Roger Gassert

List of Publications by Year
in descending order

190 papers	6,896 citations	108046 37 h-index	97045 71 g-index
202 all docs	202 docs citations	202 times ranked	7518 citing authors

#	Article	IF	Citations
1	Transfer Learning Based on Optimal Transport for Motor Imagery Brain-Computer Interfaces. IEEE Transactions on Biomedical Engineering, 2022, 69, 807-817.	2.5	18
2	Illusory Body Ownership Affects the Cortical Response to Vicarious Somatosensation. Cerebral Cortex, 2022, 32, 312-328.	1.6	7
3	Personalized prediction of rehabilitation outcomes in multiple sclerosis: a proof-of-concept using clinical data, digital health metrics, and machine learning. Medical and Biological Engineering and Computing, 2022, 60, 249-261.	1.6	6
4	Clinical utility of a pediatric hand exoskeleton: identifying users, practicability, and acceptance, and recommendations for design improvement. Journal of NeuroEngineering and Rehabilitation, 2022, 19, 17.	2.4	12
5	Reliability and validity of digital health metrics for assessing arm and hand impairments in an ataxic disorder. Annals of Clinical and Translational Neurology, 2022, 9, 432-443.	1.7	6
6	Intention Detection Strategies for Robotic Upper-Limb Orthoses: A Scoping Review Considering Usability, Daily Life Application, and User Evaluation. Frontiers in Neurorobotics, 2022, 16, 815693.	1.6	16
7	Characterizing reproducibility of cerebral hemodynamic responses when applying short-channel regression in functional near-infrared spectroscopy. Neurophotonics, 2022, 9, 015004.	1.7	9
8	A survey on the influence of CYBATHLON on the development and acceptance of advanced assistive technologies. Journal of NeuroEngineering and Rehabilitation, 2022, 19, 38.	2.4	5
9	A low-dimensional representation of arm movements and hand grip forces in post-stroke individuals. Scientific Reports, 2022, 12, 7601.	1.6	3
10	Differentiation of Parkinson's disease tremor and essential tremor based on a novel hand posture. Clinical Parkinsonism & Related Disorders, 2022, 7, 100146.	0.5	0
11	The modulatory effect of self-paced and cued motor execution on subthalamic beta-bursts in Parkinson's disease: Evidence from deep brain recordings in humans. Neurobiology of Disease, 2022, 172, 105818.	2.1	4
12	Fully Wearable Actuated Soft Exoskeleton for Grasping Assistance in Everyday Activities. Soft Robotics, 2021, 8, 128-143.	4.6	113
13	Knee Compliance Reduces Peak Swing Phase Collision Forces in a Lower-Limb Exoskeleton Leg: A Test Bench Evaluation. IEEE Transactions on Biomedical Engineering, 2021, 68, 535-544.	2.5	6
14	Impact of Audio/Visual Guidance on Novices' Training with VR Orthopedic Surgical Simulators. Lecture Notes in Networks and Systems, 2021, , 370-379.	0.5	0
15	Deep brain electrical neurofeedback allows Parkinson patients to control pathological oscillations and quicken movements. Scientific Reports, 2021, 11, 7973.	1.6	17
16	Towards a Platform for Robot-Assisted Minimally-Supervised Therapy of Hand Function: Design and Pilot Usability Evaluation. Frontiers in Bioengineering and Biotechnology, 2021, 9, 652380.	2.0	13
17	Neurorehabilitation From a Distance: Can Intelligent Technology Support Decentralized Access to Quality Therapy?. Frontiers in Robotics and AI, 2021, 8, 612415.	2.0	24
18	Reliable and valid robot-assisted assessments of hand proprioceptive, motor and sensorimotor impairments after stroke. Journal of NeuroEngineering and Rehabilitation, 2021, 18, 115.	2.4	18

