Etienne Burdet

List of Publications by Year
in descending order

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276	12,222	47006	33894
papers	citations	47 h-index	99 g-index

286	286	286	8150
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The central nervous system stabilizes unstable dynamics by learning optimal impedance. Nature, 2001, 414, 446-449.	27.8	999
2	Variable impedance actuators: A review. Robotics and Autonomous Systems, 2013, 61, 1601-1614.	5.1	822
3	A Brain Controlled Wheelchair to Navigate in Familiar Environments. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2010, 18, 590-598.	4.9	449
4	Human-Like Adaptation of Force and Impedance in Stable and Unstable Interactions. IEEE Transactions on Robotics, 2011, 27, 918-930.	10.3	360
5	Adaptation to Stable and Unstable Dynamics Achieved By Combined Impedance Control and Inverse Dynamics Model. Journal of Neurophysiology, 2003, 90, 3270-3282.	1.8	358
6	On the analysis of movement smoothness. Journal of NeuroEngineering and Rehabilitation, 2015, 12, 112.	4.6	335
7	A Robust and Sensitive Metric for Quantifying Movement Smoothness. IEEE Transactions on Biomedical Engineering, 2012, 59, 2126-2136.	4.2	309
8	Variable Stiffness Actuators: Review on Design and Components. IEEE/ASME Transactions on Mechatronics, 2016, 21, 2418-2430.	5.8	293
9	CNS Learns Stable, Accurate, and Efficient Movements Using a Simple Algorithm. Journal of Neuroscience, 2008, 28, 11165-11173.	3.6	271
10	Endpoint Stiffness of the Arm Is Directionally Tuned to Instability in the Environment. Journal of Neuroscience, 2007, 27, 7705-7716.	3.6	255
11	Robot-assisted rehabilitation of hand function. Current Opinion in Neurology, 2010, 23, 661-670.	3.6	232
12	Large-Area Soft e-Skin: The Challenges Beyond Sensor Designs. Proceedings of the IEEE, 2019, 107, 2016-2033.	21.3	214
13	Controlling a Wheelchair Indoors Using Thought. IEEE Intelligent Systems, 2007, 22, 18-24.	4.0	211
14	HandCARE: A Cable-Actuated Rehabilitation System to Train Hand Function After Stroke. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2008, 16, 582-591.	4.9	195
15	Development of BOLD signal hemodynamic responses in the human brain. NeuroImage, 2012, 63, 663-673.	4.2	172
16	A Haptic Knob for Rehabilitation of Hand Function. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2007, 15, 356-366.	4.9	166
17	Two is better than one: Physical interactions improve motor performance in humans. Scientific Reports, 2014, 4, 3824.	3.3	161
18	MRI/fMRI-compatible robotic system with force feedback for interaction with human motion. IEEE/ASME Transactions on Mechatronics, 2006, 11, 216-224.	5.8	160

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19	Variable stiffness actuators: The userâ€™s point of view. International Journal of Robotics Research, 2015, 34, 727-743.	8.5	160
20	Functional significance of stiffness in adaptation of multijoint arm movements to stable and unstable dynamics. Experimental Brain Research, 2003, 151, 145-157.	1.5	155
21	A method for measuring endpoint stiffness during multi-joint arm movements. Journal of Biomechanics, 2000, 33, 1705-1709.	2.1	148
22	Bimanual coordination during a physically coupled task in unilateral spastic cerebral palsy children. Journal of NeuroEngineering and Rehabilitation, 2019, 16, 1.	4.6	133
23	A Framework to Describe, Analyze and Generate Interactive Motor Behaviors. PLoS ONE, 2012, 7, e49945.	2.5	125
24	Computational neurorehabilitation: modeling plasticity and learning to predict recovery. Journal of NeuroEngineering and Rehabilitation, 2016, 13, 42.	4.6	125
25	A model of force and impedance in human arm movements. Biological Cybernetics, 2004, 90, 368-75.	1.3	121
26	Stability and motor adaptation in human arm movements. Biological Cybernetics, 2006, 94, 20-32.	1.3	118
27	Quantization of human motions and learning of accurate movements. Biological Cybernetics, 1998, 78, 307-318.	1.3	116
28	Different Mechanisms Involved in Adaptation to Stable and Unstable Dynamics. Journal of Neurophysiology, 2003, 90, 3255-3269.	1.8	115
29	Robotic Assessment of Upper Limb Motor Function After Stroke. American Journal of Physical Medicine and Rehabilitation, 2012, 91, S255-S269.	1.4	115
30	Adaptive control of the Hexaglide, a 6 dof parallel manipulator. , 0, , .		108
31	Somatosensory cortical activation identified by functional MRI in preterm and term infants. NeuroImage, 2010, 49, 2063-2071.	4.2	102
32	Force, Impedance, and Trajectory Learning for Contact Tooling and Haptic Identification. IEEE Transactions on Robotics, 2018, 34, 1170-1182.	10.3	102
33	Human Robotics. , 2013, , .		98
34	Effects of a robot-assisted training of grasp and pronation/supination in chronic stroke: a pilot study. Journal of NeuroEngineering and Rehabilitation, 2011, 8, 63.	4.6	97
35	Dissociating Variability and Effort as Determinants of Coordination. PLoS Computational Biology, 2009, 5, e1000345.	3.2	94
36	Actuation methods for applications in MR environments. Concepts in Magnetic Resonance Part B, 2006, 29B, 191-209.	0.7	92

