	1.4	7
46	Sleep–disordered breathing in chronic heart failure is highly variable when measured remotely using a novel non–contact biomotion sensor. European Journal of Heart Failure, 2017, 19, 688-690.	7.1	7
47	Electroencephalogram associations to cognitive performance in clinically active nurses. Physiological Measurement, 2016, 37, 968-980.	2.1	6
48	Monitoring of nocturnal central sleep apnea in Heart failure patients using noncontact respiratory differences. , 2017, 2017, 1534-1538.		6
49	Spatio-Temporal Inertial Measurements Feature Extraction Improves Hand Movement Pattern Recognition without Electromyography. , 2018, 2018, 2108-2111.		6
50	A Population Based Feature Subset Selection Algorithm Guided by Fuzzy Feature Dependency. Communications in Computer and Information Science, 2012, , 430-438.	0.5	5
51	Event-related Potentials of Consumer Preferences. Procedia Computer Science, 2015, 76, 68-73.	2.0	5
52	Fuzzy discriminant analysis based feature projection in myoelectric control. , 2008, 2008, 5049-52.		4
53	Intelligent Artificial Ants based feature extraction from wavelet packet coefficients for biomedical signal classification. , 2008, , .		4
54	Application of CRF and SVM based semi-supervised learning for semantic labeling of environments. , 2012, , .		3

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55	Towards speed-independent road-type classification. , 2012, , .		3
56	Selecting the optimal movement subset with different pattern recognition based EMG control algorithms. , 2016, 2016, 315-318.		3
57	Spatially Filtered Low-Density EMG and Time-Domain Descriptors Improves Hand Movement Recognition. , 2019, 2019, 2671-2674.		3
58	A Position Weight Matrix Feature Extraction Algorithm Improves Hand Gesture Recognition. , 2020, 2020, 5765-5768.		3
59	A Hybrid Nonlinear-Discriminant Analysis Feature Projection Technique. Lecture Notes in Computer Science, 2008, , 544-550.	1.3	3
60	Analysis of Different Hand and Finger Grip Patterns using Surface Electromyography and Hand Dynamometry. Al-Khawarizmi Engineering Journal, 2020, 16, 14-23.	0.5	3
61	Spatio-temporal warping for myoelectric control: an offline, feasibility study. Journal of Neural Engineering, 2021, 18, 066028.	3.5	3
62	Feature Extraction Using Wavelet Scattering Transform Coefficients for EMG Pattern Classification. Lecture Notes in Computer Science, 2022, , 181-189.	1.3	3
63	Combined Dynamic Time Warping and Spatiotemporal Attention for Myoelectric Control. , 2021, 2021, 5940-5943.		3
64	Orthogonal Locality Sensitive Fuzzy Discriminant Analysis in Sleep-Stage Scoring. , 2010, , .		2
65	A comparison of post-processing techniques on the performance of EMG based pattern recognition system for the transradial amputees. , 2016, , .		2
66	A Machine Learning Approach for Material Type Logging and Chemical Assaying from Autonomous Measure-While-Drilling (MWD) Data. Mathematical Geosciences, 0, , 1.	2.4	2
67	Evaluation of Time-Domain Features of Sensory ENG Signals. , 2018, 2018, 2438-2441.		1
68	Recurrent Fusion of Time-Domain Descriptors Improves EMG-based Hand Movement Recognition. , 2020, 2020, 657-661.		1
69	Swarm Based Fuzzy Discriminant Analysis for Multifunction Prosthesis Control. Lecture Notes in Computer Science, 2010, , 197-206.	1.3	1
70	Editorial: Current Trends in Deep Learning for Movement Analysis and Prosthesis Control. Frontiers in Neuroscience, 2022, 16, 889202.	2.8	1
71	Cardinality and Short-Term Memory Concepts based Novel Feature Extraction for Myoelectric Pattern Recognition. , 2021, 2021, 708-712.		0
72	Intelligent driver drowsiness detection system using Uncorrelated Fuzzy Locality Preserving Analysis. , 2011, , .		0

#	Article	IF	Citations
73	Myoelectric Control of Prosthetic Devices for Rehabilitation. , 0, , 965-973.		0
74	Hand Movement Recognition with Long Short-Term Memory based Pattern Recognition of Acoustic Myography signals. , 2022, , .		0