Paul L Gribble

List of Publications by Year
in descending order

86 papers	5,125 citations	109321 35 h-index	102487 66 g-index
107 all docs	107 docs citations	107 times ranked	3218 citing authors

#	Article	IF	Citations
1	Role of Cocontraction in Arm Movement Accuracy. Journal of Neurophysiology, 2003, 89, 2396-2405.	1.8	516
2	Motor Learning by Observing. Neuron, 2005, 46, 153-160.	8.1	343
3	Are Complex Control Signals Required for Human Arm Movement?. Journal of Neurophysiology, 1998, 79, 1409-1424.	1.8	252
4	Somatosensory Plasticity and Motor Learning. Journal of Neuroscience, 2010, 30, 5384-5393.	3.6	245
5	Compensation for Interaction Torques During Single- and Multijoint Limb Movement. Journal of Neurophysiology, 1999, 82, 2310-2326.	1.8	243
6	Dissociation between hand motion and population vectors from neural activity in motor cortex. Nature, 2001, 413, 161-165.	27.8	198
7	Sensory Plasticity in Human Motor Learning. Trends in Neurosciences, 2016, 39, 114-123.	8.6	160
8	Overlap of internal models in motor cortex for mechanical loads during reaching. Nature, 2002, 417, 938-941.	27.8	126
9	Can proprioceptive training improve motor learning?. Journal of Neurophysiology, 2012, 108, 3313-3321.	1.8	114
10	Compensation for loads during arm movements using equilibrium-point control. Experimental Brain Research, 2000, 135, 474-482.	1.5	100
11	Mapping Proprioception across a 2D Horizontal Workspace. PLoS ONE, 2010, 5, e11851.	2.5	93
12	Spinal stretch reflexes support efficient hand control. Nature Neuroscience, 2019, 22, 529-533.	14.8	88
13	Are there distinct neural representations of object and limb dynamics?. Experimental Brain Research, 2006, 173, 689-697.	1.5	86
14	Control of position and movement is simplified by combined muscle spindle and Golgi tendon organ feedback. Journal of Neurophysiology, 2013, 109, 1126-1139.	1.8	86
15	The Central Nervous System Does Not Minimize Energy Cost in Arm Movements. Journal of Neurophysiology, 2010, 104, 2985-2994.	1.8	85
16	Hand-eye coordination for rapid pointing movements. Experimental Brain Research, 2002, 145, 372-382.	1.5	84
17	Independent coactivation of shoulder and elbow muscles. Experimental Brain Research, 1998, 123, 355-360.	1.5	82
18	Learning to Control Arm Stiffness Under Static Conditions. Journal of Neurophysiology, 2004, 92, 3344-3350.	1.8	81

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19	Kinematics and Kinetics of Multijoint Reaching in Nonhuman Primates. Journal of Neurophysiology, 2003, 89, 2667-2677.	1.8	80
20	Recent Tests of the Equilibrium-Point Hypothesis (Î» Model). Motor Control, 1998, 2, 189-205.	0.6	75
21	Relationship between cocontraction, movement kinematics and phasic muscle activity in single-joint arm movement. Experimental Brain Research, 2001, 140, 171-181.	1.5	71
22	An Examination of the Degrees of Freedom of Human Jaw Motion in Speech and Mastication. Journal of Speech, Language, and Hearing Research, 1997, 40, 1341-1351.	1.6	69
23	Spatially selective enhancement of proprioceptive acuity following motor learning. Journal of Neurophysiology, 2011, 105, 2512-2521.	1.8	67
24	Repetitive Transcranial Magnetic Stimulation to the Primary Motor Cortex Interferes with Motor Learning by Observing. Journal of Cognitive Neuroscience, 2009, 21, 1013-1022.	2.3	66
25	Dissociating error-based and reinforcement-based loss functions during sensorimotor learning. PLoS Computational Biology, 2017, 13, e1005623.	3.2	66
26	Generalization of Motor Learning Based on Multiple Field Exposures and Local Adaptation. Journal of Neurophysiology, 2005, 93, 3327-3338.	1.8	65
27	Feedforward and Feedback Control Share an Internal Model of the Arm's Dynamics. Journal of Neuroscience, 2018, 38, 10505-10514.	3.6	59
28	A Trial-by-Trial Window into Sensorimotor Transformations in the Human Motor Periphery. Journal of Neuroscience, 2016, 36, 8273-8282.	3.6	58
29	Visual Cues Signaling Object Grasp Reduce Interference in Motor Learning. Journal of Neurophysiology, 2009, 102, 2112-2120.	1.8	57
30	Proactive Interference as a Result of Persisting Neural Representations of Previously Learned Motor Skills in Primary Motor Cortex. Journal of Cognitive Neuroscience, 2006, 18, 2167-2176.	2.3	55
31	fMRI Activation during Observation of Others' Reach Errors. Journal of Cognitive Neuroscience, 2010, 22, 1493-1503.	2.3	55
32	The cost of moving optimally: kinematic path selection. Journal of Neurophysiology, 2014, 112, 1815-1824.	1.8	51
33	Transient visual responses reset the phase of lowâ€frequency oscillations in the skeletomotor periphery. European Journal of Neuroscience, 2015, 42, 1919-1932.	2.6	49
34	Both fast and slow learning processes contribute to savings following sensorimotor adaptation. Journal of Neurophysiology, 2019, 121, 1575-1583.	1.8	48
35	Limb Stiffness Is Modulated With Spatial Accuracy Requirements During Movement in the Absence of Destabilizing Forces. Journal of Neurophysiology, 2009, 101, 1542-1549.	1.8	47
36	Observing object lifting errors modulates cortico-spinal excitability and improves object lifting performance. Cortex, 2014, 50, 115-124.	2.4	46

