Daniel M Wolpert

List of Publications by Citations

197 papers	32,346 citations	79 h-index	179 g-index
229 ext. papers	37,494 ext. citations	7.6 avg, IF	7.59 L-index

#	Paper	IF	Citations
197	Signal-dependent noise determines motor planning. *Nature*, **1998**, 394, 780-4	50.4	1761
196	Internal models in the cerebellum. *Trends in Cognitive Sciences*, **1998**, 2, 338-47	14	1670
195	Noise in the nervous system. *Nature Reviews Neuroscience*, **2008**, 9, 292-303	13.5	1635
194	Computational principles of movement neuroscience. *Nature Neuroscience*, **2000**, 3 Suppl, 1212-7	25.5	1364
193	Bayesian integration in sensorimotor learning. *Nature*, **2004**, 427, 244-7	50.4	1270
192	Central cancellation of self-produced tickle sensation. *Nature Neuroscience*, **1998**, 1, 635-40	25.5	952
191	Motor prediction. *Current Biology*, **2001**, 11, R729-32	6.3	891
190	Principles of sensorimotor learning. *Nature Reviews Neuroscience*, **2011**, 12, 739-51	13.5	863
189	Is the cerebellum a smith predictor?. *Journal of Motor Behavior*, **1993**, 25, 203-16	1.4	854
188	A unifying computational framework for motor control and social interaction. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2003**, 358, 593-602	5.8	768
187	Abnormalities in the awareness and control of action. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2000**, 355, 1771-88	5.8	739
186	Computational approaches to motor control. *Trends in Cognitive Sciences*, **1997**, 1, 209-16	14	646
185	Abnormalities in the awareness of action. *Trends in Cognitive Sciences*, **2002**, 6, 237-242	14	634
184	Spatio-temporal prediction modulates the perception of self-produced stimuli. *Journal of Cognitive Neuroscience*, **1999**, 11, 551-9	3.1	628
183	Why can℞ you tickle yourself?. *NeuroReport*, **2000**, 11, R11-6	1.7	594
182	Maintaining internal representations: the role of the human superior parietal lobe. *Nature Neuroscience*, **1998**, 1, 529-33	25.5	581
181	Mosaic model for sensorimotor learning and control. *Neural Computation*, **2001**, 13, 2201-20	2.9	569

180	Perspectives and problems in motor learning. *Trends in Cognitive Sciences*, **2001**, 5, 487-494	14	569
179	Bayesian decision theory in sensorimotor control. *Trends in Cognitive Sciences*, **2006**, 10, 319-26	14	561
178	Explaining the symptoms of schizophrenia: abnormalities in the awareness of action. *Brain Research Reviews*, **2000**, 31, 357-63		537
177	When feeling is more important than seeing in sensorimotor adaptation. *Current Biology*, **2002**, 12, 834-7	6.3	439
176	The cerebellum is involved in predicting the sensory consequences of action. *NeuroReport*, **2001**, 12, 1879-84	1.7	421
175	Changes of mind in decision-making. *Nature*, **2009**, 461, 263-6	50.4	401
174	Computational mechanisms of sensorimotor control. *Neuron*, **2011**, 72, 425-42	13.9	399
173	Sources of signal-dependent noise during isometric force production. *Journal of Neurophysiology*, **2002**, 88, 1533-44	3.2	387
172	Predicting the consequences of our own actions: the role of sensorimotor context estimation. *Journal of Neuroscience*, **1998**, 18, 7511-8	6.6	321
171	The role of execution noise in movement variability. *Journal of Neurophysiology*, **2004**, 91, 1050-63	3.2	319
170	Prediction precedes control in motor learning. *Current Biology*, **2003**, 13, 146-50	6.3	311
169	Evidence for sensory prediction deficits in schizophrenia. *American Journal of Psychiatry*, **2005**, 162, 2384-6	11.9	274
168	Two eyes for an eye: the neuroscience of force escalation. *Science*, **2003**, 301, 187	33.3	265
167	Risk-sensitivity in sensorimotor control. *Frontiers in Human Neuroscience*, **2011**, 5, 1	3.3	242
166	Are arm trajectories planned in kinematic or dynamic coordinates? An adaptation study. *Experimental Brain Research*, **1995**, 103, 460-70	2.3	240
165	Computational principles of sensorimotor control that minimize uncertainty and variability. *Journal of Physiology*, **2007**, 578, 387-96	3.9	233
164	Motor control is decision-making. *Current Opinion in Neurobiology*, **2012**, 22, 996-1003	7.6	220
163	Failure to consolidate the consolidation theory of learning for sensorimotor adaptation tasks. *Journal of Neuroscience*, **2004**, 24, 8662-71	6.6	212

