# Etienne Burdet

List of Publications by Year
in descending order

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| 276 | 12,222 | 53939 | 38517 |
|---|---|---|---|
| papers | citations | 47 h-index | 99 g-index |

| 286 | 286 | 286 | 9144 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Identification of Multiple Limbs Coordination Strategies in a Three-Goal Independent Task. IEEE Transactions on Medical Robotics and Bionics, 2022, 4, 348-351. | 2.1 | 2 |
| 2 | Development of functional organization within the sensorimotor network across the perinatal period. Human Brain Mapping, 2022, 43, 2249-2261. | 1.9 | 6 |
| 3 | Modernising grip dynamometry: Inter-instrument reliability between GripAble and Jamar. BMC Musculoskeletal Disorders, 2022, 23, 80. | 0.8 | 8 |
| 4 | Active Visuo-Tactile Interactive Robotic Perception for Accurate Object Pose Estimation in Dense Clutter. IEEE Robotics and Automation Letters, 2022, 7, 4686-4693. | 3.3 | 16 |
| 5 | GripAble: An accurate, sensitive and robust digital device for measuring grip strength. Journal of Rehabilitation and Assistive Technologies Engineering, 2022, 9, 205566832210784. | 0.6 | 6 |
| 6 | Principles of human movement augmentation and the challenges in making it a reality. Nature Communications, 2022, 13, 1345. | 5.8 | 34 |
| 7 | Balance strategy in hoverboard control. Scientific Reports, 2022, 12, 4509. | 1.6 | 3 |
| 8 | Is a Robot Needed to Modify Human Effort in Bimanual Tracking?. IEEE Robotics and Automation Letters, 2022, 7, 8069-8075. | 3.3 | 2 |
| 9 | 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. | 4.7 | 37 |
| 10 | Cable-Driven Robotic Interface for Lower Limb Neuromechanics Identification. IEEE Transactions on Biomedical Engineering, 2021, 68, 461-469. | 2.5 | 4 |
| 11 | Cortical Processing of Multimodal Sensory Learning in Human Neonates. Cerebral Cortex, 2021, 31, 1827-1836. | 1.6 | 7 |
| 12 | Short Time Delay Does Not Hinder Haptic Communication Benefits. IEEE Transactions on Haptics, 2021, 14, 322-327. | 1.8 | 9 |
| 13 | Arm movement adaptation to concurrent pain constraints. Scientific Reports, 2021, 11, 6792. | 1.6 | 1 |
| 14 | Flexible Assimilation of Human's Target for Versatile Human-Robot Physical Interaction. IEEE Transactions on Haptics, 2021, 14, 421-431. | 1.8 | 6 |
| 15 | Design and Evaluation of a Foot-Controlled Robotic System for Endoscopic Surgery. IEEE Robotics and Automation Letters, 2021, 6, 2469-2476. | 3.3 | 14 |
| 16 | A Three-Limb Teleoperated Robotic System with Foot Control for Flexible Endoscopic Surgery. Annals of Biomedical Engineering, 2021, 49, 2282-2296. | 1.3 | 21 |
| 17 | Human performance in three-hands tasks. Scientific Reports, 2021, 11, 9511. | 1.6 | 17 |
| 18 | Stochastic optimal feedforward-feedback control determines timing and variability of arm movements with or without vision. PLoS Computational Biology, 2021, 17, e1009047. | 1.5 | 21 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Robotic Assisted Upper Limb Training Post Stroke: A Randomized Control Trial Using Combinatory Approach Toward Reducing Workforce Demands. Frontiers in Neurology, 2021, 12, 622014. | 1.1 | 21 |
| 20 | An eye tracking based virtual reality system for use inside magnetic resonance imaging systems. Scientific Reports, 2021, 11, 16301. | 1.6 | 21 |
| 21 | Self-Directed Exergaming for Stroke Upper Limb Impairment Increases Exercise Dose Compared to Standard Care. Neurorehabilitation and Neural Repair, 2021, 35, 974-985. | 1.4 | 13 |
