

Kamair Aminian

List of Publications by Year in descending order

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267
papers

14,291
citations

24978

57
h-index

24915

109
g-index

285
all docs

285
docs citations

285
times ranked

10650
citing authors

#	ARTICLE	IF	CITATIONS
1	Spatio-temporal parameters of gait measured by an ambulatory system using miniature gyroscopes. <i>Journal of Biomechanics</i> , 2002, 35, 689-699.	0.9	705
2	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, 711-723.	2.5	642
3	Gait Assessment in Parkinson's Disease: Toward an Ambulatory System for Long-Term Monitoring. <i>IEEE Transactions on Biomedical Engineering</i> , 2004, 51, 1434-1443.	2.5	527
4	iTUG, a Sensitive and Reliable Measure of Mobility. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2010, 18, 303-310.	2.7	426
5	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, 843-851.	2.5	371
6	Evaluation of Accelerometer-Based Fall Detection Algorithms on Real-World Falls. <i>PLoS ONE</i> , 2012, 7, e37062.	1.1	359
7	Quantification of Tremor and Bradykinesia in Parkinson's Disease Using a Novel Ambulatory Monitoring System. <i>IEEE Transactions on Biomedical Engineering</i> , 2007, 54, 313-322.	2.5	335
8	3D gait assessment in young and elderly subjects using foot-worn inertial sensors. <i>Journal of Biomechanics</i> , 2010, 43, 2999-3006.	0.9	307
9	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, 171-176.	0.9	296
10	Physical activity monitoring based on accelerometry: validation and comparison with video observation. <i>Medical and Biological Engineering and Computing</i> , 1999, 37, 304-308.	1.6	263
11	Ambulatory measurement of 3D knee joint angle. <i>Journal of Biomechanics</i> , 2008, 41, 1029-1035.	0.9	251
12	Functional calibration procedure for 3D knee joint angle description using inertial sensors. <i>Journal of Biomechanics</i> , 2009, 42, 2330-2335.	0.9	251
13	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, 1478-1484.	2.5	239
14	The gait and balance of patients with diabetes can be improved: a randomised controlled trial. <i>Diabetologia</i> , 2010, 53, 458-466.	2.9	236
15	Wearable sensors objectively measure gait parameters in Parkinson's disease. <i>PLoS ONE</i> , 2017, 12, e0183989.	1.1	235
16	On-Shoe Wearable Sensors for Gait and Turning Assessment of Patients With Parkinson's Disease. <i>IEEE Transactions on Biomedical Engineering</i> , 2013, 60, 155-158.	2.5	223
17	Capturing human motion using body-fixed sensors: outdoor measurement and clinical applications. <i>Computer Animation and Virtual Worlds</i> , 2004, 15, 79-94.	0.7	219
18	Quantitative estimation of foot-flat and stance phase of gait using foot-worn inertial sensors. <i>Gait and Posture</i> , 2013, 37, 229-234.	0.6	209

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19	Relationships between dual-task related changes in stride velocity and stride time variability in healthy older adults. <i>Human Movement Science</i> , 2006, 25, 372-382.	0.6	185
20	Long-term unsupervised mobility assessment in movement disorders. <i>Lancet Neurology</i> , The, 2020, 19, 462-470.	4.9	181
21	Ambulatory Monitoring of Physical Activities in Patients With Parkinson's Disease. <i>IEEE Transactions on Biomedical Engineering</i> , 2007, 54, 2296-2299.	2.5	177
22	Distance to achieve steady state walking speed in frail elderly persons. <i>Gait and Posture</i> , 2008, 27, 91-96.	0.6	166
23	Estimation and Visualization of Sagittal Kinematics of Lower Limbs Orientation Using Body-Fixed Sensors. <i>IEEE Transactions on Biomedical Engineering</i> , 2006, 53, 1385-1393.	2.5	160
24	Evaluation of an ambulatory system for gait analysis in hip osteoarthritis and after total hip replacement. <i>Gait and Posture</i> , 2004, 20, 102-107.	0.6	156
25	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, 686-691.	1.6	153
26	Mobile Health Applications to Promote Active and Healthy Ageing. <i>Sensors</i> , 2017, 17, 622.	2.1	151
27	Heel and Toe Clearance Estimation for Gait Analysis Using Wireless Inertial Sensors. <i>IEEE Transactions on Biomedical Engineering</i> , 2012, 59, 3162-3168.	2.5	141
28	Does walking strategy in older people change as a function of walking distance?. <i>Gait and Posture</i> , 2009, 29, 261-266.	0.6	136
29	Gait and Foot Clearance Parameters Obtained Using Shoe-Worn Inertial Sensors in a Large-Population Sample of Older Adults. <i>Sensors</i> , 2014, 14, 443-457.	2.1	133
30	Quaternion-based fusion of gyroscopes and accelerometers to improve 3D angle measurement. <i>Electronics Letters</i> , 2006, 42, 612.	0.5	127
31	Mobility assessment in older people: new possibilities and challenges. <i>European Journal of Ageing</i> , 2007, 4, 3-12.	1.2	126
32	Sturzererkennung mit am K�rper getragenen Sensoren. <i>Zeitschrift Fur Gerontologie Und Geriatrie</i> , 2013, 46, 706-719.	0.8	126
33	AGE-RELATED DECLINE OF GAIT CONTROL UNDER A DUAL-TASK CONDITION. <i>Journal of the American Geriatrics Society</i> , 2003, 51, 1187-1188.	1.3	122
34	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.	0.5	122
35	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, 879-884.	0.5	119
36	Gait alterations of diabetic patients while walking on different surfaces. <i>Gait and Posture</i> , 2009, 29, 488-493.	0.6	115

