

Simon Steib

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

231
papers

4,444
citations

32
h-index

58
g-index

257
ext. papers

5,898
ext. citations

3.5
avg, IF

5.94
L-index

#	Paper	IF	Citations
231	Technology in Parkinson® disease: Challenges and opportunities. <i>Movement Disorders</i> , 2016 , 31, 1272-82		305
230	Dose-response relationship of resistance training in older adults: a meta-analysis. <i>Medicine and Science in Sports and Exercise</i> , 2010 , 42, 902-14	1.2	238
229	An Emerging Era in the Management of Parkinson® Disease: Wearable Technologies and the Internet of Things. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2015 , 19, 1873-81	7.2	179
228	Inertial sensor-based stride parameter calculation from gait sequences in geriatric patients. <i>IEEE Transactions on Biomedical Engineering</i> , 2015 , 62, 1089-97	5	168
227	Wearable sensors objectively measure gait parameters in Parkinson® disease. <i>PLoS ONE</i> , 2017 , 12, e0183989	3.7	148
226	Unbiased and mobile gait analysis detects motor impairment in Parkinson® disease. <i>PLoS ONE</i> , 2013 , 8, e56956	3.7	135
225	Revisiting QRS detection methodologies for portable, wearable, battery-operated, and wireless ECG systems. <i>PLoS ONE</i> , 2014 , 9, e84018	3.7	131
224	Stride segmentation during free walk movements using multi-dimensional subsequence dynamic time warping on inertial sensor data. <i>Sensors</i> , 2015 , 15, 6419-40	3.8	126
223	Hierarchical, multi-sensor based classification of daily life activities: comparison with state-of-the-art algorithms using a benchmark dataset. <i>PLoS ONE</i> , 2013 , 8, e75196	3.7	100
222	Internet of Health Things: Toward intelligent vital signs monitoring in hospital wards. <i>Artificial Intelligence in Medicine</i> , 2018 , 89, 61-69	7.4	97
221	Sensor-Based Gait Parameter Extraction With Deep Convolutional Neural Networks. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2017 , 21, 85-93	7.2	94
220	Real-time ECG monitoring and arrhythmia detection using Android-based mobile devices. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2012 , 2012, 2452-5	0.9	80
219	Towards Mobile Gait Analysis: Concurrent Validity and Test-Retest Reliability of an Inertial Measurement System for the Assessment of Spatio-Temporal Gait Parameters. <i>Sensors</i> , 2017 , 17,	3.8	76
218	Recent machine learning advancements in sensor-based mobility analysis: Deep learning for Parkinson® disease assessment. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2016 , 2016, 655-658	0.9	73
217	Activity recognition in beach volleyball using a Deep Convolutional Neural Network. <i>Data Mining and Knowledge Discovery</i> , 2017 , 31, 1678-1705	5.6	68
216	Biometric and mobile gait analysis for early diagnosis and therapy monitoring in Parkinson® disease. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2011 , 2011, 868-71	0.9	62
215	An Overview of Smart Shoes in the Internet of Health Things: Gait and Mobility Assessment in Health Promotion and Disease Monitoring. <i>Applied Sciences (Switzerland)</i> , 2017 , 7, 986	2.6	60

