Joseph McIntyre

List of Publications by Year
in descending order

69 papers	3,360 citations	172207 29 h-index	149479 56 g-index
70 all docs	70 docs citations	70 times ranked	2101 citing authors

#	Article	IF	Citations
1	Does the brain model Newton's laws?. Nature Neuroscience, 2001, 4, 693-694.	7.1	440
2	Visuo-motor coordination and internal models for object interception. Experimental Brain Research, 2009, 192, 571-604.	0.7	217
3	Servo Hypotheses for the Biological Control of Movement. Journal of Motor Behavior, 1993, 25, 193-202.	0.5	192
4	Viewer-Centered Frame of Reference for Pointing to Memorized Targets in Three-Dimensional Space. Journal of Neurophysiology, 1997, 78, 1601-1618.	0.9	180
5	Short-Term Memory for Reaching to Visual Targets: Psychophysical Evidence for Body-Centered Reference Frames. Journal of Neuroscience, 1998, 18, 8423-8435.	1.7	173
6	A modular theory of multisensory integration for motor control. Frontiers in Computational Neuroscience, 2014, 8, 1.	1.2	137
7	The control of stable postures in the multijoint arm. Experimental Brain Research, 1996, 110, 248-64.	0.7	135
8	Anticipating the Effects of Gravity When Intercepting Moving Objects: Differentiating Up and Down Based on Nonvisual Cues. Journal of Neurophysiology, 2005, 94, 4471-4480.	0.9	117
9	Kinematic strategies and sensorimotor transformations in the wiping movements of frogs. Journal of Neurophysiology, 1989, 62, 750-767.	0.9	115
10	Kinematic and dynamic processes for the control of pointing movements in humans revealed by short-term exposure to microgravity. Neuroscience, 2005, 135, 371-383.	1.1	102
11	Effect of gravity on human spontaneous 10-Hz electroencephalographic oscillations during the arrest reaction. Brain Research, 2006, 1121, 104-116.	1.1	94
12	Internal models and prediction of visual gravitational motion. Vision Research, 2008, 48, 1532-1538.	0.7	93
13	Hand trajectories of vertical arm movements in one- G and zero- G environments. Experimental Brain Research, 1998, 120, 496-502.	0.7	81
14	Viewer-centered and body-centered frames of reference in direct visuomotor transformations. Experimental Brain Research, 1999, 129, 201-210.	0.7	68
15	Cognitive allocentric representations of visual space shape pointing errors. Experimental Brain Research, 2002, 147, 426-436.	0.7	66
16	Gravity Influences Top-Down Signals in Visual Processing. PLoS ONE, 2014, 9, e82371.	1.1	60
17	Multimodal reference frame for the planning of vertical arms movements. Neuroscience Letters, 2007, 423, 211-215.	1.0	58
18	Do novel gravitational environments alter the grip-force/load-force coupling at the fingertips?. Experimental Brain Research, 2005, 163, 324-334.	0.7	54

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19	When Up Is Down in 0g: How Gravity Sensing Affects the Timing of Interceptive Actions. Journal of Neuroscience, 2012, 32, 1969-1973.	1.7	53
20	Reference frames and internal models for visuo-manual coordination: what can we learn from microgravity experiments?. Brain Research Reviews, 1998, 28, 143-154.	9.1	52
21	Movement Stability Under Uncertain Internal Models of Dynamics. Journal of Neurophysiology, 2010, 104, 1301-1313.	0.9	52
22	Gravity affects the preferred vertical and horizontal in visual perception of orientation. NeuroReport, 1999, 10, 1085-1089.	0.6	45
23	Analysis of Pointing Errors Reveals Properties of Data Representations and Coordinate Transformations Within the Central Nervous System. Neural Computation, 2000, 12, 2823-2855.	1.3	45
24	Behavioral and Neural Correlates of Communication via Pointing. PLoS ONE, 2011, 6, e17719.	1.1	45
25	Viewing another person's body as a target object: A behavioural and PET study of pointing. Neuropsychologia, 2012, 50, 1801-1813.	0.7	43
26	Gait transitions in simulated reduced gravity. Journal of Applied Physiology, 2011, 110, 781-788.	1.2	38
27	Perception and Reproduction of Force Direction in the Horizontal Plane. Journal of Neurophysiology, 2003, 90, 3040-3053.	0.9	37
28	Weightlessness alters up/down asymmetries in the perception of self-motion. Experimental Brain Research, 2013, 226, 95-106.	0.7	37
29	Spatial, not temporal cues drive predictive orienting movements during navigation. NeuroReport, 2000, 11, 775-778.	0.6	36
30	Internal reference frames for representation and storage of visual information: the role of gravity.. Acta Astronautica, 2001, 49, 111-121.	1.7	30
31	Necessity is the Mother of Invention: Reconstructing Missing Sensory Information in Multiple, Concurrent Reference Frames for Eyeâ€“Hand Coordination. Journal of Neuroscience, 2011, 31, 1397-1409.	1.7	30
32	Two Reference Frames for Visual Perception in Two Gravity Conditions. Perception, 2005, 34, 545-555.	0.5	29
33	Estimating time to contact and impact velocity when catching an accelerating object with the hand.. Journal of Experimental Psychology: Human Perception and Performance, 2003, 29, 219-237.	0.7	28
34	Central Processes Amplify and Transform Anisotropies of the Visual System in a Test of Visualâ€“Haptic Coordination. Journal of Neuroscience, 2008, 28, 1246-1261.	1.7	24
35	Hand trajectory formation during whole body reaching movements in man. Neuroscience Letters, 1998, 240, 159-162.	1.0	23
36	Physiological Basis of Limb-Impedance Modulation During Free and Constrained Movements. Journal of Neurophysiology, 2008, 100, 2577-2588.	0.9	22

