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	A soft robotic exosuit improves walking in patients after stroke. Science Translational Medicine, 2017, 9, .	12.4	439
2	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
3	Wearable Movement Sensors for Rehabilitation: A Focused Review of Technological and Clinical Advances. PM and R, 2018, 10, S220-S232.	1.6	129
4	A Lightweight and Efficient Portable Soft Exosuit for Paretic Ankle Assistance in Walking After Stroke. , 2018, , .		87
5	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
6	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
7	Targeting Paretic Propulsion to Improve Poststroke Walking Function: A Preliminary Study. Archives of Physical Medicine and Rehabilitation, 2014, 95, 840-848.	0.9	69
8	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
9	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
10	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
11	A soft exosuit for patients with stroke: Feasibility study with a mobile off-board actuation unit. , 2015, , .		55
12	Reducing The Cost of Transport and Increasing Walking Distance After Stroke. Neurorehabilitation and Neural Repair, 2016, 30, 661-670.	2.9	54
13	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
14	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
15	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
16	Biomechanical mechanisms underlying exosuit-induced improvements in walking economy after stroke. Journal of Experimental Biology, 2018, 221, .	1.7	33
17	Toward Neuroscience of the Everyday World (NEW) using functional near-infrared spectroscopy. Current Opinion in Biomedical Engineering, 2021, 18, 100272.	3.4	31
18	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

#	Article	IF	Citations
19	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
20	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
21	Real-time gait metric estimation for everyday gait training with wearable devices in people poststroke. Wearable Technologies, 2021, 2, .	3.1	16
22	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
23	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
24	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
25	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
26	Soft robotic exosuit augmented high intensity gait training on stroke survivors: a pilot study. Journal of NeuroEngineering and Rehabilitation, 2022, 19, .	4.6	12
27	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
28	Dynamic structure of lower limb joint angles during walking post-stroke. Journal of Biomechanics, 2018, 68, 1-5.	2.1	9
29	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
30	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
31	Automated detection of soleus concentric contraction in variable gait conditions for improved exosuit control. , 2020, , .		7
32	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
33	The Dynamic Motor Control Index as a Marker of Age-Related Neuromuscular Impairment. Frontiers in Aging Neuroscience, 2021, 13, 678525.	3.4	6
34	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
35	Effects of repeated treadmill testing and electrical stimulation on post-stroke gait kinematics. Gait and Posture, 2013, 37, 67-71.	1.4	5
36	Exosuit-induced improvements in walking after stroke: Comprehensive analysis on gait energetics and biomechanics. , 2017, , .		4

#	Article	IF	Citations
37	Soft exosuits increase walking speed and distance after stroke. , 2017, , .		3
38	Visual-Inertial Filtering for Human Walking Quantification. , 2021, , .		3
39	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
40	Targeting post-stroke walking automaticity with a propulsion-augmenting soft robotic exosuit: toward a biomechanical and neurophysiological approach to assistance prescription. , 2021, , .		1
41	Isometric Quadriceps Strength Test Device to Improve the Reliability of Handheld Dynamometry in Patient With Anterior Cruciate Ligament Injury. , 2018, , .		0
42	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