214	Mobile Stride Length Estimation With Deep Convolutional Neural Networks. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2018 , 22, 354-362	7.2	59
213	Multimodal Assessment of Parkinson Disease: A Deep Learning Approach. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2019 , 23, 1618-1630	7.2	59
212	Effects of Exercise Therapy on Postural Instability in Parkinson Disease: A Meta-analysis. <i>Journal of Neurologic Physical Therapy</i> , 2016 , 40, 3-14	4.1	55
211	Fatigue-induced alterations of static and dynamic postural control in athletes with a history of ankle sprain. <i>Journal of Athletic Training</i> , 2013 , 48, 203-8	4	48
210	Temporal Trajectory Aware Video Quality Measure. <i>IEEE Journal on Selected Topics in Signal Processing</i> , 2009 , 3, 266-279	7.5	48
209	An approximation of the Gaussian RBF kernel for efficient classification with SVMs. <i>Pattern Recognition Letters</i> , 2016 , 84, 107-113	4.7	47
208	Support vector machines for detecting age-related changes in running kinematics. <i>Journal of Biomechanics</i> , 2011 , 44, 540-2	2.9	43
207	Effects of localized and general fatigue on static and dynamic postural control in male team handball athletes. <i>Journal of Strength and Conditioning Research</i> , 2012 , 26, 1162-8	3.2	41
206	Effect of walking speed on gait sub phase durations. <i>Human Movement Science</i> , 2015 , 43, 118-24	2.4	40
205	Effects of fatiguing treadmill running on sensorimotor control in athletes with and without functional ankle instability. <i>Clinical Biomechanics</i> , 2013 , 28, 790-5	2.2	38
204	Combined shifted-excitation Raman difference spectroscopy and support vector regression for monitoring the algal production of complex polysaccharides. <i>Analyst, The</i> , 2013 , 138, 5639-46	5	36
203	Marker-based classification of young-elderly gait pattern differences via direct PCA feature extraction and SVMs. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2013 , 16, 435-42	2.1	36
202	Generic performance measure for multiclass-classifiers. <i>Pattern Recognition</i> , 2017 , 68, 111-125	7.7	35
201	Segmentation of Gait Sequences in Sensor-Based Movement Analysis: A Comparison of Methods in Parkinson Disease. <i>Sensors</i> , 2018 , 18,	3.8	33
200	Pattern classification of kinematic and kinetic running data to distinguish gender, shod/barefoot and injury groups with feature ranking. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2012 , 15, 467-74	2.1	33
199	Sensor-based stroke detection and stroke type classification in table tennis 2015 ,		32
198	Estimation of gait kinematics and kinetics from inertial sensor data using optimal control of musculoskeletal models. <i>Journal of Biomechanics</i> , 2019 , 95, 109278	2.9	31
197	Instrumented gait analysis: a measure of gait improvement by a wheeled walker in hospitalized geriatric patients. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2017 , 14, 18	5.3	30

196	Fast T Wave Detection Calibrated by Clinical Knowledge with Annotation of P and T Waves. <i>Sensors</i> , 2015 , 15, 17693-714	3.8	30
195	Removal of the electrocardiogram signal from surface EMG recordings using non-linearly scaled wavelets. <i>Journal of Electromyography and Kinesiology</i> , 2011 , 21, 683-8	2.5	29
194	Immediate effects of perturbation treadmill training on gait and postural control in patients with Parkinson's disease. <i>Gait and Posture</i> , 2016 , 50, 102-108	2.6	28
193	Smart soccer shoe 2016 ,		28
192	Sensor-based gait analysis in atypical parkinsonian disorders. <i>Brain and Behavior</i> , 2018 , 8, e00977	3.4	28
191	Time course and dimensions of postural control changes following neuromuscular training in youth field hockey athletes. <i>European Journal of Applied Physiology</i> , 2014 , 114, 395-403	3.4	28
190	Functional muscle power testing in young, middle-aged, and community-dwelling nonfrail and prefrail older adults. <i>Archives of Physical Medicine and Rehabilitation</i> , 2011 , 92, 967-71	2.8	28
189	Subsequence dynamic time warping as a method for robust step segmentation using gyroscope signals of daily life activities. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2015, 2015, 6744-7</i>	0.9	26
188	Classification and visualization of skateboard tricks using wearable sensors. <i>Pervasive and Mobile Computing</i> , 2017 , 40, 42-55	3.5	24
187	Promoting relaxation using virtual reality, olfactory interfaces and wearable EEG 2018 ,		24
186	Inertial sensor based and shoe size independent gait analysis including heel and toe clearance estimation. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2015, 2015, 5424-7</i>	0.9	22
185	Blood glucose level prediction based on support vector regression using mobile platforms. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2016, 2016, 2990-2993</i>	0.9	20
184	Effects of acute cardiovascular exercise on motor memory encoding and consolidation: A systematic review with meta-analysis. <i>Neuroscience and Biobehavioral Reviews</i> , 2020 , 116, 365-381	9	19
183	Virtual and augmented reality in sports 2016 ,		18
182	A Single Bout of Aerobic Exercise Improves Motor Skill Consolidation in Parkinson's Disease. <i>Frontiers in Aging Neuroscience</i> , 2018 , 10, 328	5.3	18
181	Comparison of Different Algorithms for Calculating Velocity and Stride Length in Running Using Inertial Measurement Units. <i>Sensors</i> , 2018 , 18,	3.8	18
180	Length changes of human tibialis anterior central aponeurosis during passive movements and isometric, concentric, and eccentric contractions. <i>European Journal of Applied Physiology</i> , 2012 , 112, 1483-94	2.4	17
179	Perturbation During Treadmill Training Improves Dynamic Balance and Gait in Parkinson's Disease: A Single-Blind Randomized Controlled Pilot Trial. <i>Neurorehabilitation and Neural Repair</i> , 2017 , 31, 758-768	4.7	17

