Stefano Rossi

List of Publications by Year
in descending order

74	1,732	331259 21	315357 38
papers	citations	h-index	g-index

78	78	78	2085
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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
2	Measuring Kinematic Response to Perturbed Locomotion in Young Adults. Sensors, 2022, 22, 672.	2.1	3
3	Sex-specific tuning of modular muscle activation patterns for locomotion in young and older adults. PLoS ONE, 2022, 17, e0269417.	1.1	9
4	The assessment of inertial odometry system performance in tracking upper limb kinematics. , 2022, , .		0
5	Polymer Materials for Respiratory Protection: Processing, End Use, and Testing Methods. ACS Applied Polymer Materials, 2021, 3, 531-548.	2.0	44
6	A Machine-Learning Approach to Measure the Anterior Cruciate Ligament Injury Risk in Female Basketball Players. Sensors, 2021, 21, 3141.	2.1	24
7	Repeatability and reproducibility in the breathability measurement of surgical masks. , 2021, , .		6
8	Validation of a 3D Markerless System for Gait Analysis Based on OpenPose and Two RGB Webcams. IEEE Sensors Journal, 2021, 21, 17064-17075.	2.4	35
9	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
10	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
11	Reactive Postural Responses to Continuous Yaw Perturbations in Healthy Humans: The Effect of Aging. Sensors, 2020, 20, 63.	2.1	18
12	BEAT: Balance Evaluation Automated Testbed for the standardization of balance assessment in human wearing exoskeleton. , 2020, , .		6
13	Can the measurements of leg stability during jump landing predict and monitor anterior cruciate ligament injury? A case report of basketball player. , 2020, , .		1
14	Accuracy Evaluation and Clinical Application of an Optimized Solution for Measuring Spatio-Temporal Gait Parameters. , 2020, , .		4
15	Reliability and Repeatability Analysis of Indices to Measure Gait Deterioration in MS Patients during Prolonged Walking. Sensors, 2020, 20, 5063.	2.1	7
16	Assessing the Effects of Kata and Kumite Techniques on Physical Performance in Elite Karatekas. Sensors, 2020, 20, 3186.	2.1	13
17	On the OCRA Measurement: Automatic Computation of the Dynamic Technical Action Frequency Factor. Sensors, 2020, 20, 1643.	2.1	7
18	Sport Biomechanics Applications Using Inertial, Force, and EMG Sensors: A Literature Overview. Applied Bionics and Biomechanics, 2020, 2020, 1-18.	0.5	60

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19	Using an ankle robotic device for motor performance and motor learning evaluation. Heliyon, 2020, 6, e03262.	1.4	4
20	A markerless system for gait analysis based on OpenPose library. , 2020, , .		48
21	Immediate effects of rhythmic auditory stimulation on gait kinematics in Parkinsonâ€™s disease ON/OFF medication. Clinical Neurophysiology, 2019, 130, 1789-1797.	0.7	20
22	Inter-laboratory and inter-operator reproducibility in gait analysis measurements in pediatric subjects. International Biomechanics, 2019, 6, 19-33.	0.9	13
23	Parkinsonâ€™s disease and Levodopa effects on muscle synergies in postural perturbation. , 2019, , .		4
24	Automatic identification and counting of repetitive actions related to an industrial worker. , 2019, , .		4
25	Measuring changes in gait kinematics due to walking-related fatigue in patients with Multiple Sclerosis. , 2019, , .		6
26	Perturbed Point-to-Point Reaching Tasks in a 3D Environment Using a Portable Haptic Device. Electronics (Switzerland), 2019, 8, 32.	1.8	4
27	Automatic Detection of Faults in Race Walking: A Comparative Analysis of Machine-Learning Algorithms Fed with Inertial Sensor Data. Sensors, 2019, 19, 1461.	2.1	40
28	Quantifying Age-Related Differences of Ankle Mechanical Properties Using a Robotic Device. Robotics, 2019, 8, 96.	2.1	3
29	Is the Neuromuscular Organization of Throwing Unchanged in Virtual Reality? Implications for Upper Limb Rehabilitation. Electronics (Switzerland), 2019, 8, 1495.	1.8	3
30	How to choose and interpret similarity indices to quantify the variability in gait joint kinematics. International Biomechanics, 2018, 5, 1-8.	0.9	18
31	Muscle Synergies: Use and Validation in Clinics, Robotics, and Sports. Applied Bionics and Biomechanics, 2018, 2018, 1-2.	0.5	2
32	Yaw Postural Perturbation Through Robotic Platform: Aging Effects on Muscle Synergies. , 2018, , .		6
33	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
34	Measuring age-related differences in kinematic postural strategies under yaw perturbation. , 2018, , .		9
35	Submovement changes in goal-directed and non-goal-directed ankle movements using pediAnklebot. , 2018, , .		0
36	Feasibility of Muscle Synergy Outcomes in Clinics, Robotics, and Sports: A Systematic Review. Applied Bionics and Biomechanics, 2018, 2018, 1-19.	0.5	70

