

Stefano Rossi

List of Publications by Year in descending order

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Version: 2024-02-01

74
papers

1,732
citations

331259

21
h-index

315357

38
g-index

78
all docs

78
docs citations

78
times ranked

2085
citing authors

#	ARTICLE	IF	CITATIONS
1	Gait Partitioning Methods: A Systematic Review. <i>Sensors</i> , 2016, 16, 66.	2.1	261
2	Experimental evaluation of accuracy and repeatability of a novel body-to-sensor calibration procedure for inertial sensor-based gait analysis. <i>Measurement: Journal of the International Measurement Confederation</i> , 2014, 52, 145-155.	2.5	136
3	A Novel HMM Distributed Classifier for the Detection of Gait Phases by Means of a Wearable Inertial Sensor Network. <i>Sensors</i> , 2014, 14, 16212-16234.	2.1	105
4	Robot-Aided Neurorehabilitation: A Pediatric Robot for Ankle Rehabilitation. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2015, 23, 1056-1067.	2.7	76
5	Feasibility of Muscle Synergy Outcomes in Clinics, Robotics, and Sports: A Systematic Review. <i>Applied Bionics and Biomechanics</i> , 2018, 2018, 1-19.	0.5	70
6	WAKE-Up Exoskeleton to Assist Children With Cerebral Palsy: Design and Preliminary Evaluation in Level Walking. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2017, 25, 906-916.	2.7	67
7	Validation of Inter-Subject Training for Hidden Markov Models Applied to Gait Phase Detection in Children with Cerebral Palsy. <i>Sensors</i> , 2015, 15, 24514-24529.	2.1	60
8	Sport Biomechanics Applications Using Inertial, Force, and EMG Sensors: A Literature Overview. <i>Applied Bionics and Biomechanics</i> , 2020, 2020, 1-18.	0.5	60
9	Feasibility Study of a Wearable Exoskeleton for Children: Is the Gait Altered by Adding Masses on Lower Limbs?. <i>PLoS ONE</i> , 2013, 8, e73139.	1.1	52
10	A markerless system for gait analysis based on OpenPose library. , 2020, , .		48
11	Polymer Materials for Respiratory Protection: Processing, End Use, and Testing Methods. <i>ACS Applied Polymer Materials</i> , 2021, 3, 531-548.	2.0	44
12	Robotic and clinical evaluation of upper limb motor performance in patients with Friedreichâ€™s Ataxia: an observational study. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2015, 12, 41.	2.4	42
13	Automatic Detection of Faults in Race Walking: A Comparative Analysis of Machine-Learning Algorithms Fed with Inertial Sensor Data. <i>Sensors</i> , 2019, 19, 1461.	2.1	40
14	Effect of changing visual condition and frequency of horizontal oscillations on postural balance of standing healthy subjects. <i>Gait and Posture</i> , 2008, 28, 615-626.	0.6	37
15	Validation of a 3D Markerless System for Gait Analysis Based on OpenPose and Two RGB Webcams. <i>IEEE Sensors Journal</i> , 2021, 21, 17064-17075.	2.4	35
16	Spasticity Measurement Based on Tonic Stretch Reflex Threshold in Children with Cerebral Palsy Using the PediAnklebot. <i>Frontiers in Human Neuroscience</i> , 2017, 11, 277.	1.0	33
17	Measuring Gait Quality in Parkinsonâ€™s Disease through Real-Time Gait Phase Recognition. <i>Sensors</i> , 2018, 18, 919.	2.1	33
18	Pediatric anklebot. , 2011, 2011, 5975410.		29