162	Temporal and amplitude generalization in motor learning. *Journal of Neurophysiology*, **1998**, 79, 1825-38	3.2	211
161	The scaling of motor noise with muscle strength and motor unit number in humans. *Experimental Brain Research*, **2004**, 157, 417-30	2.3	205
160	The statistics of natural hand movements. *Experimental Brain Research*, **2008**, 188, 223-36	2.3	198
159	Modular decomposition in visuomotor learning. *Nature*, **1997**, 386, 392-5	50.4	176
158	Widespread access to predictive models in the motor system: a short review. *Journal of Neural Engineering*, **2005**, 2, S313-9	5	176
157	Motor task variation induces structural learning. *Current Biology*, **2009**, 19, 352-7	6.3	170
156	Kinematics and dynamics are not represented independently in motor working memory: evidence from an interference study. *Journal of Neuroscience*, **2002**, 22, 1108-13	6.6	162
155	Role of uncertainty in sensorimotor control. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2002**, 357, 1137-45	5.8	159
154	Sensorimotor attenuation by central motor command signals in the absence of movement. *Nature Neuroscience*, **2006**, 9, 26-7	25.5	156
153	A modular planar robotic manipulandum with end-point torque control. *Journal of Neuroscience Methods*, **2009**, 181, 199-211	3	155
152	Perception of the consequences of self-action is temporally tuned and event driven. *Current Biology*, **2005**, 15, 1125-8	6.3	153
151	The cerebellum contributes to somatosensory cortical activity during self-produced tactile stimulation. *NeuroImage*, **1999**, 10, 448-59	7.9	147
150	Generalization to local remappings of the visuomotor coordinate transformation. *Journal of Neuroscience*, **1996**, 16, 7085-96	6.6	145
149	The main sequence of saccades optimizes speed-accuracy trade-off. *Biological Cybernetics*, **2006**, 95, 21-9	2.8	144
148	Specificity of reflex adaptation for task-relevant variability. *Journal of Neuroscience*, **2008**, 28, 14165-75	6.6	142
147	Mental state inference using visual control parameters. *Cognitive Brain Research*, **2005**, 22, 129-51		142
146	Activation in posterior superior temporal sulcus parallels parameter inducing the percept of animacy. *Neuron*, **2005**, 45, 625-35	13.9	140
145	Your own action influences how you perceive another person's action. *Current Biology*, **2004**, 14, 493-8	6.3	139

