

# Herman Van Der Kooij

## List of Publications by Citations

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189  
papers

6,688  
citations

42  
h-index

77  
g-index

205  
ext. papers

7,878  
ext. citations

3  
avg, IF

5.91  
L-index

#	Paper	IF	Citations
189	Design and evaluation of the LOPES exoskeleton robot for interactive gait rehabilitation. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , <b>2007</b> , 15, 379-86	4.8	865
188	Compliant actuation of rehabilitation robots. <i>IEEE Robotics and Automation Magazine</i> , <b>2008</b> , 15, 60-69	3.4	300
187	The clinical utility of posturography. <i>Clinical Neurophysiology</i> , <b>2008</b> , 119, 2424-36	4.3	298
186	Design and control of the MINDWALKER exoskeleton. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , <b>2015</b> , 23, 277-86	4.8	196
185	A multisensory integration model of human stance control. <i>Biological Cybernetics</i> , <b>1999</b> , 80, 299-308	2.8	193
184	Self-Aligning Exoskeleton Axes Through Decoupling of Joint Rotations and Translations. <i>IEEE Transactions on Robotics</i> , <b>2009</b> , 25, 628-633	6.5	167
183	An adaptive model of sensory integration in a dynamic environment applied to human stance control. <i>Biological Cybernetics</i> , <b>2001</b> , 84, 103-15	2.8	165
182	Gait disorders and balance disturbances in Parkinson's disease: clinical update and pathophysiology. <i>Current Opinion in Neurology</i> , <b>2008</b> , 21, 461-71	7.1	161
181	Comparison of different methods to identify and quantify balance control. <i>Journal of Neuroscience Methods</i> , <b>2005</b> , 145, 175-203	3	150
180	Reference trajectory generation for rehabilitation robots: complementary limb motion estimation. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , <b>2009</b> , 17, 23-30	4.8	141
179	Oscillator-based assistance of cyclical movements: model-based and model-free approaches. <i>Medical and Biological Engineering and Computing</i> , <b>2011</b> , 49, 1173-85	3.1	125
178	Ambulatory measurement of ground reaction forces. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , <b>2005</b> , 13, 423-7	4.8	113
177	Non-linear stimulus-response behavior of the human stance control system is predicted by optimization of a system with sensory and motor noise. <i>Journal of Computational Neuroscience</i> , <b>2011</b> , 30, 759-78	1.4	102
176	The Effects on Kinematics and Muscle Activity of Walking in a Robotic Gait Trainer During Zero-Force Control. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , <b>2008</b> , 16, 360-370	4.8	92
175	Evaluation of instrumented shoes for ambulatory assessment of ground reaction forces. <i>Gait and Posture</i> , <b>2007</b> , 26, 39-47	2.6	87
174	LIMPACT: A Hydraulically Powered Self-Aligning Upper Limb Exoskeleton. <i>IEEE/ASME Transactions on Mechatronics</i> , <b>2015</b> , 20, 2285-2298	5.5	83
173	LOPES II--Design and Evaluation of an Admittance Controlled Gait Training Robot With Shadow-Leg Approach. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , <b>2016</b> , 24, 352-63	4.8	83