| 22 | Proof-of-Concept of a Sensor-Based Evaluation Method for Better Sensitivity of Upper-Extremity Motor Function Assessment. Sensors, 2021, 21, 5926. | 2.1 | 7 |
| 23 | EEG measures of sensorimotor processing and their development are abnormal in children with isolated dystonia and dystonic cerebral palsy. NeuroImage: Clinical, 2021, 30, 102569. | 1.4 | 7 |
| 24 | Adapting the visuo-haptic perception through muscle coactivation. Scientific Reports, 2021, 11, 21986. | 1.6 | 5 |
| 25 | Trimanipulation: Evaluation of human performance in a 3-handed coordination task. , 2021, , . | | 7 |
| 26 | Perception and Performance of Electrical Stimulation for Proprioception. , 2021, 2021, 4550-4554. | | 3 |
| 27 | Haptic Bimanual System for Teleoperation of Time-Delayed Tasks. , 2021, , . | | 1 |
| 28 | A Subject-Specific Four-Degree-of-Freedom Foot Interface to Control a Surgical Robot. IEEE/ASME Transactions on Mechatronics, 2020, 25, 951-963. | 3.7 | 26 |
| 29 | Energetic Passivity Decoding of Human Hip Joint for Physical Human-Robot Interaction. IEEE Robotics and Automation Letters, 2020, 5, 5953-5960. | 3.3 | 10 |
| 30 | Abnormal microscale neuronal connectivity triggered by a proprioceptive stimulus in dystonia. Scientific Reports, 2020, 10, 20758. | 1.6 | 7 |
| 31 | Adaptive impedance control with trajectory adaptation for minimizing interaction force. , 2020, , . | | 5 |
| 32 | An fMRI Compatible Smart Device for Measuring Palmar Grasping Actions in Newborns. Sensors, 2020, 20, 6040. | 2.1 | 11 |
| 33 | A Multimodal Intention Detection Sensor Suite for Shared Autonomy of Upper-Limb Robotic Prostheses. Sensors, 2020, 20, 6097. | 2.1 | 16 |
| 34 | The dominant limb preferentially stabilizes posture in a bimanual task with physical coupling. Journal of Neurophysiology, 2020, 123, 2154-2160. | 0.9 | 18 |
| 35 | Improving Tracking through Human-Robot Sensory Augmentation. IEEE Robotics and Automation Letters, 2020, 5, 4399-4406. | 3.3 | 15 |
| 36 | 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. | 2.7 | 10 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Estimating Human Wrist Stiffness during a Tooling Task. Sensors, 2020, 20, 3260. | 2.1 | 8 |
| 38 | 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. | 1.7 | 20 |
| 39 | Nonlinearity Compensation in A Multi-DoF Shoulder Sensing Exosuit For Real-Time Teleoperation. , 2020, , . | | 3 |
| 40 | A Clustering-Based Approach to Identify Joint Impedance During Walking. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 1808-1816. | 2.7 | 9 |
| 41 | Identification of the best strategy to command variable stiffness using electromyographic signals. Journal of Neural Engineering, 2020, 17, 016058. | 1.8 | 4 |
| 42 | Tri-Manipulation: An Evaluation of Human Performance in 3-Handed Teleoperation. IEEE Transactions on Medical Robotics and Bionics, 2020, 2, 545-548. | 2.1 | 14 |
| 43 | Analogous adaptations in speed, impulse and endpoint stiffness when learning a real and virtual insertion task with haptic feedback. Scientific Reports, 2020, 10, 22342. | 1.6 | 3 |
| 44 | 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. | 2.7 | 34 |
| 45 | The effect of skill level matching in dyadic interaction on learning of a tracing task. , 2019, 2019, 824-829. | | 12 |