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19	Contribution of interaction force to the sense of hand ownership and the sense of hand agency. Scientific Reports, 2021, 11, 18069.	1.6	3
20	Improving Robotic Hand Prosthesis Control With Eye Tracking and Computer Vision: A Multimodal Approach Based on the Visuomotor Behavior of Grasping. Frontiers in Artificial Intelligence, 2021, 4, 744476.	2.0	10
21	An analysis of usability evaluation practices and contexts of use in wearable robotics. Journal of NeuroEngineering and Rehabilitation, 2021, 18, 170.	2.4	19
22	Technology-aided assessment of functionally relevant sensorimotor impairments in arm and hand of post-stroke individuals. Journal of NeuroEngineering and Rehabilitation, 2020, 17, 128.	2.4	19
23	Development and Evaluation of a Sensor Glove to Detect Grasp Intention for a Wearable Robotic Hand Exoskeleton. , 2020, , .		7
24	Tremor analysis with wearable sensors correlates with outcome after thalamic deep brain stimulation. Clinical Parkinsonism & Related Disorders, 2020, 3, 100066.	0.5	5
25	Characterization and wearability evaluation of a fully portable wrist exoskeleton for unsupervised training after stroke. Journal of NeuroEngineering and Rehabilitation, 2020, 17, 132.	2.4	27
26	A Method to Evaluate and Improve the Usability of a Robotic Hand Orthosis from the Caregiver Perspective. , 2020, , .		3
27	An Environment Recognition and Parameterization System for Shared-Control of a Powered Lower-Limb Exoskeleton. , 2020, , .		11
28	Neurocognitive robot-assisted rehabilitation of hand function: a randomized control trial on motor recovery in subacute stroke. Journal of NeuroEngineering and Rehabilitation, 2020, 17, 115.	2.4	50
29	Design and Preliminary Evaluation of a Perturbation-based Robot-assisted Assessment of Hand Sensorimotor Impairments. , 2020, , .		2
30	Comparison of Particle Filter to Established Filtering Methods in Electromyography Biofeedback. Biomedical Signal Processing and Control, 2020, 60, 101949.	3.5	4
31	A data-driven framework for selecting and validating digital health metrics: use-case in neurological sensorimotor impairments. Npj Digital Medicine, 2020, 3, 80.	5.7	29
32	Remote Actuation Systems for Fully Wearable Assistive Devices: Requirements, Selection, and Optimization for Out-of-the-Lab Application of a Hand Exoskeleton. Frontiers in Robotics and AI, 2020, 7, 596185.	2.0	14
33	Short-channel regression in functional near-infrared spectroscopy is more effective when considering heterogeneous scalp hemodynamics. Neurophotonics, 2020, 7, 035011.	1.7	46
34	Method for Muscle Tone Monitoring During Robot-Assisted Therapy of Hand Function: A Proof of Concept. , 2019, 2019, 957-962.		9
35	User-centered Design and Evaluation of Physical Interfaces for an Exoskeleton for Paraplegic Users. , 2019, 2019, 1159-1166.		27
36	Automated and Quantitative Assessment of Tactile Mislocalization After Stroke. Frontiers in Neurology, 2019, 10, 593.	1.1	3

