Alexandre Balbinot

List of Publications by Year
in descending order

59	436	1051969 10	1051228 16
papers	citations	h-index	g-index

61	61	61	436
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Identification and removal of contaminants in sEMG recordings through a methodology based on Fuzzy Inference and Actor-Critic Reinforcement learning. Expert Systems With Applications, 2022, 206, 117772.	4.4	3
2	Surface electromyography and electroencephalography processing in dysarthric patients for verbal commands or speaking intention characterization. Measurement: Journal of the International Measurement Confederation, 2021, 175, 109147.	2.5	1
3	Deep learning for surface electromyography artifact contamination type detection. Biomedical Signal Processing and Control, 2021, 68, 102752.	3.5	10
4	Actor-Critic Reinforcement Learning Based Algorithm for Contaminant Type Identification in Surface Electromyography Data. , 2021, 2021, 186-189.		3
5	Resilient EMG Classification to Enable Reliable Upper-Limb Movement Intent Detection. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 2507-2514.	2.7	12
6	Statistical feature and channel selection for upper limb classification using sEMG signal processing. Research on Biomedical Engineering, 2020, 36, 411-427.	1.5	8
7	Recurrent Neural Network as Estimator for a Virtual sEMG Channel. , 2019, 2019, 3620-3623.		4
8	Paraconsistent Random Forest: An Alternative Approach for Dealing With Uncertain Data. IEEE Access, 2019, 7, 147914-147927.	2.6	11
9	Proposal of a Hardware SVM Implementation for Fast sEMG Classification. IFMBE Proceedings, 2019, , 381-386.	0.2	2
10	Instrumentation of Pedals of a Road Bicycle as a Proposal for Analysis of Applied Force. IFMBE Proceedings, 2019, , 283-288.	0.2	0
11	Enhancing the classification of hand movements through sEMG signal and non-iterative methods. Health and Technology, 2019, 9, 561-577.	2.1	9
12	Open Database for Accurate Upper-Limb Intent Detection Using Electromyography and Reliable Extreme Learning Machines. Sensors, 2019, 19, 1864.	2.1	35
13	Smoothed arg max Extreme Learning Machine: An Alternative to Avoid Classification Ripple in sEMG Signals. , 2019, 2019, 6603-6606.		1
14	Fault-Tolerant Sensor Detection of sEMG signals: Quality Analysis Using a Two-Class Support Vector Machine. , 2018, 2018, 5644-5647.		1
15	An Automatic Cycling Performance Classifier System Based on the Crank Arm Force Measurement Data. , 2018, 2018, 4237-4240.		1
16	Using Antonyan Vardan Transform and Extreme Learning Machines for Accurate sEMG Signal Classification. , 2018, 2018, 5224-5227.		6
17	Using the sEMG signal representativity improvement towards upper-limb movement classification reliability. Biomedical Signal Processing and Control, 2018, 46, 182-191.	3.5	10
18	Virtual Sensor of Surface Electromyography in a New Extensive Fault-Tolerant Classification System. Sensors, 2018, 18, 1388.	2.1	15

