H F Machiel Van Der Loos

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/7829978/publications.pdf

Version: 2024-02-01

55 papers	3,035 citations	430754 18 h-index	414303 32 g-index
57 all docs	57 docs citations	57 times ranked	3011 citing authors

#	Article	IF	Citations
1	Robot-assisted movement training compared with conventional therapy techniques for the rehabilitation of upper-limb motor function after stroke. Archives of Physical Medicine and Rehabilitation, 2002, 83, 952-959.	0.5	993
2	MIME robotic device for upper-limb neurorehabilitation in subacute stroke subjects: A follow-up study. Journal of Rehabilitation Research and Development, 2006, 43, 631.	1.6	381
3	Virtual Reality Therapy for Adults Post-Stroke: A Systematic Review and Meta-Analysis Exploring Virtual Environments and Commercial Games in Therapy. PLoS ONE, 2014, 9, e93318.	1.1	371
4	Video Games and Rehabilitation. Journal of Neurologic Physical Therapy, 2013, 37, 166-175.	0.7	225
5	Towards a personal robotics development platform: Rationale and design of an intrinsically safe personal robot. , 2008, , .		118
6	Experimental results using force-feedback cueing in robot-assisted stroke therapy. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2005, 13, 335-348.	2.7	80
7	Grip forces and load forces in handovers. , 2012, , .		66
8	Therapistsâ€™ Perceptions of Social Media and Video Game Technologies in Upper Limb Rehabilitation. JMIR Serious Games, 2015, 3, e2.	1.7	66
9	Human standing is modified by an unconscious integration of congruent sensory and motor signals. Journal of Physiology, 2012, 590, 5783-5794.	1.3	55
10	Transformation of Vestibular Signals for the Control of Standing in Humans. Journal of Neuroscience, 2016, 36, 11510-11520.	1.7	52
11	On identifying kinematic and muscle synergies: a comparison of matrix factorization methods using experimental data from the healthy population. Journal of Neurophysiology, 2017, 117, 290-302.	0.9	51
12	Robotic stroke therapy assistant. Robotica, 2003, 21, 33-44.	1.3	50
13	Rehabilitation and Health Care Robotics. , 2008, , 1223-1251.		32
14	Survey-Based Discussions on Morally Contentious Applications of Interactive Robotics. International Journal of Social Robotics, 2012, 4, 77-96.	3.1	31
15	Biofeedback vs. game scores for reducing trunk compensation after stroke: a randomized crossover trial. Topics in Stroke Rehabilitation, 2018, 25, 96-113.	1.0	31
16	Reducing Trunk Compensation in Stroke Survivors: A Randomized Crossover Trial Comparing Visual and Force Feedback Modalities. Archives of Physical Medicine and Rehabilitation, 2017, 98, 1932-1940.	0.5	29
17	Evaluating the User Experience of Exercising Reaching Motions With a Robot That Predicts Desired Movement Difficulty. Journal of Motor Behavior, 2016, 48, 31-46.	0.5	24
18	Validation of a Robotic Balance System for Investigations in the Control of Human Standing Balance. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2011, 19, 382-390.	2.7	23