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37	PEXO - A Pediatric Whole Hand Exoskeleton for Grasping Assistance in Task-Oriented Training. , 2019, 2019, 108-114.		28
38	Magnetometer-Based Drift Correction During Rest in IMU Arm Motion Tracking. Sensors, 2019, 19, 1312.	2.1	43
39	Wearable Sensors in Ambulatory Individuals With a Spinal Cord Injury: From Energy Expenditure Estimation to Activity Recommendations. Frontiers in Neurology, 2019, 10, 1092.	1.1	20
40	A penalized time-frequency band feature selection and classification procedure for improved motor intention decoding in multichannel EEG. Journal of Neural Engineering, 2019, 16, 016019.	1.8	41
41	Maintaining Gait Balance After Perturbations to the Leg: Kinematic and Electromyographic Patterns. Biosystems and Biorobotics, 2019, , 100-104.	0.2	0
42	Design and Evaluation of a Bowden-Cable-Based Remote Actuation System for Wearable Robotics. IEEE Robotics and Automation Letters, 2018, 3, 2101-2108.	3.3	43
43	BOLD signal in sensorimotor regions reveals differential encoding of passive forefinger velocity and displacement amplitude. NeuroImage, 2018, 173, 332-340.	2.1	9
44	Enhancing simulations with intra-subject variability for improved psychophysical assessments. PLoS ONE, 2018, 13, e0209839.	1.1	2
45	Reliability of Wearable-Sensor-Derived Measures of Physical Activity in Wheelchair-Dependent Spinal Cord Injured Patients. Frontiers in Neurology, 2018, 9, 1039.	1.1	13
46	Performance metrics for an application-driven selection and optimization of psychophysical sampling procedures. PLoS ONE, 2018, 13, e0207217.	1.1	2
47	Estimation of Energy Expenditure in Wheelchair-Bound Spinal Cord Injured Individuals Using Inertial Measurement Units. Frontiers in Neurology, 2018, 9, 478.	1.1	15
48	Influence of Arm Weight Support on a Robotic Assessment of Upper Limb Function. , 2018, , .		4
49	Reliability, validity, and clinical feasibility of a rapid and objective assessment of post-stroke deficits in hand proprioception. Journal of NeuroEngineering and Rehabilitation, 2018, 15, 47.	2.4	31
50	Rehabilitation robots for the treatment of sensorimotor deficits: a neurophysiological perspective. Journal of NeuroEngineering and Rehabilitation, 2018, 15, 46.	2.4	240
51	Development of VariLeg, an exoskeleton with variable stiffness actuation: first results and user evaluation from the CYBATHLON 2016. Journal of NeuroEngineering and Rehabilitation, 2018, 15, 18.	2.4	42
52	Algorithm for improving psychophysical threshold estimates by detecting sustained inattention in experiments using PEST. Attention, Perception, and Psychophysics, 2018, 80, 1629-1645.	0.7	7
53	Functionally separated networks for self-paced and externally-cued motor execution in Parkinson's disease: Evidence from deep brain recordings in humans. NeuroImage, 2018, 177, 20-29.	2.1	33
54	Robot-assisted rehabilitation of hand function. , 2018, , 205-225.		15

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55	Motion-Based Augmented Broadcasting System with Haptic Feedback. Lecture Notes in Electrical Engineering, 2018, , 375-381.	0.3	0
56	A method to qualitatively assess arm use in stroke survivors in the home environment. Medical and Biological Engineering and Computing, 2017, 55, 141-150.	1.6	63
57	Design and Characterization of an Exoskeleton for Perturbing the Knee During Gait. IEEE Transactions on Biomedical Engineering, 2017, 64, 2331-2343.	2.5	41
58	Anatomical and functional properties of the foot and leg representation in areas 3b, 1 and 2 of primary somatosensory cortex in humans: A 7T fMRI study. NeuroImage, 2017, 159, 473-487.	2.1	59
59	Fully embedded myoelectric control for a wearable robotic hand orthosis. , 2017, 2017, 615-621.		35
60	Investigating Motor Skill Learning Processes with a Robotic Manipulandum. Journal of Visualized Experiments, 2017, , .	0.2	1
61	Multi-Day Recordings of Wearable Sensors Are Valid and Sensitive Measures of Function and Independence in Human Spinal Cord Injury. Journal of Neurotrauma, 2017, 34, 1141-1148.	1.7	17
62	Training wrist extensor function and detecting unwanted movement strategies in an EMG-controlled visuomotor task. , 2017, 2017, 1549-1555.		10
63	The eWrist â€" A wearable wrist exoskeleton with sEMG-based force control for stroke rehabilitation. , 2017, 2017, 726-733.		39
64	Age-based model for metacarpophalangeal joint proprioception in elderly. Clinical Interventions in Aging, 2017, Volume 12, 635-643.	1.3	22
65	Wearable and modular functional near-infrared spectroscopy instrument with multidistance measurements at four wavelengths. Neurophotonics, 2017, 4, 1.	1.7	57
66	Design and Evaluation of a Fiber-Optic Grip Force Sensor with Compliant 3D-Printable Structure for (f)MRI Applications. Journal of Sensors, 2016, 2016, 1-11.	0.6	8
67	Monitoring Upper Limb Recovery after Cervical Spinal Cord Injury: Insights beyond Assessment Scores. Frontiers in Neurology, 2016, 7, 142.	1.1	16
68	Reliable and Rapid Robotic Assessment of Wrist Proprioception Using a Gauge Position Matching Paradigm. Frontiers in Human Neuroscience, 2016, 10, 316.	1.0	31
69	Novel Sensor Technology To Assess Independence and Limb-Use Laterality in Cervical Spinal Cord Injury. Journal of Neurotrauma, 2016, 33, 1950-1957.	1.7	18
70	An adaptive and robust online method to predict gait events. , 2016, 2016, 6277-6281.		2
71	Differential neural encoding of sensorimotor and visual body representations. Scientific Reports, 2016, 6, 37259.	1.6	27
72	Effect of handle design on movement dynamics and muscle co-activation in a wrist flexion task. International Journal of Industrial Ergonomics, 2016, 56, 170-180.	1.5	10

