MatjaÅ¾ Zadravec

List of Publications by Year
in descending order

21 papers	223 citations	1040056 9 h-index	1058476 14 g-index
21 all docs	21 docs citations	21 times ranked	203 citing authors

#	Article	IF	Citations
1	A novel robot for imposing perturbations during overground walking: mechanism, control and normative stepping responses. Journal of NeuroEngineering and Rehabilitation, 2016, 13, 55.	4.6	39
2	Sit-to-Stand Trainer: An Apparatus for Training â€œNormal-Likeâ€•Sit to Stand Movement. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2016, 24, 639-649.	4.9	30
3	Planar arm movement trajectory formation: An optimization based simulation study. Biocybernetics and Biomedical Engineering, 2013, 33, 106-117.	5.9	20
4	Feasibility of robot-based perturbed-balance training during treadmill walking in a high-functioning chronic stroke subject: a case-control study. Journal of NeuroEngineering and Rehabilitation, 2018, 15, 32.	4.6	20
5	An effective balancing response to lateral perturbations at pelvis level during slow walking requires control in all three planes of motion. Journal of Biomechanics, 2017, 60, 79-90.	2.1	15
6	Influence of Treadmill Speed and Perturbation Intensity on Selection of Balancing Strategies during Slow Walking Perturbed in the Frontal Plane. Applied Bionics and Biomechanics, 2019, 2019, 1-14.	1.1	15
7	The comparison of stepping responses following perturbations applied to pelvis during overground and treadmill walking. Technology and Health Care, 2017, 25, 781-790.	1.2	14
8	Assessment of dynamic balancing responses following perturbations during slow walking in relation to clinical outcome measures for high-functioning post-stroke subjects. Journal of NeuroEngineering and Rehabilitation, 2020, 17, 85.	4.6	13
9	Estimation of Muscle Co-Activations in Wrist Rehabilitation After Stroke is Sensitive to Motor Unit Distribution and Action Potential Shapes. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 1208-1215.	4.9	12
10	Biomechanics of In-Stance Balancing Responses Following Outward-Directed Perturbation to the Pelvis During Very Slow Treadmill Walking Show Complex and Well-Orchestrated Reaction of Central Nervous System. Frontiers in Bioengineering and Biotechnology, 2020, 8, 884.	4.1	8
11	Learning gait by therapist demonstration for natural-like walking with the CORBYS powered orthosis. , 2015, , .		7
12	Centre of Pressure Estimation during Walking Using Only Inertial-Measurement Units and End-To-End Statistical Modelling. Sensors, 2020, 20, 6136.	3.8	7
13	A novel robot-assisted training approach for improving gait symmetry after stroke. , 2017, 2017, 222-227.		6
14	A 3D Template Model for Healthy and Impaired Walking. , 2018, , .		5
15	Toward minimum effort reaching trajectories formation in robot-based rehabilitation after stroke. International Journal of Rehabilitation Research, 2014, 37, 256-266.	1.3	4
16	The Existence of Shared Muscle Synergies Underlying Perturbed and Unperturbed Gait Depends on Walking Speed. Applied Sciences (Switzerland), 2022, 12, 2135.	2.5	3
17	Development of an Apparatus for Bilateral Rhythmical Training of Arm Movement Via Linear and Elliptical Trajectories of Various Directions. Journal of Medical Devices, Transactions of the ASME, 2014, 8, .	0.7	2
18	A Novel Approach to Robot-Supported Training of Symmetry, Propulsion and Balance During Walking After Stroke: A Case Study. , 2018, , .		1

#	Article	IF	Citations
19	Emulation of hill walking and turning on Balance Assessment Robot: A preliminary study. , 2019, 2019, 7-12.		1
20	High-density electromyography biofeedback during robotic wrist exercises for reducing co-activation of antagonist muscles: a case report. International Journal of Rehabilitation Research, 2021, 44, 92-97.	1.3	1
21	Comparison of dynamic balancing responses following outward lateral perturbations during walking of healthy and post-stroke subjects. Current Directions in Biomedical Engineering, 2017, 3, 11-14.	0.4	0