172	Design of a rotational hydroelastic actuator for a powered exoskeleton for upper limb rehabilitation. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2010</b> , 57, 728-35	5	82
171	Passive and accurate torque control of series elastic actuators <b>2007</b> ,		82
170	Sensing pressure distribution on a lower-limb exoskeleton physical human-machine interface. <i>Sensors</i> , <b>2011</b> , 11, 207-27	3.8	79
169	Postural responses evoked by platform perturbations are dominated by continuous feedback. <i>Journal of Neurophysiology</i> , <b>2007</b> , 98, 730-43	3.2	75
168	EMG patterns during assisted walking in the exoskeleton. <i>Frontiers in Human Neuroscience</i> , <b>2014</b> , 8, 423	3.3	74
167	Disentangling the contribution of the paretic and non-paretic ankle to balance control in stroke patients. <i>Experimental Neurology</i> , <b>2006</b> , 201, 441-51	5.7	73
166	Center of mass velocity-based predictions in balance recovery following pelvis perturbations during human walking. <i>Journal of Experimental Biology</i> , <b>2016</b> , 219, 1514-23	3	70
165	Design of an electric series elastic actuated joint for robotic gait rehabilitation training <b>2010</b> ,		65
164	Impaired standing balance: the clinical need for closing the loop. <i>Neuroscience</i> , <b>2014</b> , 267, 157-65	3.9	62
163	Sampling duration effects on centre of pressure descriptive measures. <i>Gait and Posture</i> , <b>2011</b> , 34, 19-24	2.6	60
162	Ankle-foot orthoses in stroke: effects on functional balance, weight-bearing asymmetry and the contribution of each lower limb to balance control. <i>Clinical Biomechanics</i> , <b>2009</b> , 24, 769-75	2.2	60
161	Influence of gravity compensation on muscle activation patterns during different temporal phases of arm movements of stroke patients. <i>Neurorehabilitation and Neural Repair</i> , <b>2009</b> , 23, 478-85	4.7	59
160	The effect of impedance-controlled robotic gait training on walking ability and quality in individuals with chronic incomplete spinal cord injury: an explorative study. <i>Journal of NeuroEngineering and Rehabilitation</i> , <b>2014</b> , 11, 26	5.3	58
159	A passive exoskeleton with artificial tendons: design and experimental evaluation. <i>IEEE International Conference on Rehabilitation Robotics</i> , <b>2011</b> , 2011, 5975470	1.3	57
158	Fixating the pelvis in the horizontal plane affects gait characteristics. <i>Gait and Posture</i> , <b>2008</b> , 28, 157-63	2.6	55
157	Dampace: dynamic force-coordination trainer for the upper extremities <b>2007</b> ,		52
156	Robot-aided assessment of lower extremity functions: a review. <i>Journal of NeuroEngineering and Rehabilitation</i> , <b>2016</b> , 13, 72	5.3	52
155	Identification of the contribution of the ankle and hip joints to multi-segmental balance control. <i>Journal of NeuroEngineering and Rehabilitation</i> , <b>2013</b> , 10, 23	5.3	50

154	Dynamic Balance Control (DBC) in lower leg amputee subjects; contribution of the regulatory activity of the prosthesis side. <i>Clinical Biomechanics</i> , <b>2012</b> , 27, 40-5	2.2	50
153	. <i>IEEE Robotics and Automation Magazine</i> , <b>2014</b> , 21, 56-61	3-4	47
152	Speed-dependent reference joint trajectory generation for robotic gait support. <i>Journal of Biomechanics</i> , <b>2014</b> , 47, 1447-58	2.9	46
151	Influence of haptic guidance in learning a novel visuomotor task. <i>Journal of Physiology (Paris)</i> , <b>2009</b> , 103, 276-85		46
150	Dampace: Design of an Exoskeleton for Force-Coordination Training in Upper-Extremity Rehabilitation. <i>Journal of Medical Devices, Transactions of the ASME</i> , <b>2009</b> , 3,	1.3	45
149	Evaluation of the Achilles Ankle Exoskeleton. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , <b>2017</b> , 25, 151-160	4.8	42
148	Design of a series elastic- and Bowden cable-based actuation system for use as torque-actuator in exoskeleton-type training		39
147	Changes in sensory reweighting of proprioceptive information during standing balance with age and disease. <i>Journal of Neurophysiology</i> , <b>2015</b> , 114, 3220-33	3.2	36
146	Sensory reweighting of proprioceptive information of the left and right leg during human balance control. <i>Journal of Neurophysiology</i> , <b>2012</b> , 108, 1138-48	3.2	36
145	Selective control of gait subtasks in robotic gait training: foot clearance support in stroke survivors with a powered exoskeleton. <i>Journal of NeuroEngineering and Rehabilitation</i> , <b>2013</b> , 10, 3	5.3	34
144	An Adaptive Neuromuscular Controller for Assistive Lower-Limb Exoskeletons: A Preliminary Study on Subjects with Spinal Cord Injury. <i>Frontiers in Neurobotics</i> , <b>2017</b> , 11, 30	3.4	34
143	Influence of gravity compensation on muscle activity during reach and retrieval in healthy elderly. <i>Journal of Electromyography and Kinesiology</i> , <b>2009</b> , 19, e40-9	2.5	34
142	Comparing internal models of the dynamics of the visual environment. <i>Biological Cybernetics</i> , <b>2005</b> , 92, 147-63	2.8	34
141	Balance asymmetry in Parkinson's disease and its contribution to freezing of gait. <i>PLoS ONE</i> , <b>2014</b> , 9, e102493	3.7	31
140	Oscillator-based walking assistance: a model-free approach. <i>IEEE International Conference on Rehabilitation Robotics</i> , <b>2011</b> , 2011, 5975352	1.3	30
139	Freebal: dedicated gravity compensation for the upper extremities <b>2007</b> ,		30
138	LOPES: selective control of gait functions during the gait rehabilitation of CVA patients		30
137	Poor motor function is associated with reduced sensory processing after stroke. <i>Experimental Brain Research</i> , <b>2015</b> , 233, 1339-49	2.3	29