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37	Physically interacting individuals estimate the partnerâ€™s goal to enhance their movements. Nature Human Behaviour, 2017, 1, .	12.0	91
38	Concurrent adaptation of force and impedance in the redundant muscle system. Biological Cybernetics, 2010, 102, 31-44.	1.3	89
39	A Collaborative Wheelchair System. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2008, 16, 161-170.	4.9	85
40	Visual Feedback Is Not Necessary for the Learning of Novel Dynamics. PLoS ONE, 2007, 2, e1336.	2.5	82
41	Microrobotics and MEMS-Based Fabrication Techniques for Scaffold-Based Tissue Engineering. Macromolecular Bioscience, 2005, 5, 477-489.	4.1	80
42	Slaves no longer: review on role assignment for humanâ€“robot joint motor action. Adaptive Behavior, 2014, 22, 70-82.	1.9	80
43	Motor Memory and Local Minimization of Error and Effort, Not Global Optimization, Determine Motor Behavior. Journal of Neurophysiology, 2010, 104, 382-390.	1.8	79
44	A robotic teacher of Chinese handwriting. , 0, , .		78
45	Maturation of Sensori-Motor Functional Responses in the Preterm Brain. Cerebral Cortex, 2016, 26, 402-413.	2.9	71
46	A Brain-Controlled Wheelchair Based on P300 and Path Guidance. , 0, , .		69
47	Differential game theory for versatile physical humanâ€“robot interaction. Nature Machine Intelligence, 2019, 1, 36-43.	16.0	69
48	Somatotopic Mapping of the Developing Sensorimotor Cortex in the Preterm Human Brain. Cerebral Cortex, 2018, 28, 2507-2515.	2.9	68
49	Biomimetic motor behavior for simultaneous adaptation of force, impedance and trajectory in interaction tasks. , 2010, , .		62
50	Opportunities and Challenges in MR-Compatible Robotics. IEEE Engineering in Medicine and Biology Magazine, 2008, 27, 15-22.	0.8	60
51	Sensors for Applications in Magnetic Resonance Environments. IEEE/ASME Transactions on Mechatronics, 2008, 13, 335-344.	5.8	56
52	Is EMG a Viable Alternative to BCI for Detecting Movement Intention in Severe Stroke?. IEEE Transactions on Biomedical Engineering, 2018, 65, 2790-2797.	4.2	53
53	An MR compatible robot technology. , 0, , .		49
54	Haptic communication between humans is tuned by the hard or soft mechanics of interaction. PLoS Computational Biology, 2018, 14, e1005971.	3.2	49

