Louis N Awad

List of Publications by Year
in descending order

42 papers	1,726 citations	471509 17 h-index	395702 33 g-index
44 all docs	44 docs citations	44 times ranked	1530 citing authors

#	Article	IF	Citations
1	O 089 - A soft robotic exosuit assisting the paretic ankle in patients post-stroke: Effect on muscle activation during overground walking. Gait and Posture, 2022, 95, 217-218.	1.4	7
2	Mobile Unilateral Hip Flexion Exosuit Assistance for Overground Walking in Individuals Post-Stroke: A Case Series. Biosystems and Biorobotics, 2022, , 357-361.	0.3	0
3	Soft robotic exosuit augmented high intensity gait training on stroke survivors: a pilot study. Journal of NeuroEngineering and Rehabilitation, 2022, 19, .	4.6	12
4	Real-time gait metric estimation for everyday gait training with wearable devices in people poststroke. Wearable Technologies, 2021, 2, .	3.1	16
5	Targeting post-stroke walking automaticity with a propulsion-augmenting soft robotic exosuit: toward a biomechanical and neurophysiological approach to assistance prescription. , 2021, , .		1
6	Toward Neuroscience of the Everyday World (NEW) using functional near-infrared spectroscopy. Current Opinion in Biomedical Engineering, 2021, 18, 100272.	3.4	31
7	Targeting Paretic Propulsion and Walking Speed With a Soft Robotic Exosuit: A Consideration-of-Concept Trial. Frontiers in Neurorobotics, 2021, 15, 689577.	2.8	13
8	The Dynamic Motor Control Index as a Marker of Age-Related Neuromuscular Impairment. Frontiers in Aging Neuroscience, 2021, 13, 678525.	3.4	6
9	Visual-Inertial Filtering for Human Walking Quantification. , 2021, , .		3
10	Estimation of Walking Speed and Its Spatiotemporal Determinants Using a Single Inertial Sensor Worn on the Thigh: From Healthy to Hemiparetic Walking. Sensors, 2021, 21, 6976.	3.8	8
11	Ankle resistance with a unilateral soft exosuit increases plantarflexor effort during pushoff in unimpaired individuals. Journal of NeuroEngineering and Rehabilitation, 2021, 18, 182.	4.6	6
12	Central Drive to the Paretic Ankle Plantarflexors Affects the Relationship Between Propulsion and Walking Speed After Stroke. Journal of Neurologic Physical Therapy, 2020, 44, 42-48.	1.4	15
13	Automated detection of soleus concentric contraction in variable gait conditions for improved exosuit control. , 2020, , .		7
14	A Music-Based Digital Therapeutic: Proof-of-Concept Automation of a Progressive and Individualized Rhythm-Based Walking Training Program After Stroke. Neurorehabilitation and Neural Repair, 2020, 34, 986-996.	2.9	20
15	Automating a Progressive and Individualized Rhythm-based Walking Training Program After Stroke: Feasibility of a Music-based Digital Therapeutic. Archives of Physical Medicine and Rehabilitation, 2020, 101, e30.	0.9	1
16	These legs were made for propulsion: advancing the diagnosis and treatment of post-stroke propulsion deficits. Journal of NeuroEngineering and Rehabilitation, 2020, 17, 139.	4.6	43
17	The ReWalk ReStoreâ„¢ soft robotic exosuit: a multi-site clinical trial of the safety, reliability, and feasibility of exosuit-augmented post-stroke gait rehabilitation. Journal of NeuroEngineering and Rehabilitation, 2020, 17, 80.	4.6	72
18	Indirect measurement of anterior-posterior ground reaction forces using a minimal set of wearable inertial sensors: from healthy to hemiparetic walking. Journal of NeuroEngineering and Rehabilitation, 2020, 17, 82.	4.6	10