136	Detecting asymmetries in balance control with system identification: first experimental results from Parkinson patients. <i>Journal of Neural Transmission</i> , <b>2007</b> , 114, 1333-7	4.3	29
135	Selective control of a subtask of walking in a robotic gait trainer(LOPES) <b>2007</b> ,		29
134	Parkinson's disease patients compensate for balance control asymmetry. <i>Journal of Neurophysiology</i> , <b>2014</b> , 112, 3227-39	3.2	28
133	Direct measurement of the intrinsic ankle stiffness during standing. <i>Journal of Biomechanics</i> , <b>2015</b> , 48, 1258-63	2.9	27
132	Selectivity and resolution of surface electrical stimulation for grasp and release. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , <b>2012</b> , 20, 94-101	4.8	27
131	Impaired standing balance in elderly: a new engineering method helps to unravel causes and effects. <i>Journal of the American Medical Directors Association</i> , <b>2014</b> , 15, 227.e1-227.e6	5.9	26
130	An electric scooter simulation program for training the driving skills of stroke patients with mobility problems: a pilot study. <i>Cyberpsychology, Behavior and Social Networking</i> , <b>2008</b> , 11, 751-4		26
129	An alternative approach to synthesizing bipedal walking. <i>Biological Cybernetics</i> , <b>2003</b> , 88, 46-59	2.8	26
128	Effects of a powered ankle-foot orthosis on perturbed standing balance. <i>Journal of NeuroEngineering and Rehabilitation</i> , <b>2018</b> , 15, 50	5.3	25
127	The effect of directional inertias added to pelvis and ankle on gait. <i>Journal of NeuroEngineering and Rehabilitation</i> , <b>2013</b> , 10, 40	5.3	25
126	SCRIPT passive orthosis: design and technical evaluation of the wrist and hand orthosis for rehabilitation training at home. <i>IEEE International Conference on Rehabilitation Robotics</i> , <b>2013</b> , 2013, 6650401	1.3	25
125	Assessment of Multi-Joint Coordination and Adaptation in Standing Balance: A Novel Device and System Identification Technique. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , <b>2015</b> , 23, 973-82	4.8	24
124	Quantifying connectivity via efferent and afferent pathways in motor control using coherence measures and joint position perturbations. <i>Experimental Brain Research</i> , <b>2013</b> , 228, 141-53	2.3	24
123	MINDWALKER: Going one step further with assistive lower limbs exoskeleton for SCI condition subjects <b>2012</b> ,		23
122	Lower extremity joint-level responses to pelvis perturbation during human walking. <i>Scientific Reports</i> , <b>2018</b> , 8, 14621	4.9	23
121	Rapid limb-specific modulation of vestibular contributions to ankle muscle activity during locomotion. <i>Journal of Physiology</i> , <b>2017</b> , 595, 2175-2195	3.9	22
120	Achilles: An autonomous lightweight ankle exoskeleton to provide push-off power <b>2014</b> ,		22
119	Design of a compliantly actuated exo-skeleton for an impedance controlled gait trainer robot. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , <b>2006</b> , 2006, 189-93		21

