Giovanni D'Addio

List of Publications by Year
in descending order

89 papers	1,346 citations	471509 17 h-index	454955 30 g-index
98 all docs	98 docs citations	98 times ranked	1193 citing authors

#	Article	IF	Citations
1	Bidimensional and Tridimensional Poincaré Maps in Cardiology: A Multiclass Machine Learning Study. Electronics (Switzerland), 2022, 11, 448.	3.1	12
2	A Machine Learning Approach to Predict the Rehabilitation Outcome in Convalescent COVID-19 Patients. Journal of Personalized Medicine, 2022, 12, 328.	2.5	4
3	Statistical Analysis and Kinematic Assessment of Upper Limb Reaching Task in Parkinson's Disease. Sensors, 2022, 22, 1708.	3.8	5
4	Benchmarking between two wearable inertial systems for gait analysis based on a different sensor placement using several statistical approaches. Measurement: Journal of the International Measurement Confederation, 2021, 173, 108642.	5.0	31
5	Positive impact of short-term gait rehabilitation in Parkinson patients: a combined approach based on statistics and machine learning. Mathematical Biosciences and Engineering, 2021, 18, 6995-7009.	1.9	28
6	Evaluation of Grip Force and Energy Efficiency of the "Federica" Hand. Machines, 2021, 9, 25.	2.2	15
7	Gait analysis may distinguish progressive supranuclear palsy and Parkinson disease since the earliest stages. Scientific Reports, 2021, 11, 9297.	3.3	16
8	Heart rate turbulence in obstructive sleep apnea syndrome: The effect of short-term CPAP therapy. European Journal of Internal Medicine, 2021, 86, 111-114.	2.2	1
9	Work-Related Risk Assessment According to the Revised NIOSH Lifting Equation: A Preliminary Study Using a Wearable Inertial Sensor and Machine Learning. Sensors, 2021, 21, 2593.	3.8	35
10	Reliability of kinematic parameters related to the Timed Up and Go Test in patients with gait impairments. , 2021, , .		1
11	Analysis of Test-Retest Repeatability of Gait Analysis Parameters in Hereditary Spastic Paraplegia. , 2021, , .		6
12	Statistical correlation analysis between kinematic features and clinical indexes and scales for obese patients. , 2021, , .		1
13	Design and validation of an e-textile-based wearable system for remote health monitoring. Acta IMEKO (2012), 2021, 10, 220.	0.7	7
14	Gait Analysis using Wearable E-Textile Sock: an Experimental Study of Test-Retest Reliability. , 2021, , .		7
15	Extracting Features from Poincaré Plots to Distinguish Congestive Heart Failure Patients According to NYHA Classes. Bioengineering, 2021, 8, 138.	3.5	16
16	Influence of the Backpack on School Children's Gait: A Statistical and Machine Learning Approach. IFMBE Proceedings, 2021, , 682-688.	0.3	8
17	The E-Textile for Biomedical Applications: A Systematic Review of Literature. Diagnostics, 2021, 11, 2263.	2.6	6
18	A multiple linear regression approach to extimate lifted load from features extracted from inertial data.. Giornale Italiano Di Medicina Del Lavoro Ed Ergonomia, 2021, 43, 373-378.	0.3	0