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73	Design and Application of a New Automated Fluidic Visceral Stimulation Device for Human fMRI Studies of Interoception. IEEE Journal of Translational Engineering in Health and Medicine, 2016, 4, 1-12.	2.2	7
74	Robotic and Wearable Sensor Technologies for Measurements/Clinical Assessments. , 2016, , 183-207.		13
75	Self-directed arm therapy at home after stroke with a sensor-based virtual reality training system. Journal of NeuroEngineering and Rehabilitation, 2016, 13, 75.	2.4	105
76	Spinal cord injury affects the interplay between visual and sensorimotor representations of the body. Scientific Reports, 2016, 6, 20144.	1.6	42
77	Design and Evaluation of a Cable-Driven fMRI-Compatible Haptic Interface to Investigate Precision Grip Control. IEEE Transactions on Haptics, 2016, 9, 20-32.	1.8	18
78	A novel algorithm for detecting active propulsion in wheelchair users following spinal cord injury. Medical Engineering and Physics, 2016, 38, 267-274.	0.8	40
79	Design and Characterization of a Lightweight and Fully Portable Remote Actuation System for Use With a Hand Exoskeleton. IEEE Robotics and Automation Letters, 2016, 1, 976-983.	3.3	106
80	Quantification of long cane usage characteristics with the constant contact technique. Applied Ergonomics, 2016, 55, 216-225.	1.7	9
81	Development of a Cognitive Robotic System for Simple Surgical Tasks. International Journal of Advanced Robotic Systems, 2015, 12, 37.	1.3	35
82	Detecting motion intention in stroke survivors using autonomic nervous system responses. , 2015, , .		1
83	Improvement in precision grip force control with self-modulation of primary motor cortex during motor imagery. Frontiers in Behavioral Neuroscience, 2015, 9, 18.	1.0	60
84	Identification of Vibrotactile Patterns Encoding Obstacle Distance Information. IEEE Transactions on Haptics, 2015, 8, 298-305.	1.8	24
85	Keynote lecture 7: Re-engineering robot-assisted rehabilitation. , 2015, , .		0
86	Exploratory movements in unconstrained tactile search with virtual surfaces. , 2015, , .		0
87	Objective assessment of vibrotactile mislocalization using a Haptic Glove. , 2015, , .		3
88	Motion planning for a multi-arm surgical robot using both sampling-based algorithms and motion primitives. , 2015, , .		9
89	Assessment-driven arm therapy at home using an IMU-based virtual reality system. , 2015, , .		45
90	Design and evaluation of a compact, integrated fMRI-compatible force sensor printed by additive manufacturing. , 2015, , .		8