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37	Measurements of human force control during a constrained arm motion using a force-actuated joystick. Journal of Neurophysiology, 1995, 73, 1201-1222.	0.9	21
38	Egocentric and allocentric reference frames for catching a falling object. Experimental Brain Research, 2010, 201, 653-662.	0.7	20
39	The perception of visually presented yaw and pitch turns: Assessing the contribution of motion, static, and cognitive cues. Perception & Psychophysics, 2006, 68, 1338-1350.	2.3	17
40	Minimum jerk for human catching movements in 3D. , 2012, , .		16
41	Independence of bilateral symmetry detection from a gravitational reference frame. Spatial Vision, 1995, 9, 127-137.	1.4	15
42	Characterization of the NEURARM bio-inspired joint position and stiffness open loop controller. , 2008, , .		15
43	Task Dependency of Grip Stiffnessâ€"A Study of Human Grip Force and Grip Stiffness Dependency during Two Different Tasks with Same Grip Forces. PLoS ONE, 2013, 8, e80889.	1.1	15
44	Persistent deterioration of visuospatial performance in spaceflight. Scientific Reports, 2021, 11, 9590.	1.6	14
45	When Kinesthesia Becomes Visual: A Theoretical Justification for Executing Motor Tasks in Visual Space. PLoS ONE, 2013, 8, e68438.	1.1	14
46	Estimating time to contact and impact velocity when catching an accelerating object with the hand. Journal of Experimental Psychology: Human Perception and Performance, 2003, 29, 219-37.	0.7	14
47	Does gravity play an essential role in the asymmetrical visual perception of vertical and horizontal line length?. Acta Astronautica, 2001, 49, 123-130.	1.7	12
48	A robotic model to investigate human motor control. Biological Cybernetics, 2011, 105, 1-19.	0.6	12
49	Physiological modules for generating discrete and rhythmic movements: action identification by a dynamic recurrent neural network. Frontiers in Computational Neuroscience, 2014, 8, 100.	1.2	12
50	Stability constraints for the distributed control of motor behavior. Neural Networks, 1993, 6, 1045-1059.	3.3	11
51	The kinelite project. Acta Astronautica, 1998, 43, 277-289.	1.7	11
52	Arm path fragmentation and spatiotemporal features of hand reaching in healthy subjects and stroke patients. , 2010, 2010, 5242-5.		11
53	Gravity-dependent estimates of object mass underlie the generation of motor commands for horizontal limb movements. Journal of Neurophysiology, 2014, 112, 384-392.	0.9	11
54	A strategy of faster movements used by elderly humans to lift objects of increasing weight in ecological context. Neuroscience, 2017, 357, 384-399.	1.1	10

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55	Physiological modules for generating discrete and rhythmic movements: component analysis of EMG signals. Frontiers in Computational Neuroscience, 2014, 8, 169.	1.2	9
56	Eye-hand coordination when the body moves: Dynamic egocentric and exocentric sensory encoding. Neuroscience Letters, 2012, 513, 78-83.	1.0	8
57	Keep your head on straight: Facilitating sensori-motor transformations for eyeâ€“hand coordination. Neuroscience, 2013, 248, 88-94.	1.1	8
58	Gravity and spatial orientation in virtual 3D-mazes. Journal of Vestibular Research: Equilibrium and Orientation, 2003, 13, 273-86.	0.8	8
59	A 6 D.O.F. opto-inertial tracker for virtual reality experiments in microgravity. Acta Astronautica, 2001, 49, 451-462.	1.7	5
60	Perception of affordances during long-term exposure to weightlessness in the International Space station. Cognitive Processing, 2015, 16, 171-174.	0.7	4
61	The visual encoding of purely proprioceptive intermanual tasks is due to the need of transforming joint signals, not to their interhemispheric transfer. Journal of Neurophysiology, 2017, 118, 1598-1608.	0.9	4
62	Perception of Affordance during Short-Term Exposure to Weightlessness in Parabolic Flight. PLoS ONE, 2016, 11, e0153598.	1.1	4
63	Does the brain make waves to improve stability?. Brain Research Bulletin, 2008, 75, 717-722.	1.4	3
64	How Tilting the Head Interferes With Eye-Hand Coordination: The Role of Gravity in Visuo-Proprioceptive, Cross-Modal Sensory Transformations. Frontiers in Integrative Neuroscience, 2022, 16, 788905.	1.0	3
65	Constrained motion control on a hemispherical surface: path planning. Journal of Neurophysiology, 2014, 111, 954-968.	0.9	2
66	Reference frames and internal models studied in microgravity. , 2001, , .		0
67	GRIP: Dexterous Manipulation of Objects in Weightlessness. , 0, , .		0
68	Human Manipulation Segmentation and Characterization Based on Instantaneous Work. Advances in Intelligent Systems and Computing, 2020, , 343-354.	0.5	0
69	Regulating Grip Forces through EMG-Controlled Protheses for Transradial Amputees. Applied Sciences (Switzerland), 2021, 11, 11199.	1.3	0