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37	Measuring Gait Quality in Parkinsonâ€™s Disease through Real-Time Gait Phase Recognition. Sensors, 2018, 18, 919.	2.1	33
38	EMG factorization during walking: does digital filtering influence the accuracy in the evaluation of the muscle synergy number?. , 2018, , .		2
39	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
40	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
41	WAKE-Up Exoskeleton to Assist Children With Cerebral Palsy: Design and Preliminary Evaluation in Level Walking. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 906-916.	2.7	67
42	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
43	Performance evaluation of 3D reaching tasks using a low-cost haptic device and virtual reality. , 2017, , .		3
44	A novel protocol to evaluate ankle movements during reaching tasks using pediAnklebot. , 2017, 2017, 326-331.		3
45	Spasticity Measurement Based on Tonic Stretch Reflex Threshold in Children with Cerebral Palsy Using the PediAnklebot. Frontiers in Human Neuroscience, 2017, 11, 277.	1.0	33
46	Validation of Ankle Strength Measurements by Means of a Hand-Held Dynamometer in Adult Healthy Subjects. Journal of Sensors, 2017, 2017, 1-8.	0.6	10
47	Factorization of EMG via muscle synergies in walking task: Evaluation of intra-subject and inter-subject variability. , 2017, , .		9
48	Gait Partitioning Methods: A Systematic Review. Sensors, 2016, 16, 66.	2.1	261
49	Disability and Fatigue Can Be Objectively Measured in Multiple Sclerosis. PLoS ONE, 2016, 11, e0148997.	1.1	28
50	A wearable setup for auditory cued gait analysis in patients with Parkinson's Disease. , 2016, , .		5
51	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
52	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
53	Estimation of multivariable dynamic ankle impedance after botulinum toxin injection in children with cerebral palsy. , 2016, , .		2
54	A HMM distributed classifier to control robotic knee module of an active orthosis. , 2015, , .		6

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55	Dynamic Posturography: Perturbed equilibrium assessment on healthy adult subjects. , 2015, , .		1
56	Robotic and clinical evaluation of upper limb motor performance in patients with Friedreichâ€™s Ataxia: an observational study. Journal of NeuroEngineering and Rehabilitation, 2015, 12, 41.	2.4	42
57	Validation of Inter-Subject Training for Hidden Markov Models Applied to Gait Phase Detection in Children with Cerebral Palsy. Sensors, 2015, 15, 24514-24529.	2.1	60
58	Effect of the calibration procedure of an optoelectronic system on the joint kinematics. , 2015, , .		0
59	Impedance plethysmography system with inertial measurement units for motion artefact reduction: Application to continuous breath activity monitoring. , 2015, , .		8
60	Robot-Aided Neurorehabilitation: A Pediatric Robot for Ankle Rehabilitation. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2015, 23, 1056-1067.	2.7	76
61	Real-time gait detection based on Hidden Markov Model: Is it possible to avoid training procedure?. , 2015, , .		12
62	A preliminary study on quality of knee strength measurements by means of Hand Held Dynamometer and Optoelectronic System. , 2015, , .		1
63	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
64	A Novel HMM Distributed Classifier for the Detection of Gait Phases by Means of a Wearable Inertial Sensor Network. Sensors, 2014, 14, 16212-16234.	2.1	105
65	WAKE-up: A wearable ankle knee exoskeleton. , 2014, , .		13
66	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
67	Experimental evaluation of accuracy and repeatability of a novel body-to-sensor calibration procedure for inertial sensor-based gait analysis. Measurement: Journal of the International Measurement Confederation, 2014, 52, 145-155.	2.5	136
68	Compensation to whole body active rotation perturbation. Gait and Posture, 2014, 39, 621-624.	0.6	7
69	Feasibility Study of a Wearable Exoskeleton for Children: Is the Gait Altered by Adding Masses on Lower Limbs?. PLoS ONE, 2013, 8, e73139.	1.1	52
70	Pediatric anklebot. , 2011, 2011, 5975410.		29
71	Adaptations of glutamatergic synapses in the striatum contribute to recovery from cerebellar damage. European Journal of Neuroscience, 2008, 27, 2188-2196.	1.2	25
72	Effect of changing visual condition and frequency of horizontal oscillations on postural balance of standing healthy subjects. Gait and Posture, 2008, 28, 615-626.	0.6	37

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73	Experimental Measurement of the Ski Boot Stiffness in Sagittal and Frontal Planes. , 2008, , .		0
74	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