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91	A Method to Study Precision Grip Control in Viscoelastic Force Fields Using a Robotic Gripper. IEEE Transactions on Biomedical Engineering, 2015, 62, 39-48.	2.5	14
92	Measurement of human rotation behavior for psychological and neuropsychological investigations. Behavior Research Methods, 2015, 47, 1425-1435.	2.3	5
93	Control strategies for active lower extremity prosthetics and orthotics: a review. Journal of NeuroEngineering and Rehabilitation, 2015, 12, 1.	2.4	773
94	An Energy Tank-Based Interactive Control Architecture for Autonomous and Teleoperated Robotic Surgery. IEEE Transactions on Robotics, 2015, 31, 1073-1088.	7.3	142
95	Performance comparison of interaction control strategies on a hand rehabilitation robot. , 2015, , .		10
96	Sub-processes of motor learning revealed by a robotic manipulandum for rodents. Behavioural Brain Research, 2015, 278, 569-576.	1.2	13
97	Classification of Stair Ascent and Descent in Stroke Patients. , 2014, , .		15
98	Neurocognitive Robot-Assisted Therapy of Hand Function. IEEE Transactions on Haptics, 2014, 7, 140-149.	1.8	39
99	The Virtual Peg Insertion Test as an assessment of upper limb coordination in ARSACS patients: A pilot study. Journal of the Neurological Sciences, 2014, 347, 341-344.	0.3	24
100	Assessment-driven selection and adaptation of exercise difficulty in robot-assisted therapy: a pilot study with a hand rehabilitation robot. Journal of NeuroEngineering and Rehabilitation, 2014, 11, 154.	2.4	73
101	Dopamine-responsive pattern in tremor patients. Parkinsonism and Related Disorders, 2014, 20, 1283-1286.	1.1	9
102	Activity classification based on inertial and barometric pressure sensors at different anatomical locations. Physiological Measurement, 2014, 35, 1245-1263.	1.2	158
103	Experimental Validation of a Rapid, Adaptive Robotic Assessment of the MCP Joint Angle Difference Threshold. Lecture Notes in Computer Science, 2014, , 3-10.	1.0	10
104	Detection of motor execution using a hybrid fNIRS-biosignal BCI: a feasibility study. Journal of NeuroEngineering and Rehabilitation, 2013, 10, 4.	2.4	65
105	Neurofeedback-mediated self-regulation of the dopaminergic midbrain. NeuroImage, 2013, 83, 817-825.	2.1	90
106	Design of a wearable perturbator for human knee impedance estimation during gait. , 2013, 2013, 6650372.		32
107	Combined tendon vibration and virtual reality for post-stroke hand rehabilitation. , 2013, , .		25
108	Prototype of a VR upper-limb rehabilitation system enhanced with motion-based tactile feedback. , 2013, , .		28

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109	Delineating the whole brain BOLD response to passive movement kinematics. , 2013, 2013, 6650474.		9
110	Usability assessment of low-cost vibration motors for presenting vibrotactile feedback in sensory and motor rehabilitation. , 2013, , .		0
111	A Robotic Platform to Assess, Guide and Perturb Rat Forelimb Movements. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2013, 21, 796-805.	2.7	21
112	Physical Studentâ€"Robot Interaction With the ETHZ Haptic Paddle. IEEE Transactions on Education, 2013, 56, 9-17.	2.0	23
113	A new hand exoskeleton device for rehabilitation using a three-layered sliding spring mechanism. , 2013, , .		98
114	Real-time fMRI neurofeedback: Progress and challenges. NeuroImage, 2013, 76, 386-399.	2.1	398
115	Advanced Augmented White Cane with obstacle height and distance feedback. , 2013, 2013, 6650358.		35
116	Silicon photomultipliers for improved detection of low light levels in miniature near-infrared spectroscopy instruments. Biomedical Optics Express, 2013, 4, 659.	1.5	56
117	Motor execution detection based on autonomic nervous system responses. Physiological Measurement, 2013, 34, 35-51.	1.2	16
118	Assessment of upper limb motor function in patients with multiple sclerosis using the Virtual Peg Insertion Test: A pilot study. , 2013, 2013, 6650494.		26
119	Robot-assisted assessment of vibration perception and localization on the hand. Disability and Rehabilitation: Assistive Technology, 2013, 8, 129-135.	1.3	6
120	Full body illusion is associated with widespread skin temperature reduction. Frontiers in Behavioral Neuroscience, 2013, 7, 65.	1.0	113
121	MRI-Compatible Grasping Force Sensor with an Inclined Double Parallel Structure using Fiber Optics. Transactions of the Institute of Systems Control and Information Engineers, 2013, 26, 110-116.	0.1	3
122	Tactile Feedback Improves Performance in a Palpation Task: Results in a VR-Based Testbed. Presence: Teleoperators and Virtual Environments, 2012, 21, 435-451.	0.3	5
123	Differential-damper topologies for actuators in rehabilitation robotics. , 2012, 2012, 3081-5.		3
124	Can simple error sonification in combination with music help improve accuracy in upper limb movements?. , 2012, , .		7
125	Effects of 2D/3D visual feedback and visuomotor collocation on motor performance in a Virtual Peg Insertion Test. , 2012, 2012, 4776-9.		5
126	MRI-Compatible Grasping Force Sensor With an Inclined Double Parallel Structure Using Fiber Optics. , 2012, , .		1