| 46 | Performance Evaluation of a Foot Interface to Operate a Robot Arm. IEEE Robotics and Automation Letters, 2019, 4, 3302-3309. | 3.3 | 14 |
| 47 | Large-Area Soft e-Skin: The Challenges Beyond Sensor Designs. Proceedings of the IEEE, 2019, 107, 2016-2033. | 16.4 | 214 |
| 48 | Augmented manipulation ability in humans with six-fingered hands. Nature Communications, 2019, 10, 2401. | 5.8 | 37 |
| 49 | Exploring User Motor Behaviour in Bimanual Interactive Video Games. , 2019, , . | | 0 |
| 50 | Differential game theory for versatile physical humanâ€“robot interaction. Nature Machine Intelligence, 2019, 1, 36-43. | 8.3 | 69 |
| 51 | Assisting Human Balance in Standing With a Robotic Exoskeleton. IEEE Robotics and Automation Letters, 2019, 4, 414-421. | 3.3 | 25 |
| 52 | Bimanual coordination during a physically coupled task in unilateral spastic cerebral palsy children. Journal of NeuroEngineering and Rehabilitation, 2019, 16, 1. | 2.4 | 133 |
| 53 | Individuals physically interacting in a group rapidly coordinate their movement by estimating the collective goal. ELife, 2019, 8, . | 2.8 | 26 |
| 54 | Symbitron: Symbiotic Man-Machine Interactions in Wearable Exoskeletons to Enhance Mobility for Paraplegics. Biosystems and Biorobotics, 2019, , 361-364. | 0.2 | 0 |

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|---|---|---|---|
| 55 | Is EMG a Viable Alternative to BCI for Detecting Movement Intention in Severe Stroke?. IEEE Transactions on Biomedical Engineering, 2018, 65, 2790-2797. | 2.5 | 53 |
| 56 | Horseback riding therapy for a deafblind individual enabled by a haptic interface. Assistive Technology, 2018, 30, 143-150. | 1.2 | 7 |
| 57 | Sensory Integration of Apparent Motion Speed and Vibration Magnitude. IEEE Transactions on Haptics, 2018, 11, 455-463. | 1.8 | 6 |
| 58 | Development and Comparison of Foot Interfaces for Controlling a Robotic Arm in Surgery. , 2018, , . | | 6 |
| 59 | A novel sensor design for accurate measurement of facial somatosensation in pre-term infants. PLoS ONE, 2018, 13, e0207145. | 1.1 | 8 |
| 60 | Muscle patterns underlying voluntary modulation of co-contraction. PLoS ONE, 2018, 13, e0205911. | 1.1 | 13 |
| 61 | Somatotopic Mapping of the Developing Sensorimotor Cortex in the Preterm Human Brain. Cerebral Cortex, 2018, 28, 2507-2515. | 1.6 | 68 |
| 62 | Force, Impedance, and Trajectory Learning for Contact Tooling and Haptic Identification. IEEE Transactions on Robotics, 2018, 34, 1170-1182. | 7.3 | 102 |
| 63 | Interactive robot assistance for upper-limb training. , 2018, , 137-148. | | 4 |
| 64 | Haptic communication between humans is tuned by the hard or soft mechanics of interaction. PLoS Computational Biology, 2018, 14, e1005971. | 1.5 | 49 |
| 65 | Physically interacting individuals estimate the partnerâ€™s goal to enhance their movements. Nature Human Behaviour, 2017, 1, . | 6.2 | 91 |
| 66 | Elasticity improves handgrip performance and user experience during visuomotor control. Royal Society Open Science, 2017, 4, 160961. | 1.1 | 15 |
| 67 | Versatile Interaction Control and Haptic Identification in Humans and Robots. Springer Tracts in Advanced Robotics, 2017, , 187-206. | 0.3 | 10 |
| 68 | Transfer of dynamic motor skills acquired during isometric training to free motion. Journal of Neurophysiology, 2017, 118, 219-233. | 0.9 | 7 |
| 69 | SITAR: a system for independent task-oriented assessment and rehabilitation. Journal of Rehabilitation and Assistive Technologies Engineering, 2017, 4, 205566831772963. | 0.6 | 9 |
