

Kamair Aminian

List of Publications by Year in descending order

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Version: 2024-02-01

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	Instrumented 5-Time Sit-To-Stand Test: Parameters Predicting Serious Falls beyond the Duration of the Test. <i>Gerontology</i> , 2022, 68, 587-600.	1.4	7
2	Putting Temperature into the Equation: Development and Validation of Algorithms to Distinguish Non-Wearing from Inactivity and Sleep in Wearable Sensors. <i>Sensors</i> , 2022, 22, 1117.	2.1	3
3	Concurrent Evolution of Biomechanical and Physiological Parameters With Running-Induced Acute Fatigue. <i>Frontiers in Physiology</i> , 2022, 13, 814172.	1.3	9
4	SmartSwim, a Novel IMU-Based Coaching Assistance. <i>Sensors</i> , 2022, 22, 3356.	2.1	6
5	A functional approach towards the design, development, and test of an affordable dynamic prosthetic foot. <i>PLoS ONE</i> , 2022, 17, e0266656.	1.1	1
6	Depth Estimation for Egocentric Rehabilitation Monitoring Using Deep Learning Algorithms. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 6578.	1.3	2
7	Biomechanical Ambulatory Assessment of 3D Knee Angle Using Novel Inertial Sensor-Based Technique. <i>IEEE Access</i> , 2021, 9, 36559-36570.	2.6	5
8	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
9	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
10	Running Speed Estimation Using Shoe-Worn Inertial Sensors: Direct Integration, Linear, and Personalized Model. <i>Frontiers in Sports and Active Living</i> , 2021, 3, 585809.	0.9	8
11	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
12	Editorial: Health and Performance Assessment in Winter Sports. <i>Frontiers in Sports and Active Living</i> , 2021, 3, 628574.	0.9	7
13	Continuous Analysis of Marathon Running Using Inertial Sensors: Hitting Two Walls?. <i>International Journal of Sports Medicine</i> , 2021, 42, 1182-1190.	0.8	11
14	Comparison of Laboratory and Daily-Life Gait Speed Assessment during ON and OFF States in Parkinson's Disease. <i>Sensors</i> , 2021, 21, 3974.	2.1	13
15	Falls Efficacy Is Associated With Better Gait and Functional Outcomes After Rehabilitation in Older Patients. <i>Archives of Physical Medicine and Rehabilitation</i> , 2021, 102, 1134-1139.	0.5	1
16	Clinical value of assessing motor performance in postacute stroke patients. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2021, 18, 102.	2.4	6
17	Level, Uphill, and Downhill Running Economy Values Are Correlated Except on Steep Slopes. <i>Frontiers in Physiology</i> , 2021, 12, 697315.	1.3	16
18	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

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19	Indirect Estimation of Breathing Rate from Heart Rate Monitoring System during Running. <i>Sensors</i> , 2021, 21, 5651.	2.1	16
20	Real-world gait speed estimation, frailty and handgrip strength: a cohort-based study. <i>Scientific Reports</i> , 2021, 11, 18966.	1.6	15
21	Effect of Fear of Falling on Mobility Measured During Lab and Daily Activity Assessments in Parkinson's Disease. <i>Frontiers in Aging Neuroscience</i> , 2021, 13, 722830.	1.7	7
22	Technical validation of real-world monitoring of gait: a multicentric observational study. <i>BMJ Open</i> , 2021, 11, e050785.	0.8	56
23	Swimming Phase-Based Performance Evaluation Using a Single IMU in Main Swimming Techniques. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 793302.	2.0	10
24	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
25	A Robotic Glenohumeral Simulator for Investigating Prosthetic Implant Subluxation. <i>Journal of Biomechanical Engineering</i> , 2020, 142, .	0.6	1
26	Changes in spatio-temporal gait parameters and vertical speed during an extreme mountain ultra-marathon. <i>European Journal of Sport Science</i> , 2020, 20, 1339-1345.	1.4	7
27	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
28	The association of basic and challenging motor capacity with mobility performance and falls in young seniors. <i>Archives of Gerontology and Geriatrics</i> , 2020, 90, 104134.	1.4	5
29	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
30	Digital Technology to Deliver a Lifestyle-Integrated Exercise Intervention in Young Seniors: The PreventIT Feasibility Randomized Controlled Trial. <i>Frontiers in Digital Health</i> , 2020, 2, 10.	1.5	12
31	Real-world speed estimation using single trunk IMU: methodological challenges for impaired gait patterns. , 2020, 2020, 4596-4599.		12
32	Seek and learn: Automated identification of microevents in animal behaviour using envelopes of acceleration data and machine learning. <i>Methods in Ecology and Evolution</i> , 2020, 11, 1639-1651.	2.2	11
33	A Sensor Fusion Approach to the Estimation of Instantaneous Velocity Using Single Wearable Sensor During Sprint. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 838.	2.0	14
34	Reply to Comments: Hurdle Clearance Detection and Spatiotemporal Analysis in 400 Meters Hurdles Races Using Shoe-Mounted Magnetic and Inertial Sensor. <i>Sensors</i> , 2020, 20, 2993.	2.1	0
35	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
36	A Vibrational Technique for <i>In Vitro</i> Intraoperative Prosthesis Fixation Monitoring. <i>IEEE Transactions on Biomedical Engineering</i> , 2020, 67, 2953-2964.	2.5	3