144	Internal models for motor control. *Novartis Foundation Symposium*, **1998**, 218, 291-304; discussion 304-7		137
143	Structure learning in action. *Behavioural Brain Research*, **2010**, 206, 157-65	3.4	131
142	Attenuation of self-generated tactile sensations is predictive, not postdictive. *PLoS Biology*, **2006**, 4, e28	9.7	131
141	Deliberation in the motor system: reflex gains track evolving evidence leading to a decision. *Journal of Neuroscience*, **2012**, 32, 2276-86	6.6	130
140	Probabilistic models in human sensorimotor control. *Human Movement Science*, **2007**, 26, 511-24	2.4	128
139	The loss function of sensorimotor learning. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 9839-42	11.5	124
138	A common mechanism underlies changes of mind about decisions and confidence. *ELife*, **2016**, 5, e12192	8.9	124
137	Evidence for an eye-centered spherical representation of the visuomotor map. *Journal of Neurophysiology*, **1999**, 81, 935-9	3.2	121
136	Consolidation of dynamic motor learning is not disrupted by rTMS of primary motor cortex. *Current Biology*, **2004**, 14, 252-6	6.3	110
135	Impedance control reduces instability that arises from motor noise. *Journal of Neuroscience*, **2009**, 29, 12606-16	6.6	107
134	Hierarchical MOSAIC for movement generation. *International Congress Series*, **2003**, 1250, 575-590		104
133	Decision-making in sensorimotor control. *Nature Reviews Neuroscience*, **2018**, 19, 519-534	13.5	100
132	Sensorimotor prediction and memory in object manipulation. *Canadian Journal of Experimental Psychology*, **2001**, 55, 87-95	0.8	98
131	On the origins of suboptimality in human probabilistic inference. *PLoS Computational Biology*, **2014**, 10, e1003661	5	96
130	Internal representations of temporal statistics and feedback calibrate motor-sensory interval timing. *PLoS Computational Biology*, **2012**, 8, e1002771	5	94
129	Bayesian integration in force estimation. *Journal of Neurophysiology*, **2004**, 92, 3161-5	3.2	94
128	Adaptation to a visuomotor shift depends on the starting posture. *Journal of Neurophysiology*, **2002**, 88, 973-81	3.2	94
127	Effective reinforcement learning following cerebellar damage requires a balance between exploration and motor noise. *Brain*, **2016**, 139, 101-14	11.2	93

126	Functional magnetic resonance imaging of impaired sensory prediction in schizophrenia. *JAMA Psychiatry*, **2014**, 71, 28-35	14.5	93
125	Multiple single unit recording in the cortex of monkeys using independently moveable microelectrodes. *Journal of Neuroscience Methods*, **1999**, 94, 5-17	3	92
124	Perceptual distortion contributes to the curvature of human reaching movements. *Experimental Brain Research*, **1994**, 98, 153-6	2.3	91
123	Near optimal combination of sensory and motor uncertainty in time during a naturalistic perception-action task. *Journal of Neurophysiology*, **2009**, 101, 1901-12	3.2	84
122	The role of inertial sensitivity in motor planning. *Journal of Neuroscience*, **1998**, 18, 5948-57	6.6	84
121	Optimal control predicts human performance on objects with internal degrees of freedom. *PLoS Computational Biology*, **2009**, 5, e1000419	5	83
120	Visuomotor feedback gains upregulate during the learning of novel dynamics. *Journal of Neurophysiology*, **2012**, 108, 467-78	3.2	83
119	Motor learning. *Current Biology*, **2010**, 20, R467-72	6.3	81
118	Gone in 0.6 seconds: the encoding of motor memories depends on recent sensorimotor states. *Journal of Neuroscience*, **2012**, 32, 12756-68	6.6	79
117	Kinematic cues in perceptual weight judgement and their origins in box lifting. *Psychological Research*, **2007**, 71, 13-21	2.5	77
116	The temporal evolution of feedback gains rapidly update to task demands. *Journal of Neuroscience*, **2013**, 33, 10898-909	6.6	74
115	The effect of contextual cues on the encoding of motor memories. *Journal of Neurophysiology*, **2013**, 109, 2632-44	3.2	73
114	Controlling the statistics of action: obstacle avoidance. *Journal of Neurophysiology*, **2002**, 87, 2434-40	3.2	72
113	Motor Planning, Not Execution, Separates Motor Memories. *Neuron*, **2016**, 92, 773-779	13.9	71
112	Rhythm generation in monkey motor cortex explored using pyramidal tract stimulation. *Journal of Physiology*, **2002**, 541, 685-99	3.9	70
111	Mere expectation to move causes attenuation of sensory signals. *PLoS ONE*, **2008**, 3, e2866	3.7	70
110	Learning optimal adaptation strategies in unpredictable motor tasks. *Journal of Neuroscience*, **2009**, 29, 6472-8	6.6	69
109	Predictive motor learning of temporal delays. *Journal of Neurophysiology*, **1999**, 82, 2039-48	3.2	69

