H F Machiel Van Der Loos

List of Publications by Year
in descending order

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	Perceptions of power-assist devices: interviews with manual wheelchair users. Disability and Rehabilitation: Assistive Technology, 2023, 18, 693-703.	1.3	4
2	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
3	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
4	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
5	Ethics of Corporeal, Co-present Robots as Agents of Influence: a Review. Current Robotics Reports, 2021, 2, 223-229.	5.1	5
6	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
7	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
8	Development of a Learning-Based Intention Detection Framework for Power-Assisted Manual Wheelchair Users. , 2020, , .		3
9	Development of A Learning-Based Terrain Classification Framework for Pushrim-Activated Power-Assisted Wheelchairs. , 2020, 2020, 4762-4765.		3
10	Towards the Development of a Learning-Based Intention Classification Framework for Pushrim-Activated Power-Assisted Wheelchairs. , 2019, 2019, 95-100.		5
11	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
12	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
13	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
14	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
15	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
16	Trunk Compensation During Bimanual Reaching at Different Heights by Healthy and Hemiparetic Adults. Journal of Motor Behavior, 2017, 49, 580-592.	0.5	13
17	Developing safe fall strategies for lower limb exoskeletons. , 2017, 2017, 314-319.		6
18	Data sample size needed for analysis of kinematic and muscle synergies in healthy and stroke populations. , 2017, 2017, 777-782.		2

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19	Transformation of Vestibular Signals for the Control of Standing in Humans. Journal of Neuroscience, 2016, 36, 11510-11520.	1.7	52
20	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
21	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
22	A wearable vibrotactile device for upper-limb bilateral motion training in stroke rehabilitation: A case study. , 2015, 2015, 3480-3.		7
23	Therapistsâ€™ Perceptions of Social Media and Video Game Technologies in Upper Limb Rehabilitation. JMIR Serious Games, 2015, 3, e2.	1.7	66
24	Applying the biodesign innovation process: Addressing the inadequate supply of surgical screws in the developing world. , 2014, , .		1
25	Experimental Performance Evaluation of Human Balance Control Models. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2014, 22, 1115-1127.	2.7	8
26	Physiological responses to error amplification in a robotic reaching adaptation task. , 2014, 2014, 2318-21.		3
27	Usability testing of gaming and social media applications for stroke and cerebral palsy upper limb rehabilitation. , 2014, 2014, 3602-5.		21
28	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
29	Adaptation of task difficulty in rehabilitation exercises based on the user's motor performance and physiological responses. , 2013, 2013, 6650429.		19
30	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
31	Video Games and Rehabilitation. Journal of Neurologic Physical Therapy, 2013, 37, 166-175.	0.7	225
32	Charlie Rides the Elevator -- Integrating Vision, Navigation and Manipulation towards Multi-floor Robot Locomotion. , 2013, , .		22
33	Special Issue on Assistive Robotics [From the Guest Editors]. IEEE Robotics and Automation Magazine, 2013, 20, 16-19.	2.2	9
34	Grip forces and load forces in handovers. , 2012, , .		66
35	Error amplification to promote motor learning and motivation in therapy robotics. , 2012, 2012, 3907-10.		17
36	Independent ankle motion control improves robotic balance simulator. , 2012, 2012, 6487-91.		4

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37	Human standing is modified by an unconscious integration of congruent sensory and motor signals. Journal of Physiology, 2012, 590, 5783-5794.	1.3	55
38	Survey-Based Discussions on Morally Contentious Applications of Interactive Robotics. International Journal of Social Robotics, 2012, 4, 77-96.	3.1	31
39	Did you see it hesitate? - empirically grounded design of hesitation trajectories for collaborative robots. , 2011, , .		1
40	Roboethics: Ethics Applied to Robotics [From the Guest Editors]. IEEE Robotics and Automation Magazine, 2011, 18, 21-22.	2.2	19
41	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
42	Did you see it hesitate? - Empirically grounded design of hesitation trajectories for collaborative robots. , 2011, , .		13
43	Development of whole-body humanoid “pneumat-BS” with pneumatic musculoskeletal system. , 2011, , .		6
44	Case Study: An Assistive Technology Ethics Survey. , 2011, , 75-93.		0
45	Using Team-Based Learning to Improve Learning and the Student Experience in a Mechanical Design Course. , 2010, , .		0
46	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
47	On Line - affective state reporting device. , 2009, , .		0
48	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
49	Rehabilitation and Health Care Robotics. , 2008, , 1223-1251.		32
50	Towards a personal robotics development platform: Rationale and design of an intrinsically safe personal robot. , 2008, , .		118
51	Culture Coaching: A Model for Facilitating Globally Distributed Collaborative Work. , 2006, , .		4
52	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
53	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
54	Robotic stroke therapy assistant. Robotica, 2003, 21, 33-44.	1.3	50

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55	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