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37	Drift-Free Foot Orientation Estimation in Running Using Wearable IMU. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 65.	2.0	25
38	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
39	Long-term unsupervised mobility assessment in movement disorders. <i>Lancet Neurology</i> , The, 2020, 19, 462-470.	4.9	181
40	Hurdle Clearance Detection and Spatiotemporal Analysis in 400 Meters Hurdles Races Using Shoe-Mounted Magnetic and Inertial Sensors. <i>Sensors</i> , 2020, 20, 354.	2.1	5
41	A Novel Macro-Micro Approach for Swimming Analysis in Main Swimming Techniques Using IMU Sensors. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 597738.	2.0	13
42	Behavioural compass: animal behaviour recognition using magnetometers. <i>Movement Ecology</i> , 2019, 7, 28.	1.3	22
43	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
44	A Magnet-Based Timing System to Detect Gate Crossings in Alpine Ski Racing. <i>Sensors</i> , 2019, 19, 940.	2.1	9
45	A novel biomechanical approach for animal behaviour recognition using accelerometers. <i>Methods in Ecology and Evolution</i> , 2019, 10, 802-814.	2.2	57
46	The effects of dual tasks on gait in children with cerebral palsy. <i>Gait and Posture</i> , 2019, 70, 148-155.	0.6	18
47	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
48	A Personalized Approach to Improve Walking Detection in Real-Life Settings: Application to Children with Cerebral Palsy. <i>Sensors</i> , 2019, 19, 5316.	2.1	5
49	Abnormal postural behavior in patients with functional movement disorders during exposure to stress. <i>Psychoneuroendocrinology</i> , 2019, 101, 232-239.	1.3	7
50	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
51	Standing Height as a Prevention Measure for Overuse Injuries of the Back in Alpine Ski Racing: A Kinematic and Kinetic Study of Giant Slalom. <i>Orthopaedic Journal of Sports Medicine</i> , 2018, 6, 232596711774784.	0.8	15
52	Classification and characterization of postural transitions using instrumented shoes. <i>Medical and Biological Engineering and Computing</i> , 2018, 56, 1403-1412.	1.6	11
53	Error performances of a model-based biplane fluoroscopic system for tracking knee prosthesis during treadmill gait task. <i>Medical and Biological Engineering and Computing</i> , 2018, 56, 307-316.	1.6	5
54	Knee Implant Loosening Detection: A Vibration Analysis Investigation. <i>Annals of Biomedical Engineering</i> , 2018, 46, 97-107.	1.3	19