108	Statistics of natural movements are reflected in motor errors. *Journal of Neurophysiology*, **2009**, 102, 1902-10	3.2	67
107	Task-dependent coordination of rapid bimanual motor responses. *Journal of Neurophysiology*, **2012**, 107, 890-901	3.2	66
106	Motor learning and prediction in a variable environment. *Current Opinion in Neurobiology*, **2003**, 13, 232-7	7.6	65
105	Context estimation for sensorimotor control. *Journal of Neurophysiology*, **2000**, 84, 1026-34	3.2	64
104	Internal Models in Biological Control. *Annual Review of Control, Robotics, and Autonomous Systems*, **2019**, 2, 339-364	11.8	63
103	Fast but fleeting: adaptive motor learning processes associated with aging and cognitive decline. *Journal of Neuroscience*, **2014**, 34, 13411-21	6.6	63
102	Optimal control of redundant muscles in step-tracking wrist movements. *Journal of Neurophysiology*, **2005**, 94, 4244-55	3.2	63
101	Ageing increases reliance on sensorimotor prediction through structural and functional differences in frontostriatal circuits. *Nature Communications*, **2016**, 7, 13034	17.4	61
100	Parallel specification of competing sensorimotor control policies for alternative action options. *Nature Neuroscience*, **2016**, 19, 320-6	25.5	60
99	Computations underlying sensorimotor learning. *Current Opinion in Neurobiology*, **2016**, 37, 7-11	7.6	60
98	Motor learning of novel dynamics is not represented in a single global coordinate system: evaluation of mixed coordinate representations and local learning. *Journal of Neurophysiology*, **2014**, 111, 1165-82	3.2	60
97	The influence of previous experience on predictive motor control. *NeuroReport*, **2001**, 12, 649-53	1.7	59
96	Sensorimotor integration compensates for visual localization errors during smooth pursuit eye movements. *Journal of Neurophysiology*, **2001**, 85, 1914-22	3.2	58
95	Multiple grasp-specific representations of tool dynamics mediate skillful manipulation. *Current Biology*, **2010**, 20, 618-23	6.3	57
94	Earthquakes, influenza and cycles of Indian kala-azar. *Transactions of the Royal Society of Tropical Medicine and Hygiene*, **1988**, 82, 843-50	2	57
93	Modulation of somatosensory processing by action. *NeuroImage*, **2013**, 70, 356-62	7.9	56
92	Confidence Is the Bridge between Multi-stage Decisions. *Current Biology*, **2016**, 26, 3157-3168	6.3	55
91	Theoretical perspectives on active sensing. *Current Opinion in Behavioral Sciences*, **2018**, 11, 100-108	4	55

