Andrea Mannini

List of Publications by Year
in descending order

59 papers	**2,188** citations	430442 **18** h-index	276539 **41** g-index
60 all docs	**60** docs citations	**60** times ranked	**2820** citing authors

#	Article	IF	Citations
1	Machine Learning Methods for Classifying Human Physical Activity from On-Body Accelerometers. Sensors, 2010, 10, 1154-1175.	2.1	624
2	Activity Recognition Using a Single Accelerometer Placed at the Wrist or Ankle. Medicine and Science in Sports and Exercise, 2013, 45, 2193-2203.	0.2	317
3	A Machine Learning Framework for Gait Classification Using Inertial Sensors: Application to Elderly, Post-Stroke and Huntington's Disease Patients. Sensors, 2016, 16, 134.	2.1	190
4	Gait phase detection and discrimination between walking–jogging activities using hidden Markov models applied to foot motion data from a gyroscope. Gait and Posture, 2012, 36, 657-661.	0.6	130
5	Online Decoding of Hidden Markov Models for Gait Event Detection Using Foot-Mounted Gyroscopes. IEEE Journal of Biomedical and Health Informatics, 2014, 18, 1122-1130.	3.9	99
6	A hidden Markov model-based technique for gait segmentation using a foot-mounted gyroscope. , 2011, 2011, 4369-73.		70
7	Prior-to- and Post-Impact Fall Detection Using Inertial and Barometric Altimeter Measurements. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2016, 24, 774-783.	2.7	62
8	Activity Recognition in Youth Using Single Accelerometer Placed at Wrist or Ankle. Medicine and Science in Sports and Exercise, 2017, 49, 801-812.	0.2	61
9	Walking speed estimation using foot-mounted inertial sensors: Comparing machine learning and strap-down integration methods. Medical Engineering and Physics, 2014, 36, 1312-1321.	0.8	49
10	Accelerometry-Based Classification of Human Activities Using Markov Modeling. Computational Intelligence and Neuroscience, 2011, 2011, 1-10.	1.1	48
11	Accelerometry-based recognition of the placement sites of a wearable sensor. Pervasive and Mobile Computing, 2015, 21, 62-74.	2.1	40
12	Wearable Sensors in Sports for Persons with Disability: A Systematic Review. Sensors, 2021, 21, 1858.	2.1	37
13	Grasp force estimation from the transient EMG using high-density surface recordings. Journal of Neural Engineering, 2020, 17, 016052.	1.8	32
14	Classifier Personalization for Activity Recognition Using Wrist Accelerometers. IEEE Journal of Biomedical and Health Informatics, 2019, 23, 1585-1594.	3.9	31
15	A Smartwatch Step Counter for Slow and Intermittent Ambulation. IEEE Access, 2017, 5, 13028-13037.	2.6	30
16	Machine learning methods for functional recovery prediction and prognosis in post-stroke rehabilitation: a systematic review. Journal of NeuroEngineering and Rehabilitation, 2022, 19, .	2.4	28
17	Hidden Markov model-based strategy for gait segmentation using inertial sensors: Application to elderly, hemiparetic patients and Huntington's disease patients. , 2015, 2015, 5179-82.		25
18	A Wearable Magnetometer-Free Motion Capture System: Innovative Solutions for Real-World Applications. IEEE Sensors Journal, 2020, 20, 8844-8857.	2.4	25

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19	Fourier-based integration of quasi-periodic gait accelerations for drift-free displacement estimation using inertial sensors. BioMedical Engineering OnLine, 2015, 14, 106.	1.3	23
20	On-line classification of human activity and estimation of walk-run speed from acceleration data using support vector machines. , 2011, 2011, 3302-5.		22
21	Online Grasp Force Estimation From the Transient EMG. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 2333-2341.	2.7	21
22	Elastomeric contractile actuators for hand rehabilitation splints. , 2008, , .		18
23	Automatic classification of gait in children with early-onset ataxia or developmental coordination disorder and controls using inertial sensors. Gait and Posture, 2017, 52, 287-292.	0.6	18
24	Physical activity characterization: does one site fit all?. Physiological Measurement, 2018, 39, 09TR02.	1.2	18
25	Predictors of Function, Activity, and Participation of Stroke Patients Undergoing Intensive Rehabilitation: A Multicenter Prospective Observational Study Protocol. Frontiers in Neurology, 2021, 12, 632672.	1.1	15
26	Data-driven prediction of decannulation probability and timing in patients with severe acquired brain injury. Computer Methods and Programs in Biomedicine, 2021, 209, 106345.	2.6	12
27	Clinical, Neurophysiological, and Genetic Predictors of Recovery in Patients With Severe Acquired Brain Injuries (PRABI): A Study Protocol for a Longitudinal Observational Study. Frontiers in Neurology, 2022, 13, 711312.	1.1	11
28	Wearable Inertial Sensing for ICT Management of Fall Detection, Fall Prevention, and Assessment in Elderly. Technologies, 2018, 6, 91.	3.0	10
29	Ambulatory Assessment of the Dynamic Margin of Stability Using an Inertial Sensor Network. Sensors, 2019, 19, 4117.	2.1	9
30	Critical illness polyneuromyopathy: Functional impact after severe acquired brain injuries. Acta Neurologica Scandinavica, 2020, 142, 574-584.	1.0	9
31	Merging Clinical and EEG Biomarkers in an Elastic-Net Regression for Disorder of Consciousness Prognosis Prediction. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2022, 30, 1504-1513.	2.7	9
32	Contractile and Buckling Actuators Based on Dielectric Elastomers: Devices and Applications. Advances in Science and Technology, 2008, 61, 186-191.	0.2	8
33	Ambulatory Assessment of Instantaneous Velocity during Walking Using Inertial Sensor Measurements. Sensors, 2016, 16, 2206.	2.1	8
34	Optimal Spatial Sensor Design for Magnetic Tracking in a Myokinetic Control Interface. Computer Methods and Programs in Biomedicine, 2021, 211, 106407.	2.6	8
35	Critical Illness Polyneuropathy and Myopathy and Clinical Detection of the Recovery of Consciousness in Severe Acquired Brain Injury Patients with Disorders of Consciousness after Rehabilitation. Diagnostics, 2022, 12, 516.	1.3	8
36	Performance assessment in archery: a systematic review. Sports Biomechanics, 2022, , 1-23.	0.8	7

