Ernest Nlandu Kamavuako

List of Publications by Year
in descending order

86	2,872	136950 32	182427 51
papers	citations	h-index	g-index

86	86	86	2249
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Precise temporal association between cortical potentials evoked by motor imagination and afference induces cortical plasticity. Journal of Physiology, 2012, 590, 1669-1682.	2.9	210
2	Detection of movement intention from single-trial movement-related cortical potentials. Journal of Neural Engineering, 2011, 8, 066009.	3.5	208
3	Efficient neuroplasticity induction in chronic stroke patients by an associative brain-computer interface. Journal of Neurophysiology, 2016, 115, 1410-1421.	1.8	189
4	Multiday EMG-Based Classification of Hand Motions with Deep Learning Techniques. Sensors, 2018, 18, 2497.	3.8	146
5	Peripheral Electrical Stimulation Triggered by Self-Paced Detection of Motor Intention Enhances Motor Evoked Potentials. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2012, 20, 595-604.	4.9	129
6	Detection and classification of movement-related cortical potentials associated with task force and speed. Journal of Neural Engineering, 2013, 10, 056015.	3.5	98
7	A Review of Techniques for Detection of Movement Intention Using Movement-Related Cortical Potentials. Computational and Mathematical Methods in Medicine, 2015, 2015, 1-13.	1.3	91
8	Multiday Evaluation of Techniques for EMG-Based Classification of Hand Motions. IEEE Journal of Biomedical and Health Informatics, 2019, 23, 1526-1534.	6.3	82
9	Performance Evaluation of Convolutional Neural Network for Hand Gesture Recognition Using EMG. Sensors, 2020, 20, 1642.	3.8	76
10	Detecting and classifying movement-related cortical potentials associated with hand movements in healthy subjects and stroke patients from single-electrode, single-trial EEG. Journal of Neural Engineering, 2015, 12, 056013.	3.5	70
11	Online mapping of EMG signals into kinematics by autoencoding. Journal of NeuroEngineering and Rehabilitation, 2018, 15, 21.	4.6	68
12	Relationship between grasping force and features of single-channel intramuscular EMG signals. Journal of Neuroscience Methods, 2009, 185, 143-150.	2.5	63
13	Detecting and classifying three different hand movement types through electroencephalography recordings for neurorehabilitation. Medical and Biological Engineering and Computing, 2016, 54, 1491-1501.	2.8	60
14	Simultaneous and Proportional Force Estimation in Multiple Degrees of Freedom From Intramuscular EMG. IEEE Transactions on Biomedical Engineering, 2012, 59, 1804-1807.	4.2	57
15	Changes in H-reflex and V-waves following spinal manipulation. Experimental Brain Research, 2015, 233, 1165-1173.	1.5	57
16	An EEG Experimental Study Evaluating the Performance of Texas Instruments ADS1299. Sensors, 2018, 18, 3721.	3.8	49
17	Influence of the feature space on the estimation of hand grasping force from intramuscular EMG. Biomedical Signal Processing and Control, 2013, 8, 1-5.	5.7	48
18	Comparison of spatial filters and features for the detection and classification of movement-related cortical potentials in healthy individuals and stroke patients. Journal of Neural Engineering, 2015, 12, 056003.	3.5	47