| 70 | Anticipatory detection of turning in humans for intuitive control of robotic mobility assistance. Bioinspiration and Biomimetics, 2017, 12, 055004. | 1.5 | 8 |
| 71 | A simple tool to measure spasticity in spinal cord injury subjects. , 2017, 2017, 1590-1596. | | 6 |
| 72 | Driver-automation indirect shared control of highly automated vehicles with intention-aware authority transition. , 2017, , . | | 34 |

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|---|---|---|---|
| 73 | Collaborative Gaming to Enhance Patient Performance During Virtual Therapy. Biosystems and Biorobotics, 2017, , 375-379. | 0.2 | 2 |
| 74 | Modeling of Endpoint Feedback Learning Implemented Through Point-to-Point Learning Control. IEEE Transactions on Control Systems Technology, 2017, 25, 1576-1585. | 3.2 | 6 |
| 75 | Modelling Neuromuscular Function of SCI Patients in Balancing. Biosystems and Biorobotics, 2017, , 355-359. | 0.2 | 1 |
| 76 | Positioning the endoscope in laparoscopic surgery by foot: Influential factors on surgeons' performance in virtual trainer. , 2017, 2017, 3944-3948. | | 7 |
| 77 | Validity of a sensor-based table-top platform to measure upper limb function. , 2017, 2017, 652-657. | | 3 |
| 78 | Balancing the playing field: collaborative gaming for physical training. Journal of NeuroEngineering and Rehabilitation, 2017, 14, 116. | 2.4 | 47 |
| 79 | Taxonomy based analysis of force exchanges during object grasping and manipulation. PLoS ONE, 2017, 12, e0178185. | 1.1 | 8 |
| 80 | Investigation of isometric strength and control of the upper extremities in multiple sclerosis. Journal of Rehabilitation and Assistive Technologies Engineering, 2016, 3, 205566831666397. | 0.6 | 5 |
| 81 | 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. | 1.4 | 16 |
| 82 | How Variability and Effort Determine Coordination at Large Forces. PLoS ONE, 2016, 11, e0149512. | 1.1 | 4 |
| 83 | EMERGING DIRECTIONS IN LOWER LIMB EXTERNALLY WEARABLE ROBOTS FOR GAIT REHABILITATION AND AUGMENTATION â€“ A REVIEW. , 2016, , 840-850. | | 3 |
| 84 | In a demanding task, three-handed manipulation is preferred to two-handed manipulation. Scientific Reports, 2016, 6, 21758. | 1.6 | 44 |
| 85 | Computational neurorehabilitation: modeling plasticity and learning to predict recovery. Journal of NeuroEngineering and Rehabilitation, 2016, 13, 42. | 2.4 | 125 |
| 86 | Multi-source micro-friction identification for a class of cable-driven robots with passive backbone. Mechanical Systems and Signal Processing, 2016, 80, 152-165. | 4.4 | 12 |
| 87 | Effects of a neuromuscular controller on a powered ankle exoskeleton during human walking. , 2016, , . | | 19 |
| 88 | The duration of reaching movement is longer than predicted by minimum variance. Journal of Neurophysiology, 2016, 116, 2342-2345. | 0.9 | 32 |
| 89 | Facing the partner influences exchanges in force. Scientific Reports, 2016, 6, 35397. | 1.6 | 7 |
| 90 | A Simple fMRI Compatible Robotic Stimulator to Study the Neural Mechanisms of Touch and Pain. Annals of Biomedical Engineering, 2016, 44, 2431-2441. | 1.3 | 5 |

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| 91 | Variable Stiffness Actuators: Review on Design and Components. IEEE/ASME Transactions on Mechatronics, 2016, 21, 2418-2430. | 3.7 | 293 |
| 92 | Maturation of Sensori-Motor Functional Responses in the Preterm Brain. Cerebral Cortex, 2016, 26, 402-413. | 1.6 | 71 |
