

Kamair Aminian

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.

256
papers

10,977
citations

52
h-index

98
g-index

285
ext. papers

12,844
ext. citations

3.3
avg, IF

6.26
L-index

#	Paper	IF	Citations
256	Spatio-temporal parameters of gait measured by an ambulatory system using miniature gyroscopes. <i>Journal of Biomechanics</i> , 2002 , 35, 689-99	2.9	585
255	Ambulatory system for human motion analysis using a kinematic sensor: monitoring of daily physical activity in the elderly. <i>IEEE Transactions on Biomedical Engineering</i> , 2003 , 50, 711-23	5	552
254	Gait assessment in Parkinson's disease: toward an ambulatory system for long-term monitoring. <i>IEEE Transactions on Biomedical Engineering</i> , 2004 , 51, 1434-43	5	431
253	iTUG, a sensitive and reliable measure of mobility. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2010 , 18, 303-10	4.8	341
252	Measurement of stand-sit and sit-stand transitions using a miniature gyroscope and its application in fall risk evaluation in the elderly. <i>IEEE Transactions on Biomedical Engineering</i> , 2002 , 49, 843-51	5	294
251	Evaluation of accelerometer-based fall detection algorithms on real-world falls. <i>PLoS ONE</i> , 2012 , 7, e37062	3.7	285
250	Quantification of tremor and bradykinesia in Parkinson's disease using a novel ambulatory monitoring system. <i>IEEE Transactions on Biomedical Engineering</i> , 2007 , 54, 313-22	5	262
249	3D gait assessment in young and elderly subjects using foot-worn inertial sensors. <i>Journal of Biomechanics</i> , 2010 , 43, 2999-3006	2.9	233
248	Physical activity monitoring based on accelerometry: validation and comparison with video observation. <i>Medical and Biological Engineering and Computing</i> , 1999 , 37, 304-8	3.1	227
247	The instrumented timed up and go test: potential outcome measure for disease modifying therapies in Parkinson's disease. <i>Journal of Neurology, Neurosurgery and Psychiatry</i> , 2010 , 81, 171-6	5.5	226
246	Functional calibration procedure for 3D knee joint angle description using inertial sensors. <i>Journal of Biomechanics</i> , 2009 , 42, 2330-5	2.9	207
245	Ambulatory measurement of 3D knee joint angle. <i>Journal of Biomechanics</i> , 2008 , 41, 1029-35	2.9	203
244	The gait and balance of patients with diabetes can be improved: a randomised controlled trial. <i>Diabetologia</i> , 2010 , 53, 458-66	10.3	194
243	A new approach to accurate measurement of uniaxial joint angles based on a combination of accelerometers and gyroscopes. <i>IEEE Transactions on Biomedical Engineering</i> , 2005 , 52, 1478-84	5	192
242	Capturing human motion using body-fixed sensors: outdoor measurement and clinical applications. <i>Computer Animation and Virtual Worlds</i> , 2004 , 15, 79-94	0.9	184
241	On-shoe wearable sensors for gait and turning assessment of patients with Parkinson's disease. <i>IEEE Transactions on Biomedical Engineering</i> , 2013 , 60, 155-8	5	178
240	Quantitative estimation of foot-flat and stance phase of gait using foot-worn inertial sensors. <i>Gait and Posture</i> , 2013 , 37, 229-34	2.6	164

