Philippe S Archambault

List of Publications by Year
in descending order

105 papers	2,931 citations	172207 29 h-index	197535 49 g-index
114 all docs	114 docs citations	114 times ranked	2830 citing authors

#	Article	IF	Citations
1	Effects of robot-assisted therapy on stroke rehabilitation in upper limbs: Systematic review and meta-analysis of the literature. Journal of Rehabilitation Research and Development, 2012, 49, 479.	1.6	308
2	Development of a whole arm wearable robotic exoskeleton for rehabilitation and to assist upper limb movements. Robotica, 2015, 33, 19-39.	1.3	150
3	Recruitment and sequencing of different degrees of freedom during pointing movements involving the trunk in healthy and hemiparetic subjects. Experimental Brain Research, 1999, 126, 55-67.	0.7	148
4	Evaluation of the JACO robotic arm: Clinico-economic study for powered wheelchair users with upper-extremity disabilities. , 2011, 2011, 5975397.		126
5	Control of an exoskeleton robot arm with sliding mode exponential reaching law. International Journal of Control, Automation and Systems, 2013, 11, 92-104.	1.6	98
6	Hand trajectory invariance in reaching movements involving the trunk. Experimental Brain Research, 2001, 138, 288-303.	0.7	86
7	Cortical Mechanisms for Online Control of Hand Movement Trajectory: The Role of the Posterior Parietal Cortex. Cerebral Cortex, 2009, 19, 2848-2864.	1.6	84
8	Virtual reality treatment and assessments for post-stroke unilateral spatial neglect: A systematic literature review. Neuropsychological Rehabilitation, 2017, 27, 409-454.	1.0	84
9	Effectiveness of Functional Electrical Stimulation in Improving Clinical Outcomes in the Upper Arm following Stroke: A Systematic Review and Meta-Analysis. BioMed Research International, 2015, 2015, 1-14.	0.9	83
10	Multi-muscle control of head movements in monkeys: the referent configuration hypothesis. Neuroscience Letters, 2000, 283, 65-68.	1.0	74
11	Online Control of Hand Trajectory and Evolution of Motor Intention in the Parietofrontal System. Journal of Neuroscience, 2011, 31, 742-752.	1.7	71
12	1998 ISEK Congress Keynote Lecture. Journal of Electromyography and Kinesiology, 1998, 8, 383-390.	0.7	68
13	The cortical network for eyeâ€“hand coordination and its relevance to understanding motor disorders of parietal patients. Neuropsychologia, 2006, 44, 2607-2620.	0.7	66
14	Feasibility, Safety and Efficacy of a Virtual Reality Exergame System to Supplement Upper Extremity Rehabilitation Post-Stroke: A Pilot Randomized Clinical Trial and Proof of Principle. International Journal of Environmental Research and Public Health, 2020, 17, 113.	1.2	60
15	Electromyogram-Related Neuromuscular Electrical Stimulation for Restoring Wrist and Hand Movement in Poststroke Hemiplegia: A Systematic Review and Meta-Analysis. Neurorehabilitation and Neural Repair, 2019, 33, 96-111.	1.4	58
16	Visually-guided correction of hand reaching movements: The neurophysiological bases in the cerebral cortex. Vision Research, 2015, 110, 244-256.	0.7	54
17	Impairment of Online Control of Hand and Eye Movements in a Monkey Model of Optic Ataxia. Cerebral Cortex, 2013, 23, 2644-2656.	1.6	51
18	Maximizing post-stroke upper limb rehabilitation using a novel telerehabilitation interactive virtual reality system in the patient's home: study protocol of a randomized clinical trial. Contemporary Clinical Trials, 2016, 47, 49-53.	0.8	48

