Alberto Ranavolo

List of Publications by Year
in descending order

90 papers	2,265 citations	201674 27 h-index	254184 43 g-index
96 all docs	96 docs citations	96 times ranked	2031 citing authors

#	Article	IF	Citations
1	Identification of Gait Unbalance and Fallers Among Subjects with Cerebellar Ataxia by a Set of Trunk Acceleration-Derived Indices of Gait. Cerebellum, 2023, 22, 46-58.	2.5	15
2	Kerbside Waste Collection Round Risk Assessment by Means of Physiological Parameters: sEMG and Heart Rate. Lecture Notes in Networks and Systems, 2022, , 191-199.	0.7	0
3	Human-Robot Collaboration (HRC) Technologies for Reducing Work-Related Musculoskeletal Diseases in Industry 4.0. Lecture Notes in Networks and Systems, 2022, , 335-342.	0.7	5
4	Trunk Muscle Coactivation in People with and without Low Back Pain during Fatiguing Frequency-Dependent Lifting Activities. Sensors, 2022, 22, 1417.	3.8	5
5	Characterizing the Gait of People With Different Types of Amputation and Prosthetic Components Through Multimodal Measurements: A Methodological Perspective. Frontiers in Rehabilitation Sciences, 2022, 3, .	1.2	8
6	Consensus Paper: Ataxic Gait. Cerebellum, 2022, , 1.	2.5	9
7	Trunk muscle co-activation and activity in one- and two-person lifting. International Journal of Industrial Ergonomics, 2022, 89, 103297.	2.6	3
8	Machine Learning Approach to Support the Detection of Parkinson's Disease in IMU-Based Gait Analysis. Sensors, 2022, 22, 3700.	3.8	29
9	sEMG and Postural Analysis for Biomechanical Risk Assessment in a Banknotes Printing Process. Lecture Notes in Networks and Systems, 2021, , 297-304.	0.7	0
10	Ergonomic Risk Assessment of Sea Fisherman Part IV: Tunisian Chapter. Lecture Notes in Networks and Systems, 2021, , 157-167.	0.7	0
11	An artificial neural network approach to detect presence and severity of Parkinson's disease via gait parameters. PLoS ONE, 2021, 16, e0244396.	2.5	28
12	Ability of a Set of Trunk Inertial Indexes of Gait to Identify Gait Instability and Recurrent Fallers in Parkinson's Disease. Sensors, 2021, 21, 3449.	3.8	13
13	Bipolar versus high-density surface electromyography for evaluating risk in fatiguing frequency-dependent lifting activities. Applied Ergonomics, 2021, 95, 103456.	3.1	14
14	Ability of a set of trunk acceleration-derived gait stability indexes to identify gait unbalance and recurrent fallers in subjects with Parkinson's disease. Journal of the Neurological Sciences, 2021, 429, 117670.	0.6	0
15	Modular Control of Kinematics in Prosthetic Gait: Low-Dimensional Description Based on the Planar Covariation Law. IFMBE Proceedings, 2021, , 833-839.	0.3	2
16	2.4 GHz BLE-based Smart Sensing System for Remote Monitoring of Health, Safety and Comfort at Workplace. , 2021, , .		1
17	The Effects of Upper-Body Exoskeletons on Human Metabolic Cost and Thermal Response during Work Tasks—A Systematic Review. International Journal of Environmental Research and Public Health, 2020, 17, 7374.	2.6	38
18	Global lower limb muscle coactivation during walking in trans-femoral and trans-tibial amputees. , 2020, , .		0