239	Relationships between dual-task related changes in stride velocity and stride time variability in healthy older adults. <i>Human Movement Science</i> , 2006 , 25, 372-82	2.4	150
238	Wearable sensors objectively measure gait parameters in Parkinson's disease. <i>PLoS ONE</i> , 2017 , 12, e0183989	3.9	148
237	Ambulatory monitoring of physical activities in patients with Parkinson's disease. <i>IEEE Transactions on Biomedical Engineering</i> , 2007 , 54, 2296-9	5	148
236	Distance to achieve steady state walking speed in frail elderly persons. <i>Gait and Posture</i> , 2008 , 27, 91-6	2.6	139
235	Temporal feature estimation during walking using miniature accelerometers: an analysis of gait improvement after hip arthroplasty. <i>Medical and Biological Engineering and Computing</i> , 1999 , 37, 686-91	3.1	132
234	Estimation and visualization of sagittal kinematics of lower limbs orientation using body-fixed sensors. <i>IEEE Transactions on Biomedical Engineering</i> , 2006 , 53, 1385-93	5	131
233	Evaluation of an ambulatory system for gait analysis in hip osteoarthritis and after total hip replacement. <i>Gait and Posture</i> , 2004 , 20, 102-7	2.6	131
232	Does walking strategy in older people change as a function of walking distance?. <i>Gait and Posture</i> , 2009 , 29, 261-6	2.6	116
231	Heel and toe clearance estimation for gait analysis using wireless inertial sensors. <i>IEEE Transactions on Biomedical Engineering</i> , 2012 , 59, 3162-8	5	111
230	Dual-task-related gait changes in the elderly: does the type of cognitive task matter?. <i>Journal of Motor Behavior</i> , 2005 , 37, 259-64	1.4	108
229	Fall detection with body-worn sensors : a systematic review. <i>Zeitschrift Fur Gerontologie Und Geriatrie</i> , 2013 , 46, 706-19	2.7	105
228	What is the relationship between fear of falling and gait in well-functioning older persons aged 65 to 70 years?. <i>Archives of Physical Medicine and Rehabilitation</i> , 2010 , 91, 879-84	2.8	103
227	Mobility assessment in older people: new possibilities and challenges. <i>European Journal of Ageing</i> , 2007 , 4, 3-12	3.6	103
226	Quaternion-based fusion of gyroscopes and accelerometers to improve 3D angle measurement. <i>Electronics Letters</i> , 2006 , 42, 612	1.1	102
225	Age-related decline of gait control under a dual-task condition. <i>Journal of the American Geriatrics Society</i> , 2003 , 51, 1187-8	5.6	100
224	Gait and foot clearance parameters obtained using shoe-worn inertial sensors in a large-population sample of older adults. <i>Sensors</i> , 2013 , 14, 443-57	3.8	98
223	Mobile Health Applications to Promote Active and Healthy Ageing. <i>Sensors</i> , 2017 , 17,	3.8	88
222	Gait alterations of diabetic patients while walking on different surfaces. <i>Gait and Posture</i> , 2009 , 29, 488-93	3.6	88

221	Stair climbing detection during daily physical activity using a miniature gyroscope. <i>Gait and Posture</i> , 2005 , 22, 287-94	2.6	85
220	DYNAMIC COMPLEXITY OF PHYSICAL ACTIVITY PATTERNS: NEW CONCEPTS FOR GERIATRIC ASSESSMENT. <i>Innovation in Aging</i> , 2017 , 1, 1160-1160	0.1	78
219	Long-term unsupervised mobility assessment in movement disorders. <i>Lancet Neurology, The</i> , 2020 , 19, 462-470	24.1	74
218	Ambulatory system for the quantitative and qualitative analysis of gait and posture in chronic pain patients treated with spinal cord stimulation. <i>Gait and Posture</i> , 2004 , 20, 113-25	2.6	74
217	Multi-parametric evaluation of sit-to-stand and stand-to-sit transitions in elderly people. <i>Medical Engineering and Physics</i> , 2011 , 33, 1086-93	2.4	71
216	The prediction of speed and incline in outdoor running in humans using accelerometry. <i>Medicine and Science in Sports and Exercise</i> , 1999 , 31, 1053-9	1.2	66
215	A novel approach to reducing number of sensing units for wearable gait analysis systems. <i>IEEE Transactions on Biomedical Engineering</i> , 2013 , 60, 72-7	5	64
214	Gait analysis and WOMAC are complementary in assessing functional outcome in total hip replacement. <i>Clinical Rehabilitation</i> , 2006 , 20, 413-20	3.3	64
213	Can accelerometry accurately predict the energy cost of uphill/downhill walking?. <i>Ergonomics</i> , 2001 , 44, 48-62	2.9	62
212	. <i>IEEE Transactions on Instrumentation and Measurement</i> , 1995 , 44, 743-746	5.2	61
211	Spatio-temporal gait analysis in children with cerebral palsy using, foot-worn inertial sensors. <i>Gait and Posture</i> , 2014 , 39, 436-42	2.6	60
210	Stride-to-stride variability while enumerating animal names among healthy young adults: result of stride velocity or effect of attention-demanding task?. <i>Gait and Posture</i> , 2008 , 27, 138-43	2.6	57
209	Front-crawl instantaneous velocity estimation using a wearable inertial measurement unit. <i>Sensors</i> , 2012 , 12, 12927-39	3.8	55
208	Analyzing 180 degrees turns using an inertial system reveals early signs of progression of 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> , 2009 , 2009, 224-7	0.9	55
207	Quantification of everyday motor function in a geriatric population. <i>Journal of Rehabilitation Research and Development</i> , 2007 , 44, 417-28		54
206	Multi-segment foot kinematics after total ankle replacement and ankle arthrodesis during relatively long-distance gait. <i>Gait and Posture</i> , 2012 , 36, 561-6	2.6	53
205	Ambulatory assessment of 3D ground reaction force using plantar pressure distribution. <i>Gait and Posture</i> , 2010 , 32, 311-6	2.6	53
204	Arm position during daily activity. <i>Gait and Posture</i> , 2008 , 28, 581-7	2.6	52