90	Risk-sensitive optimal feedback control accounts for sensorimotor behavior under uncertainty. *PLoS Computational Biology*, **2010**, 6, e1000857	5	52
89	Nash equilibria in multi-agent motor interactions. *PLoS Computational Biology*, **2009**, 5, e1000468	5	50
88	Representations of uncertainty in sensorimotor control. *Current Opinion in Neurobiology*, **2011**, 21, 629-35	7.6	49
87	Where does your own action influence your perception of another person's action in the brain?. *NeuroImage*, **2006**, 29, 524-35	7.9	49
86	The value of the follow-through derives from motor learning depending on future actions. *Current Biology*, **2015**, 25, 397-401	6.3	48
85	Deficits in sensory prediction are related to delusional ideation in healthy individuals. *Neuropsychologia*, **2010**, 48, 4169-72	3.2	48
84	Learning and decay of prediction in object manipulation. *Journal of Neurophysiology*, **2000**, 84, 334-43	3.2	48
83	Motor effort alters changes of mind in sensorimotor decision making. *PLoS ONE*, **2014**, 9, e92681	3.7	48
82	Flexible representations of dynamics are used in object manipulation. *Current Biology*, **2008**, 18, 763-768	6.3	47
81	Internal models underlying grasp can be additively combined. *Experimental Brain Research*, **2004**, 155, 334-40	2.3	47
80	Action plan co-optimization reveals the parallel encoding of competing reach movements. *Nature Communications*, **2015**, 6, 7428	17.4	46
79	Rhythmicity, randomness and synchrony in climbing fiber signals. *Trends in Neurosciences*, **2005**, 28, 611-9	13.3	46
78	Active sensing in the categorization of visual patterns. *ELife*, **2016**, 5,	8.9	46
77	An improvement in perception of self-generated tactile stimuli following theta-burst stimulation of primary motor cortex. *Neuropsychologia*, **2007**, 45, 2712-7	3.2	44
76	A neuroeconomics approach to inferring utility functions in sensorimotor control. *PLoS Biology*, **2004**, 2, e330	9.7	43
75	Separate representations of dynamics in rhythmic and discrete movements: evidence from motor learning. *Journal of Neurophysiology*, **2011**, 105, 1722-31	3.2	42
74	High-frequency repetitive transcranial magnetic stimulation over the hand area of the primary motor cortex disturbs predictive grip force scaling. *European Journal of Neuroscience*, **2005**, 22, 2392-6	3.5	40
73	Context-dependent partitioning of motor learning in bimanual movements. *Journal of Neurophysiology*, **2010**, 104, 2082-91	3.2	39

72	The effect of visuomotor displacements on arm movement paths. *Experimental Brain Research*, **1999**, 127, 213-23	2.3	39
71	Facilitation of learning induced by both random and gradual visuomotor task variation. *Journal of Neurophysiology*, **2012**, 107, 1111-22	3.2	36
70	Cognitive tomography reveals complex, task-independent mental representations. *Current Biology*, **2013**, 23, 2169-75	6.3	34
69	Transfer of dynamic learning across postures. *Journal of Neurophysiology*, **2009**, 102, 2816-24	3.2	34
68	Planning movements in a simple redundant task. *Current Biology*, **2002**, 12, 488-91	6.3	34
67	Context-dependent decay of motor memories during skill acquisition. *Current Biology*, **2013**, 23, 1107-12	6.3	33
66	Piercing of Consciousness as a Threshold-Crossing Operation. *Current Biology*, **2017**, 27, 2285-2295.e6	6.3	33
65	Multiple motor memories are learned to control different points on a tool. *Nature Human Behaviour* , **2018**, 2, 300-311	12.8	32
64	Interference between velocity-dependent and position-dependent force-fields indicates that tasks depending on different kinematic parameters compete for motor working memory. *Experimental Brain Research*, **2005**, 163, 400-5	2.3	32
63	Risk-sensitivity and the mean-variance trade-off: decision making in sensorimotor control. *Proceedings of the Royal Society B: Biological Sciences*, **2011**, 278, 2325-32	4.4	31
62	A single-rate context-dependent learning process underlies rapid adaptation to familiar object dynamics. *PLoS Computational Biology*, **2011**, 7, e1002196	5	29
61	Risk sensitivity in a motor task with speed-accuracy trade-off. *Journal of Neurophysiology*, **2011**, 105, 2668-74	3.2	29
60	TOPS (Task Optimization in the Presence of Signal-Dependent Noise) model. *Systems and Computers in Japan*, **2004**, 35, 48-58		29
59	Scaling down motor memories: de-adaptation after motor learning. *Neuroscience Letters*, **2004**, 370, 102-7	3.3	29
58	Composition and decomposition in bimanual dynamic learning. *Journal of Neuroscience*, **2008**, 28, 10531-40	6.6	27
57	Simultaneous bimanual dynamics are learned without interference. *Experimental Brain Research*, **2007**, 183, 17-25	2.3	27
56	Naturalistic approaches to sensorimotor control. *Progress in Brain Research*, **2011**, 191, 3-29	2.9	26
55	Rapid Visuomotor Responses Reflect Value-Based Decisions. *Journal of Neuroscience*, **2019**, 39, 3906-3920	6.6	25