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37	Dynamic Splint-Like Hand Orthosis for Finger Rehabilitation. , 0, , 443-461.		6
38	An Innovative Sensor Fusion Algorithm for Motion Tracking With On-Line Bias Compensation: Application to Joint Angles Estimation in Yoga. IEEE Sensors Journal, 2021, 21, 21285-21294.	2.4	6
39	Healthcare and Accelerometry: Applications for Activity Monitoring, Recognition, and Functional Assessment. , 2016, , 21-49.		6
40	A smartphone-centered wearable sensor network for fall risk assessment in the elderly. , 2015, , .		6
41	Sport-induced fatigue detection in gait parameters using inertial sensors and support vector machines. , 2020, , .		5
42	The methodology of a â€œlivingâ€•COVID-19 registry development in a clinical context. Journal of Clinical Epidemiology, 2022, 142, 209-217.	2.4	4
43	Grasp Force Estimation from HD-EMG Recordings with Channel Selection Using Elastic Nets: Preliminary Study. , 2018, , .		3
44	Mortality and characteristics of older people dying with COVID-19 in Lombardy nursing homes, Italy: An observational cohort study. Journal of Research in Medical Sciences, 2021, 26, 40.	0.4	3
45	Predicting post COVID-19 rehabilitation duration with linear kernel SVR. , 2021, , .		3
46	Assessment of Biomechanical Response to Fatigue through Wearable Sensors in Semi-Professional Football Referees. Sensors, 2021, 21, 66.	2.1	3
47	Critical issue on the extinction and inattention subtest of NIHSS scale: an analysis on post-acute stroke patients attending inpatient rehabilitation. BMC Neurology, 2021, 21, 475.	0.8	3
48	Effects of COVID-19 pandemic on intensive rehabilitation after severe acquired brain injuries. Neurological Sciences, 2021, 43, 791.	0.9	2
49	Factors influencing trunk control recovery after intensive rehabilitation in post-stroke patients: a multicentre prospective study. Topics in Stroke Rehabilitation, 2023, 30, 109-118.	1.0	2
50	Predicting SARS-CoV-2 infection duration at hospital admission:a deep learning solution. Medical and Biological Engineering and Computing, 2022, 60, 459-470.	1.6	2
51	Impact of decompressive craniectomy on functional outcome of severe acquired brain injuries patients, at discharge from intensive inpatient rehabilitation. Disability and Rehabilitation, 2021, , 1-7.	0.9	1
52	Feasibility Study on Disentangling Muscle Movements in TMR Patients Through a Myokinetic Control Interface for the Control of Artificial Hands. IEEE Robotics and Automation Letters, 2022, 7, 7240-7246.	3.3	1
53	Evaluation of time-frequency features as detectors of lack of balance due to tripping-like perturbations. , 2019, 2019, 2443-2446.		0
54	Ballistic skills assessment in semi-professional football players through inertial sensors: the effects of COVID-19 forced rest period. , 2021, , .		0

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55	Deep Echo State Networks for Functional Ambulation Categories Estimation. , 2021, , .		0
56	Step counting for slow and intermittent ambulation based on a smartwatch accelerometer. , 2017, , .		0
57	Effects of Gait Speed on the Margin of Stability in Healthy Young Adults. Biosystems and Biorobotics, 2019, , 420-424.	0.2	0
58	The â€œchronically critical illâ€•patient: characteristics of a population of patients admitted to a pulmonary rehabilitation unit. , 2020, , .		0
59	Quantitative Analysis of Performance Recovery in Semi-Professional Football Players after the COVID-19 Forced Rest Period. Sensors, 2022, 22, 242.	2.1	0