203	A new ambulatory system for comparative evaluation of the three-dimensional knee kinematics, applied to anterior cruciate ligament injuries. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , 2006 , 14, 592-604	5.5	50
202	A system to measure the kinematics during the entire ski jump sequence using inertial sensors. <i>Journal of Biomechanics</i> , 2013 , 46, 56-62	2.9	49
201	Instrumented shoes for activity classification in the elderly. <i>Gait and Posture</i> , 2016 , 44, 12-7	2.6	48
200	Outcome evaluation in shoulder surgery using 3D kinematics sensors. <i>Gait and Posture</i> , 2007 , 25, 523-32	2.6	48
199	Soft tissue artifact assessment during treadmill walking in subjects with total knee arthroplasty. <i>IEEE Transactions on Biomedical Engineering</i> , 2013 , 60, 3131-40	5	47
198	Incline, speed, and distance assessment during unconstrained walking. <i>Medicine and Science in Sports and Exercise</i> , 1995 , 27, 226-234	1.2	46
197	Measurement of multi-segment foot joint angles during gait using a wearable system. <i>Journal of Biomechanical Engineering</i> , 2012 , 134, 061006	2.1	45
196	Barcoding human physical activity to assess chronic pain conditions. <i>PLoS ONE</i> , 2012 , 7, e32239	3.7	45
195	Automatic front-crawl temporal phase detection using adaptive filtering of inertial signals. <i>Journal of Sports Sciences</i> , 2013 , 31, 1251-60	3.6	44
194	The FARSEEING real-world fall repository: a large-scale collaborative database to collect and share sensor signals from real-world falls. <i>European Review of Aging and Physical Activity</i> , 2016 , 13, 8	6.5	43
193	Improving activity recognition using a wearable barometric pressure sensor in mobility-impaired stroke patients. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2015 , 12, 72	5.3	43
192	Detection and classification of postural transitions in real-world conditions. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2012 , 20, 688-96	4.8	42
191	Standardization proposal of soft tissue artefact description for data sharing in human motion measurements. <i>Journal of Biomechanics</i> , 2017 , 62, 5-13	2.9	41
190	Proposal for a multiphase fall model based on real-world fall recordings with body-fixed sensors. <i>Zeitschrift Fur Gerontologie Und Geriatrie</i> , 2012 , 45, 707-15	2.7	41
189	An exercise intervention to improve diabetic patients' gait in a real-life environment. <i>Gait and Posture</i> , 2010 , 32, 185-90	2.6	41
188	Automatic measurement of key ski jumping phases and temporal events with a wearable system. <i>Journal of Sports Sciences</i> , 2012 , 30, 53-61	3.6	40
187	Technical and clinical view on ambulatory assessment in Parkinson's disease. <i>Acta Neurologica Scandinavica</i> , 2014 , 130, 139-47	3.8	38
186	A wearable inertial system to assess the cervical spine mobility: comparison with an optoelectronic-based motion capture evaluation. <i>Medical Engineering and Physics</i> , 2014 , 36, 49-56	2.4	38