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127	High-fidelity rendering of virtual objects with the ReHapticKnob - novel avenues in robot-assisted rehabilitation of hand function. , 2012, , .		18
128	Survey on Surgical Instrument Handle Design. Surgical Innovation, 2012, 19, 50-59.	0.4	65
129	Validation of a mechanism to balance exercise difficulty in robot-assisted upper-extremity rehabilitation after stroke. Journal of NeuroEngineering and Rehabilitation, 2012, 9, 6.	2.4	61
130	Robots for Measurement/Clinical Assessment. , 2012, , 443-456.		20
131	A small-scale robotic manipulandum for motor training in stroke rats. , 2011, 2011, 5975349.		13
132	Design of a robotic device for assessment and rehabilitation of hand sensory function. , 2011, 2011, 5975436.		20
133	Upper limb assessment using a Virtual Peg Insertion Test. , 2011, 2011, 5975348.		29
134	Multisensory Mechanisms in Temporo-Parietal Cortex Support Self-Location and First-Person Perspective. Neuron, 2011, 70, 363-374.	3.8	385
135	Multi-Sensory and Sensorimotor Foundation of Bodily Self-Consciousness â€" An Interdisciplinary Approach. Frontiers in Psychology, 2011, 2, 383.	1.1	73
136	Design and characterization of the ReHapticKnob, a robot for assessment and therapy of hand function. , 2011, , .		1
137	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.	2.7	34
138	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.	2.4	97
139	Mutual interferences and design principles for mechatronic devices in magnetic resonance imaging. International Journal of Computer Assisted Radiology and Surgery, 2011, 6, 473-488.	1.7	28
140	Towards a BCI for sensorimotor training: Initial results from simultaneous fNIRS and biosignal recordings. , 2011, 2011, 6339-43.		10
141	Low-power sensor module for long-term activity monitoring. , 2011, 2011, 2237-41.		26
142	Neuroscience robotics to investigate multisensory integration and bodily awareness. , 2011, 2011, 8348-52.		9
143	BOLD correlations to force in precision grip: An event-related study. , 2011, 2011, 2342-6.		10
144	Design and characterization of the ReHapticKnob, a robot for assessment and therapy of hand function. , 2011, , .		18

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145	Human-Centered Design in the Care of Immobile Patients. Lecture Notes in Computer Science, 2011, , 321-326.	1.0	1
146	Influence of force and torque feedback on operator performance in a VR-based suturing task. Applied Bionics and Biomechanics, 2010, 7, 217-230.	0.5	13
147	Thick-film multi-DOF force/torque sensor for wrist rehabilitation. Sensors and Actuators A: Physical, 2010, 162, 361-366.	2.0	53
148	Model-based attenuation of movement artifacts in fMRI. Journal of Neuroscience Methods, 2010, 192, 58-69.	1.3	8
149	A technique to train finger coordination and independence after stroke. Disability and Rehabilitation: Assistive Technology, 2010, 5, 279-287.	1.3	14
150	Design and compatibility of a high-performance actuation system for fMRI-based neuroscience studies. , 2010, , .		9
151	ReFlex, a haptic wrist interface for motor learning and rehabilitation. , 2010, , .		11
152	Design and psychophysical evaluation of a tactile pulse display for teleoperated artery palpation. , 2010, , .		13
153	Probing and restoring sensorimotor function with robotic interfaces. Neuroscience Research, 2010, 68, e45.	1.0	0
154	ReGrasp, a robotic tool to investigate fine motor control and track therapy-induced neuroplasticity. , 2010, , .		3
155	Virtual environment to evaluate multimodal feedback strategies for augmented navigation of the visually impaired. , 2010, 2010, 975-8.		10
156	Augmented white cane with multimodal haptic feedback. , 2010, , .		43
157	Haptic/VR Assessment Tool for Fine Motor Control. Lecture Notes in Computer Science, 2010, , 186-193.	1.0	8
158	ReachMAN: a personal robot to train reaching and manipulation. , 2009, , .		27
159	The Role of Posture, Magnification, and Grip Force on Microscopic Accuracy. Annals of Biomedical Engineering, 2009, 37, 997-1006.	1.3	36
160	Thick-film multi-DOF force / torque sensor for wrist rehabilitation. Procedia Chemistry, 2009, 1, 1267-1270.	0.7	2
161	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.	1.2	37
162	Development of a 2-DOF electrostatic haptic joystick for MRI/fMRI applications. , 2009, , .		15