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55	Balancing the playing field: collaborative gaming for physical training. Journal of NeuroEngineering and Rehabilitation, 2017, 14, 116.	4.6	47
56	MRI-Compatible Robotics. IEEE Engineering in Medicine and Biology Magazine, 2008, 27, 12-14.	0.8	44
57	In a demanding task, three-handed manipulation is preferred to two-handed manipulation. Scientific Reports, 2016, 6, 21758.	3.3	44
58	Design of a simple MRI/fMRI compatible force/torque sensor. , 0, , .		41
59	A versatile biomimetic controller for contact tooling and haptic exploration. , 2012, , .		41
60	Control of a Supernumerary Robotic Hand by Foot: An Experimental Study in Virtual Reality. PLoS ONE, 2015, 10, e0134501.	2.5	41
61	The effects of hemorrhagic parenchymal infarction on the establishment of sensori-motor structural and functional connectivity in early infancy. Neuroradiology, 2014, 56, 985-994.	2.2	40
62	Controlling a wheelchair using a BCI with low information transfer rate. , 2007, , .		39
63	Sparse linear regression for reconstructing muscle activity from human cortical fMRI. NeuroImage, 2008, 42, 1463-1472.	4.2	38
64	A 2-DOF fMRI compatible haptic interface to investigate the neural control of arm movements. , 0, , .		37
65	Supplementary motor area and anterior intraparietal area integrate fineâ€graded timing and force control during precision grip. European Journal of Neuroscience, 2009, 30, 2401-2406.	2.6	37
66	Augmented manipulation ability in humans with six-fingered hands. Nature Communications, 2019, 10, 2401.	12.8	37
67	Indirect Shared Control for Cooperative Driving Between Driver and Automation in Steer-by-Wire Vehicles. IEEE Transactions on Intelligent Transportation Systems, 2021, 22, 7826-7836.	8.0	37
68	Interaction Force, Impedance and Trajectory Adaptation: By Humans, for Robots. Springer Tracts in Advanced Robotics, 2014, , 331-345.	0.4	37
69	Dynamics and control of an MRI compatible master-slave system with hydrostatic transmission. , 2004, , .		36
70	The Role of Posture, Magnification, and Grip Force on Microscopic Accuracy. Annals of Biomedical Engineering, 2009, 37, 997-1006.	2.5	36
71	Variable impedance actuators: Moving the robots of tomorrow. , 2012, , .		36
72	Novel Hybrid Adaptive Controller for Manipulation in Complex Perturbation Environments. PLoS ONE, 2015, 10, e0129281.	2.5	35

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73	Collaborative wheelchair assistant. , 0, , .		34
74	Force Field Adaptation Can Be Learned Using Vision in the Absence of Proprioceptive Error. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2011, 19, 298-306.	4.9	34
75	Driver-automation indirect shared control of highly automated vehicles with intention-aware authority transition. , 2017, , .		34
76	Prediction of Gait Freezing in Parkinsonian Patients: A Binary Classification Augmented With Time Series Prediction. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 1909-1919.	4.9	34
77	Principles of human movement augmentation and the challenges in making it a reality. Nature Communications, 2022, 13, 1345.	12.8	34
78	Assessing suturing techniques using a virtual reality surgical simulator. Microsurgery, 2010, 30, 479-486.	1.3	33
79	The duration of reaching movement is longer than predicted by minimum variance. Journal of Neurophysiology, 2016, 116, 2342-2345.	1.8	32
80	Interpersonal strategies for disturbance attenuation during a rhythmic joint motor action. Physiology and Behavior, 2015, 147, 348-358.	2.1	31
81	Democratizing Neurorehabilitation: How Accessible are Low-Cost Mobile-Gaming Technologies for Self-Rehabilitation of Arm Disability in Stroke?. PLoS ONE, 2016, 11, e0163413.	2.5	31
82	A Haptic Knob for Rehabilitation of Stroke Patients. , 2006, , .		30
83	Impedance control is selectively tuned to multiple directions of movement. Journal of Neurophysiology, 2011, 106, 2737-2748.	1.8	29
84	ReachMAN: a personal robot to train reaching and manipulation. , 2009, , .		27
85	Motor planning explains human behaviour in tasks with multiple solutions. Robotics and Autonomous Systems, 2013, 61, 362-368.	5.1	27
86	A Subject-Specific Four-Degree-of-Freedom Foot Interface to Control a Surgical Robot. IEEE/ASME Transactions on Mechatronics, 2020, 25, 951-963.	5.8	26
87	Individuals physically interacting in a group rapidly coordinate their movement by estimating the collective goal. ELife, 2019, 8, .	6.0	26
88	Experimental evaluation of nonlinear adaptive controllers. IEEE Control Systems, 1998, 18, 39-47.	0.8	25
89	A force-feedback control system for micro-assembly. Journal of Micromechanics and Microengineering, 2006, 16, 1861-1868.	2.6	25
90	Hi5: A versatile dual-wrist device to study human-human interaction and bimanual control. , 2011, , .		25