#	Article	IF	Citations
19	Critical Issues and Imminent Challenges in the Use of sEMG in Return-To-Work Rehabilitation of Patients Affected by Neurological Disorders in the Epoch of Human–Robot Collaborative Technologies. Frontiers in Neurology, 2020, 11, 572069.	2.4	10
20	The Sensor-Based Biomechanical Risk Assessment at the Base of the Need for Revising of Standards for Human Ergonomics. Sensors, 2020, 20, 5750.	3.8	31
21	Impairment of Global Lower Limb Muscle Coactivation During Walking in Cerebellar Ataxias. Cerebellum, 2020, 19, 583-596.	2.5	12
22	Global Muscle Coactivation of the Sound Limb in Gait of People with Transfemoral and Transtibial Amputation. Sensors, 2020, 20, 2543.	3.8	19
23	Smart Collaborative Systems for Enabling Flexible and Ergonomic Work Practices [Industry Activities]. IEEE Robotics and Automation Magazine, 2020, 27, 169-176.	2.0	40
24	Pelvic obliquity as a compensatory mechanism leading to lower energy recovery: Characterization among the types of prostheses in subjects with transfemoral amputation. Gait and Posture, 2020, 80, 280-284.	1.4	8
25	Lifting Activity Assessment Using Kinematic Features and Neural Networks. Applied Sciences (Switzerland), 2020, 10, 1989.	2.5	23
26	Back and Shoulder Biomechanical Load in Curbside Waste Workers. Advances in Intelligent Systems and Computing, 2020, , 237-243.	0.6	1
27	Prediction of Responsiveness of Gait Variables to Rehabilitation Training in Parkinson's Disease. Frontiers in Neurology, 2019, 10, 826.	2.4	29
28	Modular motor control of the sound limb in gait of people with trans-femoral amputation. Journal of NeuroEngineering and Rehabilitation, 2019, 16, 132.	4.6	17
29	The Working Life of People with Degenerative Cerebellar Ataxia. Cerebellum, 2019, 18, 910-921.	2.5	8
30	Progressive Modular Rebalancing System and Visual Cueing for Gait Rehabilitation in Parkinson's Disease: A Pilot, Randomized, Controlled Trial With Crossover. Frontiers in Neurology, 2019, 10, 902.	2.4	15
31	Common and specific gait patterns in people with varying anatomical levels of lower limb amputation and different prosthetic components. Human Movement Science, 2019, 66, 9-21.	1.4	28
32	Locomotor coordination in patients with Hereditary Spastic Paraplegia. Journal of Electromyography and Kinesiology, 2019, 45, 61-69.	1.7	26
33	Applied Forces and sEMG Activity Contribution to Risk Assessment for Assistance Workers Helping Passengers with Restricted Mobility. Advances in Intelligent Systems and Computing, 2019, , 218-226.	0.6	0
34	sEMG Activity Contribution to Risk Assessment for PRM Assistance Workers. Advances in Intelligent Systems and Computing, 2019, , 357-362.	0.6	0
35	Biomechanical characterization of the Junzuki karate punch: indexes of performance. European Journal of Sport Science, 2018, 18, 796-805.	2.7	11
36	Lifting activity assessment using surface electromyographic features and neural networks. International Journal of Industrial Ergonomics, 2018, 66, 1-9.	2.6	36