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19	Manipulation of Dysfunctional Spinal Joints Affects Sensorimotor Integration in the Prefrontal Cortex: A Brain Source Localization Study. Neural Plasticity, 2016, 2016, 1-9.	2.2	47
20	Classification of EEG signals to identify variations in attention during motor task execution. Journal of Neuroscience Methods, 2017, 284, 27-34.	2.5	45
21	Stacked Sparse Autoencoders for EMG-Based Classification of Hand Motions: A Comparative Multi Day Analyses between Surface and Intramuscular EMG. Applied Sciences (Switzerland), 2018, 8, 1126.	2.5	45
22	The effect of arm position on classification of hand gestures with intramuscular EMG. Biomedical Signal Processing and Control, 2018, 43, 1-8.	5.7	44
23	Combined surface and intramuscular EMG for improved real-time myoelectric control performance. Biomedical Signal Processing and Control, 2014, 10, 102-107.	5.7	43
24	The effect of time on EMG classification of hand motions in able-bodied and transradial amputees. Journal of Electromyography and Kinesiology, 2018, 40, 72-80.	1.7	43
25	Effect of threshold values on the combination of EMG time domain features: Surface versus intramuscular EMG. Biomedical Signal Processing and Control, 2018, 45, 267-273.	5.7	39
26	The effects of a single session of spinal manipulation on strength and cortical drive in athletes. European Journal of Applied Physiology, 2018, 118, 737-749.	2.5	38
27	On the usability of intramuscular EMG for prosthetic control: A Fittsâ€™ Law approach. Journal of Electromyography and Kinesiology, 2014, 24, 770-777.	1.7	37
28	Impact of Spinal Manipulation on Cortical Drive to Upper and Lower Limb Muscles. Brain Sciences, 2017, 7, 2.	2.3	37
29	Wrist torque estimation during simultaneous and continuously changing movements: surface vs. untargeted intramuscular EMG. Journal of Neurophysiology, 2013, 109, 2658-2665.	1.8	36
30	Determination of optimum threshold values for EMG time domain features; a multi-dataset investigation. Journal of Neural Engineering, 2016, 13, 046011.	3.5	36
31	Upper limb complex movements decoding from pre-movement EEG signals using wavelet common spatial patterns. Computer Methods and Programs in Biomedicine, 2020, 183, 105076.	4.7	35
32	Surface Versus Untargeted Intramuscular EMG Based Classification of Simultaneous and Dynamically Changing Movements. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2013, 21, 992-998.	4.9	34
33	Chronic high-dose beetroot juice supplementation improves time trial performance of well-trained cyclists in normoxia and hypoxia. Nitric Oxide - Biology and Chemistry, 2019, 85, 44-52.	2.7	32
34	Distinct patterns of variation in the distribution of knee pain. Scientific Reports, 2018, 8, 16522.	3.3	25
35	Rehabilitation of Upper Limb Motor Impairment in Stroke: A Narrative Review on the Prevalence, Risk Factors, and Economic Statistics of Stroke and State of the Art Therapies. Healthcare (Switzerland), 2022, 10, 190.	2.0	23
36	Comparison of Features for Movement Prediction from Single-Trial Movement-Related Cortical Potentials in Healthy Subjects and Stroke Patients. Computational Intelligence and Neuroscience, 2015, 2015, 1-8.	1.7	22