178	Task-Dependent Intermuscular Motor Unit Synchronization between Medial and Lateral Vastii Muscles during Dynamic and Isometric Squats. <i>PLoS ONE</i> , 2015 , 10, e0142048	3.7	17
177	Respiratory inductance plethysmography-a rationale for validity during exercise. <i>Medicine and Science in Sports and Exercise</i> , 2014 , 46, 488-95	1.2	17
176	A multimodal approach to ankle instability: Interrelations between subjective and objective assessments of ankle status in athletes. <i>Journal of Orthopaedic Research</i> , 2016 , 34, 525-32	3.8	17
175	Thigh-Derived Inertial Sensor Metrics to Assess the Sit-to-Stand and Stand-to-Sit Transitions in the Timed Up and Go (TUG) Task for Quantifying Mobility Impairment in Multiple Sclerosis. <i>Frontiers in Neurology</i> , 2018 , 9, 684	4.1	17
174	CNN-Based Estimation of Sagittal Plane Walking and Running Biomechanics From Measured and Simulated Inertial Sensor Data. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020 , 8, 604	5.8	16
173	Turning Analysis during Standardized Test Using On-Shoe Wearable Sensors in Parkinson's Disease. <i>Sensors</i> , 2019 , 19,	3.8	16
172	Gait and Cognition in Parkinson's Disease: Cognitive Impairment Is Inadequately Reflected by Gait Performance during Dual Task. <i>Frontiers in Neurology</i> , 2017 , 8, 550	4.1	16
171	Wearable trick classification in freestyle snowboarding 2016 ,		16
170	Automatic recognition of Parkinson's disease using surface electromyography during standardized gait tests. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2013 , 2013, 5781-4	0.9	15
169	Tracking of ball and players in beach volleyball videos. <i>PLoS ONE</i> , 2014 , 9, e111730	3.7	15
168	Sex-Specific Differences in Running Injuries: A Systematic Review with Meta-Analysis and Meta-Regression. <i>Sports Medicine</i> , 2021 , 51, 1011-1039	10.6	15
167	Diving Into Research of Biomedical Engineering in Scuba Diving. <i>IEEE Reviews in Biomedical Engineering</i> , 2017 , 10, 323-333	6.4	14
166	Automatic clustering of code changes 2016 ,		14
165	Pull Test estimation in Parkinson's disease patients using wearable sensor technology. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2015 , 2015, 3109-12	0.9	14
164	Timed Up-and-Go phase segmentation in Parkinson's disease patients using unobtrusive inertial sensors. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2015 , 2015, 5171-4	0.9	14
163	Treadmill exercise intervention improves gait and postural control in alpha-synuclein mouse models without inducing cerebral autophagy. <i>Behavioural Brain Research</i> , 2019 , 363, 199-215	3.4	14
162	Pre-operative sensor-based gait parameters predict functional outcome after total knee arthroplasty. <i>Gait and Posture</i> , 2018 , 66, 194-200	2.6	14
161	The Diagnostic Scope of Sensor-Based Gait Analysis in Atypical Parkinsonism: Further Observations. <i>Frontiers in Neurology</i> , 2019 , 10, 5	4.1	13