118	Adaptation of multijoint coordination during standing balance in healthy young and healthy old individuals. <i>Journal of Neurophysiology</i> , <b>2016</b> , 115, 1422-35	3.2	21
117	Improving the transparency of a rehabilitation robot by exploiting the cyclic behaviour of walking. <i>IEEE International Conference on Rehabilitation Robotics</i> , <b>2013</b> , 2013, 6650393	1.3	19
116	Actively controlled lateral gait assistance in a lower limb exoskeleton <b>2013</b> ,		19
115	Spring uses in exoskeleton actuation design. <i>IEEE International Conference on Rehabilitation Robotics</i> , <b>2011</b> , 2011, 5975471	1.3	19
114	Freebal: Design of a Dedicated Weight-Support System for Upper-Extremity Rehabilitation. <i>Journal of Medical Devices, Transactions of the ASME</i> , <b>2009</b> , 3,	1.3	19
113	Mechanics of very slow human walking. <i>Scientific Reports</i> , <b>2019</b> , 9, 18079	4.9	19
112	. <i>IEEE Transactions on Robotics</i> , <b>2016</b> , 32, 920-932	6.5	18
111	A damper driven robotic end-point manipulator for functional rehabilitation exercises after stroke. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2014</b> , 61, 2646-54	5	17
110	Assessment of visuospatial neglect in stroke patients using virtual reality: a pilot study. <i>International Journal of Rehabilitation Research</i> , <b>2009</b> , 32, 280-6	1.8	17
109	Neuromuscular Controller Embedded in a Powered Ankle Exoskeleton: Effects on Gait, Clinical Features and Subjective Perspective of Incomplete Spinal Cord Injured Subjects. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , <b>2020</b> , 28, 1157-1167	4.8	16
108	A bilateral ankle manipulator to investigate human balance control. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , <b>2011</b> , 19, 660-9	4.8	16
107	Design of a rotational hydro-elastic actuator for an active upper-extremity rehabilitation exoskeleton <b>2008</b> ,		16
106	Reduced center of pressure modulation elicits foot placement adjustments, but no additional trunk motion during anteroposterior-perturbed walking. <i>Journal of Biomechanics</i> , <b>2018</b> , 68, 93-98	2.9	15
105	Effects of a neuromuscular controller on a powered ankle exoskeleton during human walking <b>2016</b> ,		15
104	Soft artificial tactile sensors for the measurement of human-robot interaction in the rehabilitation of the lower limb. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2010</b> , 2010, 1279-82	0.9	15
103	An Improved Force Controller With Low and Passive Apparent Impedance for Series Elastic Actuators. <i>IEEE/ASME Transactions on Mechatronics</i> , <b>2020</b> , 25, 1220-1230	5.5	14
102	LOPES: a lower extremity powered exoskeleton. <i>Proceedings - IEEE International Conference on Robotics and Automation</i> , <b>2007</b> ,		14
101	Effect of position feedback during task-oriented upper-limb training after stroke: five-case pilot study. <i>Journal of Rehabilitation Research and Development</i> , <b>2011</b> , 48, 1109-18		13