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19	Rehabilitation Outcome in Patients undergone Hip or Knee Replacement Surgery using Inertial Technology for Gait Analysis. , 2020, , .		16
20	Experimental Development and Validation of an E-Textile Sock Prototype. , 2020, , .		11
21	Repeatability of Spatio-Temporal Gait Measurements in Parkinsonâ€™s Disease. , 2020, , .		11
22	Machine learning to predict mortality after rehabilitation among patients with severe stroke. Scientific Reports, 2020, 10, 20127.	3.3	48
23	Design and Validation of an E-Textile-Based Wearable Sock for Remote Gait and Postural Assessment. Sensors, 2020, 20, 6691.	3.8	30
24	Classifying patients affected by Parkinsonâ€™s disease into freezers or non-freezers through machine learning. , 2020, , .		7
25	Machine learning models for the prediction of acuity and variability of eye-positioning using features extracted from oculography. Health and Technology, 2020, 10, 961-968.	3.6	21
26	A quantitative analysis of muscular co-activation on EMG signals in spastic patients treated with Botulinum toxin. , 2020, , .		1
27	Backpack Influence on Kinematic Parameters related to Timed Up and Go (TUG) Test in School Children. , 2020, , .		14
28	Machine learning can detect the presence of Mild cognitive impairment in patients affected by Parkinsonâ€™s Disease. , 2020, , .		20
29	Feasibility of Machine Learning in Predicting Features Related to Congenital Nystagmus. IFMBE Proceedings, 2020, , 907-913.	0.3	21
30	Classifying Different Stages of Parkinsonâ€™s Disease Through Random Forests. IFMBE Proceedings, 2020, , 1155-1162.	0.3	20
31	Potential Biomechanical Overload on Skeletal Muscle Structures in Students During Walk with Backpack. IFMBE Proceedings, 2020, , 262-266.	0.3	8
32	Experimental Study to Improve â€œFedericaâ€•Prosthetic Hand and Its Control System. IFMBE Proceedings, 2020, , 586-593.	0.3	5
33	Efficacy of Machine Learning in Predicting the Kind of Delivery by Cardiotocography. IFMBE Proceedings, 2020, , 793-799.	0.3	25
34	Improvements of a Simple Piezoresistive Array Armband for Gesture Recognition. , 2020, , .		1
35	Using gait analysisâ€™ parameters to classify Parkinsonism: A data mining approach. Computer Methods and Programs in Biomedicine, 2019, 180, 105033.	4.7	54
36	A novel approach to estimate the upper limb reaching movement in three-dimensional space. Informatics in Medicine Unlocked, 2019, 15, 100155.	3.4	15

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37	Development of a Prototype E-Textile Sock*. , 2019, 2019, 17498-1752.		15
38	Phenomenological models of NaV1.5. A side by side, procedural, hands-on comparison between Hodgkin-Huxley and kinetic formalisms. Scientific Reports, 2019, 9, 17493.	3.3	7
39	Agreement between Opal and G-Walk Wearable Inertial Systems in Gait Analysis on Normal and Pathological Subjects. , 2019, 2019, 3286-3289.		31
40	A Piezoresistive Array Armband With Reduced Number of Sensors for Hand Gesture Recognition. Frontiers in Neurorobotics, 2019, 13, 114.	2.8	48
41	Efficacy of the Regent Suit-based rehabilitation on gait EMG patterns in hemiparetic subjects: a pilot study. European Journal of Physical and Rehabilitation Medicine, 2018, 54, 705-716.	2.2	7
42	A hybrid decomposition method to infer the sub-movements composition of planar reaching movements. Informatics in Medicine Unlocked, 2017, 9, 210-218.	3.4	3
43	Quick-response coding system for tracking rehabilitation treatments in clinical setting. , 2017, , .		1
44	Computerised simulation of fetal heart rate signals. , 2017, , .		0
45	Laser Speckle Imaging of Rat Pial Microvasculature during Hypoperfusion-Reperfusion Damage. Frontiers in Cellular Neuroscience, 2017, 11, 298.	3.7	5
46	Dietary protein intake in sarcopenic obese older women. Clinical Interventions in Aging, 2016, 11, 133.	2.9	63
47	Effects of wavelets analysis on power spectral distributions in posturographic signal processing. , 2016, , .		5
48	New posturographic assessment by means of novel e-textile and wireless socks device. , 2016, , .		17
49	Analysis of reaching movements of upper arm in robot assisted exercises. Kinematic assessment of robot assisted upper arm reaching single-joint movements. Giornale Italiano Di Medicina Del Lavoro Ed Ergonomia, 2016, 38, 116-27.	0.3	3
50	Bioengineering activities in proprioceptive and robotic rehabilitation at Salvatore Maugeri Foundation. , 2015, , .		10
51	The effects of the vibratory stimulation of the neck muscles for the evaluation of stepping performance in Parkinson's Disease. , 2015, , .		19
52	Submovements composition and quality assessment of reaching movements in subjects with Parkinson's Disease. , 2015, , .		12
53	Changes in frequency components of blood flow oscillations in hyperglycemic obese people. , 2014, , .		2
54	Fractal behavior of heart rate variability during ECG stress test in cardiac patients. , 2014, , .		3

