

# Zimi Sawacha

## List of Publications by Year in descending order

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Version: 2024-02-01

60  
papers

1,839  
citations

377584

21  
h-index

299063

42  
g-index

75  
all docs

75  
docs citations

75  
times ranked

2096  
citing authors

#	ARTICLE	IF	CITATIONS
1	Electromyography-informed modeling for estimating muscle activation and force alterations in Parkinson's disease. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2022, 25, 14-26.	0.9	5
2	Influence of age on postural control during dual task: a centre of pressure motion and electromyographic analysis. <i>Aging Clinical and Experimental Research</i> , 2022, 34, 137-149.	1.4	3
3	Quantitative Evaluation of Hypomimia in Parkinson's Disease: A Face Tracking Approach. <i>Sensors</i> , 2022, 22, 1358.	2.1	6
4	A Supervised Classification of Children with Fragile X Syndrome and Controls Based on Kinematic and sEMG Parameters. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 1612.	1.3	1
5	Reliability and Repeatability of ACL Quick Check®: A Methodology for on Field Lower Limb Joint Kinematics and Kinetics Assessment in Sport Applications. <i>Sensors</i> , 2022, 22, 259.	2.1	5
6	EMG analysis across different tasks improves prevention screenings in diabetes: a cluster analysis approach. <i>Medical and Biological Engineering and Computing</i> , 2022, 60, 1659.	1.6	1
7	Could Proprioceptive Stimuli Change Saddle Pressure on Male Cyclists during Different Hand Positions? An Exploratory Study of the Effect of the Equistasi® Device. <i>Sports</i> , 2022, 10, 88.	0.7	4
8	Quantitative assessment of training effects using EksoGT® exoskeleton in Parkinson's disease patients: A randomized single blind clinical trial. <i>Contemporary Clinical Trials Communications</i> , 2022, 28, 100926.	0.5	3
9	The Design and Simulation of a 16-Sensors Plantar Pressure Insole Layout for Different Applications: From Sports to Clinics, a Pilot Study. <i>Sensors</i> , 2021, 21, 1450.	2.1	15
10	Changes of biomechanics induced by Equistasi® in Parkinson's disease: coupling between balance and lower limb joints kinematics. <i>Medical and Biological Engineering and Computing</i> , 2021, 59, 1403-1415.	1.6	7
11	Feasibility and Reliability Assessment of Video-Based Motion Analysis and Surface Electromyography in Children with Fragile X during Gait. <i>Sensors</i> , 2021, 21, 4746.	2.1	7
12	Relationship between Muscular Activity and Postural Control Changes after Proprioceptive Focal Stimulation (Equistasi®) in Middle-Moderate Parkinson's Disease Patients: An Explorative Study. <i>Sensors</i> , 2021, 21, 560.	2.1	14
13	Motion analysis for ACL injuries prevention in sport: a systematic review. <i>Minerva Orthopedics</i> , 2021, 72, .	0.1	3
14	Effects of Rapid Palatal Expansion on Chewing Biomechanics in Children with Malocclusion: A Surface Electromyography Study. <i>Sensors</i> , 2020, 20, 2086.	2.1	3
15	Clustering classification of diabetic walking abnormalities: a new approach taking into account intralimb coordination patterns. <i>Gait and Posture</i> , 2020, 79, 33-40.	0.6	11
16	Muscular activation changes in lower limbs after underwater gait training in Parkinson's disease: A surface emg pilot study. <i>Gait and Posture</i> , 2020, 80, 185-191.	0.6	19
17	Gait abnormalities in people with Dravet syndrome: A cross-sectional multi-center study. <i>European Journal of Paediatric Neurology</i> , 2019, 23, 808-818.	0.7	16
18	Proprioceptive Focal Stimulation (Equistasi®) May Improve the Quality of Gait in Middle-Moderate Parkinson's Disease Patients. Double-Blind, Double-Dummy, Randomized, Crossover, Italian Multicentric Study. <i>Frontiers in Neurology</i> , 2019, 10, 998.	1.1	25

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19	Gait and posture analysis in patients with maxillary transverse discrepancy, before and after RPE. <i>International Orthodontics</i> , 2018, 16, 158-173.	0.6	14
20	A methodological framework for detecting ulcersâ€™ risk in diabetic foot subjects by combining gait analysis, a new musculoskeletal foot model and a foot finite element model. <i>Gait and Posture</i> , 2018, 60, 279-285.	0.6	34
21	Validation of plantar pressure simulations using finite and discrete element modelling in healthy and diabetic subjects. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2017, 20, 1442-1452.	0.9	2
22	The role of muscle forces on foot internal stresses and plantar pressure distribution: differences between healthy and diabetic neuropathic subjects. <i>Gait and Posture</i> , 2017, 57, 73-74.	0.6	0
23	Differences in Tackle biomechanics between elite young and adult Rugby players. <i>Gait and Posture</i> , 2017, 57, 315-316.	0.6	0
24	SIAMOC position paper on gait analysis in clinical practice: General requirements, methods and appropriateness. Results of an Italian consensus conference. <i>Gait and Posture</i> , 2017, 58, 252-260.	0.6	82
25	Comparison of lower limb muscle strength between diabetic neuropathic and healthy subjects using OpenSim. <i>Gait and Posture</i> , 2017, 58, 194-200.	0.6	21
26	Underwater gait analysis in Parkinsonâ€™s disease. <i>Gait and Posture</i> , 2017, 52, 87-94.	0.6	39
27	Closed-loop EMG-informed model-based analysis of human musculoskeletal mechanics on rough terrains. , 2017, 2017, 364-368.		4
28	Towards the generation of a parametric foot model using principal component analysis: A pilot study. <i>Medical Engineering and Physics</i> , 2016, 38, 547-559.	0.8	6
29	Relationship between sagittal plane kinematics, foot morphology and vertical forces applied to three regions of the foot. <i>International Biomechanics</i> , 2016, 3, 50-56.	0.9	3
30	Altered EMG patterns in diabetic neuropathic and not neuropathic patients during step ascending and descending. <i>Journal of Electromyography and Kinesiology</i> , 2016, 31, 32-39.	0.7	13
31	GAIT ANALYSIS DRIVEN 2D FINITE ELEMENT MODEL OF THE NEUROPATHIC HINDFOOT. <i>Journal of Mechanics in Medicine and Biology</i> , 2016, 16, 1650012.	0.3	1
32	Evaluation of a robotic knee brace during the performance of functional tasks in stroke survivors. <i>Gait and Posture</i> , 2015, 42, S20.	0.6	0
33	MOToNMS: A MATLAB toolbox to process motion data for neuromusculoskeletal modeling and simulation. <i>Source Code for Biology and Medicine</i> , 2015, 10, 12.	1.7	109
34	Processing of sEMG signals for online motion of a single robot joint through GMM modelization. , 2015, , .		5
35	Under water gait analysis in Parkinson's disease. <i>Gait and Posture</i> , 2015, 42, S8.	0.6	0
36	Finite Element Modelling in Musculoskeletal Biomechanics. , 2014, , 527-544.		2