100	Complementary Limb Motion Estimation based on Interjoint Coordination: Experimental Evaluation <b>2007</b> ,		13
99	Symbitron Exoskeleton: Design, Control, and Evaluation of a Modular Exoskeleton for Incomplete and Complete Spinal Cord Injured Individuals. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , <b>2021</b> , 29, 330-339	4.8	13
98	Asymmetries in reactive and anticipatory balance control are of similar magnitude in Parkinson's disease patients. <i>Gait and Posture</i> , <b>2016</b> , 43, 108-13	2.6	12
97	Stretch Evoked Potentials in Healthy Subjects and After Stroke: A Potential Measure for Proprioceptive Sensorimotor Function. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , <b>2015</b> , 23, 643-54	4.8	12
96	Real-time estimate of period derivatives using adaptive oscillators: Application to impedance-based walking assistance <b>2012</b> ,		12
95	Comparison of closed-loop system identification techniques to quantify multi-joint human balance control. <i>Annual Reviews in Control</i> , <b>2016</b> , 41, 58-70	10.3	12
94	Foot Placement Modulation Diminishes for Perturbations Near Foot Contact. <i>Frontiers in Bioengineering and Biotechnology</i> , <b>2018</b> , 6, 48	5.8	11
93	Increased range of motion and decreased muscle activity during maximal reach with gravity compensation in stroke patients <b>2007</b> ,		11
92	A simple controller for the prediction of three-dimensional gait. <i>Journal of Biomechanics</i> , <b>2012</b> , 45, 2610-279	7.9	10
91	Use of induced acceleration to quantify the (de)stabilization effect of external and internal forces on postural responses. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2007</b> , 54, 2284-95	5	10
90	Improving the Standing Balance of Paraplegics through the Use of a Wearable Exoskeleton <b>2018</b> ,		10
89	Automatic versus manual tuning of robot-assisted gait training in people with neurological disorders. <i>Journal of NeuroEngineering and Rehabilitation</i> , <b>2020</b> , 17, 9	5.3	9
88	Assessment of the underlying systems involved in standing balance: the additional value of electromyography in system identification and parameter estimation. <i>Journal of NeuroEngineering and Rehabilitation</i> , <b>2017</b> , 14, 97	5.3	9
87	Changes in H-Reflex Recruitment After Trans-Spinal Direct Current Stimulation With Multiple Electrode Configurations. <i>Frontiers in Neuroscience</i> , <b>2018</b> , 12, 151	5.1	9
86	Design of a self-aligning 3-DOF actuated exoskeleton for diagnosis and training of wrist and forearm after stroke. <i>IEEE International Conference on Rehabilitation Robotics</i> , <b>2013</b> , 2013, 6650357	1.3	9
85	Face to phase: pitfalls in time delay estimation from coherency phase. <i>Journal of Computational Neuroscience</i> , <b>2014</b> , 37, 1-8	1.4	9
84	Model Predictive Control-based gait pattern generation for wearable exoskeletons. <i>IEEE International Conference on Rehabilitation Robotics</i> , <b>2011</b> , 2011, 5975442	1.3	9
83	An explorative, cross-sectional study into abnormal muscular coupling during reach in chronic stroke patients. <i>Journal of NeuroEngineering and Rehabilitation</i> , <b>2010</b> , 7, 14	5.3	9