#	Article	IF	Citations
37	Dataset on gait patterns in degenerative neurological diseases. Data in Brief, 2018, 16, 806-816.	1.0	10
38	Differential changes in the spinal segmental locomotor output in Hereditary Spastic Paraplegia. Clinical Neurophysiology, 2018, 129, 516-525.	1.5	20
39	Identification of specific gait patterns in patients with cerebellar ataxia, spastic paraplegia, and Parkinson's disease: A non-hierarchical cluster analysis. Human Movement Science, 2018, 57, 267-279.	1.4	36
40	Myoelectric manifestation of muscle fatigue in repetitive work detected by means of miniaturized sEMG sensors. International Journal of Occupational Safety and Ergonomics, 2018, 24, 464-474.	1.9	16
41	Effect of Restraining the Base of Support on the Other Biomechanical Features in Patients with Cerebellar Ataxia. Cerebellum, 2018, 17, 264-275.	2.5	9
42	Global lower limb muscle coactivation during walking at different speeds: Relationship between spatio-temporal, kinematic, kinetic, and energetic parameters. Journal of Electromyography and Kinesiology, 2018, 43, 148-157.	1.7	19
43	Wearable Monitoring Devices for Biomechanical Risk Assessment at Work: Current Status and Future Challenges—A Systematic Review. International Journal of Environmental Research and Public Health, 2018, 15, 2001.	2.6	82
44	Surface electromyography for risk assessment in work activities designed using the "revised NIOSH lifting equation". International Journal of Industrial Ergonomics, 2018, 68, 34-45.	2.6	35
45	Neurophysiology of gait. Handbook of Clinical Neurology / Edited By P J Vinken and G W Bruyn, 2018, 154, 299-303.	1.8	7
46	Upper Limb Repetitive Movement Risk Assessment by Means of sEMG Parameters. Advances in Intelligent Systems and Computing, 2018, , 213-221.	0.6	1
47	Comparison of Two Post Office Workstation Layouts by Means of an Optoelectronic Motion Analysis System. Advances in Intelligent Systems and Computing, 2018, , 230-240.	0.6	0
48	Local Stability of the Trunk in Patients with Degenerative Cerebellar Ataxia During Walking. Cerebellum, 2017, 16, 26-33.	2.5	44
49	Progression of Gait Ataxia in Patients with Degenerative Cerebellar Disorders: a 4-Year Follow-Up Study. Cerebellum, 2017, 16, 629-637.	2.5	38
50	Increased lower limb muscle coactivation reduces gait performance and increases metabolic cost in patients with hereditary spastic paraparesis. Clinical Biomechanics, 2017, 48, 63-72.	1.2	40
51	Harmony as a convergence attractor that minimizes the energy expenditure and variability in physiological gait and the loss of harmony in cerebellar ataxia. Clinical Biomechanics, 2017, 48, 15-23.	1.2	45
52	Ergonomic Risk Assessment of Sea Fishermen Part II: Upper Limb Repetitive Movements. Advances in Intelligent Systems and Computing, 2017, , 333-340.	0.6	3
53	Mechanical lifting energy consumption in work activities designed by means of the "revised NIOSH lifting equation". Industrial Health, 2017, 55, 444-454.	1.0	28
54	Use of dynamic movement orthoses to improve gait stability and trunk control in ataxic patients. European Journal of Physical and Rehabilitation Medicine, 2017, 53, 735-743.	2.2	15

#	Article	IF	Citations
55	A New Contact Mat Wireless System for Estimating Vertical Jump Height. Procedia Engineering, 2016, 147, 770-775.	1.2	1
56	Gait Patterns in Patients with Hereditary Spastic Paraparesis. PLoS ONE, 2016, 11, e0164623.	2.5	38
57	Electromyographic and Kinematic Patient Handling Risk Assessment: Overhead Lift Versus Floor Lift. Advances in Intelligent Systems and Computing, 2016, , 245-254.	0.6	0
58	Perceptive rehabilitation and trunk posture alignment in patients with Parkinson disease: a single blind randomized controlled trial. European Journal of Physical and Rehabilitation Medicine, 2016, 52, 799-809.	2.2	7
59	Kinematic and Electromyographic Assessment of Upper Limb Repetitive Movements in an Artisanal Pastry Workshop. Procedia Manufacturing, 2015, 3, 4315-4321.	1.9	0
60	Neuromuscular adjustments of gait associated with unstable conditions. Journal of Neurophysiology, 2015, 114, 2867-2882.	1.8	112
61	A new muscle co-activation index for biomechanical load evaluation in work activities. Ergonomics, 2015, 58, 966-979.	2.1	46
62	Kinematic and electromyographic assessment of manual handling on a supermarket green- grocery shelf. Work, 2015, 51, 261-271.	1.1	15
63	Effect of 24-h continuous rotigotine treatment on stationary and non-stationary locomotion in de novo patients with Parkinson disease in an open-label uncontrolled study. Journal of Neurology, 2015, 262, 2539-2547.	3.6	19
64	Modular organization of the head retraction responses elicited by electrical painful stimulation of the facial skin in humans. Clinical Neurophysiology, 2015, 126, 2306-2313.	1.5	5
65	Locomotor patterns in cerebellar ataxia. Journal of Neurophysiology, 2014, 112, 2810-2821.	1.8	114
66	Kinematic and electromyographic differences between mouse and touchpad use on laptop computers. International Journal of Industrial Ergonomics, 2014, 44, 413-420.	2.6	10
67	Lower Limb Antagonist Muscle Co-Activation and its Relationship with Gait Parameters in Cerebellar Ataxia. Cerebellum, 2014, 13, 226-236.	2.5	78
68	Upper Body Kinematics in Patients with Cerebellar Ataxia. Cerebellum, 2014, 13, 689-697.	2.5	35
69	Sudden Stopping in Patients with Cerebellar Ataxia. Cerebellum, 2013, 12, 607-616.	2.5	22
70	Reply to Comment "Why Do Patients with Cerebellar Ataxia Not Use Environmental Cues for Reducing Unpredictability of Sudden Gait Stopping?" on "Sudden Stopping in Patients with Cerebellar Ataxia". Cerebellum, 2013, 12, 958-959.	2.5	1
71	Strategies Adopted by Cerebellar Ataxia Patients to Perform U-Turns. Cerebellum, 2013, 12, 460-468.	2.5	27
72	Modelling the spine as a deformable body: Feasibility of reconstruction using an optoelectronic system. Applied Ergonomics, 2013, 44, 192-199.	3.1	35