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37	3D finite element model of the diabetic neuropathic foot: A gait analysis driven approach. Journal of Biomechanics, 2014, 47, 3064-3071.	0.9	41
38	Identification of diabetic neuropathic patients at risk of foot ulceration through finite element models and cluster analysis. Journal of Foot and Ankle Research, 2014, 7, .	0.7	1
39	Biomechanical evaluation of diabetic foot through hierarchical cluster analysis. Journal of Foot and Ankle Research, 2014, 7, .	0.7	0
40	2â€Dimensional foot FE models for clinical application in gait analysis. Journal of Foot and Ankle Research, 2014, 7, .	0.7	0
41	Assessment of biofeedback rehabilitation in post-stroke patients combining fMRI and gait analysis: a case study. Journal of NeuroEngineering and Rehabilitation, 2014, 11, 53.	2.4	17
42	Comparison of Markerless and Marker-Based Motion Capture Technologies through Simultaneous Data Collection during Gait: Proof of Concept. PLoS ONE, 2014, 9, e87640.	1.1	129
43	The role of foot morphology on foot function in diabetic subjects with or without neuropathy. Gait and Posture, 2013, 37, 603-610.	0.6	38
44	Relationship between clinical and instrumental balance assessments in chronic post-stroke hemiparesis subjects. Journal of NeuroEngineering and Rehabilitation, 2013, 10, 95.	2.4	63
45	Motion analysis of front crawl swimming applying CAST technique by means of automatic tracking. Journal of Sports Sciences, 2013, 31, 276-287.	1.0	28
46	Validation of Plantar Pressure Measurements for a Novel In-Shoe Plantar Sensory Replacement Unit. Journal of Diabetes Science and Technology, 2013, 7, 1176-1178.	1.3	4
47	Association between Physical Activity Levels and Physiological Factors Underlying Mobility in Young, Middle-Aged and Older Individuals Living in a City District. PLoS ONE, 2013, 8, e74227.	1.1	32
48	Effectiveness of an automatic tracking software in underwater motion analysis. Journal of Sports Science and Medicine, 2013, 12, 660-7.	0.7	19
49	Abnormal muscle activation during gait in diabetes patients with and without neuropathy. Gait and Posture, 2012, 35, 101-105.	0.6	101
50	Integrated kinematicsâ€kineticsâ€plantar pressure data analysis: A useful tool for characterizing diabetic foot biomechanics. Gait and Posture, 2012, 36, 20-26.	0.6	76
51	Biomechanical assessment of balance and posture in subjects with ankylosing spondylitis. Journal of NeuroEngineering and Rehabilitation, 2012, 9, 63.	2.4	49
52	Foot type biomechanics in diabetic and not diabetic subjects. Journal of Foot and Ankle Research, 2012, 5, .	0.7	1
53	Markerless analysis of front crawl swimming. Journal of Biomechanics, 2011, 44, 2236-2242.	0.9	51
54	Impaired gait in ankylosing spondylitis. Medical and Biological Engineering and Computing, 2011, 49, 801-809.	1.6	46

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55	A New Classification of Diabetic Gait Pattern Based on Cluster Analysis of Biomechanical Data. Journal of Diabetes Science and Technology, 2010, 4, 1127-1138.	1.3	50
56	SVM classification of locomotion modes using surface electromyography for applications in rehabilitation robotics. , 2010, , .		22
57	Characterizing multisegment foot kinematics during gait in diabetic foot patients. Journal of NeuroEngineering and Rehabilitation, 2009, 6, 37.	2.4	57
58	Diabetic gait and posture abnormalities: A biomechanical investigation through three dimensional gait analysis. Clinical Biomechanics, 2009, 24, 722-728.	0.5	138
59	A new anatomically based protocol for gait analysis in children. Gait and Posture, 2007, 26, 560-571.	0.6	358
60	Relationships Among Cushion Type, Backrest Height, Seated Posture, And Reach Of Wheelchair Users With Spinal Cord Injury. Journal of Spinal Cord Medicine, 2003, 26, 236-243.	0.7	27