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	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
2	Feature Extraction Using Wavelet Scattering Transform Coefficients for EMG Pattern Classification. Lecture Notes in Computer Science, 2022, , 181-189.	1.3	3
3	Myoelectric Control With Fixed Convolution-Based Time-Domain Feature Extraction: Exploring the Spatioâ€“Temporal Interaction. IEEE Transactions on Human-Machine Systems, 2022, 52, 1247-1257.	3.5	8
4	Editorial: Current Trends in Deep Learning for Movement Analysis and Prosthesis Control. Frontiers in Neuroscience, 2022, 16, 889202.	2.8	1
5	Hand Movement Recognition with Long Short-Term Memory based Pattern Recognition of Acoustic Myography signals. , 2022, , .		0
6	A long short-term recurrent spatial-temporal fusion for myoelectric pattern recognition. Expert Systems With Applications, 2021, 178, 114977.	7.6	14
7	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
8	Spatio-temporal warping for myoelectric control: an offline, feasibility study. Journal of Neural Engineering, 2021, 18, 066028.	3.5	3
9	Cardinality and Short-Term Memory Concepts based Novel Feature Extraction for Myoelectric Pattern Recognition. , 2021, 2021, 708-712.		0
10	Combined Dynamic Time Warping and Spatiotemporal Attention for Myoelectric Control. , 2021, 2021, 5940-5943.		3
11	EMG-Based Hand Gesture Classification with Long Short-Term Memory Deep Recurrent Neural Networks. , 2020, 2020, 3302-3305.		33
12	Recurrent Fusion of Time-Domain Descriptors Improves EMG-based Hand Movement Recognition. , 2020, 2020, 657-661.		1
13	A Position Weight Matrix Feature Extraction Algorithm Improves Hand Gesture Recognition. , 2020, 2020, 5765-5768.		3
14	Recursive Multi-Signal Temporal Fusions With Attention Mechanism Improves EMG Feature Extraction. IEEE Transactions on Artificial Intelligence, 2020, 1, 139-150.	4.7	16
15	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
16	Differences in EMG Feature Space between Able-Bodied and Amputee Subjects for Myoelectric Control. , 2019, , .		15
17	Spatially Filtered Low-Density EMG and Time-Domain Descriptors Improves Hand Movement Recognition. , 2019, 2019, 2671-2674.		3
18	Evaluation of Time-Domain Features of Sensory ENG Signals. , 2018, 2018, 2438-2441.		1

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19	Spatio-Temporal Inertial Measurements Feature Extraction Improves Hand Movement Pattern Recognition without Electromyography. , 2018, 2018, 2108-2111.		6
20	Feature Extraction and Selection for Myoelectric Control Based on Wearable EMG Sensors. Sensors, 2018, 18, 1615.	3.8	206
21	Sleepâ€disordered breathing in chronic heart failure is highly variable when measured remotely using a novel nonâ€contact biomotion sensor. European Journal of Heart Failure, 2017, 19, 688-690.	7.1	7
22	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
23	Monitoring of nocturnal central sleep apnea in Heart failure patients using noncontact respiratory differences. , 2017, 2017, 1534-1538.		6
24	Navigating features: a topologically informed chart of electromyographic features space. Journal of the Royal Society Interface, 2017, 14, 20170734.	3.4	55
25	A fusion of time-domain descriptors for improved myoelectric hand control. , 2016, , .		24
26	Electroencephalogram associations to cognitive performance in clinically active nurses. Physiological Measurement, 2016, 37, 968-980.	2.1	6
27	A dynamic channel selection algorithm for the classification of EEG and EMG data. , 2016, , .		13
28	Combined influence of forearm orientation and muscular contraction on EMG pattern recognition. Expert Systems With Applications, 2016, 61, 154-161.	7.6	140
29	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
30	A comparison of post-processing techniques on the performance of EMG based pattern recognition system for the transradial amputees. , 2016, , .		2
31	Myoelectric feature extraction using temporal-spatial descriptors for multifunction prosthetic hand control. , 2016, 2016, 1696-1699.		10
32	Selecting the optimal movement subset with different pattern recognition based EMG control algorithms. , 2016, 2016, 315-318.		3
33	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
34	Influence of multiple dynamic factors on the performance of myoelectric pattern recognition. , 2015, 2015, 1679-82.		9
35	Event-related Potentials of Consumer Preferences. Procedia Computer Science, 2015, 76, 68-73.	2.0	5
36	Correlation Analysis of Electromyogram Signals for Multiuser Myoelectric Interfaces. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2014, 22, 745-755.	4.9	87