160	A Survey of Sensors in Healthcare Workflow Monitoring. <i>ACM Computing Surveys</i> , 2018 , 51, 1-37	13.4	13
159	Time-dependent postural control adaptations following a neuromuscular warm-up in female handball players: a randomized controlled trial. <i>BMC Sports Science, Medicine and Rehabilitation</i> , 2016 , 8, 33	2.4	13
158	Approaching the accuracy-cost conflict in embedded classification system design. <i>Pattern Analysis and Applications</i> , 2016 , 19, 839-855	2.3	13
157	Development and clinical validation of inertial sensor-based gait-clustering methods in Parkinson's disease. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2019 , 16, 77	5.3	13
156	Three-Dimensional Biomechanical Analysis of Rearfoot and Forefoot Running. <i>Orthopaedic Journal of Sports Medicine</i> , 2017 , 5, 2325967117719065	3.5	13
155	Benchmarking Foot Trajectory Estimation Methods for Mobile Gait Analysis. <i>Sensors</i> , 2017 , 17,	3.8	13
154	An IMU-based mobile system for golf putt analysis. <i>Sports Engineering</i> , 2015 , 18, 123-133	1.4	13
153	Comparison of the AMICA and the InfoMax algorithm for the reduction of electromyogenic artifacts in EEG data. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2013 , 2013, 6804-7	0.9	13
152	Embedded surface classification in digital sports. <i>Pattern Recognition Letters</i> , 2009 , 30, 1448-1456	4.7	13
151	Objective sensor-based gait measures reflect motor impairment in multiple sclerosis patients: Reliability and clinical validation of a wearable sensor device. <i>Multiple Sclerosis and Related Disorders</i> , 2019 , 39, 101903	4	13
150	Hidden Markov Model-Based Smart Annotation for Benchmark Cyclic Activity Recognition Database Using Wearables. <i>Sensors</i> , 2019 , 19,	3.8	12
149	Combined accelerometer and EMG analysis to differentiate essential tremor from Parkinson's disease. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2016 , 2016, 672-675	0.9	12
148	Unobtrusive and Energy-Efficient Swimming Exercise Tracking Using On-Node Processing. <i>IEEE Sensors Journal</i> , 2016 , 16, 3972-3980	4	12
147	Smart Annotation of Cyclic Data Using Hierarchical Hidden Markov Models. <i>Sensors</i> , 2017 , 17,	3.8	12
146	Detection of fetal kicks using body-worn accelerometers during pregnancy: Trade-offs between sensors number and positioning. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2016 , 2016, 5319-5322	0.9	12
145	Sensor-based gait analysis of individualized improvement during apomorphine titration in Parkinson's disease. <i>Journal of Neurology</i> , 2018 , 265, 2656-2665	5.5	12
144	Speed dependent effects of laterally wedged insoles on gait biomechanics in healthy subjects. <i>Gait and Posture</i> , 2017 , 55, 145-149	2.6	11
143	Perturbation Treadmill Training Improves Clinical Characteristics of Gait and Balance in Parkinson's Disease. <i>Journal of Parkinson's Disease</i> , 2019 , 9, 413-426	5.3	11