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163	Rehabilitation of grasping and forearm pronation/supination with the Haptic Knob. , 2009, , .		22
164	A system for robot-assisted neuro-rehabilitation of hand function. , 2009, , .		2
165	Exercises for rehabilitation and assessment of hand motor function with the Haptic Knob. , 2009, , .		5
166	Opportunities and Challenges in MR-Compatible Robotics. IEEE Engineering in Medicine and Biology Magazine, 2008, 27, 15-22.	1.1	60
167	MRI-Compatible Robotics. IEEE Engineering in Medicine and Biology Magazine, 2008, 27, 12-14.	1.1	44
168	HandCARE: A Cable-Actuated Rehabilitation System to Train Hand Function After Stroke. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2008, 16, 582-591.	2.7	195
169	Sensors for Applications in Magnetic Resonance Environments. IEEE/ASME Transactions on Mechatronics, 2008, 13, 335-344.	3.7	56
170	Sensing Glove for Brain Studies: Design and Assessment of Its Compatibility for fMRI With a Robust Test. IEEE/ASME Transactions on Mechatronics, 2008, 13, 345-354.	3.7	35
171	Post-stroke training of a pick and place activity in a virtual environment. , 2008, , .		10
172	HandCARE2: A novel cable interface for hand rehabilitation. , 2008, , .		7
173	A hybrid ultrasonic motor and electrorheological fluid clutch actuator for force-feedback in MRI/fMRI. , 2008, 2008, 3438-42.		12
174	2-DOF fMRI-Compatible Haptic Interface for Bimanual Motor Tasks with Grip/Load Force Measurement. Springer Tracts in Advanced Robotics, 2008, , 109-129.	0.3	6
175	A Cable Driven Robotic System to Train Finger Function After Stroke. , 2007, , .		17
176	Development of a Robot-Assisted Rehabilitation Therapy to train Hand Function for Activities of Daily Living. , 2007, , .		21
177	A Haptic Knob with a Hybrid Ultrasonic Motor and Powder Clutch Actuator. , 2007, , .		24
178	Accurate Real-Time Feedback of Surface EMG During fMRI. Journal of Neurophysiology, 2007, 97, 912-920.	0.9	21
179	A Haptic Knob for Rehabilitation of Hand Function. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2007, 15, 356-366.	2.7	166
180	MRI/fMRI-compatible robotic system with force feedback for interaction with human motion. IEEE/ASME Transactions on Mechatronics, 2006, 11, 216-224.	3.7	160

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181	Actuation methods for applications in MR environments. Concepts in Magnetic Resonance Part B, 2006, 29B, 191-209.	0.3	92
182	A Haptic Knob for Rehabilitation of Stroke Patients. , 2006, , .		30
183	Hybrid Ultrasonic Motor and Electrorheological Clutch System for MR-Compatible Haptic Rendering. , 2006, , .		7
184	IPMC actuator array as a 3D haptic display. , 2005, 5759, 331.		4
185	fMRI compatible haptic interface actuated with traveling wave ultrasonic motor. , 0, , .		35
186	Evaluation of MR-compatibility of Electrostatic Linear Motor. , 0, , .		12
187	A 2-DOF fMRI compatible haptic interface to investigate the neural control of arm movements. , 0, , .		37
188	Investigation of a Cable Transmission for the Actuation of MR Compatible Haptic Interfaces. , 0, , .		24
189	A Versatile MRI/fMRI Compatible Spherical 2-DOF Haptic Interface. , 0, , .		4
190	Active mechatronic interface for haptic perception studies with functional magnetic resonance imaging: compatibility and design criteria. , 0, , .		10