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91	Computerâ€controlled stimulation for functional magnetic resonance imaging studies of the neonatal olfactory system. Acta Paediatrica, International Journal of Paediatrics, 2013, 102, 868-875.	1.5	25
92	Assisting Human Balance in Standing With a Robotic Exoskeleton. IEEE Robotics and Automation Letters, 2019, 4, 414-421.	5.1	25
93	Evaluation of parametric and nonparametric nonlinear adaptive controllers. Robotica, 1998, 16, 59-73.	1.9	24
94	Investigation of a Cable Transmission for the Actuation of MR Compatible Haptic Interfaces. , 0, , .		24
95	A Haptic Knob with a Hybrid Ultrasonic Motor and Powder Clutch Actuator. , 2007, , .		24
96	An fMRI Compatible Wrist Robotic Interface to Study Brain Development in Neonates. Annals of Biomedical Engineering, 2013, 41, 1181-1192.	2.5	24
97	Implementation and Test of Human-Operated and Human-Like Adaptive Impedance Controls on Baxter Robot. Lecture Notes in Computer Science, 2014, , 109-119.	1.3	24
98	Microassembly Fabrication of Tissue Engineering Scaffolds With Customized Design. IEEE Transactions on Automation Science and Engineering, 2008, 5, 446-456.	5.2	22
99	Rehabilitation of grasping and forearm pronation/supination with the Haptic Knob. , 2009, , .		22
100	Pointing with the wrist: a postural model for Dondersâ€™ law. Experimental Brain Research, 2011, 212, 417-427.	1.5	22
101	Generalization in Adaptation to Stable and Unstable Dynamics. PLoS ONE, 2012, 7, e45075.	2.5	22
102	Development of a Robot-Assisted Rehabilitation Therapy to train Hand Function for Activities of Daily Living. , 2007, , .		21
103	A Three-Limb Teleoperated Robotic System with Foot Control for Flexible Endoscopic Surgery. Annals of Biomedical Engineering, 2021, 49, 2282-2296.	2.5	21
104	Stochastic optimal feedforward-feedback control determines timing and variability of arm movements with or without vision. PLoS Computational Biology, 2021, 17, e1009047.	3.2	21
105	Robotic Assisted Upper Limb Training Post Stroke: A Randomized Control Trial Using Combinatory Approach Toward Reducing Workforce Demands. Frontiers in Neurology, 2021, 12, 622014.	2.4	21
106	An eye tracking based virtual reality system for use inside magnetic resonance imaging systems. Scientific Reports, 2021, 11, 16301.	3.3	21
107	Monolithic shape memory alloy micrograpper for 3D assembly of tissue engineering scaffolds. , 2001, , .		20
108	Evaluation of a Collaborative Wheelchair System in Cerebral Palsy and Traumatic Brain Injury Users. Neurorehabilitation and Neural Repair, 2009, 23, 494-504.	2.9	20

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109	For Motion Assistance Humans Prefer to Rely on a Robot Rather Than on an Unpredictable Human. IEEE Open Journal of Engineering in Medicine and Biology, 2020, 1, 133-139.	2.3	20
110	Motion Plan Changes Predictably in Dyadic Reaching. PLoS ONE, 2016, 11, e0167314.	2.5	20
111	Effects of a neuromuscular controller on a powered ankle exoskeleton during human walking. , 2016, , .		19
112	A model of force and impedance in human arm movements. Biological Cybernetics, 0, , .	1.3	19
113	Modeling Individual Human Motor Behavior Through Model Reference Iterative Learning Control. IEEE Transactions on Biomedical Engineering, 2012, 59, 1892-1901.	4.2	18
114	Technology-Aided Assessment of Sensorimotor Function in Early Infancy. Frontiers in Neurology, 2014, 5, 197.	2.4	18
115	The dominant limb preferentially stabilizes posture in a bimanual task with physical coupling. Journal of Neurophysiology, 2020, 123, 2154-2160.	1.8	18
116	Dynamic Thread for Real-Time Knot-Tying. , 0, , .		17
117	A Cable Driven Robotic System to Train Finger Function After Stroke. , 2007, , .		17
118	Analysis of grasping strategies and function in hemiparetic patients using an instrumented object. , 2013, 2013, 6650379.		17
119	Human performance in three-hands tasks. Scientific Reports, 2021, 11, 9511.	3.3	17
120	Shape memory alloy microgripper for robotic microassembly of tissue engineering scaffolds. , 2004, , .		16
121	Self-Paced Reaching after Stroke: A Quantitative Assessment of Longitudinal and Directional Sensitivity Using the H-Man Planar Robot for Upper Limb Neurorehabilitation. Frontiers in Neuroscience, 2016, 10, 477.	2.8	16
122	A Multimodal Intention Detection Sensor Suite for Shared Autonomy of Upper-Limb Robotic Prostheses. Sensors, 2020, 20, 6097.	3.8	16
123	Active Visuo-Tactile Interactive Robotic Perception for Accurate Object Pose Estimation in Dense Clutter. IEEE Robotics and Automation Letters, 2022, 7, 4686-4693.	5.1	16
124	The control and training of single motor units in isometric tasks are constrained by a common input signal. ELife, 0, 11, .	6.0	16
125	Evaluation of the Collaborative Wheelchair Assistant System. , 2007, , .		15
126	Investigation of Motion Guidance With Scooter Cobot and Collaborative Learning. , 2007, 23, 245-255.		15

