Robert LeMoyne

List of Publications by Year
in descending order

87 papers	1,195 citations	623734 14 h-index	677142 22 g-index
91 all docs	91 docs citations	91 times ranked	476 citing authors

#	Article	IF	Citations
1	Implementation of Machine Learning Classification Regarding Hemiplegic Gait Using an Assortment of Machine Learning Algorithms with Quantification from Conformal Wearable and Wireless Inertial Sensor System. Journal of Biomedical Science and Engineering, 2021, 14, 415-425.	0.4	2
2	Implementation of an Assortment of Machine Learning Classification Algorithms Regarding Diadochokinesia for Hemiparesis with Quantification from Conformal Wearable and Wireless System. Journal of Biomedical Science and Engineering, 2021, 14, 426-434.	0.4	1
3	Preliminary Biometrics of ECG Signal Based on Temporal Organization through the Implementation of a Multilayer Perceptron Neural Network. Journal of Biomedical Science and Engineering, 2021, 14, 435-441.	0.4	1
4	Machine Learning Classification of Diadochokinesia for a Hemiplegic Ankle Foot Complex Pair. , 2021, , .		2
5	Biometrics of ECG Signal through Temporal Organization with Support Vector Machine. , 2021, , .		2
6	Conformal Wearable Sensors for Distinguishing Circumduction for Hemiplegic Gait with Machine Learning. , 2021, , .		0
7	Application of a Multilayer Perceptron Neural Network for Differentiation of the Influence of Ankle Stretch Duration for Hemiplegic Affected Ankle Dorsiflexion Quantified by a Smartphone Functioning as a Wearable and Wireless Gyroscope Platform. , 2021, , .		1
8	Conformal Wearable for Quantification of Dorsiflexion for a Hemiplegic Ankle Pair with Distinction by Machine Learning. , 2021, , .		1
9	Network Centric Therapy for Machine Learning Classification of Hemiplegic Gait through Conformal Wearable and Wireless Inertial Sensors. , 2020, , .		1
10	Application of deep learning to distinguish multiple deep brain stimulation parameter configurations for the treatment of Parkinsonâ€™s disease. , 2020, , .		4
11	Virtual Proprioception for Eccentric Training through Conformal Wearable and Wireless Inertial Sensor Systems. , 2020, , .		0
12	Conformal Wearable and Wireless Inertial Sensor System for Machine Learning Classification of Hemiplegic Reduced Arm Swing. , 2020, , .		0
13	Diadochokinesia Distinction of Hemiparesis through Quantification of Conformal Wearable and Wireless Inertial Sensor with Machine Learning. , 2020, , .		2
14	Evaluation of Machine Learning Algorithms for Classifying Deep Brain Stimulation Respective of â€˜Onâ€™ and â€˜Offâ€™ Status. , 2019, , .		4
15	Deep Brain Stimulation for the Treatment of Movement Disorder Regarding Parkinsonâ€™s Disease and Essential Tremor with Device Characterization. Smart Sensors, Measurement and Instrumentation, 2019, , 37-51.	0.6	4
16	Movement Disorders: Parkinsonâ€™s Disease and Essential Tremorâ€”A General Perspective. Smart Sensors, Measurement and Instrumentation, 2019, , 17-24.	0.6	6
17	Role of Machine Learning for Classification of Movement Disorder and Deep Brain Stimulation Status. Smart Sensors, Measurement and Instrumentation, 2019, , 99-111.	0.6	0
18	Wearable and Wireless Systems for Movement Disorder Evaluation and Deep Brain Stimulation Systems. Smart Sensors, Measurement and Instrumentation, 2019, , 1-15.	0.6	1