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55	Simple Gait Symmetry Measures Based on Foot Angular Velocity: Analysis in Post Stroke Patients. , 2018, 2018, 5442-5445.		2
56	Gait Symmetry Assessment with a Low Back 3D Accelerometer in Post-Stroke Patients. Sensors, 2018, 18, 3322.	2.1	37
57	A New Training Assessment Method for Alpine Ski Racing: Estimating Center of Mass Trajectory by Fusing Inertial Sensors With Periodically Available Position Anchor Points. Frontiers in Physiology, 2018, 9, 1203.	1.3	17
58	Complexity of Daily Physical Activity Is More Sensitive Than Conventional Metrics to Assess Functional Change in Younger Older Adults. Sensors, 2018, 18, 2032.	2.1	18
59	Concern about Falling and Complexity of Free-Living Physical Activity Patterns in Well-Functioning Older Adults. Gerontology, 2018, 64, 603-611.	1.4	29
60	Accurate Estimation of Running Temporal Parameters Using Foot-Worn Inertial Sensors. Frontiers in Physiology, 2018, 9, 610.	1.3	72
61	What is the Best Configuration of Wearable Sensors to Measure Spatiotemporal Gait Parameters in Children with Cerebral Palsy?. Sensors, 2018, 18, 394.	2.1	42
62	Feet Fidgeting Detection Based on Accelerometers Using Decision Tree Learning and Gradient Boosting. Lecture Notes in Computer Science, 2018, , 75-84.	1.0	7
63	Standardization proposal of soft tissue artefact description for data sharing in human motion measurements. Journal of Biomechanics, 2017, 62, 5-13.	0.9	65
64	A wrist sensor and algorithm to determine instantaneous walking cadence and speed in daily life walking. Medical and Biological Engineering and Computing, 2017, 55, 1773-1785.	1.6	42
65	An Accurate Wearable Foot Clearance Estimation System: Toward a Real-Time Measurement System. IEEE Sensors Journal, 2017, 17, 2542-2549.	2.4	23
66	Bone orientation and position estimation errors using Cosserat point elements and least squares methods: Application to gait. Journal of Biomechanics, 2017, 62, 110-116.	0.9	10
67	Total hip arthroplasty using a cementless dual-mobility cup provides increased stability and favorable gait parameters at five years follow-up. Orthopaedics and Traumatology: Surgery and Research, 2017, 103, 21-25.	0.9	18
68	Assessment of the lower limb soft tissue artefact at marker-cluster level with a high-density marker set during walking. Journal of Biomechanics, 2017, 62, 21-26.	0.9	15
69	Measuring upper limb function in children with hemiparesis with 3D inertial sensors. Child's Nervous System, 2017, 33, 2159-2168.	0.6	20
70	Locomotion detection and cadence estimation using 3D wrist accelerometer: an in-field validation. Gait and Posture, 2017, 57, 186-187.	0.6	4
71	Evaluation of knee functional calibration with and without the effect of soft tissue artefact. Journal of Biomechanics, 2017, 62, 53-59.	0.9	15
72	The Use of Body Worn Sensors for Detecting the Vibrations Acting on the Lower Back in Alpine Ski Racing. Frontiers in Physiology, 2017, 8, 522.	1.3	42

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73	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
74	Mobile Health Applications to Promote Active and Healthy Ageing. <i>Sensors</i> , 2017, 17, 622.	2.1	151
75	Wearable sensors objectively measure gait parameters in Parkinson's disease. <i>PLoS ONE</i> , 2017, 12, e0183989.	1.1	235
76	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
77	DYNAMIC COMPLEXITY OF PHYSICAL ACTIVITY PATTERNS: NEW CONCEPTS FOR GERIATRIC ASSESSMENT. <i>Innovation in Aging</i> , 2017, 1, 1160-1160.	0.0	0
78	Heightened clinical utility of smartphone versus body-worn inertial system for shoulder function B-B score. <i>PLoS ONE</i> , 2017, 12, e0174365.	1.1	8
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	Advances in Long Term Physical Behaviour Monitoring. <i>BioMed Research International</i> , 2016, 2016, 1-2.	0.9	3
81	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
82	Physical Behavior in Older Persons during Daily Life: Insights from Instrumented Shoes. <i>Sensors</i> , 2016, 16, 1225.	2.1	42
83	MEMS Inertial Motion Sensing Watch for Measuring Walking and Running Activities. , 2016, , .		3
84	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
85	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
86	Quantifying dimensions of physical behavior in chronic pain conditions. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2016, 13, 85.	2.4	12
87	Patterns of human activity behavior. , 2016, , .		3
88	Optimal slopes and speeds in uphill ski mountaineering: a field study. <i>European Journal of Applied Physiology</i> , 2016, 116, 2017-2024.	1.2	12
89	Measuring spatio-temporal parameters of uphill ski-mountaineering with ski-fixed inertial sensors. <i>Journal of Biomechanics</i> , 2016, 49, 3052-3055.	0.9	11
90	Fall detection algorithms for real-world falls harvested from lumbar sensors in the elderly population: A machine learning approach. , 2016, 2016, 3712-3715.		34