185	Outcome of unilateral ankle arthrodesis and total ankle replacement in terms of bilateral gait mechanics. <i>Journal of Orthopaedic Research</i> , 2014 , 32, 377-84	3.8	37
184	Validation of functional calibration and strap-down joint drift correction for computing 3D joint angles of knee, hip, and trunk in alpine skiing. <i>PLoS ONE</i> , 2017 , 12, e0181446	3.7	36
183	A randomised controlled clinical trial and gait analysis of fixed- and mobile-bearing total knee replacements with a five-year follow-up. <i>Journal of Bone and Joint Surgery: British Volume</i> , 2012 , 94, 648-55		36
182	Day-to-day variability of physical activity of older adults living in the community. <i>Journal of Aging and Physical Activity</i> , 2010 , 18, 75-86	1.6	36
181	Three-Dimensional Body and Centre of Mass Kinematics in Alpine Ski Racing Using Differential GNSS and Inertial Sensors. <i>Remote Sensing</i> , 2016 , 8, 671	5	36
180	Recommendations for standardizing validation procedures assessing physical activity of older persons by monitoring body postures and movements. <i>Sensors</i> , 2014 , 14, 1267-77	3.8	35
179	Continuous monitoring and quantification of multiple parameters of daily physical activity in ambulatory Duchenne muscular dystrophy patients. <i>European Journal of Paediatric Neurology</i> , 2011 , 15, 40-7	3.8	35
178	Reliability and validity of the inertial sensor-based Timed "Up and Go" test in individuals affected by stroke. <i>Journal of Rehabilitation Research and Development</i> , 2016 , 53, 599-610		34
177	A novel biomechanical approach for animal behaviour recognition using accelerometers. <i>Methods in Ecology and Evolution</i> , 2019 , 10, 802-814	7.7	32
176	Accurate Estimation of Running Temporal Parameters Using Foot-Worn Inertial Sensors. <i>Frontiers in Physiology</i> , 2018 , 9, 610	4.6	32
175	Clinical factors associated with gait alterations in diabetic patients. <i>Diabetic Medicine</i> , 2009 , 26, 1003-9	3.5	31
174	The Use of Body Worn Sensors for Detecting the Vibrations Acting on the Lower Back in Alpine Ski Racing. <i>Frontiers in Physiology</i> , 2017 , 8, 522	4.6	30
173	An Inertial Sensor-Based Method for Estimating the Athlete's Relative Joint Center Positions and Center of Mass Kinematics in Alpine Ski Racing. <i>Frontiers in Physiology</i> , 2017 , 8, 850	4.6	30
172	Criteria for evaluation of measurement properties of clinical balance measures for use in fall prevention studies. <i>Journal of Evaluation in Clinical Practice</i> , 2008 , 14, 236-40	2.5	30
171	Physical Behavior in Older Persons during Daily Life: Insights from Instrumented Shoes. <i>Sensors</i> , 2016 , 16,	3.8	30
170	A wrist sensor and algorithm to determine instantaneous walking cadence and speed in daily life walking. <i>Medical and Biological Engineering and Computing</i> , 2017 , 55, 1773-1785	3.1	29
169	An effortless procedure to align the local frame of an inertial measurement unit to the local frame of another motion capture system. <i>Journal of Biomechanics</i> , 2012 , 45, 2297-300	2.9	29
168	A new approach for quantitative analysis of inter-joint coordination during gait. <i>IEEE Transactions on Biomedical Engineering</i> , 2008 , 55, 755-64	5	29