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37	Stair climbing detection during daily physical activity using a miniature gyroscope. <i>Gait and Posture</i> , 2005, 22, 287-294.	0.6	107
38	Multi-parametric evaluation of sit-to-stand and stand-to-sit transitions in elderly people. <i>Medical Engineering and Physics</i> , 2011, 33, 1086-1093.	0.8	95
39	Estimation of speed and incline of walking using neural network. <i>IEEE Transactions on Instrumentation and Measurement</i> , 1995, 44, 743-746.	2.4	84
40	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, 113-125.	0.6	84
41	Spatio-temporal gait analysis in children with cerebral palsy using, foot-worn inertial sensors. <i>Gait and Posture</i> , 2014, 39, 436-442.	0.6	84
42	A Novel Approach to Reducing Number of Sensing Units for Wearable Gait Analysis Systems. <i>IEEE Transactions on Biomedical Engineering</i> , 2013, 60, 72-77.	2.5	83
43	The prediction of speed and incline in outdoor running in humans using accelerometry. <i>Medicine and Science in Sports and Exercise</i> , 1999, 31, 1053-1059.	0.2	79
44	Gait analysis and WOMAC are complementary in assessing functional outcome in total hip replacement. <i>Clinical Rehabilitation</i> , 2006, 20, 413-420.	1.0	73
45	Accurate Estimation of Running Temporal Parameters Using Foot-Worn Inertial Sensors. <i>Frontiers in Physiology</i> , 2018, 9, 610.	1.3	72
46	Front-Crawl Instantaneous Velocity Estimation Using a Wearable Inertial Measurement Unit. <i>Sensors</i> , 2012, 12, 12927-12939.	2.1	71
47	Ambulatory assessment of 3D ground reaction force using plantar pressure distribution. <i>Gait and Posture</i> , 2010, 32, 311-316.	0.6	70
48	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, 138-143.	0.6	69
49	Can accelerometry accurately predict the energy cost of uphill/downhill walking?. <i>Ergonomics</i> , 2001, 44, 48-62.	1.1	68
50	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.	1.3	67
51	Analyzing 180° turns using an inertial system reveals early signs of progression of parkinson's disease. , 2009, 2009, 224-7.		66
52	Instrumented shoes for activity classification in the elderly. <i>Gait and Posture</i> , 2016, 44, 12-17.	0.6	65
53	Standardization proposal of soft tissue artefact description for data sharing in human motion measurements. <i>Journal of Biomechanics</i> , 2017, 62, 5-13.	0.9	65
54	Improving activity recognition using a wearable barometric pressure sensor in mobility-impaired stroke patients. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2015, 12, 72.	2.4	64