82	Evaluation of a Virtual Model Control for the selective support of gait functions using an exoskeleton <b>2007</b> ,		9
81	Evaluation of the effect on walking of balance-related degrees of freedom in a robotic gait training device <b>2007</b> ,		9
80	Robot-Aided Gait Training with LOPES <b>2012</b> , 379-396		9
79	Control of thumb force using surface functional electrical stimulation and muscle load sharing. <i>Journal of NeuroEngineering and Rehabilitation</i> , <b>2013</b> , 10, 104	5.3	8
78	Paretic versus non-paretic stepping responses following pelvis perturbations in walking chronic-stage stroke survivors. <i>Journal of NeuroEngineering and Rehabilitation</i> , <b>2017</b> , 14, 106	5.3	8
77	Grasp and release with surface functional electrical stimulation using a Model Predictive Control approach. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2012</b> , 2012, 333-6	0.9	8
76	Selective and adaptive robotic support of foot clearance for training stroke survivors with stiff knee gait <b>2009</b> ,		8
75	Novel actuation design of a gait trainer with shadow leg approach. <i>IEEE International Conference on Rehabilitation Robotics</i> , <b>2013</b> , 2013, 6650369	1.3	7
74	Optimization of human walking for exoskeletal support. <i>IEEE International Conference on Rehabilitation Robotics</i> , <b>2013</b> , 2013, 6650394	1.3	7
73	In vivo measurement of human knee and hip dynamics using MIMO system identification. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2010</b> , 2010, 3426-9	0.9	7
72	Effect of added inertia on the pelvis on gait. <i>IEEE International Conference on Rehabilitation Robotics</i> , <b>2011</b> , 2011, 5975493	1.3	7
71	Locomotor adaptation and retention to gradual and sudden dynamic perturbations. <i>IEEE International Conference on Rehabilitation Robotics</i> , <b>2011</b> , 2011, 5975379	1.3	7
70	A low-tech virtual reality application for training of upper extremity motor function in neurorehabilitation <b>2008</b> ,		7
69	Observations from unperturbed closed loop systems cannot indicate causality. <i>Journal of Physiology</i> , <b>2005</b> , 569, 705; author reply 706	3.9	7
68	The Reliance on Vestibular Information During Standing Balance Control Decreases With Severity of Vestibular Dysfunction. <i>Frontiers in Neurology</i> , <b>2018</b> , 9, 371	4.1	6
67	Modeling, design, and optimization of Mindwalker series elastic joint. <i>IEEE International Conference on Rehabilitation Robotics</i> , <b>2013</b> , 2013, 6650381	1.3	6
66	Introducing a Modular, Personalized Exoskeleton for Ankle and Knee Support of Individuals with a Spinal Cord Injury. <i>Biosystems and Biorobotics</i> , <b>2017</b> , 169-173	0.2	6
65	Velocity-dependent reference trajectory generation for the LOPES gait training robot. <i>IEEE International Conference on Rehabilitation Robotics</i> , <b>2011</b> , 2011, 5975414	1.3	6



64	Soft, Wearable, and Pleated Pneumatic Interference Actuator Provides Knee Extension Torque for Sit-to-Stand. <i>Soft Robotics</i> , <b>2021</b> , 8, 28-43	9.2	6
63	Position-Cortical Coherence as a Marker of Afferent Pathway Integrity Early Poststroke: A Prospective Cohort Study. <i>Neurorehabilitation and Neural Repair</i> , <b>2020</b> , 34, 344-359	4.7	5
62	A Clustering-Based Approach to Identify Joint Impedance During Walking. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , <b>2020</b> , 28, 1808-1816	4.8	5
61	Manual physical balance assistance of therapists during gait training of stroke survivors: characteristics and predicting the timing. <i>Journal of NeuroEngineering and Rehabilitation</i> , <b>2017</b> , 14, 125	5.3	5
60	The PREHydrA: A Passive Return, High Force Density, Electro-Hydrostatic Actuator Concept for Wearable Robotics. <i>IEEE Robotics and Automation Letters</i> , <b>2018</b> , 3, 3569-3574	4.2	5
59	Lateral balance control for robotic gait training. <i>IEEE International Conference on Rehabilitation Robotics</i> , <b>2013</b> , 2013, 6650363	1.3	5
58	Reduction of muscle activity during repeated reach and retrieval with gravity compensation in stroke patients <b>2007</b> ,		5
57	Estimating ankle torque and dynamics of the stabilizing mechanism: No need for horizontal ground reaction forces. <i>Journal of Biomechanics</i> , <b>2020</b> , 106, 109813	2.9	5
56	Performance-Based Adaptive Assistance for Diverse Subtasks of Walking in a Robotic Gait Trainer: Description of a New Controller and Preliminary Results <b>2018</b> ,		5
55	Ankle muscle responses during perturbed walking with blocked ankle joints. <i>Journal of Neurophysiology</i> , <b>2019</b> , 121, 1711-1717	3.2	4
54	Design of a perfect balance system for active upper-extremity exoskeletons. <i>IEEE International Conference on Rehabilitation Robotics</i> , <b>2013</b> , 2013, 6650376	1.3	4
53	An explorative study into changes in circle drawing after gravity compensation training in chronic stroke patients. <i>IEEE International Conference on Rehabilitation Robotics</i> , <b>2011</b> , 2011, 5975402	1.3	4
52	Rendering potential wearable robot designs with the LOPES gait trainer. <i>IEEE International Conference on Rehabilitation Robotics</i> , <b>2011</b> , 2011, 5975448	1.3	4
51	Suitability of hydraulic disk brakes for passive actuation of upper-extremity rehabilitation exoskeleton. <i>Applied Bionics and Biomechanics</i> , <b>2009</b> , 6, 103-114	1.6	4
50	Reliability of System Identification Techniques to Assess Standing Balance in Healthy Elderly. <i>PLoS ONE</i> , <b>2016</b> , 11, e0151012	3.7	4
49	Effect of Amplitude and Number of Repetitions of the Perturbation on System Identification of Human Balance Control During Stance. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , <b>2019</b> , 27, 2336-2343	4.8	4
48	Realizing Soft High Torque Actuators for Complete Assistance Wearable Robots. <i>Biosystems and Biorobotics</i> , <b>2019</b> , 39-43	0.2	4
47	Can Momentum-Based Control Predict Human Balance Recovery Strategies?. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , <b>2020</b> , 28, 2015-2024	4.8	3