167	Measurement of the dynamics in ski jumping using a wearable inertial sensor-based system. <i>Journal of Sports Sciences</i> , 2014 , 32, 591-600	3.6	28
166	Evaluation of a mixed approach combining stationary and wearable systems to monitor gait over long distance. <i>Journal of Biomechanics</i> , 2010 , 43, 2196-202	2.9	28
165	Soft tissue artifact distribution on lower limbs during treadmill gait: Influence of skin markers' location on cluster design. <i>Journal of Biomechanics</i> , 2015 , 48, 1965-71	2.9	27
164	Fall detection algorithms for real-world falls harvested from lumbar sensors in the elderly population: a machine learning approach. <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, 2712-2715	0.9	27
163	Course Setting as a Prevention Measure for Overuse Injuries of the Back in Alpine Ski Racing: A Kinematic and Kinetic Study of Giant Slalom and Slalom. <i>Orthopaedic Journal of Sports Medicine</i> , 2016 , 4, 2325967116630719	3.5	27
162	Ambulatory measurement of ankle kinetics for clinical applications. <i>Journal of Biomechanics</i> , 2011 , 44, 2712-8	2.9	26
161	Objective evaluation of shoulder function using body-fixed sensors: a new way to detect early treatment failures?. <i>Journal of Shoulder and Elbow Surgery</i> , 2011 , 20, 1074-81	4.3	26
160	Assessment of physical activity in older people with and without cognitive impairment. <i>Journal of Aging and Physical Activity</i> , 2011 , 19, 347-72	1.6	26
159	Gait assessment in children with duchenne muscular dystrophy during long-distance walking. <i>Journal of Child Neurology</i> , 2012 , 27, 30-8	2.5	26
158	What is the Best Configuration of Wearable Sensors to Measure Spatiotemporal Gait Parameters in Children with Cerebral Palsy?. <i>Sensors</i> , 2018 , 18,	3.8	25
157	Estimating dominant upper-limb segments during daily activity. <i>Gait and Posture</i> , 2008 , 27, 368-75	2.6	25
156	Nonlinear analysis of human physical activity patterns in health and disease. <i>Physical Review E</i> , 2008 , 77, 021913	2.4	25
155	Gait Symmetry Assessment with a Low Back 3D Accelerometer in Post-Stroke Patients. <i>Sensors</i> , 2018 , 18,	3.8	25
154	A Hidden Markov Model of the breaststroke swimming temporal phases using wearable inertial measurement units 2013 ,		23
153	Unraveling dynamics of human physical activity patterns in chronic pain conditions. <i>Scientific Reports</i> , 2013 , 3, 2019	4.9	23
152	Can we predict outcome of surgical reconstruction of Charcot neuroarthropathy by dynamic plantar pressure assessment?--A proof of concept study. <i>Gait and Posture</i> , 2010 , 31, 87-92	2.6	23
151	Filtering by adaptive sampling (FAS). <i>Medical and Biological Engineering and Computing</i> , 1988 , 26, 658-623.1		23
150	A wearable system for multi-segment foot kinetics measurement. <i>Journal of Biomechanics</i> , 2014 , 47, 1704-11	2.9	22

149	Improved physical activity in patients treated for chronic pain by spinal cord stimulation. <i>Neuromodulation</i> , 2005 , 8, 40-8	3.1	22
148	Wearable Barometric Pressure Sensor to Improve Postural Transition Recognition of Mobility-Impaired Stroke Patients. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2016 , 24, 1210-1217	4.8	22
147	Suitability of commercial barometric pressure sensors to distinguish sitting and standing activities for wearable monitoring. <i>Medical Engineering and Physics</i> , 2014 , 36, 739-44	2.4	21
146	Elevated heels and adaptation to new shoes in frail elderly women. <i>Zeitschrift Fur Gerontologie Und Geriatrie</i> , 2003 , 36, 29-34	2.7	21
145	Assessment of physical activity of patients with chronic pain. <i>Neuromodulation</i> , 2014 , 17 Suppl 1, 42-7	3.1	20
144	Instrumented Knee Prosthesis for Force and Kinematics Measurements. <i>IEEE Transactions on Automation Science and Engineering</i> , 2013 , 10, 615-624	4.9	20
143	Vulnerability in high-functioning persons aged 65 to 70 years: the importance of the fear factor. <i>Aging Clinical and Experimental Research</i> , 2010 , 22, 212-8	4.8	20
142	Level, downhill and uphill walking identification using neural networks. <i>Electronics Letters</i> , 1993 , 29, 1563.1	3.1	20
141	An Accurate Wearable Foot Clearance Estimation System: Toward a Real-Time Measurement System. <i>IEEE Sensors Journal</i> , 2017 , 17, 2542-2549	4	19
140	Protocol for the PreventIT feasibility randomised controlled trial of a lifestyle-integrated exercise intervention in young older adults. <i>BMJ Open</i> , 2019 , 9, e023526	3	19
139	An inertial sensor-based system for spatio-temporal analysis in classic cross-country skiing diagonal technique. <i>Journal of Biomechanics</i> , 2015 , 48, 3199-205	2.9	19
138	Effect of Manual Lymphatic Drainage After Total Knee Arthroplasty: A Randomized Controlled Trial. <i>Archives of Physical Medicine and Rehabilitation</i> , 2016 , 97, 674-82	2.8	19
137	Development of a standard fall data format for signals from body-worn sensors : the FARSEEING consensus. <i>Zeitschrift Fur Gerontologie Und Geriatrie</i> , 2013 , 46, 720-6	2.7	19
136	Outcome evaluation of ankle osteoarthritis treatments: plantar pressure analysis during relatively long-distance walking. <i>Clinical Biomechanics</i> , 2011 , 26, 397-404	2.2	19
135	Reliability of diabetic patients' gait parameters in a challenging environment. <i>Gait and Posture</i> , 2008 , 28, 680-6	2.6	18
134	Characterization of lower-limbs inter-segment coordination during the take-off extension in ski jumping. <i>Human Movement Science</i> , 2013 , 32, 741-52	2.4	17
133	Distribution of arm velocity and frequency of arm usage during daily activity: objective outcome evaluation after shoulder surgery. <i>Gait and Posture</i> , 2013 , 38, 247-52	2.6	17
132	Comparison of gait characteristics between clinical and daily life settings in children with cerebral palsy. <i>Scientific Reports</i> , 2020 , 10, 2091	4.9	16