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55	Quantification of everyday motor function in a geriatric population. <i>Journal of Rehabilitation Research and Development</i> , 2007, 44, 417.	1.6	64
56	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.	2.3	62
57	Multi-segment foot kinematics after total ankle replacement and ankle arthrodesis during relatively long-distance gait. <i>Gait and Posture</i> , 2012, 36, 561-566.	0.6	60
58	Arm position during daily activity. <i>Gait and Posture</i> , 2008, 28, 581-587.	0.6	59
59	Soft Tissue Artifact Assessment During Treadmill Walking in Subjects With Total Knee Arthroplasty. <i>IEEE Transactions on Biomedical Engineering</i> , 2013, 60, 3131-3140.	2.5	59
60	Barcoding Human Physical Activity to Assess Chronic Pain Conditions. <i>PLoS ONE</i> , 2012, 7, e32239.	1.1	58
61	A novel biomechanical approach for animal behaviour recognition using accelerometers. <i>Methods in Ecology and Evolution</i> , 2019, 10, 802-814.	2.2	57
62	Outcome evaluation in shoulder surgery using 3D kinematics sensors. <i>Gait and Posture</i> , 2007, 25, 523-532.	0.6	56
63	Technical validation of real-world monitoring of gait: a multicentric observational study. <i>BMJ Open</i> , 2021, 11, e050785.	0.8	56
64	Incline, speed, and distance assessment during unconstrained walking. <i>Medicine and Science in Sports and Exercise</i> , 1995, 27, 226-234.	0.2	55
65	Measurement of Multi-segment Foot Joint Angles During Gait Using a Wearable System. <i>Journal of Biomechanical Engineering</i> , 2012, 134, 061006.	0.6	55
66	A system to measure the kinematics during the entire ski jump sequence using inertial sensors. <i>Journal of Biomechanics</i> , 2013, 46, 56-62.	0.9	55
67	Automatic front-crawl temporal phase detection using adaptive filtering of inertial signals. <i>Journal of Sports Sciences</i> , 2013, 31, 1251-1260.	1.0	54
68	Detection and Classification of Postural Transitions in Real-World Conditions. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2012, 20, 688-696.	2.7	53
69	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, 40-47.	0.7	52
70	Automatic measurement of key ski jumping phases and temporal events with a wearable system. <i>Journal of Sports Sciences</i> , 2012, 30, 53-61.	1.0	52
71	Vorschlag für ein Mehrphasensturzmodell auf der Basis von Sturzdokumentationen mit am Körper getragenen Sensoren. <i>Zeitschrift Für Gerontologie Und Geriatrie</i> , 2012, 45, 707-715.	0.8	50
72	Recommendations for Standardizing Validation Procedures Assessing Physical Activity of Older Persons by Monitoring Body Postures and Movements. <i>Sensors</i> , 2014, 14, 1267-1277.	2.1	50

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73	An exercise intervention to improve diabetic patients' gait in a real-life environment. <i>Gait and Posture</i> , 2010, 32, 185-190.	0.6	49
74	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.	0.8	49
75	Technical and clinical view on ambulatory assessment in Parkinson's disease. <i>Acta Neurologica Scandinavica</i> , 2014, 130, 139-147.	1.0	49
76	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.	1.8	49
77	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.	1.1	48
78	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.	0.5	47
79	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.	1.6	47
80	Gait speed in clinical and daily living assessments in Parkinson's disease patients: performance versus capacity. <i>Npj Parkinson's Disease</i> , 2021, 7, 24.	2.5	44
81	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-B, 648-655.	3.4	43
82	Outcome of unilateral ankle arthrodesis and total ankle replacement in terms of bilateral gait mechanics. <i>Journal of Orthopaedic Research</i> , 2014, 32, 377-384.	1.2	43
83	Physical Behavior in Older Persons during Daily Life: Insights from Instrumented Shoes. <i>Sensors</i> , 2016, 16, 1225.	2.1	42
84	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.	1.6	42
85	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.	1.3	42
86	What is the Best Configuration of Wearable Sensors to Measure Spatiotemporal Gait Parameters in Children with Cerebral Palsy?. <i>Sensors</i> , 2018, 18, 394.	2.1	42
87	Clinical factors associated with gait alterations in diabetic patients. <i>Diabetic Medicine</i> , 2009, 26, 1003-1009.	1.2	41
88	Real-World Gait Speed Estimation Using Wrist Sensor: A Personalized Approach. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2020, 24, 658-668.	3.9	41
89	Comparison of gait characteristics between clinical and daily life settings in children with cerebral palsy. <i>Scientific Reports</i> , 2020, 10, 2091.	1.6	41
90	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, 236-240.	0.9	39