#	Article	IF	Citations
19	Wearable and Wireless Systems with Internet Connectivity for Quantification of Parkinsonâ€™s Disease and Essential Tremor Characteristics. Smart Sensors, Measurement and Instrumentation, 2019, , 79-97.	0.6	7
20	Traditional Ordinal Strategies for Establishing the Severity and Status of Movement Disorders, Such as Parkinsonâ€™s Disease and Essential Tremor. Smart Sensors, Measurement and Instrumentation, 2019, , 25-36.	0.6	5
21	Assessment of Machine Learning Classification Strategies for the Differentiation of Deep Brain Stimulation â€œOnâ€•and â€œOffâ€•Status for Parkinsonâ€™s Disease Using a Smartphone as a Wearable and Wireless Inertial Sensor for Quantified Feedback. Smart Sensors, Measurement and Instrumentation, 2019, , 113-126.	0.6	8
22	CLASSIFICATION OF SOFTWARE CONTROL ARCHITECTURES FOR A POWERED PROSTHESIS THROUGH CONVENTIONAL GAIT ANALYSIS USING MACHINE LEARNING APPLICATIONS. Journal of Mechanics in Medicine and Biology, 2019, 19, 1950044.	0.7	4
23	Preliminary Wearable and Locally Wireless Systems for Quantification of Parkinsonâ€™s Disease and Essential Tremor Characteristics. Smart Sensors, Measurement and Instrumentation, 2019, , 65-78.	0.6	6
24	IMPLEMENTATION OF A SMARTPHONE AS A WIRELESS ACCELEROMETER PLATFORM FOR QUANTIFYING HEMIPLEGIC GAIT DISPARITY IN A FUNCTIONALLY AUTONOMOUS CONTEXT. Journal of Mechanics in Medicine and Biology, 2018, 18, 1850005.	0.7	8
25	Wearable and Wireless Systems for Healthcare I. Smart Sensors, Measurement and Instrumentation, 2018, , .	0.6	16
26	Role of Machine Learning for Gait and Reflex Response Classification. Smart Sensors, Measurement and Instrumentation, 2018, , 111-120.	0.6	3
27	Smartphones and Portable Media Devices as Wearable and Wireless Systems for Gait and Reflex Response Quantification. Smart Sensors, Measurement and Instrumentation, 2018, , 73-93.	0.6	4
28	Implementation of a Smartphone as a Wearable and Wireless Gyroscope Platform for Machine Learning Classification of Hemiplegic Gait Through a Multilayer Perceptron Neural Network. , 2018, , .		8
29	Wearable and Wireless Systems for Gait Analysis and Reflex Quantification. Smart Sensors, Measurement and Instrumentation, 2018, , 1-20.	0.6	2
30	Traditional Clinical Evaluation of Gait and Reflex Response by Ordinal Scale. Smart Sensors, Measurement and Instrumentation, 2018, , 21-29.	0.6	2
31	Quantification Systems Appropriate for a Clinical Setting. Smart Sensors, Measurement and Instrumentation, 2018, , 31-44.	0.6	4
32	Portable Wearable and Wireless Systems for Gait and Reflex Response Quantification. Smart Sensors, Measurement and Instrumentation, 2018, , 59-71.	0.6	4
33	Bluetooth Inertial Sensors for Gait and Reflex Response Quantification with Perspectives Regarding Cloud Computing and the Internet of Things. Smart Sensors, Measurement and Instrumentation, 2018, , 95-103.	0.6	4
34	Homebound Therapy with Wearable and Wireless Systems. Smart Sensors, Measurement and Instrumentation, 2018, , 121-132.	0.6	7
35	IMPLEMENTATION OF A SMARTPHONE WIRELESS GYROSCOPE PLATFORM WITH MACHINE LEARNING FOR CLASSIFYING DISPARITY OF A HEMIPLEGIC PATELLAR TENDON REFLEX PAIR. Journal of Mechanics in Medicine and Biology, 2017, 17, 1750083.	0.7	16
36	Smartphone wireless gyroscope platform for machine learning classification of hemiplegic patellar tendon reflex pair disparity through a multilayer perceptron neural network. , 2016, , .		13