| 93 | Deaf-Blind Can Practise Horse Riding with the Help of Haptics. Lecture Notes in Computer Science, 2016, , 452-461. | 1.0 | 2 |
| 94 | Democratizing Neurorehabilitation: How Accessible are Low-Cost Mobile-Gaming Technologies for Self-Rehabilitation of Arm Disability in Stroke?. PLoS ONE, 2016, 11, e0163413. | 1.1 | 31 |
| 95 | Motion Plan Changes Predictably in Dyadic Reaching. PLoS ONE, 2016, 11, e0167314. | 1.1 | 20 |
| 96 | A Versatile Robotic Haptic Stimulator to Study the Influence of Pain on Human Motor Control and Learning. Lecture Notes in Computer Science, 2016, , 101-110. | 1.0 | 0 |
| 97 | A Wearable Automated System to Quantify Parkinsonian Symptoms Enabling Closed Loop Deep Brain Stimulation. Lecture Notes in Computer Science, 2016, , 8-19. | 1.0 | 3 |
| 98 | Pediatric Rehabilitation of Upper Limb Function Using Novel Robotic Device ReachMAN2. , 2016, , . | | 1 |
| 99 | Investigating Tactile Sensation in the Hand Using a Robot-Based Tactile Assessment Tool. Lecture Notes in Computer Science, 2016, , 17-24. | 1.0 | 1 |
| 100 | Preliminary feasibility study of the H-Man planar robot for quantitative motor assessment. , 2015, , . | | 4 |
| 101 | On the analysis of movement smoothness. Journal of NeuroEngineering and Rehabilitation, 2015, 12, 112. | 2.4 | 335 |
| 102 | Quantitative motor assessment of upperlimb after unilateral stroke: A preliminary feasibility study with H-Man, a planar robot. , 2015, , . | | 8 |
| 103 | Interpersonal strategies for disturbance attenuation during a rhythmic joint motor action. Physiology and Behavior, 2015, 147, 348-358. | 1.0 | 31 |
| 104 | Acquisition of motor skills in isometric conditions through synesthetic illusions of movement. , 2015, , . | | 4 |
| 105 | Pediatric rehabilitation with the reachMAN's modular handle. , 2015, 2015, 3933-6. | | 2 |
| 106 | Motion-based grasp selection: Improving traditional control strategies of myoelectric hand prosthesis. , 2015, , . | | 4 |
| 107 | Variable stiffness actuators: The userâ€™s point of view. International Journal of Robotics Research, 2015, 34, 727-743. | 5.8 | 160 |
| 108 | Development and evaluation of a portable MR compatible haptic interface for human motor control. , 2015, , . | | 4 |

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| 109 | Comparison of flexible and rigid hand-grip control during a feed-forward visual tracking task. , 2015, , . | | 5 |
| 110 | Quantitative assessment of motor deficit with an intelligent key Object: A Pilot Study. , 2015, , . | | 1 |
| 111 | Artificial nociception and motor responses to pain, for humans and robots. , 2015, 2015, 7402-5. | | 6 |
| 112 | Effect of sensory experience on motor learning strategy. Journal of Neurophysiology, 2015, 113, 1077-1084. | 0.9 | 5 |
| 113 | Novel Hybrid Adaptive Controller for Manipulation in Complex Perturbation Environments. PLoS ONE, 2015, 10, e0129281. | 1.1 | 35 |
| 114 | Control of a Supernumerary Robotic Hand by Foot: An Experimental Study in Virtual Reality. PLoS ONE, 2015, 10, e0134501. | 1.1 | 41 |
| 115 | The effects of hemorrhagic parenchymal infarction on the establishment of sensori-motor structural and functional connectivity in early infancy. Neuroradiology, 2014, 56, 985-994. | 1.1 | 40 |
| 116 | Dual adaptive control of bimanual manipulation with online fuzzy parameter tuning. , 2014, , . | | 4 |