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91	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
92	A patient-specific model of total knee arthroplasty to estimate patellar strain: A case study. <i>Clinical Biomechanics</i> , 2016, 32, 212-219.	0.5	12
93	Instrumented shoes for activity classification in the elderly. <i>Gait and Posture</i> , 2016, 44, 12-17.	0.6	65
94	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
95	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
96	Front-crawl stroke descriptors variability assessment for skill characterisation. <i>Journal of Sports Sciences</i> , 2016, 34, 1405-1412.	1.0	18
97	Instrumented Shoes for Real-Time Activity Monitoring Applications. <i>Studies in Health Technology and Informatics</i> , 2016, 225, 663-7.	0.2	1
98	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
99	Measurement Properties of the Smartphone-Based B-B Score in Current Shoulder Pathologies. <i>Sensors</i> , 2015, 15, 26801-26817.	2.1	6
100	Outcome of ankle arthrodesis and total ankle replacement for ankle arthrosis in terms of gait variability. <i>Journal of Biomedical Engineering and Informatics</i> , 2015, 2, 31.	0.2	0
101	Temporal and kinematic variables for real-world falls harvested from lumbar sensors in the elderly population. , 2015, 2015, 5183-6.		6
102	Enhancing clinically-relevant shoulder function assessment using only essential movements. <i>Physiological Measurement</i> , 2015, 36, 547-560.	1.2	11
103	Comparison of a dedicated body-worn inertial system and a smartphone for shoulder function and arm elevation evaluation. <i>Physiotherapy</i> , 2015, 101, e1205-e1206.	0.2	2
104	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
105	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
106	Alteration and recovery of arm usage in daily activities after rotator cuff surgery. <i>Journal of Shoulder and Elbow Surgery</i> , 2015, 24, 1346-1352.	1.2	13
107	Locally Linear Neuro-Fuzzy Estimate of the Prosthetic Knee Angle and Its Validation in a Robotic Simulator. <i>IEEE Sensors Journal</i> , 2015, 15, 6271-6278.	2.4	7
108	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

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109	Design and Development of an Inertial Sensor Based Exergame for Recovery-Step Training. , 2014, , .		3
110	Measurement of the dynamics in ski jumping using a wearable inertial sensor-based system. Journal of Sports Sciences, 2014, 32, 591-600.	1.0	34
111	Evaluation of muscular activity duration in shoulders with rotator cuff tears using inertial sensors and electromyography. Physiological Measurement, 2014, 35, 2389-2400.	1.2	10
112	Estimation of Front-Crawl Energy Expenditure Using Wearable Inertial Measurement Units. IEEE Sensors Journal, 2014, 14, 1020-1027.	2.4	13
113	Energy Expenditure Estimation Using Accelerometry and Heart Rate for Multiple Sclerosis and Healthy Older Adults. , 2014, , .		4
114	Gait and Foot Clearance Parameters Obtained Using Shoe-Worn Inertial Sensors in a Large-Population Sample of Older Adults. Sensors, 2014, 14, 443-457.	2.1	133
115	Enclosed Electronic System for Force Measurements in Knee Implants. Sensors, 2014, 14, 15009-15021.	2.1	15
116	Gait analysis using shoe-worn inertial sensors. , 2014, , .		10
117	Implantable and wearable measurement system for smart knee prosthesis. , 2014, , .		2
118	Spatio-temporal gait analysis in children with cerebral palsy using, foot-worn inertial sensors. Gait and Posture, 2014, 39, 436-442.	0.6	84
119	Suitability of commercial barometric pressure sensors to distinguish sitting and standing activities for wearable monitoring. Medical Engineering and Physics, 2014, 36, 739-744.	0.8	23
120	A wearable inertial system to assess the cervical spine mobility: Comparison with an optoelectronic-based motion capture evaluation. Medical Engineering and Physics, 2014, 36, 49-56.	0.8	49
121	Smart instrumentation for determination of ligament stiffness and ligament balance in total knee arthroplasty. Medical Engineering and Physics, 2014, 36, 721-725.	0.8	2
122	Geriatric rehabilitation after hip fracture. Zeitschrift Fur Gerontologie Und Geriatrie, 2014, 47, 236-242.	0.8	23
123	Total hip replacement with a collarless polished cemented anatomic stem: clinical and gait analysis results at tenÂyears follow-up. International Orthopaedics, 2014, 38, 717-724.	0.9	5
124	A wearable system for multi-segment foot kinetics measurement. Journal of Biomechanics, 2014, 47, 1704-1711.	0.9	34
125	Technical and clinical view on ambulatory assessment in Parkinson's disease. Acta Neurologica Scandinavica, 2014, 130, 139-147.	1.0	49
126	Recommendations for Standardizing Validation Procedures Assessing Physical Activity of Older Persons by Monitoring Body Postures and Movements. Sensors, 2014, 14, 1267-1277.	2.1	50

