Xiaoyan Li

List of Publications by Year
in descending order

40 papers	805 citations	471509 17 h-index	552781 26 g-index
40 all docs	40 docs citations	40 times ranked	755 citing authors

#	ARTICLE	IF	CITATIONS
1	Examination of Poststroke Alteration in Motor Unit Firing Behavior Using High-Density Surface EMG Decomposition. IEEE Transactions on Biomedical Engineering, 2015, 62, 1242-1252.	4.2	81
2	Motor Unit Number Reductions in Paretic Muscles of Stroke Survivors. IEEE Transactions on Information Technology in Biomedicine, 2011, 15, 505-512.	3.2	69
3	Power spectral analysis of surface electromyography (EMG) at matched contraction levels of the first dorsal interosseous muscle in stroke survivors. Clinical Neurophysiology, 2014, 125, 988-994.	1.5	58
4	EMG feature assessment for myoelectric pattern recognition and channel selection: A study with incomplete spinal cord injury. Medical Engineering and Physics, 2014, 36, 975-980.	1.7	47
5	Localized Electrical Impedance Myography of the Biceps Brachii Muscle during Different Levels of Isometric Contraction and Fatigue. Sensors, 2016, 16, 581.	3.8	39
6	Alterations in the Peak Amplitude Distribution of the Surface Electromyogram Poststroke. IEEE Transactions on Biomedical Engineering, 2013, 60, 845-852.	4.2	36
7	An Examination of the Motor Unit Number Index (MUNIX) in Muscles Paralyzed by Spinal Cord Injury. IEEE Transactions on Information Technology in Biomedicine, 2012, 16, 1143-1149.	3.2	35
8	Analysis of linear electrode array EMG for assessment of hemiparetic biceps brachii muscles. Frontiers in Human Neuroscience, 2015, 9, 569.	2.0	31
9	A Simulation-Based Analysis of Motor Unit Number Index (MUNIX) Technique Using Motoneuron Pool and Surface Electromyogram Models. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2012, 20, 297-304.	4.9	30
10	Two-Source Validation of Progressive FastICA Peel-Off for Automatic Surface EMG Decomposition in Human First Dorsal Interosseous Muscle. International Journal of Neural Systems, 2018, 28, 1850019.	5.2	28
11	Assessing muscle spasticity with Myotonometric and passive stretch measurements: validity of the Myotonometer. Scientific Reports, 2017, 7, 44022.	3.3	25
12	An examination of motor unit number index in adults with cerebral palsy. Journal of Electromyography and Kinesiology, 2015, 25, 444-450.	1.7	24
13	Summary of grip strength measurements obtained in the 2011-2012 and 2013-2014 National Health and Nutrition Examination Surveys. Journal of Hand Therapy, 2019, 32, 489-496.	1.5	23
14	Electrical Impedance Myography for Evaluating Paretic Muscle Changes After Stroke. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 2113-2121.	4.9	21
15	Application of the ${m F}$-Response for Estimating Motor Unit Number and Amplitude Distribution in Hand Muscles of Stroke Survivors. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2016, 24, 674-681.	4.9	20
16	Suppression of stimulus artifact contaminating electrically evoked electromyography. NeuroRehabilitation, 2014, 34, 381-389.	1.3	19
17	Alterations in multidimensional motor unit number index of hand muscles after incomplete cervical spinal cord injury. Frontiers in Human Neuroscience, 2015, 9, 238.	2.0	19
18	The Effect of Subcutaneous Fat on Electrical Impedance Myography: Electrode Configuration and Multi-Frequency Analyses. PLoS ONE, 2016, 11, e0156154.	2.5	16

#	Article	IF	Citations
19	The effects of notch filtering on electrically evoked myoelectric signals and associated motor unit index estimates. Journal of NeuroEngineering and Rehabilitation, 2011, 8, 64.	4.6	14
20	Alterations in Muscle Networks in the Upper Extremity of Chronic Stroke Survivors. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2021, 29, 1026-1034.	4.9	14
21	Computing motor unit number index of the first dorsal interosseous muscle with two different contraction tasks. Medical Engineering and Physics, 2012, 34, 1209-1212.	1.7	13
22	Electrical impedance myography changes after incomplete cervical spinal cord injury: An examination of hand muscles. Clinical Neurophysiology, 2017, 128, 2242-2247.	1.5	13
23	CMAP Scan Examination of the First Dorsal Interosseous Muscle After Spinal Cord Injury. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2021, 29, 1199-1205.	4.9	13
24	Motor unit number estimation of human abductor hallucis from a compound muscle action potential scan. Muscle and Nerve, 2018, 58, 735-737.	2.2	12
25	Motor unit number index examination in dominant and non-dominant hand muscles. Laterality, 2015, 20, 699-710.	1.0	11
26	Modified motor unit number index: A simulation study of the first dorsal interosseous muscle. Medical Engineering and Physics, 2016, 38, 115-120.	1.7	11
27	Assessing Hand Muscle Structural Modifications in Chronic Stroke. Frontiers in Neurology, 2018, 9, 296.	2.4	10
28	Between-side differences in hand-grip strength across the age span: Findings from 2011â€"2014 NHANES and 2011 NIH Toolbox studies. Laterality, 2019, 24, 697-706.	1.0	10
29	Alterations in Localized Electrical Impedance Myography of Biceps Brachii Muscles Paralyzed by Spinal Cord Injury. Frontiers in Neurology, 2017, 8, 253.	2.4	9
30	Motor unit number of the first dorsal interosseous muscle estimated from CMAP scan with different pulse widths and steps. Journal of Neural Engineering, 2020, 17, 014001.	3.5	9
31	Assessing the immediate impact of botulinum toxin injection on impedance of spastic muscle. Medical Engineering and Physics, 2017, 43, 97-102.	1.7	8
32	Assessing muscle compliance in stroke with the Myotonometer. Clinical Biomechanics, 2017, 50, 110-113.	1.2	8
33	Different Effects of Cold Stimulation on Reflex and Non-Reflex Components of Poststroke Spastic Hypertonia. Frontiers in Neurology, 2017, 8, 169.	2.4	8
34	Assessing redistribution of muscle innervation zones after spinal cord injuries. Journal of Electromyography and Kinesiology, 2021, 59, 102550.	1.7	8
35	A dilemma in stroke application: Standard or modified motor unit number index?. Clinical Neurophysiology, 2016, 127, 2756-2759.	1.5	4
36	Neurophysiological Factors Affecting Muscle Innervation Zone Estimation Using Surface EMG: A Simulation Study. Biosensors, 2021, 11, 356.	4.7	4

#	Article	IF	Citations
37	Muscle Fiber Diameter and Density Alterations after Stroke Examined by Single-Fiber EMG. Neural Plasticity, 2021, 2021, 1-7.	2.2	3
38	Alterations in spike amplitude distribution of the surface electromyogram post-stroke. , 2011, 2011, 7504-7.		1
39	Distribution of innervation zone and muscle fiber conduction velocity in the biceps brachii muscle. Journal of Electromyography and Kinesiology, 2022, 63, 102637.	1.7	1
40	Electromyography (EMG) examination on motor unit alterations after stroke. , 2020, , 51-64.		0