| 117 | Slaves no longer: review on role assignment for humanâ€“robot joint motor action. Adaptive Behavior, 2014, 22, 70-82. | 1.1 | 80 |
| 118 | Ergonomic design of a wrist robot. International Journal of Intelligent Computing and Cybernetics, 2014, 7, 289-306. | 1.6 | 1 |
| 119 | reachMAN2: A compact rehabilitation robot to train reaching and manipulation. , 2014, , . | | 9 |
| 120 | On experimentally validated iterative learning control in human motor systems. , 2014, , . | | 0 |
| 121 | Upper limb functional assessment of children with cerebral palsy using a sorting box. , 2014, 2014, 2330-3. | | 3 |
| 122 | 3DOM: A 3 Degree of Freedom Manipulandum to Investigate Redundant Motor Control. IEEE Transactions on Haptics, 2014, 7, 229-239. | 1.8 | 14 |
| 123 | An unobtrusive vision system to reduce the cognitive burden of hand prosthesis control. , 2014, , . | | 4 |
| 124 | Technology-Aided Assessment of Sensorimotor Function in Early Infancy. Frontiers in Neurology, 2014, 5, 197. | 1.1 | 18 |
| 125 | Biomimetic joint/task space hybrid adaptive control for bimanual robotic manipulation. , 2014, , . | | 8 |
| 126 | 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. | 2.6 | 15 |

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|---|---|---|---|
| 127 | Two is better than one: Physical interactions improve motor performance in humans. Scientific Reports, 2014, 4, 3824. | 1.6 | 161 |
| 128 | Implementation and Test of Human-Operated and Human-Like Adaptive Impedance Controls on Baxter Robot. Lecture Notes in Computer Science, 2014, , 109-119. | 1.0 | 24 |
| 129 | Interaction Force, Impedance and Trajectory Adaptation: By Humans, for Robots. Springer Tracts in Advanced Robotics, 2014, , 331-345. | 0.3 | 37 |
| 130 | Variable impedance actuators: A review. Robotics and Autonomous Systems, 2013, 61, 1601-1614. | 3.0 | 822 |
| 131 | An fMRI Compatible Wrist Robotic Interface to Study Brain Development in Neonates. Annals of Biomedical Engineering, 2013, 41, 1181-1192. | 1.3 | 24 |
| 132 | Analysis of grasping strategies and function in hemiparetic patients using an instrumented object. , 2013, 2013, 6650379. | | 17 |
| 133 | Subject-Specific Wrist Model Calibration and Application to Ergonomic Design of Exoskeletons. IEEE Sensors Journal, 2013, 13, 3293-3301. | 2.4 | 5 |
| 134 | Human like learning algorithm for simultaneous force control and haptic identification. , 2013, , . | | 4 |
| 135 | Hyperstaticity for ergonomie design of a wrist exoskeleton. , 2013, 2013, 6650417. | | 9 |
| 136 | Motor planning explains human behaviour in tasks with multiple solutions. Robotics and Autonomous Systems, 2013, 61, 362-368. | 3.0 | 27 |
| 137 | Analysis of Accuracy in Pointing with Redundant Hand-held Tools: A Geometric Approach to the Uncontrolled Manifold Method. PLoS Computational Biology, 2013, 9, e1002978. | 1.5 | 13 |
| 138 | Ergonomic design of a wrist exoskeleton and its effects on natural motor strategies during redundant tasks. , 2013, , . | | 2 |
| 139 | Computerâ€controlled stimulation for functional magnetic resonance imaging studies of the neonatal olfactory system. Acta Paediatrica, International Journal of Paediatrics, 2013, 102, 868-875. | 0.7 | 25 |
| 140 | Point-to-point learning in human motor systems. , 2013, , . | | 2 |
| 141 | Human Robotics. , 2013, , . | | 98 |
| 142 | A versatile biomimetic controller for contact tooling and haptic exploration. , 2012, , . | | 41 |