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127	Motor adaptation with passive machines: A first study on the effect of real and virtual stiffness. Computer Methods and Programs in Biomedicine, 2014, 116, 145-155.	4.7	15
128	Elasticity improves handgrip performance and user experience during visuomotor control. Royal Society Open Science, 2017, 4, 160961.	2.4	15
129	Improving Tracking through Human-Robot Sensory Augmentation. IEEE Robotics and Automation Letters, 2020, 5, 4399-4406.	5.1	15
130	The CNS Stochastically Selects Motor Plan Utilizing Extrinsic and Intrinsic Representations. PLoS ONE, 2011, 6, e24229.	2.5	15
131	Micromanipulation accuracy in pointing and tracing investigated with a contact-free measurement system. , 2009, 2009, 3960-3.		14
132	Analysis of pick-and-place, eating and drinking movements for the workspace definition of simple robotic devices. , 2009, , .		14
133	A technique to train finger coordination and independence after stroke. Disability and Rehabilitation: Assistive Technology, 2010, 5, 279-287.	2.2	14
134	3DOM: A 3 Degree of Freedom Manipulandum to Investigate Redundant Motor Control. IEEE Transactions on Haptics, 2014, 7, 229-239.	2.7	14
135	Performance Evaluation of a Foot Interface to Operate a Robot Arm. IEEE Robotics and Automation Letters, 2019, 4, 3302-3309.	5.1	14
136	Design and Evaluation of a Foot-Controlled Robotic System for Endoscopic Surgery. IEEE Robotics and Automation Letters, 2021, 6, 2469-2476.	5.1	14
137	Tri-Manipulation: An Evaluation of Human Performance in 3-Handed Teleoperation. IEEE Transactions on Medical Robotics and Bionics, 2020, 2, 545-548.	3.2	14
138	Effect of Grip Force and Training in Unstable Dynamics on Micromanipulation Accuracy. IEEE Transactions on Haptics, 2011, 4, 167-174.	2.7	13
139	Analysis of Accuracy in Pointing with Redundant Hand-held Tools: A Geometric Approach to the Uncontrolled Manifold Method. PLoS Computational Biology, 2013, 9, e1002978.	3.2	13
140	Muscle patterns underlying voluntary modulation of co-contraction. PLoS ONE, 2018, 13, e0205911.	2.5	13
141	Self-Directed Exergaming for Stroke Upper Limb Impairment Increases Exercise Dose Compared to Standard Care. Neurorehabilitation and Neural Repair, 2021, 35, 974-985.	2.9	13
142	How are internal models of unstable tasks formed?. , 2004, 2004, 4491-4.		12
143	A hybrid ultrasonic motor and electrorheological fluid clutch actuator for force-feedback in MRI/fMRI. , 2008, 2008, 3438-42.		12
144	Multi-source micro-friction identification for a class of cable-driven robots with passive backbone. Mechanical Systems and Signal Processing, 2016, 80, 152-165.	8.0	12