142	Using wearable sensors for semiology-independent seizure detection - towards ambulatory monitoring of epilepsy. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2015, 2015, 5593-6</i>	0.9	11
141	Application of artificial intelligence methods in vital signs analysis of hospitalized patients: A systematic literature review. <i>Applied Soft Computing Journal, 2020, 96, 106612</i>	7.5	11
140	Wearables-based multi-task gait and activity segmentation using recurrent neural networks. <i>Neurocomputing, 2021, 432, 250-261</i>	5.4	11
139	Balance and mobility in geriatric patients : Assessment and treatment of neurological aspects. <i>Zeitschrift Fur Gerontologie Und Geriatrie, 2019, 52, 316-323</i>	2.7	10
138	Dynamic footprint based locomotion sway assessment in Bsynucleinopathic mice using Fast Fourier Transform and Low Pass Filter. <i>Journal of Neuroscience Methods, 2018, 296, 1-11</i>	3	10
137	Comparison of real-time classification systems for arrhythmia detection on Android-based mobile devices. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2014, 2014, 2690-3</i>	0.9	10
136	Wearable Real-Time Skateboard Trick Visualization and Its Community Perception. <i>IEEE Computer Graphics and Applications, 2016, 36, 12-18</i>	1.7	10
135	DeepSigns: A predictive model based on Deep Learning for the early detection of patient health deterioration. <i>Expert Systems With Applications, 2021, 165, 113905</i>	7.8	10
134	Ball impact localization on table tennis rackets using piezo-electric sensors 2016,		9
133	Real-Time ECG and EMG Analysis for Biking Using Android-Based Mobile Devices 2014,		9
132	Comparison of Different Approaches for Measuring Tibial Cartilage Thickness. <i>Journal of Integrative Bioinformatics, 2017, 14,</i>	3.8	9
131	Wearable Current-Based ECG Monitoring System with Non-Insulated Electrodes for Underwater Application. <i>Applied Sciences (Switzerland), 2017, 7, 1277</i>	2.6	9
130	Unobtrusive heart rate estimation during physical exercise using photoplethysmographic and acceleration data. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2015, 2015, 6114-7</i>	0.9	9
129	A Novel Mobile Phone App (OncoFood) to Record and Optimize the Dietary Behavior of Oncologic Patients: Pilot Study. <i>JMIR Cancer, 2018, 4, e10703</i>	3.2	9
128	Ball speed and spin estimation in table tennis using a racket-mounted inertial sensor 2017,		8
127	Scalable ECG hardware and algorithms for extended runtime of wearable sensors 2015,		8
126	Detection of Gait From Continuous Inertial Sensor Data Using Harmonic Frequencies. <i>IEEE Journal of Biomedical and Health Informatics, 2020, 24, 1869-1878</i>	7.2	8
125	Gait variability as digital biomarker of disease severity in Huntington@ disease. <i>Journal of Neurology, 2020, 267, 1594-1601</i>	5.5	8

124	Assessment of Perceptual-Cognitive Abilities among Athletes in Virtual Environments 2018 ,		8
123	Acute Neuromuscular Adaptations in the Postural Control of Patients with Parkinson Disease after Perturbed Walking. <i>Frontiers in Aging Neuroscience</i> , 2017 , 9, 316	5.3	8
122	Data mining in the U.S. National Toxicology Program (NTP) database reveals a potential bias regarding liver tumors in rodents irrespective of the test agent. <i>PLoS ONE</i> , 2015 , 10, e0116488	3.7	8
121	A wireless trigger for synchronization of wearable sensors to external systems during recording of human gait. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2012 , 2012, 4537-40	0.9	8
120	Does the Position of Foot-Mounted IMU Sensors Influence the Accuracy of Spatio-Temporal Parameters in Endurance Running?. <i>Sensors</i> , 2020 , 20,	3.8	8
119	Inertial sensor-based gait parameters reflect patient-reported fatigue in multiple sclerosis. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2020 , 17, 165	5.3	8
118	An Overview of the Feasibility of Permanent, Real-Time, Unobtrusive Stress Measurement with Current Wearables 2019 ,		7
117	Motor output complexity in Parkinson disease during quiet standing and walking: Analysis of short-term correlations using the entropic half-life. <i>Human Movement Science</i> , 2018 , 58, 185-194	2.4	7
116	Translating satisfaction determination from health care to the automotive industry. <i>Service Business</i> , 2016 , 10, 651-685	3.9	7
115	Sampling rate impact on energy consumption of biomedical signal processing systems 2015 ,		7
114	Wearable real-time ecg monitoring with emergency alert system for scuba diving. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2015 , 2015, 6074-7	0.9	7
113	Silhouette-Length-Scaled Gait Parameters for Motor Functional Analysis in Mice and Rats. <i>ENeuro</i> , 2019 , 6,	3.9	7
112	Exercise Intensity Does not Modulate the Effect of Acute Exercise on Learning a Complex Whole-Body Task. <i>Neuroscience</i> , 2020 , 426, 115-128	3.9	7
111	From the Laboratory to the Field: IMU-Based Shot and Pass Detection in Football Training and Game Scenarios Using Deep Learning. <i>Sensors</i> , 2021 , 21,	3.8	7
110	A Gamified Smartphone-Based Intervention for Depression: Randomized Controlled Pilot Trial. <i>JMIR Mental Health</i> , 2021 , 8, e16643	6	7
109	Optimal control simulation predicts effects of midsole materials on energy cost of running. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2019 , 22, 869-879	2.1	6
108	A robust Kalman framework with resampling and optimal smoothing. <i>Sensors</i> , 2015 , 15, 4975-95	3.8	6
107	A wearable real-time activity tracker. <i>Biomedical Engineering Letters</i> , 2015 , 5, 147-157	3.6	6