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91	Gait Assessment in Children With Duchenne Muscular Dystrophy During Long-Distance Walking. <i>Journal of Child Neurology</i> , 2012, 27, 30-38.	0.7	39
92	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.	1.3	39
93	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, 1965-1971.	0.9	37
94	Gait Symmetry Assessment with a Low Back 3D Accelerometer in Post-Stroke Patients. <i>Sensors</i> , 2018, 18, 3322.	2.1	37
95	Assessment of Physical Activity in Older People With and Without Cognitive Impairment. <i>Journal of Aging and Physical Activity</i> , 2011, 19, 347-372.	0.5	35
96	A New Approach for Quantitative Analysis of Inter-Joint Coordination During Gait. <i>IEEE Transactions on Biomedical Engineering</i> , 2008, 55, 755-764.	2.5	34
97	Nonlinear analysis of human physical activity patterns in health and disease. <i>Physical Review E</i> , 2008, 77, 021913.	0.8	34
98	Measurement of the dynamics in ski jumping using a wearable inertial sensor-based system. <i>Journal of Sports Sciences</i> , 2014, 32, 591-600.	1.0	34
99	A wearable system for multi-segment foot kinetics measurement. <i>Journal of Biomechanics</i> , 2014, 47, 1704-1711.	0.9	34
100	Fall detection algorithms for real-world falls harvested from lumbar sensors in the elderly population: A machine learning approach. , 2016, 2016, 3712-3715.		34
101	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.	0.8	34
102	Evaluation of a mixed approach combining stationary and wearable systems to monitor gait over long distance. <i>Journal of Biomechanics</i> , 2010, 43, 2196-2202.	0.9	33
103	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, 2297-2300.	0.9	32
104	Course Setting as a Prevention Measure for Overuse Injuries of the Back in Alpine Ski Racing. <i>Orthopaedic Journal of Sports Medicine</i> , 2016, 4, 232596711663071.	0.8	32
105	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, 1074-1081.	1.2	31
106	A Hidden Markov Model of the breaststroke swimming temporal phases using wearable inertial measurement units. , 2013, , .		31
107	Effect of Manual Lymphatic Drainage After Total Knee Arthroplasty: A Randomized Controlled Trial. <i>Archives of Physical Medicine and Rehabilitation</i> , 2016, 97, 674-682.	0.5	31
108	Unraveling dynamics of human physical activity patterns in chronic pain conditions. <i>Scientific Reports</i> , 2013, 3, 2019.	1.6	30

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109	Assessment of Physical Activity of Patients With Chronic Pain. <i>Neuromodulation</i> , 2014, 17, 42-47.	0.4	30
110	Estimating dominant upper-limb segments during daily activity. <i>Gait and Posture</i> , 2008, 27, 368-375.	0.6	29
111	Ambulatory measurement of ankle kinetics for clinical applications. <i>Journal of Biomechanics</i> , 2011, 44, 2712-2718.	0.9	29
112	Concern about Falling and Complexity of Free-Living Physical Activity Patterns in Well-Functioning Older Adults. <i>Gerontology</i> , 2018, 64, 603-611.	1.4	29
113	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.	2.4	29
114	Elevated heels and adaptation to new shoes in frail elderly women. <i>Zeitschrift Fur Gerontologie Und Geriatrie</i> , 2003, 36, 29-34.	0.8	27
115	Improved Physical Activity in Patients Treated for Chronic Pain by Spinal Cord Stimulation. <i>Neuromodulation</i> , 2005, 8, 40-48.	0.4	27
116	Instrumented Knee Prosthesis for Force and Kinematics Measurements. <i>IEEE Transactions on Automation Science and Engineering</i> , 2013, 10, 615-624.	3.4	27
117	An inertial sensor-based system for spatio-temporal analysis in classic cross-country skiing diagonal technique. <i>Journal of Biomechanics</i> , 2015, 48, 3199-3205.	0.9	27
118	Can we predict outcome of surgical reconstruction of Charcot neuroarthropathy by dynamic plantar pressure assessment?â€”A proof of concept study. <i>Gait and Posture</i> , 2010, 31, 87-92.	0.6	25
119	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.	2.7	25
120	Drift-Free Foot Orientation Estimation in Running Using Wearable IMU. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 65.	2.0	25
121	Biomechanical Response of the Lower Extremity to Running-Induced Acute Fatigue: A Systematic Review. <i>Frontiers in Physiology</i> , 2021, 12, 646042.	1.3	25
122	Filtering by adaptive sampling (FAS). <i>Medical and Biological Engineering and Computing</i> , 1988, 26, 658-662.	1.6	24
123	Level, downhill and uphill walking identification using neural networks. <i>Electronics Letters</i> , 1993, 29, 1563.	0.5	24
124	Outcome evaluation of ankle osteoarthritis treatments: Plantar pressure analysis during relatively long-distance walking. <i>Clinical Biomechanics</i> , 2011, 26, 397-404.	0.5	24
125	Detection of the movement of the humerus during daily activity. <i>Medical and Biological Engineering and Computing</i> , 2009, 47, 467-474.	1.6	23
126	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, 212-218.	1.4	23