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145	The effect of skill level matching in dyadic interaction on learning of a tracing task. , 2019, 2019, 824-829.		12
146	Experiments in nonlinear adaptive control. , 0, , .		11
147	Classification of strategies for disturbance attenuation in human-human collaborative tasks. , 2011, 2011, 2364-7.		11
148	Differential neural correlates of reciprocal activation and cocontraction control in dorsal and ventral premotor cortices. Journal of Neurophysiology, 2012, 107, 126-133.	1.8	11
149	Learning to Design Rehabilitation Devices Through the H-CARD Course: Project-Based Learning of Rehabilitation Technology Design. IEEE Pulse, 2012, 3, 51-58.	0.3	11
150	An fMRI Compatible Smart Device for Measuring Palmar Grasping Actions in Newborns. Sensors, 2020, 20, 6040.	3.8	11
151	Development of an elastic path controller. , 0, , .		10
152	Active mechatronic interface for haptic perception studies with functional magnetic resonance imaging: compatibility and design criteria. , 0, , .		10
153	Post-stroke training of a pick and place activity in a virtual environment. , 2008, , .		10
154	Versatile Interaction Control and Haptic Identification in Humans and Robots. Springer Tracts in Advanced Robotics, 2017, , 187-206.	0.4	10
155	Energetic Passivity Decoding of Human Hip Joint for Physical Human-Robot Interaction. IEEE Robotics and Automation Letters, 2020, 5, 5953-5960.	5.1	10
156	The Influence of Posture, Applied Force and Perturbation Direction on Hip Joint Viscoelasticity. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 1138-1145.	4.9	10
157	Robotic micro-assembly of scaffold/cell constructs with a shape memory alloy gripper. , 0, , .		9
158	Motion guidance experiments with Scooter Cobot. , 0, , .		9
159	Design of a collaborative wheelchair with path guidance assistance. , 0, , .		9
160	A modular sensor-based system for the Rehabilitation and Assessment of manipulation. , 2012, , .		9
161	Hyperstaticity for ergonomie design of a wrist exoskeleton. , 2013, 2013, 6650417.		9
162	reachMAN2: A compact rehabilitation robot to train reaching and manipulation. , 2014, , .		9

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163	SITAR: a system for independent task-oriented assessment and rehabilitation. Journal of Rehabilitation and Assistive Technologies Engineering, 2017, 4, 205566831772963.	0.9	9
164	A Clustering-Based Approach to Identify Joint Impedance During Walking. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 1808-1816.	4.9	9
165	Short Time Delay Does Not Hinder Haptic Communication Benefits. IEEE Transactions on Haptics, 2021, 14, 322-327.	2.7	9
166	Model-based attenuation of movement artifacts in fMRI. Journal of Neuroscience Methods, 2010, 192, 58-69.	2.5	8
167	ReachMAN to help sub-acute patients training reaching and manipulation. , 2010, , .		8
168	Biomimetic joint/task space hybrid adaptive control for bimanual robotic manipulation. , 2014, , .		8
169	Quantitative motor assessment of upperlimb after unilateral stroke: A preliminary feasibility study with H-Man, a planar robot. , 2015, , .		8
170	Anticipatory detection of turning in humans for intuitive control of robotic mobility assistance. Bioinspiration and Biomimetics, 2017, 12, 055004.	2.9	8
171	A novel sensor design for accurate measurement of facial somatosensation in pre-term infants. PLoS ONE, 2018, 13, e0207145.	2.5	8
172	Estimating Human Wrist Stiffness during a Tooling Task. Sensors, 2020, 20, 3260.	3.8	8
173	Taxonomy based analysis of force exchanges during object grasping and manipulation. PLoS ONE, 2017, 12, e0178185.	2.5	8
174	Modernising grip dynamometry: Inter-instrument reliability between GripAble and Jamar. BMC Musculoskeletal Disorders, 2022, 23, 80.	1.9	8
175	The Learning Cobot. , 2002, , 867.		7
176	Hybrid Ultrasonic Motor and Electrorheological Clutch System for MR-Compatible Haptic Rendering. , 2006, , .		7
177	HandCARE2: A novel cable interface for hand rehabilitation. , 2008, , .		7
178	Collaborative path planning for a robotic wheelchair. Disability and Rehabilitation: Assistive Technology, 2008, 3, 315-324.	2.2	7
179	Force-controlled automatic microassembly of tissue engineering scaffolds. Journal of Micromechanics and Microengineering, 2010, 20, 035001.	2.6	7
180	Guest Editorial Motor Skill Learning and Neuro-Rehabilitation. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2012, 20, 237-238.	4.9	7