131	Segmentation of foot and ankle complex based on kinematic criteria. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2011 , 14, 773-81	2.1	16
130	Kinematics and dynamic complexity of postural transitions in frail elderly subjects. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2007 , 2007, 6118-21		16
129	Can accelerometry accurately predict the energy cost of uphill/downhill walking?		16
128	Real-World Gait Speed Estimation Using Wrist Sensor: A Personalized Approach. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2020 , 24, 658-668	7.2	16
127	Drift-Free Foot Orientation Estimation in Running Using Wearable IMU. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020 , 8, 65	5.8	15
126	Front-crawl stroke descriptors variability assessment for skill characterisation. <i>Journal of Sports Sciences</i> , 2016 , 34, 1405-12	3.6	15
125	Inter-limb coordination and energy cost in swimming. <i>Journal of Science and Medicine in Sport</i> , 2014 , 17, 439-44	4.4	15
124	Detection of the movement of the humerus during daily activity. <i>Medical and Biological Engineering and Computing</i> , 2009 , 47, 467-74	3.1	15
123	Concern about Falling and Complexity of Free-Living Physical Activity Patterns in Well-Functioning Older Adults. <i>Gerontology</i> , 2018 , 64, 603-611	5.5	15
122	Geriatric rehabilitation after hip fracture. Role of body-fixed sensor measurements of physical activity. <i>Zeitschrift Fur Gerontologie Und Geriatrie</i> , 2014 , 47, 236-42	2.7	14
121	Behavioural compass: animal behaviour recognition using magnetometers. <i>Movement Ecology</i> , 2019 , 7, 28	4.6	13
120	A Bayesian approach for pervasive estimation of breaststroke velocity using a wearable IMU. <i>Pervasive and Mobile Computing</i> , 2015 , 19, 37-46	3.5	13
119	Cognitive loading affects motor awareness and movement kinematics but not locomotor trajectories during goal-directed walking in a virtual reality environment. <i>PLoS ONE</i> , 2014 , 9, e85560	3.7	13
118	Measuring upper limb function in children with hemiparesis with 3D inertial sensors. <i>Childs Nervous System</i> , 2017 , 33, 2159-2168	1.7	12
117	Locomotion and cadence detection using a single trunk-fixed accelerometer: validity for children with cerebral palsy in daily life-like conditions. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2019 , 16, 24	5.3	12
116	Knee Implant Loosening Detection: A Vibration Analysis Investigation. <i>Annals of Biomedical Engineering</i> , 2018 , 46, 97-107	4.7	12
115	Enclosed electronic system for force measurements in knee implants. <i>Sensors</i> , 2014 , 14, 15009-21	3.8	12
114	Fractal temporal organisation of motricity is altered in major depression. <i>Psychiatry Research</i> , 2012 , 200, 288-93	9.9	12