#	Article	IF	Citations
19	Power wheelchair driving challenges in the community: a usersâ€™ perspective. Disability and Rehabilitation: Assistive Technology, 2015, 10, 211-215.	1.3	47
20	Vestibular contribution to combined arm and trunk motion. Experimental Brain Research, 2003, 150, 515-519.	0.7	44
21	Driving performance in a power wheelchair simulator. Disability and Rehabilitation: Assistive Technology, 2012, 7, 226-233.	1.3	41
22	Exploring Powered Wheelchair Users and Their Caregiversâ€™ Perspectives on Potential Intelligent Power Wheelchair Use: A Qualitative Study. International Journal of Environmental Research and Public Health, 2014, 11, 2244-2261.	1.2	40
23	Sex differences in the shoulder joint position sense acuity: a cross-sectional study. BMC Musculoskeletal Disorders, 2015, 16, 273.	0.8	40
24	Development and Control of a Robotic Exoskeleton for Shoulder, Elbow and Forearm Movement Assistance. Applied Bionics and Biomechanics, 2012, 9, 275-292.	0.5	37
25	Virtual reality exergaming as adjunctive therapy in a sub-acute stroke rehabilitation setting: facilitators and barriers. Disability and Rehabilitation: Assistive Technology, 2019, 14, 317-324.	1.3	37
26	Hemispheric specialization in the co-ordination of arm and trunk movements during pointing in patients with unilateral brain damage. Experimental Brain Research, 2003, 148, 488-497.	0.7	35
27	Basic elements of arm postural control analyzed by unloading. Experimental Brain Research, 2005, 164, 225-241.	0.7	33
28	Pointing movements may be produced in different frames of reference depending on the task demand. Brain Research, 2002, 929, 117-128.	1.1	32
29	Admittance-Based Upper Limb Robotic Active and Active-Assistive Movements. International Journal of Advanced Robotic Systems, 2015, 12, 117.	1.3	31
30	Virtual decomposition control of an exoskeleton robot arm. Robotica, 2016, 34, 1587-1609.	1.3	31
31	Passive and active rehabilitation control of human upper-limb exoskeleton robot with dynamic uncertainties. Robotica, 2018, 36, 1757-1779.	1.3	31
32	Control of double-joint arm posture in adults with unilateral brain damage. Experimental Brain Research, 2005, 163, 468-486.	0.7	29
33	Interrater and Intrarater Reliability and Validity of 3 Measurement Methods for Shoulder-Position Sense. Journal of Sport Rehabilitation, 2016, 25, .	0.4	29
34	Ecological Virtual Reality Evaluation of Neglect Symptoms (EVENS): Effects of Virtual Scene Complexity in the Assessment of Poststroke Unilateral Spatial Neglect. Neurorehabilitation and Neural Repair, 2018, 32, 46-61.	1.4	28
35	Cliniciansâ€™ perspectives on inertial measurement units in clinical practice. PLoS ONE, 2020, 15, e0241922.	1.1	28
36	Assessment of Joystick control during the performance of powered wheelchair driving tasks. Journal of NeuroEngineering and Rehabilitation, 2011, 8, 31.	2.4	26

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37	Adaptive control of a 7-DOF exoskeleton robot with uncertainties on kinematics and dynamics. European Journal of Control, 2018, 42, 77-87.	1.6	24
38	Exploring barriers and facilitators to the clinical use of virtual reality for post-stroke unilateral spatial neglect assessment. Disability and Rehabilitation, 2019, 41, 284-292.	0.9	24
39	Development of a 4DoFs exoskeleton robot for passive arm movement assistance. International Journal of Mechatronics and Automation, 2012, 2, 34.	0.1	23
40	Powered wheelchair simulator development: implementing combined navigation-reaching tasks with a 3D hand motion controller. Journal of NeuroEngineering and Rehabilitation, 2016, 13, 3.	2.4	23
41	The Effect of Muscle Fatigue on Position Sense in an Upper Limb Multi-joint Task. Motor Control, 2012, 16, 265-283.	0.3	22
42	Parietal encoding of action in depth. Neuropsychologia, 2009, 47, 1409-1420.	0.7	21
43	Force-position control of a robotic exoskeleton to provide upper extremity movement assistance. International Journal of Modelling, Identification and Control, 2014, 21, 390.	0.2	21
44	The potential impact of intelligent power wheelchair use on social participation: perspectives of users, caregivers and clinicians. Disability and Rehabilitation: Assistive Technology, 2015, 10, 191-197.	1.3	21
45	Optimization of Upper Extremity Rehabilitation by Combining Telerehabilitation With an Exergame in People With Chronic Stroke: Protocol for a Mixed Methods Study. JMIR Research Protocols, 2020, 9, e14629.	0.5	20
46	Modeling and control of a 7DOF exoskeleton robot for arm movements. , 2009, , .		19
47	Creating a rehabilitation living lab to optimize participation and inclusion for persons with physical disabilities. Alter, 2014, 8, 151-157.	1.0	19
48	A Personalized Home-Based Rehabilitation Program Using Exergames Combined With a Telerehabilitation App in a Chronic Stroke Survivor: Mixed Methods Case Study. JMIR Serious Games, 2021, 9, e26153.	1.7	18
49	Exoskeleton robot for rehabilitation of elbow and forearm movements. , 2010, , .		17
50	Impact of post-stroke unilateral spatial neglect on goal-directed arm movements: systematic literature review. Topics in Stroke Rehabilitation, 2015, 22, 397-428.	1.0	16
51	Development and user validation of driving tasks for a power wheelchair simulator. Disability and Rehabilitation, 2017, 39, 1549-1556.	0.9	15
52	Long-term use of the JACO robotic arm: a case series. Disability and Rehabilitation: Assistive Technology, 2019, 14, 267-275.	1.3	15
53	DYNAMIC MODELING AND EVALUATION OF A ROBOTIC EXOSKELETON FOR UPPER-LIMB REHABILITATION. International Journal of Information Acquisition, 2011, 08, 83-102.	0.2	14
54	Impacts of robotic arm use on individuals with upper extremity disabilities: A scoping review. Canadian Journal of Occupational Therapy, 2018, 85, 397-407.	0.8	14