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19	Disability and Fatigue Can Be Objectively Measured in Multiple Sclerosis. PLoS ONE, 2016, 11, e0148997.	1.1	28
20	Concurrent repeatability and reproducibility analyses of four marker placement protocols for the foot-ankle complex. Journal of Biomechanics, 2016, 49, 3168-3176.	0.9	26
21	Adaptations of glutamatergic synapses in the striatum contribute to recovery from cerebellar damage. European Journal of Neuroscience, 2008, 27, 2188-2196.	1.2	25
22	On the Reliability and Repeatability of Surface Electromyography Factorization by Muscle Synergies in Daily Life Activities. Applied Bionics and Biomechanics, 2018, 2018, 1-15.	0.5	24
23	A Machine-Learning Approach to Measure the Anterior Cruciate Ligament Injury Risk in Female Basketball Players. Sensors, 2021, 21, 3141.	2.1	24
24	Quantification of postural stability in minimally disabled multiple sclerosis patients by means of dynamic posturography: an observational study. Journal of NeuroEngineering and Rehabilitation, 2017, 14, 4.	2.4	21
25	A Redundant Accelerometric Cluster for the Measurement of Translational and Angular Acceleration and Angular Velocity of the Head. Journal of Medical Devices, Transactions of the ASME, 2007, 1, 14-22.	0.4	20
26	Evaluation of the effects on stride-to-stride variability and gait asymmetry in children with Cerebral Palsy wearing the WAKE-up ankle module. , 2016, , .		20
27	Immediate effects of rhythmic auditory stimulation on gait kinematics in Parkinson's disease ON/OFF medication. Clinical Neurophysiology, 2019, 130, 1789-1797.	0.7	20
28	Effects of the calibration procedure on the metrological performances of stereophotogrammetric systems for human movement analysis. Measurement: Journal of the International Measurement Confederation, 2017, 101, 265-271.	2.5	19
29	How to choose and interpret similarity indices to quantify the variability in gait joint kinematics. International Biomechanics, 2018, 5, 1-8.	0.9	18
30	Reactive Postural Responses to Continuous Yaw Perturbations in Healthy Humans: The Effect of Aging. Sensors, 2020, 20, 63.	2.1	18
31	Quantification of Age-Related Differences in Reaching and Circle-Drawing using a Robotic Rehabilitation Device. Applied Bionics and Biomechanics, 2014, 11, 91-104.	0.5	16
32	Analysis of Knee Strength Measurements Performed by a Hand-Held Multicomponent Dynamometer and Optoelectronic System. IEEE Transactions on Instrumentation and Measurement, 2017, 66, 85-92.	2.4	15
33	WAKE-up: A wearable ankle knee exoskeleton. , 2014, , .		13
34	Inter-laboratory and inter-operator reproducibility in gait analysis measurements in pediatric subjects. International Biomechanics, 2019, 6, 19-33.	0.9	13
35	Assessing the Effects of Kata and Kumite Techniques on Physical Performance in Elite Karatekas. Sensors, 2020, 20, 3186.	2.1	13
36	Real-time gait detection based on Hidden Markov Model: Is it possible to avoid training procedure?. , 2015, , .		12

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37	Validation of Ankle Strength Measurements by Means of a Hand-Held Dynamometer in Adult Healthy Subjects. <i>Journal of Sensors</i> , 2017, 2017, 1-8.	0.6	10
38	Measuring age-related differences in kinematic postural strategies under yaw perturbation. , 2018, , .		9
39	Factorization of EMG via muscle synergies in walking task: Evaluation of intra-subject and inter-subject variability. , 2017, , .		9
40	Sex-specific tuning of modular muscle activation patterns for locomotion in young and older adults. <i>PLoS ONE</i> , 2022, 17, e0269417.	1.1	9
41	Impedance plethysmography system with inertial measurement units for motion artefact reduction: Application to continuous breath activity monitoring. , 2015, , .		8
42	Compensation to whole body active rotation perturbation. <i>Gait and Posture</i> , 2014, 39, 621-624.	0.6	7
43	Reliability and Repeatability Analysis of Indices to Measure Gait Deterioration in MS Patients during Prolonged Walking. <i>Sensors</i> , 2020, 20, 5063.	2.1	7
44	On the OCRA Measurement: Automatic Computation of the Dynamic Technical Action Frequency Factor. <i>Sensors</i> , 2020, 20, 1643.	2.1	7
45	A HMM distributed classifier to control robotic knee module of an active orthosis. , 2015, , .		6
46	Yaw Postural Perturbation Through Robotic Platform: Aging Effects on Muscle Synergies. , 2018, , .		6
47	Measuring changes in gait kinematics due to walking-related fatigue in patients with Multiple Sclerosis. , 2019, , .		6
48	BEAT: Balance Evaluation Automated Testbed for the standardization of balance assessment in human wearing exoskeleton. , 2020, , .		6
49	Repeatability and reproducibility in the breathability measurement of surgical masks. , 2021, , .		6
50	A wearable setup for auditory cued gait analysis in patients with Parkinson's Disease. , 2016, , .		5
51	Parkinson's disease and Levodopa effects on muscle synergies in postural perturbation. , 2019, , .		4
52	Automatic identification and counting of repetitive actions related to an industrial worker. , 2019, , .		4
53	Perturbed Point-to-Point Reaching Tasks in a 3D Environment Using a Portable Haptic Device. <i>Electronics (Switzerland)</i> , 2019, 8, 32.	1.8	4
54	Accuracy Evaluation and Clinical Application of an Optimized Solution for Measuring Spatio-Temporal Gait Parameters. , 2020, , .		4