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37	Wearable body and wireless inertial sensors for machine learning classification of gait for people with Friedreich's ataxia. , 2016, , .		34
38	Implementation of a smartphone as a wireless gyroscope platform for quantifying reduced arm swing in hemiplegie gait with machine learning classification by multilayer perceptron neural network. , 2016, 2016, 2626-2630.		12
39	Advances for Prosthetic Technology. , 2016, , .		13
40	Future and Advanced Concepts for the Powered Prosthesis. , 2016, , 127-130.		2
41	Ankle-Foot Complex and the Fundamental Aspects of Gait. , 2016, , 15-27.		11
42	Testing and Evaluation Strategies for the Powered Prosthesis, a Global Perspective. , 2016, , 37-58.		12
43	Architecture of a Powered Prosthesis System: Actuators, Sensors, and Control. , 2016, , 77-92.		1
44	Amputations and Prostheses, a Topic of Global Concern. , 2016, , 1-13.		1
45	The MIT Inspired Powered Prosthesis Leading to the Commercialized BiOM Powered Prosthesis, a Precedence in Transtibial Prosthetic Technology. , 2016, , 115-126.		0
46	Energy Storage and Return (ESAR) Prosthesis. , 2016, , 69-76.		0
47	Implementation of Machine Learning with an iPod Application Mounted to a Cane for Classifying Assistive Device Usage. Journal of Medical Imaging and Health Informatics, 2015, 5, 1404-1408.	0.3	7
48	Application of a Multilayer Perceptron Neural Network for Classifying Software Platforms of a Powered Prosthesis through a Force Plate. , 2015, , .		8
49	Ankle Rehabilitation System with Feedback from a Smartphone Wireless Gyroscope Platform and Machine Learning Classification. , 2015, , .		18
50	Implementation of a smartphone wireless accelerometer platform for establishing deep brain stimulation treatment efficacy of essential tremor with machine learning. , 2015, 2015, 6772-5.		40
51	ADVANCES REGARDING POWERED PROSTHESIS FOR TRANSTIBIAL AMPUTATION. Journal of Mechanics in Medicine and Biology, 2015, 15, 1530001.	0.7	19
52	Implementation of machine learning for classifying prosthesis type through conventional gait analysis. , 2015, 2015, 202-5.		14
53	Use of Smartphones and Portable Media Devices for Quantifying Human Movement Characteristics of Gait, Tendon Reflex Response, and Parkinsonâ€™s Disease Hand Tremor. Methods in Molecular Biology, 2015, 1256, 335-358.	0.9	47
54	Implementation of Machine Learning for Classifying Hemiplegic Gait Disparity through Use of a Force Plate. , 2014, , .		26

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55	Simulation of a computational winding filament model with an exponential spring to represent titin. , 2014, 2014, 836-9.		1
56	Implementation of a smartphone as a wireless gyroscope application for the quantification of reflex response. , 2014, 2014, 3654-7.		18
57	Implementation of a smartphone for evaluating gait characteristics of a trans-tibial prosthesis. , 2014, 2014, 3674-7.		11
58	Implementation of an iPod Application as a Wearable and Wireless Accelerometer System for Identifying Quantified Disparity of Hemiplegic Gait. Journal of Medical Imaging and Health Informatics, 2014, 4, 634-641.	0.3	12
59	Implementation of an iPod Wireless Accelerometer Application Using Machine Learning to Classify Disparity of Hemiplegic and Healthy Patellar Tendon Reflex Pair. Journal of Medical Imaging and Health Informatics, 2014, 4, 21-28.	0.3	25
60	Implementation of an iPhone wireless accelerometer application for the quantification of reflex response. , 2013, 2013, 4658-61.		21
61	WIRELESS ACCELEROMETER SYSTEM FOR QUANTIFYING DISPARITY OF HEMIPLEGIC GAIT USING THE FREQUENCY DOMAIN. Journal of Mechanics in Medicine and Biology, 2013, 13, 1350035.	0.7	13
62	Wireless accelerometer configuration for monitoring Parkinsonâ€™s disease hand tremor. Advances in Parkinson S Disease, 2013, 02, 62-67.	0.2	42
63	Wearable and wireless accelerometer systems for monitoring Parkinsonâ€™s disease patientsâ€"A perspective review. Advances in Parkinson S Disease, 2013, 02, 113-115.	0.2	18
64	Quantified reflex strategy using an iPod as a wireless accelerometer application. , 2012, 2012, 2476-9.		13
65	Wireless accelerometer iPod application for quantifying gait characteristics. , 2011, 2011, 7904-7.		16
66	Fundamental Analysis of Potential Energy Derived Strategies for Acquiring Minimum Velocity Threshold for a Ramjet. , 2011, , .		1
67	FOURTH GENERATION WIRELESS REFLEX QUANTIFICATION SYSTEM FOR ACQUIRING TENDON REFLEX RESPONSE AND LATENCY. Journal of Mechanics in Medicine and Biology, 2011, 11, 31-54.	0.7	23
68	TENDON REFLEX AND STRATEGIES FOR QUANTIFICATION, WITH NOVEL METHODS INCORPORATING WIRELESS ACCELEROMETER REFLEX QUANTIFICATION DEVICES, A PERSPECTIVE REVIEW. Journal of Mechanics in Medicine and Biology, 2011, 11, 471-513.	0.7	30
69	Fundamental Analysis of a First Stage Ramjet-Rocket Combined Cycle and Second Stage Hydrolysis Propulsion System with Trajectory Weighting. , 2011, , .		1
70	Quantification of Gait Characteristics Through a Functional iPhone Wireless Accelerometer Application Mounted to the Spine. , 2010, , .		17
71	WIRELESS THREE DIMENSIONAL ACCELEROMETER REFLEX QUANTIFICATION DEVICE WITH ARTIFICIAL REFLEX SYSTEM. Journal of Mechanics in Medicine and Biology, 2010, 10, 401-415.	0.7	11
72	iPhone Wireless Accelerometer Application for Acquiring Quantified Gait Attributes. , 2010, , .		14