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55	Non-undulatory locomotion in the lamprey. NeuroReport, 2001, 12, 1803-1807.	0.6	13
56	Post-stroke unilateral spatial neglect: virtual reality-based navigation and detection tasks reveal lateralized and non-lateralized deficits in tasks of varying perceptual and cognitive demands. Journal of NeuroEngineering and Rehabilitation, 2018, 15, 34.	2.4	13
57	Adaptation and post-adaptation effects of haptic forces on locomotion in healthy young adults. Journal of NeuroEngineering and Rehabilitation, 2018, 15, 20.	2.4	13
58	Robot assisted rehabilitation for elbow and forearm movements. International Journal of Biomechatronics and Biomedical Robotics, 2011, 1, 206.	0.1	12
59	Feasibility and preliminary efficacy of a combined virtual reality, robotics and electrical stimulation intervention in upper extremity stroke rehabilitation. Journal of NeuroEngineering and Rehabilitation, 2021, 18, 61.	2.4	12
60	Comparison of powered wheelchair driving performance in a real and in a simulated environment. , 2011, , .		11
61	Analysis of movement to develop a virtual reality powered-wheelchair simulator. , 2008, , .		9
62	Mobility profile and wheelchair driving skills of powered wheelchair users: Sensor-based event recognition using a support vector machine classifier. , 2011, 2011, 7336-9.		9
63	Automatic Detection and Classification of Unsafe Events During Power Wheelchair Use. IEEE Journal of Translational Engineering in Health and Medicine, 2014, 2, 1-9.	2.2	9
64	Towards Establishing Clinical Guidelines for an Arm Rehabilitation Virtual Reality System. Biosystems and Biorobotics, 2014, , 263-270.	0.2	9
65	Creating an inclusive mall environment with the PRECEDE-PROCEED model: a living lab case study. Disability and Rehabilitation, 2017, 39, 2198-2206.	0.9	9
66	Assistive robotic arm: Evaluation of the performance of intelligent algorithms. Assistive Technology, 2021, 33, 95-104.	1.2	9
67	Development of a Web-Based Monitoring System for Power Tilt-in-Space Wheelchairs: Formative Evaluation. JMIR Rehabilitation and Assistive Technologies, 2019, 6, e13560.	1.1	9
68	Cartesian trajectory tracking of an upper limb exoskeleton robot. , 2012, , .		6
69	Augmented feedback for powered wheelchair training in a virtual environment. Journal of NeuroEngineering and Rehabilitation, 2019, 16, 12.	2.4	6
70	Rehabilitation of Upper Extremity by Telerehabilitation Combined With Exergames in Survivors of Chronic Stroke: Preliminary Findings From a Feasibility Clinical Trial. JMIR Rehabilitation and Assistive Technologies, 2022, 9, e33745.	1.1	6
71	Post-stroke visual neglect affects goal-directed locomotion in different perceptuo-cognitive conditions and on a wide visual spectrum. Restorative Neurology and Neuroscience, 2018, 36, 313-331.	0.4	5
72	Comparing childrenâ€™s driving abilities in physical and virtual environments. Disability and Rehabilitation: Assistive Technology, 2019, 16, 1-8.	1.3	5