#	Article	IF	Citations
19	Perceptions of Technology and Its Use for Therapeutic Application for Individuals With Hemiparesis: Findings From Adult and Pediatric Focus Groups. JMIR Rehabilitation and Assistive Technologies, 2015, 2, e1.	1.1	23
20	Application of Commercial Games for Home-Based Rehabilitation for People with Hemiparesis: Challenges and Lessons Learned. Games for Health Journal, 2018, 7, 197-207.	1.1	23
21	Charlie Rides the Elevator -- Integrating Vision, Navigation and Manipulation towards Multi-floor Robot Locomotion. , 2013, , .		22
22	Coaching product development teams: a conceptual foundation for empirical studies. Research in Engineering Design - Theory, Applications, and Concurrent Engineering, 2009, 19, 205-222.	1.2	21
23	Usability testing of gaming and social media applications for stroke and cerebral palsy upper limb rehabilitation. , 2014, 2014, 3602-5.		21
24	Roboethics: Ethics Applied to Robotics [From the Guest Editors]. IEEE Robotics and Automation Magazine, 2011, 18, 21-22.	2.2	19
25	Adaptation of task difficulty in rehabilitation exercises based on the user's motor performance and physiological responses. , 2013, 2013, 6650429.		19
26	Determining the Accuracy of Oculus Touch Controllers for Motor Rehabilitation Applications Using Quantifiable Upper Limb Kinematics: Validation Study. JMIR Biomedical Engineering, 2019, 4, e12291.	0.7	18
27	Error amplification to promote motor learning and motivation in therapy robotics. , 2012, 2012, 3907-10.		17
28	Comparison of seat, waist, and arm sit-to-stand assistance modalities in elderly population. Journal of Rehabilitation Research and Development, 2013, 50, 835-844.	1.6	16
29	Error Augmentation in Immersive Virtual Reality for Bimanual Upper-Limb Rehabilitation in Individuals With and Without Hemiplegic Cerebral Palsy. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 541-549.	2.7	15
30	Hey Robot, Which Way Are You Going? Nonverbal Motion Legibility Cues for Human-Robot Spatial Interaction. IEEE Robotics and Automation Letters, 2021, 6, 5010-5015.	3.3	15
31	Design and Evaluation of an Augmented Reality Head-mounted Display Interface for Human Robot Teams Collaborating in Physically Shared Manufacturing Tasks. ACM Transactions on Human-Robot Interaction, 2022, 11, 1-19.	3.2	14
32	Did you see it hesitate? - Empirically grounded design of hesitation trajectories for collaborative robots. , 2011, , .		13
33	Trunk Compensation During Bimanual Reaching at Different Heights by Healthy and Hemiparetic Adults. Journal of Motor Behavior, 2017, 49, 580-592.	0.5	13
34	A Split-Crank Bicycle Ergometer Uses Servomotors to Provide Programmable Pedal Forces for Studies in Human Biomechanics. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2010, 18, 445-452.	2.7	10
35	Special Issue on Assistive Robotics [From the Guest Editors]. IEEE Robotics and Automation Magazine, 2013, 20, 16-19.	2.2	9
36	Experimental Performance Evaluation of Human Balance Control Models. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2014, 22, 1115-1127.	2.7	8

#	Article	IF	Citations
37	A wearable vibrotactile device for upper-limb bilateral motion training in stroke rehabilitation: A case study. , 2015, 2015, 3480-3.		7
38	Developing safe fall strategies for lower limb exoskeletons. , 2017, 2017, 314-319.		6
39	Development of whole-body humanoid “pneumat-BS” with pneumatic musculoskeletal system. , 2011, , .		6
40	Towards the Development of a Learning-Based Intention Classification Framework for Pushrim-Activated Power-Assisted Wheelchairs. , 2019, 2019, 95-100.		5
41	Ethics of Corporeal, Co-present Robots as Agents of Influence: a Review. Current Robotics Reports, 2021, 2, 223-229.	5.1	5
42	Culture Coaching: A Model for Facilitating Globally Distributed Collaborative Work. , 2006, , .		4
43	Independent ankle motion control improves robotic balance simulator. , 2012, 2012, 6487-91.		4
44	Perceptions of power-assist devices: interviews with manual wheelchair users. Disability and Rehabilitation: Assistive Technology, 2023, 18, 693-703.	1.3	4
45	Physiological responses to error amplification in a robotic reaching adaptation task. , 2014, 2014, 2318-21.		3
46	Development of a Learning-Based Intention Detection Framework for Power-Assisted Manual Wheelchair Users. , 2020, , .		3
47	Development of A Learning-Based Terrain Classification Framework for Pushrim-Activated Power-Assisted Wheelchairs. , 2020, 2020, 4762-4765.		3
48	Perception of autonomy among people who use wheeled mobility assistive devices: Dependence on the type of wheeled assistive technology. Assistive Technology, 2022, 34, 725-733.	1.2	3
49	Data sample size needed for analysis of kinematic and muscle synergies in healthy and stroke populations. , 2017, 2017, 777-782.		2
50	Did you see it hesitate? - empirically grounded design of hesitation trajectories for collaborative robots. , 2011, , .		1
51	Applying the biodesign innovation process: Addressing the inadequate supply of surgical screws in the developing world. , 2014, , .		1
52	Perception of autonomy among people who use wheeled mobility assistive devices: dependence on environment and contextual factors. Disability and Rehabilitation: Assistive Technology, 2023, 18, 1066-1073.	1.3	1
53	On Line - affective state reporting device. , 2009, , .		0
54	Using Team-Based Learning to Improve Learning and the Student Experience in a Mechanical Design Course. , 2010, , .		0

#	Article	IF	Citations
55	Case Study: An Assistive Technology Ethics Survey. , 2011, , 75-93.		0