| 143 | Variable impedance actuators: Moving the robots of tomorrow. , 2012, , . | | 36 |
| 144 | Robotic Assessment of Upper Limb Motor Function After Stroke. American Journal of Physical Medicine and Rehabilitation, 2012, 91, S255-S269. | 0.7 | 115 |

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|---|---|---|---|
| 145 | Differential neural correlates of reciprocal activation and cocontraction control in dorsal and ventral premotor cortices. Journal of Neurophysiology, 2012, 107, 126-133. | 0.9 | 11 |
| 146 | Wrist Coordination in a Kinematically Redundant Stabilization Task. IEEE Transactions on Haptics, 2012, 5, 231-239. | 1.8 | 3 |
| 147 | A geometric approach to the Uncontrolled Manifold analysis. , 2012, , . | | 0 |
| 148 | Learning to Design Rehabilitation Devices Through the H-CARD Course: Project-Based Learning of Rehabilitation Technology Design. IEEE Pulse, 2012, 3, 51-58. | 0.1 | 11 |
| 149 | Guest Editorial Motor Skill Learning and Neuro-Rehabilitation. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2012, 20, 237-238. | 2.7 | 7 |
| 150 | Development of BOLD signal hemodynamic responses in the human brain. NeuroImage, 2012, 63, 663-673. | 2.1 | 172 |
| 151 | A modular sensor-based system for the Rehabilitation and Assessment of manipulation. , 2012, , . | | 9 |
| 152 | Generalization in Adaptation to Stable and Unstable Dynamics. PLoS ONE, 2012, 7, e45075. | 1.1 | 22 |
| 153 | A Framework to Describe, Analyze and Generate Interactive Motor Behaviors. PLoS ONE, 2012, 7, e49945. | 1.1 | 125 |
| 154 | A Robust and Sensitive Metric for Quantifying Movement Smoothness. IEEE Transactions on Biomedical Engineering, 2012, 59, 2126-2136. | 2.5 | 309 |
| 155 | Modeling Individual Human Motor Behavior Through Model Reference Iterative Learning Control. IEEE Transactions on Biomedical Engineering, 2012, 59, 1892-1901. | 2.5 | 18 |
| 156 | Instrumented sorting block box for children, a preliminary experiment. , 2011, 2011, 5975458. | | 4 |
| 157 | A model of reference trajectory adaptation for Interaction with objects of arbitrary shape and impedance. , 2011, , . | | 4 |
| 158 | Classification of strategies for disturbance attenuation in human-human collaborative tasks. , 2011, 2011, 2364-7. | | 11 |
| 159 | Human-Like Adaptation of Force and Impedance in Stable and Unstable Interactions. IEEE Transactions on Robotics, 2011, 27, 918-930. | 7.3 | 360 |
| 160 | Human Motor Learning Through Iterative Model Reference Adaptive Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 2883-2888. | 0.4 | 4 |
| 161 | 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 |
| 162 | Effect of Grip Force and Training in Unstable Dynamics on Micromanipulation Accuracy. IEEE Transactions on Haptics, 2011, 4, 167-174. | 1.8 | 13 |

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|---|---|---|---|
| 163 | 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 |
| 164 | Pointing with the wrist: a postural model for Dondersâ€™ law. Experimental Brain Research, 2011, 212, 417-427. | 0.7 | 22 |
| 165 | Hi5: A versatile dual-wrist device to study human-human interaction and bimanual control. , 2011, , . | | 25 |
| 166 | Impedance control is selectively tuned to multiple directions of movement. Journal of Neurophysiology, 2011, 106, 2737-2748. | 0.9 | 29 |
| 167 | A model of reference trajectory adaptation for interaction with objects of arbitrary shape and impedance. , 2011, , . | | 2 |