#	Article	IF	Citations
19	Offline Assistance Optimization of a Soft Exosuit for Augmenting Ankle Power of Stroke Survivors During Walking. IEEE Robotics and Automation Letters, 2020, 5, 828-835.	5.1	49
20	A Hinge-Free, Non-Restrictive, Lightweight Tethered Exosuit for Knee Extension Assistance During Walking. IEEE Transactions on Medical Robotics and Bionics, 2020, 2, 165-175.	3.2	56
21	Walking Faster and Farther With a Soft Robotic Exosuit: Implications for Post-Stroke Gait Assistance and Rehabilitation. IEEE Open Journal of Engineering in Medicine and Biology, 2020, 1, 108-115.	2.3	64
22	Distance-Induced Changes in Walking Speed After Stroke: Relationship to Community Walking Activity. Journal of Neurologic Physical Therapy, 2019, 43, 220-223.	1.4	13
23	Biomechanical mechanisms underlying exosuit-induced improvements in walking economy after stroke. Journal of Experimental Biology, 2018, 221, .	1.7	33
24	Dynamic structure of lower limb joint angles during walking post-stroke. Journal of Biomechanics, 2018, 68, 1-5.	2.1	9
25	Isometric Quadriceps Strength Test Device to Improve the Reliability of Handheld Dynamometry in Patient With Anterior Cruciate Ligament Injury. , 2018, , .		0
26	Wearable Movement Sensors for Rehabilitation: A Focused Review of Technological and Clinical Advances. PM and R, 2018, 10, S220-S232.	1.6	129
27	A Lightweight and Efficient Portable Soft Exosuit for Paretic Ankle Assistance in Walking After Stroke. , 2018, , .		87
28	A soft robotic exosuit improves walking in patients after stroke. Science Translational Medicine, 2017, 9, .	12.4	439
29	Reducing Circumduction and Hip Hiking During Hemiparetic Walking Through Targeted Assistance of the Paretic Limb Using a Soft Robotic Exosuit. American Journal of Physical Medicine and Rehabilitation, 2017, 96, S157-S164.	1.4	51
30	Soft exosuits increase walking speed and distance after stroke. , 2017, , .		3
31	Exosuit-induced improvements in walking after stroke: Comprehensive analysis on gait energetics and biomechanics. , 2017, , .		4
32	Identifying candidates for targeted gait rehabilitation after stroke: better prediction through biomechanics-informed characterization. Journal of NeuroEngineering and Rehabilitation, 2016, 13, 84.	4.6	15
33	Symmetry of corticomotor input to plantarflexors influences the propulsive strategy used to increase walking speed post-stroke. Clinical Neurophysiology, 2016, 127, 1837-1844.	1.5	18
34	Reducing The Cost of Transport and Increasing Walking Distance After Stroke. Neurorehabilitation and Neural Repair, 2016, 30, 661-670.	2.9	54
35	Contribution of Paretic and Nonparetic Limb Peak Propulsive Forces to Changes in Walking Speed in Individuals Poststroke. Neurorehabilitation and Neural Repair, 2016, 30, 743-752.	2.9	60
36	Walking Speed and Step Length Asymmetry Modify the Energy Cost of Walking After Stroke. Neurorehabilitation and Neural Repair, 2015, 29, 416-423.	2.9	143

#	Article	IF	Citations
37	Paretic Propulsion and Trailing Limb Angle Are Key Determinants of Long-Distance Walking Function After Stroke. Neurorehabilitation and Neural Repair, 2015, 29, 499-508.	2.9	73
38	A soft exosuit for patients with stroke: Feasibility study with a mobile off-board actuation unit. , 2015, , .		55
39	Do Improvements in Balance Relate to Improvements in Long-Distance Walking Function after Stroke?. Stroke Research and Treatment, 2014, 2014, 1-6.	0.8	6
40	Maximum Walking Speed Is a Key Determinant of Long Distance Walking Function After Stroke. Topics in Stroke Rehabilitation, 2014, 21, 502-509.	1.9	20
41	Targeting Paretic Propulsion to Improve Poststroke Walking Function: A Preliminary Study. Archives of Physical Medicine and Rehabilitation, 2014, 95, 840-848.	0.9	69
42	Effects of repeated treadmill testing and electrical stimulation on post-stroke gait kinematics. Gait and Posture, 2013, 37, 67-71.	1.4	5