46	Preliminary results of training with gravity compensation of the arm in chronic stroke survivors. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2009, 2009, 2426-9</i>	0.9	3
45	Identification of human balance control in standing		3
44	Robot-Aided Gait Training with LOPES <b>2016</b> , 461-481		3
43	Effectiveness of the LOwer Extremity Powered ExoSkeleton (LOPES) Robotic Gait Trainer on Ability and Quality of Walking in SCI Patients. <i>Biosystems and Biorobotics, 2013, 161-165</i>	0.2	3
42	Haptic human-human interaction does not improve individual visuomotor adaptation. <i>Scientific Reports, 2020, 10, 19902</i>	4.9	3
41	The effect of 'device-in-charge' versus 'patient-in-charge' support during robotic gait training on walking ability and balance in chronic stroke survivors: A systematic review. <i>Journal of Rehabilitation and Assistive Technologies Engineering, 2016, 3, 2055668316676785</i>	1.7	3
40	. <i>IEEE Transactions on Medical Robotics and Bionics, 2021, 3, 156-165</i>	3.1	3
39	Joint Stiffness Compensation for Application in the EXTEND Hand Orthosis <b>2018</b> ,		3
38	Neuromechanical Model-Based Adaptive Control of Bilateral Ankle Exoskeletons: Biological Joint Torque and Electromyogram Reduction Across Walking Conditions. <i>IEEE Transactions on Robotics, 2022, 1-15</i>	6.5	3
37	A Versatile Neuromuscular Exoskeleton Controller for Gait Assistance: A Preliminary Study on Spinal Cord Injury Patients. <i>Biosystems and Biorobotics, 2017, 163-167</i>	0.2	2
36	Feed-forward support of human walking <b>2012</b> ,		2
35	Position and torque tracking: series elastic actuation versus model-based-controlled hydraulic actuation. <i>IEEE International Conference on Rehabilitation Robotics, 2011, 2011, 5975456</i>	1.3	2
34	Suitability of Hydraulic Disk Brakes for Passive Actuation of Upper-Extremity Rehabilitation Exoskeleton. <i>Applied Bionics and Biomechanics, 2009, 6, 103-114</i>	1.6	2
33	The SoftPro Project: Synergy-Based Open-Source Technologies for Prosthetics and Rehabilitation. <i>Biosystems and Biorobotics, 2019, 370-374</i>	0.2	2
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