| 168 | The CNS Stochastically Selects Motor Plan Utilizing Extrinsic and Intrinsic Representations. PLoS ONE, 2011, 6, e24229. | 1.1 | 15 |
| 169 | Hi5: a versatile dual-wrist device to study human-human interaction and bimanual control. , 2011, , . | | 1 |
| 170 | Heterogeneous sensor network for prioritized sensing. , 2011, , . | | 0 |
| 171 | Concurrent adaptation of force and impedance in the redundant muscle system. Biological Cybernetics, 2010, 102, 31-44. | 0.6 | 89 |
| 172 | A Brain Controlled Wheelchair to Navigate in Familiar Environments. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2010, 18, 590-598. | 2.7 | 449 |
| 173 | Assessing suturing techniques using a virtual reality surgical simulator. Microsurgery, 2010, 30, 479-486. | 0.6 | 33 |
| 174 | Model-based attenuation of movement artifacts in fMRI. Journal of Neuroscience Methods, 2010, 192, 58-69. | 1.3 | 8 |
| 175 | A technique to train finger coordination and independence after stroke. Disability and Rehabilitation: Assistive Technology, 2010, 5, 279-287. | 1.3 | 14 |
| 176 | Motor Memory and Local Minimization of Error and Effort, Not Global Optimization, Determine Motor Behavior. Journal of Neurophysiology, 2010, 104, 382-390. | 0.9 | 79 |
| 177 | Robot-assisted rehabilitation of hand function. Current Opinion in Neurology, 2010, 23, 661-670. | 1.8 | 232 |
| 178 | Modelling of human motor control in an unstable task through operational space formulation. , 2010, , . | | 1 |
| 179 | Changes in muscle activation patterns following robot-assisted training of hand function after stroke. , 2010, , . | | 1 |
| 180 | Force-controlled automatic microassembly of tissue engineering scaffolds. Journal of Micromechanics and Microengineering, 2010, 20, 035001. | 1.5 | 7 |

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|---|---|---|---|
| 181 | Stabilizing unstable object by means of kinematic redundancy. , 2010, 2010, 3698-702. | | 1 |
| 182 | Somatosensory cortical activation identified by functional MRI in preterm and term infants. NeuroImage, 2010, 49, 2063-2071. | 2.1 | 102 |
| 183 | Biomimetic motor behavior for simultaneous adaptation of force, impedance and trajectory in interaction tasks. , 2010, , . | | 62 |
| 184 | ReachMAN to help sub-acute patients training reaching and manipulation. , 2010, , . | | 8 |
| 185 | Accurate micromanipulation induced by performing in unstable dynamics. , 2010, , . | | 4 |
| 186 | Automated microassembly of tissue engineering scaffold. , 2010, , . | | 1 |
| 187 | Influence of visual feedback and speed on micromanipulation accuracy. , 2009, 2009, 1188-91. | | 2 |
| 188 | Evaluation of a Collaborative Wheelchair System in Cerebral Palsy and Traumatic Brain Injury Users. Neurorehabilitation and Neural Repair, 2009, 23, 494-504. | 1.4 | 20 |
| 189 | Micromanipulation accuracy in pointing and tracing investigated with a contact-free measurement system. , 2009, 2009, 3960-3. | | 14 |
| 190 | ReachMAN: a personal robot to train reaching and manipulation. , 2009, , . | | 27 |
| 191 | Dissociating Variability and Effort as Determinants of Coordination. PLoS Computational Biology, 2009, 5, e1000345. | 1.5 | 94 |
| 192 | The Role of Posture, Magnification, and Grip Force on Microscopic Accuracy. Annals of Biomedical Engineering, 2009, 37, 997-1006. | 1.3 | 36 |
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