106	Self-Powered Multiparameter Health Sensor. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2018 , 22, 15-22	7.2	6
105	Tactile Myography: An Off-Line Assessment of Able-Bodied Subjects and One Upper-Limb Amputee. <i>Technologies</i> , 2018 , 6, 38	2.4	6
104	Systematic data analysis and data mining in CatWalk gait analysis by heat mapping exemplified in rodent models for neurodegenerative diseases. <i>Journal of Neuroscience Methods</i> , 2019 , 326, 108367	3	6
103	Extended stereopsis evaluation of professional and amateur soccer players and subjects without soccer background. <i>Frontiers in Psychology</i> , 2014 , 5, 1186	3.4	6
102	Somnography using unobtrusive motion sensors and Android-based mobile phones. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2013 , 2013, 1182-5	0.9	6
101	The Use of Digital Technology and Media in German Parkinson Disease Patients. <i>Journal of Parkinsons Disease</i> , 2020 , 10, 717-727	5.3	6
100	Assessment of gait parameters and physical function in patients with advanced cancer participating in a 12-week exercise and nutrition programme: A controlled clinical trial. <i>European Journal of Cancer Care</i> , 2020 , 29, e13199	2.4	6
99	Efficient trajectory optimization for curved running using a 3D musculoskeletal model with implicit dynamics. <i>Scientific Reports</i> , 2020 , 10, 17655	4.9	6
98	Clinical Relevance of Standardized Mobile Gait Tests. Reliability Analysis Between Gait Recordings at Hospital and Home in Parkinson Disease: A Pilot Study. <i>Journal of Parkinsons Disease</i> , 2020 , 10, 1763-1773	5.3	6
97	Interindividual Balance Adaptations in Response to Perturbation Treadmill Training in Persons With Parkinson Disease. <i>Journal of Neurologic Physical Therapy</i> , 2019 , 43, 224-232	4.1	6
96	Reference-Free Adjustment of Respiratory Inductance Plethysmography for Measurements during Physical Exercise. <i>IEEE Transactions on Biomedical Engineering</i> , 2017 , 64, 2836-2846	5	5
95	Baptizo: A sensor fusion based model for tracking the identity of human poses. <i>Information Fusion</i> , 2020 , 62, 1-13	16.7	5
94	Instantaneous P- and T-wave detection: Assessment of three ECG fiducial points detection algorithms 2016 ,		5
93	Quantification of Nighttime Micturition With an Ambulatory Sensor-Based System. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2016 , 20, 865-872	7.2	5
92	Sick Moves! Motion Parameters as Indicators of Simulator Sickness. <i>IEEE Transactions on Visualization and Computer Graphics</i> , 2019 , 25, 3146-3157	4	5
91	Performance Comparison of Two Step Segmentation Algorithms Using Different Step Activities 2014 ,		5
90	Privacy Implications of Room Climate Data. <i>Lecture Notes in Computer Science</i> , 2017 , 324-343	0.9	5
89	Hidden Markov Model based stride segmentation on unsupervised free-living gait data in Parkinson disease patients. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2021 , 18, 93	5.3	5