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73	Virtual community centre for power wheelchair training: Experience of children and clinicians. Disability and Rehabilitation: Assistive Technology, 2019, 14, 46-55.	1.3	5
74	Visual perceptual deficits and their contribution to walking dysfunction in individuals with post-stroke visual neglect. Neuropsychological Rehabilitation, 2020, 30, 207-232.	1.0	5
75	A scoping review of powered wheelchair driving tasks and performance-based outcomes. Disability and Rehabilitation: Assistive Technology, 2020, 15, 76-91.	1.3	5
76	International research priorities on the role of cognition in power mobility device use: In pursuit of informed clinical practices and knowledge translation. Assistive Technology, 2023, 35, 119-126.	1.2	5
77	Comparing the usability of a virtual reality manual wheelchair simulator in two display conditions. Journal of Rehabilitation and Assistive Technologies Engineering, 2022, 9, 205566832110671.	0.6	5
78	The effects of haptic forces on locomotion and posture in post-stroke and elderly adults. , 2015, , .		4
79	Upper extremity intervention for stroke combining virtual reality, robotics and electrical stimulation. , 2019, , .		4
80	An integrated knowledge translation project to develop, implement, and evaluate a train-the-trainer program at a community rehabilitation program in Tamil Nadu, India. Disability and Rehabilitation, 2021, 43, 3868-3877.	0.9	4
81	Development of a new virtual environment for a power wheelchair simulator: A user-centered approach. , 2013, , .		3
82	Development and user validation of driving tasks for a power wheelchair simulator. , 2015, , .		3
83	Evaluation of the usability of an actively actuated arm support. Assistive Technology, 2019, 33, 1-7.	1.2	3
84	Robot-Assisted Reaching Performance of Chronic Stroke and Healthy Individuals in a Virtual Versus a Physical Environment: A Pilot Study. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 1273-1281.	2.7	3
85	Mechanical design of a new device to assist eating in people with movement disorders. Assistive Technology, 2022, 34, 170-177.	1.2	3
86	Biomedical Research and Informatics Living Laboratory for Innovative Advances of New Technologies in Community Mobility Rehabilitation: Protocol for Evaluation and Rehabilitation of Mobility Across Continuums of Care. JMIR Research Protocols, 2022, 11, e12506.	0.5	3
87	A research protocol exploring the use of haptic forces for stroke rehabilitation. , 2013, , .		2
88	The effects of a robot-controlled haptic leash compared with an instrumented cane on gait and posture in post-stroke and older adults. , 2017, , .		2
89	Visuomotor control of complex locomotor tasks in physical and virtual environments. Neurophysiologie Clinique, 2019, 49, 434.	1.0	2
90	How to Observe Usersâ€™ Movements in Virtual Environments: Viewpoint Control in a Power Wheelchair Simulator. Human Factors, 2020, 62, 656-670.	2.1	2

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91	Evaluation of satisfaction with geospatial assistive technology (ESGAT): a methodological and usability study. Disability and Rehabilitation: Assistive Technology, 2022, 17, 134-151.	1.3	2
92	Changes in arm kinematics of chronic stroke individuals following â€œAssist-As-Askedâ€•robot-assisted training in virtual and physical environments: A proof-of-concept study. Journal of Rehabilitation and Assistive Technologies Engineering, 2020, 7, 205566832092605.	0.6	2
93	Pediatric powered mobility training: powered wheelchair versus simulator-based practice. Assistive Technology, 2023, 35, 389-398.	1.2	2
94	Robot-assisted arm training in physical and virtual environments: A case study of long-term chronic stroke. , 2017, , .		1
95	Improving wheelchair driving performance in a virtual reality simulator. , 2019, , .		1
96	The Modification and Development of a Simulator for Powered Mobility for Children. , 2019, , .		1
97	Walking with robot-generated haptic forces in a virtual environment: a new approach to analyze lower limb coordination. Journal of NeuroEngineering and Rehabilitation, 2021, 18, 136.	2.4	1
98	Inverse Kinematics for a Novel Rehabilitation Robot for Lower Limbs. Mechanisms and Machine Science, 2018, , 376-389.	0.3	1
99	Usability of a virtual reality manual wheelchair simulator. Disability and Rehabilitation: Assistive Technology, 2022, , 1-11.	1.3	1
100	Absence of equifinality of hand position in a double-step unloading task. Experimental Brain Research, 2010, 205, 167-182.	0.7	0
101	Developing innovative home-based telerehabilitation strategies for post-stroke rehabilitation. , 2015, , .		0
102	Expertsâ€™ opinion on manual wheelchair adjustments for adults with diabetes. Disability and Rehabilitation: Assistive Technology, 2018, 13, 78-86.	1.3	0
103	Augmented feedback for manual wheelchair propulsion technique training in a virtual reality simulator. Journal of NeuroEngineering and Rehabilitation, 2021, 18, 142.	2.4	0
104	Towards a Macroscopic View of Using an Assistive Technology for Mobility for Its Development: Assessing Usersâ€™ and Co-usersâ€™ Experience. Advances in Intelligent Systems and Computing, 2019, , 848-859.	0.5	0
105	Usability of a navigation application for travel in Quebec City with wheeled mobility device and, further validation of the Evaluation of satisfaction with geospatial assistive technology. Disability and Rehabilitation: Assistive Technology, 2024, 19, 367-382.	1.3	0