#	ARTICLE	IF	CITATIONS
73	Implementation of an iPhone as a wireless accelerometer for quantifying gait characteristics. , 2010, 2010, 3847-51.		52
74	Implementation of an iPhone for characterizing Parkinson's disease tremor through a wireless accelerometer application. , 2010, 2010, 4954-8.		104
75	Wireless accelerometer reflex quantification system characterizing response and latency. , 2009, 2009, 5283-6.		15
76	WIRELESS ACCELEROMETER ASSESSMENT OF GAIT FOR QUANTIFIED DISPARITY OF HEMIPARETIC LOCOMOTION. Journal of Mechanics in Medicine and Biology, 2009, 09, 329-343.	0.7	25
77	Evaluation of a wireless three dimensional MEMS accelerometer reflex quantification device using an artificial reflex system. , 2009, , .		5
78	Wireless accelerometer system for quantifying gait. , 2009, , .		18
79	Quantification of Parkinson's disease characteristics using wireless accelerometers. , 2009, , .		38
80	QUANTIFIED DEEP TENDON REFLEX DEVICE FOR RESPONSE AND LATENCY, THIRD GENERATION. Journal of Mechanics in Medicine and Biology, 2008, 08, 491-506.	0.7	24
81	ACCELEROMETERS FOR QUANTIFICATION OF GAIT AND MOVEMENT DISORDERS: A PERSPECTIVE REVIEW. Journal of Mechanics in Medicine and Biology, 2008, 08, 137-152.	0.7	61
82	QUANTIFIED DEEP TENDON REFLEX DEVICE, SECOND GENERATION. Journal of Mechanics in Medicine and Biology, 2008, 08, 75-85.	0.7	25
83	VIRTUAL PROPRIOCEPTION. Journal of Mechanics in Medicine and Biology, 2008, 08, 317-338.	0.7	45
84	Virtual proprioception with real-time step detection and processing. , 2008, 2008, 4238-41.		21
85	Smartphone and Portable Media Device: A Novel Pathway toward the Diagnostic Characterization of Human Movement. , 0, , .		17
86	An Evolutionary Perspective for Network Centric Therapy through Wearable and Wireless Systems for Reflex, Gait, and Movement Disorder Assessment with Machine Learning. , 0, , .		1
87	The Merits of Artificial Proprioception, with Applications in Biofeedback Gait Rehabilitation Concepts and Movement Disorder Characterization. , 0, , .		32