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37	The contemporary model of vertebral column joint dysfunction and impact of high-velocity, low-amplitude controlled vertebral thrusts on neuromuscular function. European Journal of Applied Physiology, 2021, 121, 2675-2720.	2.5	22
38	Optimal automatic detection of muscle activation intervals. Journal of Electromyography and Kinesiology, 2019, 48, 103-111.	1.7	21
39	Validity and Reliability of a Smartphone App for Gait and Balance Assessment. Sensors, 2022, 22, 124.	3.8	21
40	Psychophysical Evaluation of Subdermal Electrical Stimulation in Relation to Prosthesis Sensory Feedback. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018, 26, 709-715.	4.9	20
41	Paired Associative Stimulation Delivered by Pairing Movement-Related Cortical Potentials With Peripheral Electrical Stimulation: An Investigation of the Duration of Neuromodulatory Effects. Neuromodulation, 2018, 21, 362-367.	0.8	20
42	The effects of chiropractic spinal manipulation on central processing of tonic pain - a pilot study using standardized low-resolution brain electromagnetic tomography (sLORETA). Scientific Reports, 2019, 9, 6925.	3.3	20
43	On the robustness of real-time myoelectric control investigations: a multiday Fittsâ€™ law approach. Journal of Neural Engineering, 2019, 16, 026003.	3.5	20
44	Pressure buffering by the tympanic membrane. InÂvivo measurements of middle ear pressure fluctuations during elevator motion. Hearing Research, 2016, 340, 113-120.	2.0	19
45	The effects of a single session of chiropractic care on strength, cortical drive, and spinal excitability in stroke patients. Scientific Reports, 2019, 9, 2673.	3.3	19
46	Review on electromyography based intention for upper limb control using pattern recognition for human-machine interaction. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2022, 236, 628-645.	1.8	17
47	Chiropractic spinal manipulation alters TMS induced I-wave excitability and shortens the cortical silent period. Journal of Electromyography and Kinesiology, 2018, 42, 24-35.	1.7	16
48	Determination of Optimum Segmentation Schemes for Pattern Recognition-Based Myoelectric Control: A Multi-Dataset Investigation. IEEE Access, 2020, 8, 90862-90877.	4.2	15
49	Hysteresis in the electromyographyâ€“force relationship: Toward an optimal model for the estimation of force. Muscle and Nerve, 2012, 46, 755-758.	2.2	14
50	Decoding Attempted Hand Movements in Stroke Patients Using Surface Electromyography. Sensors, 2020, 20, 6763.	3.8	14
51	The Short-Term Repeatability of Subdermal Electrical Stimulation for Sensory Feedback. IEEE Access, 2020, 8, 63983-63992.	4.2	14
52	Influence of attention alternation on movement-related cortical potentials in healthy individuals and stroke patients. Clinical Neurophysiology, 2017, 128, 165-175.	1.5	13
53	Classification of Hand Grasp Kinetics and Types Using Movement-Related Cortical Potentials and EEG Rhythms. Computational Intelligence and Neuroscience, 2017, 2017, 1-8.	1.7	12
54	A Multiday Evaluation of Real-Time Intramuscular EMG Usability with ANN. Sensors, 2020, 20, 3385.	3.8	12

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55	Chiropractic Manipulation Increases Maximal Bite Force in Healthy Individuals. Brain Sciences, 2018, 8, 76.	2.3	10
56	A comparative study of motion detection with FMG and sEMG methods for assistive applications. Journal of Rehabilitation and Assistive Technologies Engineering, 2020, 7, 205566832093858.	0.9	10
57	Evaluation of windowing techniques for intramuscular EMG-based diagnostic, rehabilitative and assistive devices. Journal of Neural Engineering, 2021, 18, 016017.	3.5	10
58	Electroencephalographic Recording of the Movement-Related Cortical Potential in Ecologically Valid Movements: A Scoping Review. Frontiers in Neuroscience, 2021, 15, 721387.	2.8	10
59	Estimation of the Respiratory Rate from Localised ECG at Different Auscultation Sites. Sensors, 2021, 21, 78.	3.8	9
60	The Effect of Signal Duration on the Classification of Heart Sounds: A Deep Learning Approach. Sensors, 2022, 22, 2261.	3.8	9
61	The Variability of Psychophysical Parameters Following Surface and Subdermal Stimulation: A Multiday Study in Amputees. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 174-180.	4.9	8
62	Classification of Overt and Covert Speech for Near-Infrared Spectroscopy-Based Brain Computer Interface. Sensors, 2018, 18, 2989.	3.8	7
63	Affordable Embroidered EMG Electrodes for Myoelectric Control of Prostheses: A Pilot Study. Sensors, 2021, 21, 5245.	3.8	7
64	Detection of Movement Intentions through a Single Channel of Electroencephalography. Biosystems and Biorobotics, 2014, , 465-472.	0.3	6
65	Classification of Movement Preparation Between Attended and Distracted Self-Paced Motor Tasks. IEEE Transactions on Biomedical Engineering, 2019, 66, 3060-3071.	4.2	6
66	Associative cued asynchronous <scp>BCI</scp> induces cortical plasticity in stroke patients. Annals of Clinical and Translational Neurology, 2022, 9, 722-733.	3.7	6
67	Comparison between Embroidered and Gel Electrodes on ECG-Derived Respiration Rate. , 2020, 2020, 2622-2625.		5
68	The Effect of Spinal Manipulation on the Electrophysiological and Metabolic Properties of the Tibialis Anterior Muscle. Healthcare (Switzerland), 2020, 8, 548.	2.0	5
69	Hammersteinâ€“Wiener Multimodel Approach for Fast and Efficient Muscle Force Estimation from EMG Signals. Biosensors, 2022, 12, 117.	4.7	5
70	Reply to Morone, G.; Giansanti, D. Comment on â€œAnwer et al. Rehabilitation of Upper Limb Motor Impairment in Stroke: A Narrative Review on the Prevalence, Risk Factors, and Economic Statistics of Stroke and State of the Art Therapies. Healthcare 2022, 10, 190â€. Healthcare (Switzerland), 2022, 10, 847.	2.0	5
71	Efficacy of a Single-Task ERP Measure to Evaluate Cognitive Workload During a Novel Exergame. Frontiers in Human Neuroscience, 2021, 15, 742384.	2.0	4
72	Inter-classifier comparison for upper extremity EMG signal at different hand postures and arm positions using pattern recognition. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2022, 236, 228-238.	1.8	4