113	Instrumented prosthesis for knee implants monitoring 2011 ,		12
112	Gait speed in clinical and daily living assessments in Parkinson's disease patients: performance versus capacity. <i>Npj Parkinsons Disease</i> , 2021 , 7, 24	9.7	12
111	Design and test of a MEMS strain-sensing device for monitoring artificial knee implants. <i>Biomedical Microdevices</i> , 2013 , 15, 831-9	3.7	11
110	Estimation of Front-Crawl Energy Expenditure Using Wearable Inertial Measurement Units. <i>IEEE Sensors Journal</i> , 2014 , 14, 1020-1027	4	11
109	Accurate internal-external rotation measurement in total knee prostheses: A magnetic solution. <i>Journal of Biomechanics</i> , 2012 , 45, 2023-7	2.9	11
108	An ambulatory system for physical activity monitoring in elderly		11
107	The effects of dual tasks on gait in children with cerebral palsy. <i>Gait and Posture</i> , 2019 , 70, 148-155	2.6	10
106	Alteration and recovery of arm usage in daily activities after rotator cuff surgery. <i>Journal of Shoulder and Elbow Surgery</i> , 2015 , 24, 1346-52	4.3	10
105	Classification and characterization of postural transitions using instrumented shoes. <i>Medical and Biological Engineering and Computing</i> , 2018 , 56, 1403-1412	3.1	10
104	A patient-specific model of total knee arthroplasty to estimate patellar strain: A case study. <i>Clinical Biomechanics</i> , 2016 , 32, 212-9	2.2	10
103	Evaluation of knee functional calibration with and without the effect of soft tissue artefact. <i>Journal of Biomechanics</i> , 2017 , 62, 53-59	2.9	10
102	Gaussian process framework for pervasive estimation of swimming velocity with body-worn IMU. <i>Electronics Letters</i> , 2013 , 49, 44-45	1.1	10
101	Quantifying dimensions of physical behavior in chronic pain conditions. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2016 , 13, 85	5.3	10
100	Motion Analysis in Clinical Practice Using Ambulatory Accelerometry. <i>Lecture Notes in Computer Science</i> , 1998 , 1-11	0.9	10
99	Postural transitions detection and characterization in healthy and patient populations using a single waist sensor. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2020 , 17, 70	5.3	9
98	Enhancing clinically-relevant shoulder function assessment using only essential movements. <i>Physiological Measurement</i> , 2015 , 36, 547-60	2.9	9
97	Falls self-efficacy and gait performance after gait and balance training in older people. <i>Journal of the American Geriatrics Society</i> , 2008 , 56, 1154-6	5.6	9
96	Nonlinear Analysis of Physiological Time Series 2009 , 307-333		9

95	Walking Speed of Children and Adolescents With Cerebral Palsy: Laboratory Versus Daily Life. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020 , 8, 812	5.8	9
94	Optimal slopes and speeds in uphill ski mountaineering: a laboratory study. <i>European Journal of Applied Physiology</i> , 2016 , 116, 1011-9	3.4	9
93	Complexity of Daily Physical Activity Is More Sensitive Than Conventional Metrics to Assess Functional Change in Younger Older Adults. <i>Sensors</i> , 2018 , 18,	3.8	9
92	Total hip arthroplasty using a cementless dual-mobility cup provides increased stability and favorable gait parameters at five years follow-up. <i>Orthopaedics and Traumatology: Surgery and Research</i> , 2017 , 103, 21-25	2.9	8
91	Assessment of the lower limb soft tissue artefact at marker-cluster level with a high-density marker set during walking. <i>Journal of Biomechanics</i> , 2017 , 62, 21-26	2.9	8
90	Measuring spatio-temporal parameters of uphill ski-mountaineering with ski-fixed inertial sensors. <i>Journal of Biomechanics</i> , 2016 , 49, 3052-3055	2.9	8
89	How well do the muscular synergies extracted via non-negative matrix factorisation explain the variation of torque at shoulder joint?. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2013 , 16, 291-301	2.1	8
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