54	Fractionation of the visuomotor feedback response to directions of movement and perturbation. *Journal of Neurophysiology*, **2014**, 112, 2218-33	3.2	24
53	Structure learning in a sensorimotor association task. *PLoS ONE*, **2010**, 5, e8973	3.7	24
52	Increasing muscle co-contraction speeds up internal model acquisition during dynamic motor learning. *Scientific Reports*, **2018**, 8, 16355	4.9	24
51	Increasing Motor Noise Impairs Reinforcement Learning in Healthy Individuals. *ENeuro*, **2018**, 5,	3.9	24
50	Seeing what you want to see: priors for one's own actions represent exaggerated expectations of success. *Frontiers in Behavioral Neuroscience*, **2014**, 8, 232	3.5	23
49	Spatial representation of predictive motor learning. *Journal of Neurophysiology*, **2003**, 89, 1837-43	3.2	22
48	When Optimal Feedback Control Is Not Enough: Feedforward Strategies Are Required for Optimal Control with Active Sensing. *PLoS Computational Biology*, **2016**, 12, e1005190	5	22
47	Rapid Visuomotor Corrective Responses during Transport of Hand-Held Objects Incorporate Novel Object Dynamics. *Journal of Neuroscience*, **2015**, 35, 10572-80	6.6	21
46	The sequential encoding of competing action goals involves dynamic restructuring of motor plans in working memory. *Journal of Neurophysiology*, **2016**, 115, 3113-22	3.2	21
45	Inferring visuomotor priors for sensorimotor learning. *PLoS Computational Biology*, **2011**, 7, e1001112	5	21
44	Comment on "Single-trial spike trains in parietal cortex reveal discrete steps during decision-making". *Science*, **2016**, 351, 1406	33.3	20
43	Motor coordination: when two have to act as one. *Experimental Brain Research*, **2011**, 211, 631-41	2.3	20
42	Actions and consequences in bimanual interaction are represented in different coordinate systems. *Journal of Neuroscience*, **2006**, 26, 7121-6	6.6	20
41	Imagery of movements immediately following performance allows learning of motor skills that interfere. *Scientific Reports*, **2018**, 8, 14330	4.9	20
40	Rapid Automatic Motor Encoding of Competing Reach Options. *Cell Reports*, **2017**, 18, 1619-1626	10.6	19
39	Counterfactual Reasoning Underlies the Learning of Priors in Decision Making. *Neuron*, **2018**, 99, 1083-1097.e6	13.9	19
38	Rapid visuomotor feedback gains are tuned to the task dynamics. *Journal of Neurophysiology*, **2017**, 118, 2711-2726	3.2	18
37	Age-related reduction in motor adaptation: brain structural correlates and the role of explicit memory. *Neurobiology of Aging*, **2020**, 90, 13-23	5.6	18