#	Article	IF	Citations
73	The Effect of EMG Features on the Classification of Swallowing Events and the Estimation of Fluid Intake Volume. Sensors, 2022, 22, 3380.	3.8	4
74	Investigating the Intervention Parameters of Endogenous Paired Associative Stimulation (ePAS). Brain Sciences, 2021, 11, 224.	2.3	3
75	Decoding of Ankle Joint Movements in Stroke Patients Using Surface Electromyography. Sensors, 2021, 21, 1575.	3.8	3
76	Multiple-day high-dose beetroot juice supplementation does not improve pulmonary or muscle deoxygenation kinetics of well-trained cyclists in normoxia and hypoxia. Nitric Oxide - Biology and Chemistry, 2021, 111-112, 37-44.	2.7	3
77	The Effects of Spinal Manipulation on Motor Unit Behavior. Brain Sciences, 2021, 11, 105.	2.3	3
78	Nerve Injury Decreases Hyperacute Resting-State Connectivity Between the Anterior Cingulate and Primary Somatosensory Cortex in Anesthetized Rats. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 2691-2698.	4.9	3
79	Correlation between the stability of feature distribution and classification performance in sEMG signals. , 2021, , .		3
80	Modeling simple and complex handwriting based on EMG signals. , 2020, , 129-149.		2
81	Chiropractic Spinal Adjustment Increases the Cortical Drive to the Lower Limb Muscle in Chronic Stroke Patients. Frontiers in Neurology, 2021, 12, 747261.	2.4	2
82	Software Sensor to Enhance Online Parametric Identification for Nonlinear Closed-Loop Systems for Robotic Applications. Sensors, 2021, 21, 3653.	3.8	1
83	Altered evoked low-frequency connectivity from SI to ACC following nerve injury in rats. Journal of Neural Engineering, 2021, 18, 046063.	3.5	1
84	Intra- and Inter-Rater Reliability of Manual Feature Extraction Methods in Movement Related Cortical Potential Analysis. Sensors, 2020, 20, 2427.	3.8	0
85	Modulation of SI and ACC response to noxious and nonâ€noxious electrical stimuli after the spared nerve injury model of neuropathic pain. European Journal of Pain, 2021, 25, 612-623.	2.8	0
86	Online Closed-Loop Control Using Tactile Feedback Delivered Through Surface and Subdermal Electrotactile Stimulation. Frontiers in Neuroscience, 2021, 15, 580385.	2.8	0