88	Blind path obstacle detector using smartphone camera and line laser emitter 2016 ,		5
87	Ankle angle variability during running in athletes with chronic ankle instability and copers. <i>Gait and Posture</i> , 2019 , 68, 329-334	2.6	5
86	Combination of Defined CatWalk Gait Parameters for Predictive Locomotion Recovery in Experimental Spinal Cord Injury Rat Models. <i>ENeuro</i> , 2021 , 8,	3.9	5
85	Evaluation of Interaction Techniques for a Virtual Reality Reading Room in Diagnostic Radiology 2018 ,		5
84	A Temperature-Based Bioimpedance Correction for Water Loss Estimation During Sports. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2016 , 20, 1477-1484	7.2	4
83	Novel human computer interaction principles for cardiac feedback using google glass and Android wear 2015 ,		4
82	: the smartphone application for telemonitoring Parkinson ^Q patients through speech, gait and hands movement. <i>Neurodegenerative Disease Management</i> , 2020 , 10, 137-157	2.8	4
81	Workshop on wearables for sports 2016 ,		4
80	Inertial sensor based gait analysis discriminates subjects with and without visual impairment caused by simulated macular degeneration. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2016 , 2016, 4979-4982	0.9	4
79	Your personal movie producer 2016 ,		4
78	Dynamic footprints of β -synucleinopathic mice recorded by CatWalk gait analysis. <i>Data in Brief</i> , 2018 , 17, 189-193	1.2	4
77	A framework for early event detection for wearable systems 2015 ,		4
76	Temporal correction of detected R-peaks in ECG signals: A crucial step to improve QRS detection algorithms. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2015 , 2015, 522-5	0.9	4
75	Influence of the Presentation Time on Subjective Votings of Coded Still Images 2006 ,		4
74	Robust Step Detection from Different Waist-Worn Sensor Positions: Implications for Clinical Studies. <i>Digital Biomarkers</i> , 2020 , 4, 50-58	7.1	4
73	Indoor Trajectory Reconstruction of Walking, Jogging, and Running Activities Based on a Foot-Mounted Inertial Pedestrian Dead-Reckoning System. <i>Sensors</i> , 2020 , 20,	3.8	4
72	Detection of Unsupervised Standardized Gait Tests From Real-World Inertial Sensor Data in Parkinson ^Q Disease. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2021 , 29, 2103-2111	4.8	4
71	Predicting defibrillation success in out-of-hospital cardiac arrested patients: Moving beyond feature design. <i>Artificial Intelligence in Medicine</i> , 2020 , 110, 101963	7.4	4

70	Simultaneous Indoor Pedestrian Localization and House Mapping Based on Inertial Measurement Unit and Bluetooth Low-Energy Beacon Data. <i>Sensors</i> , 2020 , 20,	3.8	4
69	The Impact of Avatar Appearance, Perspective and Context on Gait Variability and User Experience in Virtual Reality 2021 ,		4
68	Analog non-linear transformation-based tone mapping for image enhancement in C-arm CT 2016 ,		4
67	Toward analyzing mutual interference on infrared-enabled depth cameras. <i>Computer Vision and Image Understanding</i> , 2019 , 178, 1-15	4.3	4
66	Acute exercise following skill practice promotes motor memory consolidation in Parkinson@ disease. <i>Neurobiology of Learning and Memory</i> , 2021 , 178, 107366	3.1	4
65	Human Activity Recognition Using Binary Sensors, BLE Beacons, an Intelligent Floor and Acceleration Data: A Machine Learning Approach. <i>Proceedings (mdpi)</i> , 2018 , 2, 1265	0.3	4
64	Consensus based framework for digital mobility monitoring. <i>PLoS ONE</i> , 2021 , 16, e0256541	3.7	4
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