#	Article	IF	Citations
73	Lower-Limb Joint Coordination Pattern in Obese Subjects. BioMed Research International, 2013, 2013, 1-9.	1.9	31
74	Biomechanical evaluation of supermarket cashiers before and after a redesign of the checkout counter. Ergonomics, 2012, 55, 650-669.	2.1	21
75	Reorganization of multi-muscle and joint withdrawal reflex during arm movements in post-stroke hemiparetic patients. Clinical Neurophysiology, 2012, 123, 527-540.	1.5	15
76	Adaptive behaviour of the spinal cord in the transition from quiet stance to walking. BMC Neuroscience, 2012, 13, 80.	1.9	8
77	Planned Gait Termination in Cerebellar Ataxias. Cerebellum, 2012, 11, 896-904.	2.5	27
78	Kinematic analysis of post office employees' workstations. Work, 2012, 41, 2012-2016.	1.1	1
79	Turning strategies in patients with cerebellar ataxia. Experimental Brain Research, 2012, 222, 65-75.	1.5	36
80	Gait Pattern in Inherited Cerebellar Ataxias. Cerebellum, 2012, 11, 194-211.	2.5	110
81	Walking strategies of visually impaired people on trapezoidal- and sinusoidal-section tactile groundsurface indicators. Ergonomics, 2011, 54, 246-256.	2.1	15
82	Four-week trunk-specific rehabilitation treatment improves lateral trunk flexion in Parkinson's disease. Movement Disorders, 2010, 25, 325-331.	3.9	62
83	Kinematic and neurophysiological models: Future applications in neurorehabilitation. Journal of Rehabilitation Medicine, 2009, 41, 986-987.	1.1	4
84	Modulation of spinal inhibitory reflex responses to cutaneous nociceptive stimuli during upper limb movement. European Journal of Neuroscience, 2008, 28, 559-568.	2.6	17
85	Effects of 8-week strength training with two models of chest press machines on muscular activity pattern and strength. Journal of Electromyography and Kinesiology, 2008, 18, 618-627.	1.7	20
86	Comparison between Kinematic and Kinetic Methods for Computing the Vertical Displacement of the Center of Mass during Human Hopping at Different Frequencies. Journal of Applied Biomechanics, 2008, 24, 271-279.	0.8	25
87	Relationship between recovery of calf-muscle biomechanical properties and gait pattern following surgery for achilles tendon rupture. Clinical Biomechanics, 2007, 22, 211-220.	1.2	82
88	Foot drop and plantar flexion failure determine different gait strategies in Charcot-Marie-Tooth patients. Clinical Biomechanics, 2007, 22, 905-916.	1.2	97
89	Effectiveness of Radial Shock-Wave Therapy for Calcific Tendinitis of the Shoulder: Single-Blind, Randomized Clinical Study. Physical Therapy, 2006, 86, 672-682.	2.4	137
90	Kinematic and Electromyographic Study of the Nociceptive Withdrawal Reflex in the Upper Limbs during Rest and Movement. Journal of Neuroscience, 2006, 26, 3505-3513.	3.6	29