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55	Characterization of apnea events in sleep breathing disorder by local assessment of the fractal dimension of heart rate. , 2014, , .		0
56	Blood flow oscillatory patterns in single vessels of rat pial microcirculation evaluated by laser speckle imaging. , 2014, , .		0
57	A low-cost force sensor-based posturographic plate for home care telerehabilitation exergaming. Measurement: Journal of the International Measurement Confederation, 2014, 51, 400-410.	5.0	16
58	Comparison of measured and predicted reaching movements with a robotic rehabilitation device. , 2014, , .		14
59	Relationships between linear and nonlinear indexes of heart rate variability in obstructive sleep apnea syndrome. , 2014, , .		0
60	Symbolic dynamic and frequency analysis in foetal monitoring. , 2014, , .		34
61	Comparison between clinical and instrumental assessing using Wii Fit system on balance control. , 2014, , .		18
62	Microvascular blood flow regulation impairments in hypertensive obese people. , 2014, , .		4
63	Outliers Detection and Processing in CTG Monitoring. IFMBE Proceedings, 2014, , 651-654.	0.3	9
64	Kinematic Indexes' Reproducibility of Horizontal Reaching Movements. IFMBE Proceedings, 2014, , 81-84.	0.3	9
65	Effects of Wavelets Analysis on Power Spectral Distributions in Laser Doppler Flowmetry Time Series. IFMBE Proceedings, 2014, , 647-650.	0.3	5
66	Effects of Regent Suit on lower limb electromyographic patterns. , 2013, , .		1
67	Relationships of kinematics indexes with amplitude and velocity of upper arm reaching movement. , 2013, , .		9
68	Individual identification using electrocardiogram morphology. , 2013, , .		7
69	Spline interpolation to evaluate foveation parameters in Congenital Nystagmus recordings. , 2013, , .		0
70	Frequency domain and symbolic dynamics analysis for the study of cardiac pathologies. , 2013, , .		1
71	Symbolic dynamics in cardiotocographic monitoring. , 2013, , .		7
72	Reproducibility of kinematics indexes of upper arm reaching movement in robot assisted therapy. , 2012, , .		3

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73	Kinematic and EMG patterns evaluation of upper arm reaching movements. , 2012, , .		14
74	In-Time Prognosis Based on Swarm Intelligence for Home-Care Monitoring: A Case Study on Pulmonary Disease. IEEE Sensors Journal, 2012, 12, 692-698.	4.7	20
75	A telemedicine home care based activity monitor device. , 2011, , .		3
76	Kinematics patterns of upper arm reaching movement in robot-mediated therapy. , 2011, , .		13
77	Day-Time and Night-Time HRV Ultradian Rhythms in Normal and Pathological Subjects. IFMBE Proceedings, 2011, , 450-453.	0.3	2
78	A case of pulmonary hyperinflation in chronic heart failure: role of diuretic therapy and cardiorespiratory rehabilitation. Clinical Management Issues, 2011, 5, 55-60.	0.3	0
79	Reproducibility of heart rate turbulence indexes in heart failure patients. , 2010, 2010, 2573-6.		5
80	Correlation between Fractal Behavior of HRV and Neurohormonal and Functional Indexes in Chronic Heart Failure. IFMBE Proceedings, 2010, , 53-56.	0.3	2
81	Heart rate variability and drawing impairment in hypoxemic COPD. Brain and Cognition, 2009, 70, 163-170.	1.8	26
82	Assessment of cardiovascular regulation through irreversibility analysis of heart period variability: a 24 hours Holter study in healthy and chronic heart failure populations. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2009, 367, 1359-1375.	3.4	57
83	Fractal behaviour of pathological heart rate variability dynamics. WIT Transactions on Biomedicine and Health, 2009, , .	0.0	3
84	An integrated approach based on uniform quantization for the evaluation of complexity of short-term heart period variability: Application to 24h Holter recordings in healthy and heart failure humans. Chaos, 2007, 17, 015117.	2.5	118
85	Nonlinear Indices of Heart Rate Variability in Chronic Heart Failure Patients: Redundancy and Comparative Clinical Value. Journal of Cardiovascular Electrophysiology, 2007, 18, 425-433.	1.7	121
86	Clinical correlates of non-linear indices of heart rate variability in chronic heart failure patients. Biomedizinische Technik, 2006, 51, 220-223.	0.8	14
87	Linear and non-linear indices of heart rate variability in chronic heart failure: mutual interrelationships and prognostic value. , 2005, , .		4
88	Symbolic analysis of 24h holter heart period variability series: comparison between normal and heart failure patients. , 2005, , .		14
89	Congenital mono-ophthalmia syndrome. Strabismus, 1995, 3, 157-162.	0.7	0