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127	Suitability of commercial barometric pressure sensors to distinguish sitting and standing activities for wearable monitoring. <i>Medical Engineering and Physics</i> , 2014, 36, 739-744.	0.8	23
128	Geriatric rehabilitation after hip fracture. <i>Zeitschrift Fur Gerontologie Und Geriatrie</i> , 2014, 47, 236-242.	0.8	23
129	An Accurate Wearable Foot Clearance Estimation System: Toward a Real-Time Measurement System. <i>IEEE Sensors Journal</i> , 2017, 17, 2542-2549.	2.4	23
130	Algorithms for Walking Speed Estimation Using a Lower-Back-Worn Inertial Sensor: A Cross-Validation on Speed Ranges. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2021, 29, 1955-1964.	2.7	23
131	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.	1.1	23
132	Reliability of diabetic patients' gait parameters in a challenging environment. <i>Gait and Posture</i> , 2008, 28, 680-686.	0.6	22
133	Development of a standard fall data format for signals from body-worn sensors. <i>Zeitschrift Fur Gerontologie Und Geriatrie</i> , 2013, 46, 720-726.	0.8	22
134	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, 247-252.	0.6	22
135	Inter-limb coordination and energy cost in swimming. <i>Journal of Science and Medicine in Sport</i> , 2014, 17, 439-444.	0.6	22
136	Behavioural compass: animal behaviour recognition using magnetometers. <i>Movement Ecology</i> , 2019, 7, 28.	1.3	22
137	Real-World Gait Bout Detection Using a Wrist Sensor: An Unsupervised Real-Life Validation. <i>IEEE Access</i> , 2020, 8, 102883-102896.	2.6	21
138	Measuring upper limb function in children with hemiparesis with 3D inertial sensors. <i>Child's Nervous System</i> , 2017, 33, 2159-2168.	0.6	20
139	Walking Speed of Children and Adolescents With Cerebral Palsy: Laboratory Versus Daily Life. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 812.	2.0	20
140	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.	0.5	19
141	Knee Implant Loosening Detection: A Vibration Analysis Investigation. <i>Annals of Biomedical Engineering</i> , 2018, 46, 97-107.	1.3	19
142	Fractal temporal organisation of motricity is altered in major depression. <i>Psychiatry Research</i> , 2012, 200, 288-293.	1.7	18
143	Characterization of lower-limbs inter-segment coordination during the take-off extension in ski jumping. <i>Human Movement Science</i> , 2013, 32, 741-752.	0.6	18
144	Front-crawl stroke descriptors variability assessment for skill characterisation. <i>Journal of Sports Sciences</i> , 2016, 34, 1405-1412.	1.0	18

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145	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.	0.9	18
146	Complexity of Daily Physical Activity Is More Sensitive Than Conventional Metrics to Assess Functional Change in Younger Older Adults. <i>Sensors</i> , 2018, 18, 2032.	2.1	18
147	The effects of dual tasks on gait in children with cerebral palsy. <i>Gait and Posture</i> , 2019, 70, 148-155.	0.6	18
148	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.	2.4	18
149	Segmentation of foot and ankle complex based on kinematic criteria. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2011, 14, 773-781.	0.9	17
150	Optimal slopes and speeds in uphill ski mountaineering: a laboratory study. <i>European Journal of Applied Physiology</i> , 2016, 116, 1011-1019.	1.2	17
151	A New Training Assessment Method for Alpine Ski Racing: Estimating Center of Mass Trajectory by Fusing Inertial Sensors With Periodically Available Position Anchor Points. <i>Frontiers in Physiology</i> , 2018, 9, 1203.	1.3	17
152	Editorial: Wearable Sensor Technology for Monitoring Training Load and Health in the Athletic Population. <i>Frontiers in Physiology</i> , 2019, 10, 1520.	1.3	17
153	A Bayesian approach for pervasive estimation of breaststroke velocity using a wearable IMU. <i>Pervasive and Mobile Computing</i> , 2015, 19, 37-46.	2.1	16
154	Toward a Remote Assessment of Walking Bout and Speed: Application in Patients With Multiple Sclerosis. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2021, 25, 4217-4228.	3.9	16
155	Level, Uphill, and Downhill Running Economy Values Are Correlated Except on Steep Slopes. <i>Frontiers in Physiology</i> , 2021, 12, 697315.	1.3	16
156	Indirect Estimation of Breathing Rate from Heart Rate Monitoring System during Running. <i>Sensors</i> , 2021, 21, 5651.	2.1	16
157	Nonlinear Analysis of Physiological Time Series. , 2009, , 307-333.		16
158	Can accelerometry accurately predict the energy cost of uphill/downhill walking?. , 0, .		16
159	Enclosed Electronic System for Force Measurements in Knee Implants. <i>Sensors</i> , 2014, 14, 15009-15021.	2.1	15
160	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.	0.9	15
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