36	Common encoding of novel dynamic loads applied to the hand and arm. *Journal of Neuroscience*, **2005**, 25, 5425-9	6.6	17
35	Rapid target foraging with reach or gaze: The hand looks further ahead than the eye. *PLoS Computational Biology*, **2017**, 13, e1005504	5	16
34	Q&A: Robotics as a tool to understand the brain. *BMC Biology*, **2010**, 8, 92	7.3	16
33	The effect of externally generated loading on predictive grip force modulation. *Neuroscience Letters*, **2007**, 414, 10-5	3.3	16
32	Sensory attenuation in Parkinson's disease is related to disease severity and dopamine dose. *Scientific Reports*, **2018**, 8, 15643	4.9	15
31	Enhanced crosslimb transfer of force-field learning for dynamics that are identical in extrinsic and joint-based coordinates for both limbs. *Journal of Neurophysiology*, **2016**, 115, 445-56	3.2	14
30	Contextual inference underlies the learning of sensorimotor repertoires. *Nature*, **2021**,	50.4	13
29	Model-Free Robust Optimal Feedback Mechanisms of Biological Motor Control. *Neural Computation* , **2020**, 32, 562-595	2.9	12
28	Grip force when reaching with target uncertainty provides evidence for motor optimization over averaging. *Scientific Reports*, **2017**, 7, 11703	4.9	12
27	Target Uncertainty Mediates Sensorimotor Error Correction. *PLoS ONE*, **2017**, 12, e0170466	3.7	12
26	Coordinate Representations for Interference Reduction in Motor Learning. *PLoS ONE*, **2015**, 10, e0129388	3.7	9
25	Feedback modulation: a window into cortical function. *Current Biology*, **2011**, 21, R924-6	6.3	9
24	The CNS updates its context estimate in the absence of feedback. *NeuroReport*, **2000**, 11, 3783-6	1.7	9
23	Multiple decisions about one object involve parallel sensory acquisition but time-multiplexed evidence incorporation. *ELife*, **2021**, 10,	8.9	9
22	An error-tuned model for sensorimotor learning. *PLoS Computational Biology*, **2017**, 13, e1005883	5	8
21	The Sensorimotor System Can Sculpt Behaviorally Relevant Representations for Motor Learning. *ENeuro*, **2016**, 3,	3.9	8
20	Motor systems: reaching out and grasping the molecular tools. *Current Biology*, **2014**, 24, R269-71	6.3	6
19	Selection and control of limb posture for stability. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2013**, 2013, 5626-9	0.9	6

18	Computing the Optimal Trajectory of Arm Movement: The TOPS (Task Optimization in the Presence of Signal-Dependent Noise) Model. *Studies in Fuzziness and Soft Computing*, **2003**, 395-415	0.7	5
17	Contextual inference underlies the learning of sensorimotor repertoires		5
16	Computations in Sensorimotor Learning. *Cold Spring Harbor Symposia on Quantitative Biology*, **2014**, 79, 93-8	3.9	4
15	Optimal control: when redundancy matters. *Current Biology*, **2007**, 17, R973-5	6.3	4
14	Unimodal statistical learning produces multimodal object-like representations. *ELife*, **2019**, 8,	8.9	3
13	Separate motor memories are formed when controlling different implicitly specified locations on a tool. *Journal of Neurophysiology*, **2019**, 121, 1342-1351	3.2	3
12	Adaptive coupling influences generalization of sensorimotor learning. *PLoS ONE*, **2018**, 13, e0207482	3.7	3
11	Probabilistic Mechanisms in Sensorimotor Control. *Novartis Foundation Symposium*,191-202		3
10	Human decision making anticipates future performance in motor learning. *PLoS Computational Biology*, **2020**, 16, e1007632	5	2
9	Neurophysiology: cerebral carbon copies. *Current Biology*, **2002**, 12, R552-6	6.3	2
8	Motor memories of object dynamics are categorically organized. *ELife*, **2021**, 10,	8.9	2
7	Maps, Modules, and Internal Models in Human Motor Control **2000**, 317-324		1
6	Motor learning decline with age is related to differences in the explicit memory system		1
5	Counterfactual reasoning underlies the learning of priors in decision making		1
4	Motor memories in manipulation tasks are linked to contact goals between objects. *Journal of Neurophysiology*, **2020**, 124, 994-1004	3.2	1
3	The visual geometry of a tool modulates generalization during adaptation. *Scientific Reports*, **2019**, 9, 2731	4.9	1
2	Response to Gilbert: Rhythmicity, randomness and synchrony in climbing fiber signals. *Trends in Neurosciences*, **2006**, 29, 66-67	13.3	
1	Reach adaption to a visuomotor gain with terminal error feedback involves reinforcement learning. *PLoS ONE*, **2022**, 17, e0269297	3.7	