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127	Assessment of Physical Activity of Patients With Chronic Pain. <i>Neuromodulation</i> , 2014, 17, 42-47.	0.4	30
128	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
129	Reference-Free Automated Magnetic Sensor Calibration for Angle Estimation in Smart Knee Prostheses. <i>IEEE Sensors Journal</i> , 2014, 14, 1788-1796.	2.4	8
130	Assessing physical activity in inpatient rehabilitation—sensor-based validation of the PAIR. <i>European Review of Aging and Physical Activity</i> , 2014, 11, 133-139.	1.3	2
131	Inter-limb coordination and energy cost in swimming. <i>Journal of Science and Medicine in Sport</i> , 2014, 17, 439-444.	0.6	22
132	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
133	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.	0.9	8
134	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
135	Estimation of prosthetic knee angles via data fusion of implantable and wearable sensors. , 2013, , .		5
136	Design and test of a MEMS strain-sensing device for monitoring artificial knee implants. <i>Biomedical Microdevices</i> , 2013, 15, 831-839.	1.4	14
137	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
138	Sturzerkennung mit am K�rper getragenen Sensoren. <i>Zeitschrift Fur Gerontologie Und Geriatrie</i> , 2013, 46, 706-719.	0.8	126
139	Towards estimation of front-crawl energy expenditure using the wearable aquatic movement analysis system (WAMAS). , 2013, , .		2
140	Instrumented Knee Prosthesis for Force and Kinematics Measurements. <i>IEEE Transactions on Automation Science and Engineering</i> , 2013, 10, 615-624.	3.4	27
141	A Hidden Markov Model of the breaststroke swimming temporal phases using wearable inertial measurement units. , 2013, , .		31
142	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
143	Objective evaluation of cervical spine mobility after surgery during free-living activity. <i>Clinical Biomechanics</i> , 2013, 28, 364-369.	0.5	10
144	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

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145	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
146	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
147	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
148	Accurate Measurement of Concurrent Flexion-Extension and Internal-External Rotations in Smart Knee Prostheses. <i>IEEE Transactions on Biomedical Engineering</i> , 2013, 60, 2504-2510.	2.5	11
149	Gaussian process framework for pervasive estimation of swimming velocity with body-worn IMU. <i>Electronics Letters</i> , 2013, 49, 44-45.	0.5	11
150	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
151	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
152	Unraveling dynamics of human physical activity patterns in chronic pain conditions. <i>Scientific Reports</i> , 2013, 3, 2019.	1.6	30
153	An Analog Front-End and ADC Integrated Circuit for Implantable Force and Orientation Measurements in Joint Prosthesis. <i>Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering</i> , 2013, , 295-302.	0.2	4
154	Physical activity recognition via minimal in-shoes force sensor configuration. , 2013, , .		3
155	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
156	Front-Crawl Instantaneous Velocity Estimation Using a Wearable Inertial Measurement Unit. <i>Sensors</i> , 2012, 12, 12927-12939.	2.1	71
157	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
158	Physical activity of moderately impaired elderly stroke patients during rehabilitation. <i>Physiological Measurement</i> , 2012, 33, 1923-1930.	1.2	5
159	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
160	Vorschlag für ein Mehrphasensturzmodell auf der Basis von Sturzdokumentationen mit am Körper getragenen Sensoren. <i>Zeitschrift Fur Gerontologie Und Geriatrie</i> , 2012, 45, 707-715.	0.8	50
161	Fractal temporal organisation of motricity is altered in major depression. <i>Psychiatry Research</i> , 2012, 200, 288-293.	1.7	18
162	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

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163	Detection and Classification of Postural Transitions in Real-World Conditions. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2012, 20, 688-696.	2.7	53
164	A comparison between joint coordinate system and attitude vector for multi-segment foot kinematics. Journal of Biomechanics, 2012, 45, 2041-2045.	0.9	8
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