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181	Facing the partner influences exchanges in force. Scientific Reports, 2016, 6, 35397.	3.3	7
182	Transfer of dynamic motor skills acquired during isometric training to free motion. Journal of Neurophysiology, 2017, 118, 219-233.	1.8	7
183	Positioning the endoscope in laparoscopic surgery by foot: Influential factors on surgeons' performance in virtual trainer. , 2017, 2017, 3944-3948.		7
184	Horseback riding therapy for a deafblind individual enabled by a haptic interface. Assistive Technology, 2018, 30, 143-150.	2.0	7
185	Abnormal microscale neuronal connectivity triggered by a proprioceptive stimulus in dystonia. Scientific Reports, 2020, 10, 20758.	3.3	7
186	Cortical Processing of Multimodal Sensory Learning in Human Neonates. Cerebral Cortex, 2021, 31, 1827-1836.	2.9	7
187	Proof-of-Concept of a Sensor-Based Evaluation Method for Better Sensitivity of Upper-Extremity Motor Function Assessment. Sensors, 2021, 21, 5926.	3.8	7
188	EEG measures of sensorimotor processing and their development are abnormal in children with isolated dystonia and dystonic cerebral palsy. NeuroImage: Clinical, 2021, 30, 102569.	2.7	7
189	Trimanipulation: Evaluation of human performance in a 3-handed coordination task. , 2021, , .		7
190	Artificial nociception and motor responses to pain, for humans and robots. , 2015, 2015, 7402-5.		6
191	A simple tool to measure spasticity in spinal cord injury subjects. , 2017, 2017, 1590-1596.		6
192	Modeling of Endpoint Feedback Learning Implemented Through Point-to-Point Learning Control. IEEE Transactions on Control Systems Technology, 2017, 25, 1576-1585.	5.2	6
193	Sensory Integration of Apparent Motion Speed and Vibration Magnitude. IEEE Transactions on Haptics, 2018, 11, 455-463.	2.7	6
194	Development and Comparison of Foot Interfaces for Controlling a Robotic Arm in Surgery. , 2018, , .		6
195	Flexible Assimilation of Human's Target for Versatile Human-Robot Physical Interaction. IEEE Transactions on Haptics, 2021, 14, 421-431.	2.7	6
196	Development of functional organization within the sensorimotor network across the perinatal period. Human Brain Mapping, 2022, 43, 2249-2261.	3.6	6
197	GripAble: An accurate, sensitive and robust digital device for measuring grip strength. Journal of Rehabilitation and Assistive Technologies Engineering, 2022, 9, 205566832210784.	0.9	6
198	Elastic Path Controller for Assistive Devices. , 2005, 2005, 6239-42.		5

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199	Subject-Specific Wrist Model Calibration and Application to Ergonomic Design of Exoskeletons. IEEE Sensors Journal, 2013, 13, 3293-3301.	4.7	5
200	Comparison of flexible and rigid hand-grip control during a feed-forward visual tracking task. , 2015, , .		5
201	Effect of sensory experience on motor learning strategy. Journal of Neurophysiology, 2015, 113, 1077-1084.	1.8	5
202	Investigation of isometric strength and control of the upper extremities in multiple sclerosis. Journal of Rehabilitation and Assistive Technologies Engineering, 2016, 3, 205566831666397.	0.9	5
203	A Simple fMRI Compatible Robotic Stimulator to Study the Neural Mechanisms of Touch and Pain. Annals of Biomedical Engineering, 2016, 44, 2431-2441.	2.5	5
204	Adaptive impedance control with trajectory adaptation for minimizing interaction force. , 2020, , .		5
205	Force field compensation can be learned without proprioceptive error. IFMBE Proceedings, 2009, , 381-383.	0.3	5
206	Exercises for rehabilitation and assessment of hand motor function with the Haptic Knob. , 2009, , .		5
207	Adapting the visuo-haptic perception through muscle coactivation. Scientific Reports, 2021, 11, 21986.	3.3	5
208	A modular and sensor-oriented motion planner. Robotica, 1999, 17, 87-95.	1.9	4
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