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19	An Automatic Cycling Performance Measurement System Based on ANFIS. Studies in Computational Intelligence, 2018, , 227-252.	0.7	1
20	Reever control: A biosignal controlled interface. , 2017, 2017, 706-709.		4
21	sEMG feature selection and classification using SVM-RFE. , 2017, 2017, 390-393.		17
22	Using non-iterative methods and random weight networks to classify upper-limb movements through sEMG signals. , 2017, 2017, 2047-2050.		2
23	Support vectors machine classification of surface electromyography for non-invasive naturally controlled hand prostheses. , 2016, 2016, 788-791.		11
24	Novel method to characterize upper-limb movements based on paraconsistent logic and myoelectric signals. , 2016, 2016, 395-398.		6
25	3D load cell for measure force in a bicycle crank. Measurement: Journal of the International Measurement Confederation, 2016, 93, 189-201.	2.5	6
26	Movement imagery classification in EMOTIV cap based system by NaÃ¯ve Bayes. , 2016, 2016, 4435-4438.		8
27	A new crank arm based load cell, with built-in conditioning circuit and strain gages, to measure the components of the force applied by a cyclist. , 2016, 2016, 1983-1986.		8
28	Optimization of Features to Classify Upper-Limb Movements Through sEMG Signal Processing. Brazilian Journal of Instrumentation and Control, 2016, 4, 14.	0.2	6
29	Self-adaptive Method for sEMG Movement Classification Based on Continuous Optimal Electrode Assortment. Brazilian Journal of Instrumentation and Control, 2016, 4, 21.	0.2	4
30	Upper-limb movement classification through logistic regression sEMG signal processing. , 2015, , .		6
31	Use of inertial sensors as devices for upper limb motor monitoring exercises for motor rehabilitation. Health and Technology, 2015, 5, 91-102.	2.1	4
32	Upper-limb movement classification based on sEMG signal validation with continuous channel selection. , 2015, 2015, 486-9.		6
33	Complete factorial design experiment for 3D load cell instrumented crank validation. , 2015, 2015, 3655-8.		4
34	Portable electrocardiograph through android application. , 2015, 2015, 6780-3.		3
35	Portable electrocardiograph based on the integrated circuit ADS1294 using an android application as interface. Health and Technology, 2015, 5, 147-154.	2.1	4
36	Executed Movement Using EEG Signals through a Naive Bayes Classifier. Micromachines, 2014, 5, 1082-1105.	1.4	21

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37	A New Crank Arm-Based Load Cell for the 3D Analysis of the Force Applied by a Cyclist. Sensors, 2014, 14, 22921-22939.	2.1	18
38	Acquisition, processing of myoelectrics signals and Support-Vector Machine for movement characterization of hand-arm segment. , 2014, , .		1
39	Feasibility Assay for Measure of Sternocleidomastoid and Platysma Electromyography Signal for Brain-Computer Interface Feedback. Intelligent Control and Automation, 2014, 05, 253-261.	1.0	1
40	A study of the Naive Bayes classifier for analyzing imaginary movement EEG signals using the Periodogram as spectral estimator. , 2013, , .		20
41	Measurement of transmissibility on individuals. , 2013, , .		2
42	Evaluation of sensorimotor rhythms to control a wheelchair. , 2013, , .		6
43	Evaluation of impact transmissibility on individuals with shoes and barefoot during human gait. Measurement: Journal of the International Measurement Confederation, 2013, 46, 2547-2554.	2.5	2
44	A Neuro-Fuzzy System for Characterization of Arm Movements. Sensors, 2013, 13, 2613-2630.	2.1	55
45	Decoding Arm Movements by Myoelectric Signal and Artificial Neural Networks. Intelligent Control and Automation, 2013, 04, 87-93.	1.0	16
46	Design and uncertainty analysis of a bioimpedance measurement channel. , 2013, , .		1
47	Development of a Brain-Computer Interface system based on sensorimotor rhythms. , 2012, , .		3
48	Decoding arm movements by myoeletric signals and artificial neural networks. , 2011, , .		10
49	Accelerometry for the motion analysis of the lateral plane of the human body during gait. Health and Technology, 2011, 1, 35-46.	2.1	5
50	Adaptive neuro-fuzzy logic analysis based on myoelectric signals for multifunction prosthesis control. , 2011, 2011, 7888-91.		14
51	Dynamic torque measurement for automotive application. , 2010, , .		2
52	Cognitive Measure on Different Profiles. Advances in Experimental Medicine and Biology, 2010, 657, 365-378.	0.8	1
53	InvestigaÃ§Ã£o dos principais processos de corrosÃ£o em estaÃ§Ãµes de energia elÃ©trica do Estado do RS. Revista Materia, 2009, 14, 1000-1014.	0.1	3
54	ZigBee Network for Measurement of Human Vibration. , 2008, , .		3

#	Article	IF	Citations
55	Wireless Network for Measurement of Whole-Body Vibration. Sensors, 2008, 8, 3067-3081.	2.1	17
56	VIBRATION AND NOISE EXPOSURE LEVEL IN AN OFF-ROAD PROTOTYPE. , 2006, , .		0
57	An Off-Road Suspension Design. , 0, , .		1
58	POWER TRAIN SYSTEM FOR A PROTOTYPE ECONOMIC VEHICLE. , 0, , .		0
59	Proposal of a Neuro Fuzzy System for Myoelectric Signal Analysis from Hand-Arm Segment. , 0, , .		2