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37	Towards limb position invariant myoelectric pattern recognition using time-dependent spectral features. Neural Networks, 2014, 55, 42-58.	5.9	153
38	Feature subset selection using differential evolution and a wheel based search strategy. Swarm and Evolutionary Computation, 2013, 9, 15-26.	8.1	113
39	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
40	Uncorrelated fuzzy neighborhood preserving analysis based feature projection for driver drowsiness recognition. Fuzzy Sets and Systems, 2013, 221, 90-111.	2.7	29
41	Muscle computer interfaces for driver distraction reduction. Computer Methods and Programs in Biomedicine, 2013, 110, 137-149.	4.7	54
42	Two-channel surface electromyography for individual and combined finger movements. , 2013, 2013, 4961-4.		21
43	Time-dependent spectral features for limb position invariant myoelectric pattern recognition. , 2012, , .		16
44	Electromyogram (EMG) feature reduction using Mutual Components Analysis for multifunction prosthetic fingers control. , 2012, , .		65
45	A neuroscientific approach to choice modeling: Electroencephalogram (EEG) and user preferences. , 2012, , .		9
46	Application of CRF and SVM based semi-supervised learning for semantic labeling of environments. , 2012, , .		3
47	Towards speed-independent road-type classification. , 2012, , .		3
48	Choice modeling and the brain: A study on the Electroencephalogram (EEG) of preferences. Expert Systems With Applications, 2012, 39, 12378-12388.	7.6	88
49	A Population Based Feature Subset Selection Algorithm Guided by Fuzzy Feature Dependency. Communications in Computer and Information Science, 2012, , 430-438.	0.5	5
50	Toward improved control of prosthetic fingers using surface electromyogram (EMG) signals. Expert Systems With Applications, 2012, 39, 10731-10738.	7.6	258
51	Electromyogram (EMG) based fingers movement recognition using Neighborhood Preserving Analysis with QR-decomposition. , 2011, , .		9
52	Intelligent driver drowsiness detection system using Uncorrelated Fuzzy Locality Preserving Analysis. , 2011, , .		8
53	Electromyogram (EMG) based fingers movement recognition using neighborhood preserving analysis with QR-decomposition. , 2011, , .		10
54	Driver Drowsiness Classification Using Fuzzy Wavelet-Packet-Based Feature-Extraction Algorithm. IEEE Transactions on Biomedical Engineering, 2011, 58, 121-131.	4.2	407

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55	Feature subset selection using differential evolution and a statistical repair mechanism. Expert Systems With Applications, 2011, 38, 11515-11526.	7.6	179
56	Intelligent driver drowsiness detection system using Uncorrelated Fuzzy Locality Preserving Analysis. , 2011, , .		0
57	Orthogonal Fuzzy Neighborhood Discriminant Analysis for Multifunction Myoelectric Hand Control. IEEE Transactions on Biomedical Engineering, 2010, 57, 1410-1419.	4.2	91
58	Enhancing the diversity of genetic algorithm for improved feature selection. , 2010, , .		8
59	Orthogonal Locality Sensitive Fuzzy Discriminant Analysis in Sleep-Stage Scoring. , 2010, , .		2
60	Optimizing the k-NN metric weights using differential evolution. , 2010, , .		10
61	Swarm Based Fuzzy Discriminant Analysis for Multifunction Prosthesis Control. Lecture Notes in Computer Science, 2010, , 197-206.	1.3	1
62	A novel swarm based feature selection algorithm in multifunction myoelectric control. Journal of Intelligent and Fuzzy Systems, 2009, 20, 175-185.	1.4	7
63	Evolutionary fuzzy discriminant analysis feature projection technique in myoelectric control. Pattern Recognition Letters, 2009, 30, 699-707.	4.2	27
64	Differential evolution based feature subset selection. , 2008, , .		37
65	Fuzzy discriminant analysis based feature projection in myoelectric control. , 2008, 2008, 5049-52.		4
66	Intelligent Artificial Ants based feature extraction from wavelet packet coefficients for biomedical signal classification. , 2008, , .		4
67	A Combined Ant Colony and Differential Evolution Feature Selection Algorithm. Lecture Notes in Computer Science, 2008, , 1-12.	1.3	43
68	A Hybrid Nonlinear-Discriminant Analysis Feature Projection Technique. Lecture Notes in Computer Science, 2008, , 544-550.	1.3	3
69	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
70	Novel feature extraction method based on fuzzy entropy and wavelet packet transform for myoelectric Control. , 2007, , .		47
71	A Novel Hybrid System for Skin Lesion Detection. , 2007, , .		25
72	Swarm Intelligence based Dimensionality Reduction for Myoelectric Control. , 2007, , .		7

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73	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
74	Myoelectric Control of Prosthetic Devices for Rehabilitation. , 0, , 965-973.		0