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55	Using an ankle robotic device for motor performance and motor learning evaluation. Heliyon, 2020, 6, e03262.	1.4	4
56	Preventing and Monitoring Work-Related Diseases in Firefighters: A Literature Review on Sensor-Based Systems and Future Perspectives in Robotic Devices. International Journal of Environmental Research and Public Health, 2021, 18, 9723.	1.2	4
57	Performance evaluation of 3D reaching tasks using a low-cost haptic device and virtual reality. , 2017, , .		3
58	A novel protocol to evaluate ankle movements during reaching tasks using pediAnklebot. , 2017, 2017, 326-331.		3
59	Quantifying Age-Related Differences of Ankle Mechanical Properties Using a Robotic Device. Robotics, 2019, 8, 96.	2.1	3
60	Is the Neuromuscular Organization of Throwing Unchanged in Virtual Reality? Implications for Upper Limb Rehabilitation. Electronics (Switzerland), 2019, 8, 1495.	1.8	3
61	Sensor-Based Indices for the Prediction and Monitoring of Anterior Cruciate Ligament Injury: Reliability Analysis and a Case Study in Basketball. Sensors, 2021, 21, 5341.	2.1	3
62	On the Breathability Measurement of Surgical Masks: Uncertainty, Repeatability, and Reproducibility Analysis. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-9.	2.4	3
63	Measuring Kinematic Response to Perturbed Locomotion in Young Adults. Sensors, 2022, 22, 672.	2.1	3
64	Shoulder motor performance assessment in the sagittal plane in children with hemiplegia during single joint pointing tasks. BioMedical Engineering OnLine, 2014, 13, 106.	1.3	2
65	Estimation of multivariable dynamic ankle impedance after botulinum toxin injection in children with cerebral palsy. , 2016, , .		2
66	Muscle Synergies: Use and Validation in Clinics, Robotics, and Sports. Applied Bionics and Biomechanics, 2018, 2018, 1-2.	0.5	2
67	EMG factorization during walking: does digital filtering influence the accuracy in the evaluation of the muscle synergy number?. , 2018, , .		2
68	Dynamic Posturography: Perturbed equilibrium assessment on healthy adult subjects. , 2015, , .		1
69	A preliminary study on quality of knee strength measurements by means of Hand Held Dynamometer and Optoelectronic System. , 2015, , .		1
70	Can the measurements of leg stability during jump landing predict and monitor anterior cruciate ligament injury? A case report of basketball player. , 2020, , .		1
71	Experimental Measurement of the Ski Boot Stiffness in Sagittal and Frontal Planes. , 2008, , .		0
72	Effect of the calibration procedure of an optoelectronic system on the joint kinematics. , 2015, , .		0

#	ARTICLE	IF	CITATIONS
73	Submovement changes in goal-directed and non-goal-directed ankle movements using pediAnklebot. , 2018, , .		0
74	The assessment of inertial odometry system performance in tracking upper limb kinematics. , 2022, , .		0