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37	Persistence of inter-joint coupling during single-joint elbow flexions after shoulder fixation. Experimental Brain Research, 2005, 163, 252-257.	1.5	44
38	Phasic and tonic stretch reflexes in muscles with few muscle spindles: human jaw-opener muscles. Experimental Brain Research, 1997, 116, 299-308.	1.5	43
39	Motor Force Field Learning Influences Visual Processing of Target Motion. Journal of Neuroscience, 2007, 27, 9975-9983.	3.6	40
40	Neural signatures of reward and sensory error feedback processing in motor learning. Journal of Neurophysiology, 2019, 121, 1561-1574.	1.8	40
41	Goal-dependent modulation of the long-latency stretch response at the shoulder, elbow, and wrist. Journal of Neurophysiology, 2015, 114, 3242-3254.	1.8	36
42	Functional connectivity between somatosensory and motor brain areas predicts individual differences in motor learning by observing. Journal of Neurophysiology, 2017, 118, 1235-1243.	1.8	36
43	Functional Plasticity in Somatosensory Cortex Supports Motor Learning by Observing. Current Biology, 2016, 26, 921-927.	3.9	35
44	Kinematics of wrist joint flexion in overarm throws made by skilled subjects. Experimental Brain Research, 2004, 154, 382-394.	1.5	34
45	The gradient of the reinforcement landscape influences sensorimotor learning. PLoS Computational Biology, 2019, 15, e1006839.	3.2	34
46	Changes in visual and sensory-motor resting-state functional connectivity support motor learning by observing. Journal of Neurophysiology, 2015, 114, 677-688.	1.8	33
47	Somatosensory cortical excitability changes precede those in motor cortex during human motor learning. Journal of Neurophysiology, 2019, 122, 1397-1405.	1.8	32
48	Effects of Gravitational Load on Jaw Movements in Speech. Journal of Neuroscience, 1999, 19, 9073-9080.	3.6	31
49	The Influence of Visual Perturbations on the Neural Control of Limb Stiffness. Journal of Neurophysiology, 2009, 101, 246-257.	1.8	30
50	Observed effector-independent motor learning by observing. Journal of Neurophysiology, 2012, 107, 1564-1570.	1.8	30
51	Inter-Joint Coupling Strategy During Adaptation to Novel Viscous Loads in Human Arm Movement. Journal of Neurophysiology, 2004, 92, 754-765.	1.8	28
52	Done in 100 ms: path-dependent visuomotor transformation in the human upper limb. Journal of Neurophysiology, 2018, 119, 1319-1328.	1.8	28
53	Learning New Feedforward Motor Commands Based on Feedback Responses. Current Biology, 2020, 30, 1941-1948.e3.	3.9	28
54	Coordinating long-latency stretch responses across the shoulder, elbow, and wrist during goal-directed reaching. Journal of Neurophysiology, 2016, 116, 2236-2249.	1.8	26

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55	Compensating for intersegmental dynamics across the shoulder, elbow, and wrist joints during feedforward and feedback control. Journal of Neurophysiology, 2017, 118, 1984-1997.	1.8	25
56	Bimanual proprioception: are two hands better than one?. Journal of Neurophysiology, 2014, 111, 1362-1368.	1.8	23
57	Effect of Trial Order and Error Magnitude on Motor Learning by Observing. Journal of Neurophysiology, 2010, 104, 1409-1416.	1.8	22
58	Distributed categoryâ€specific recognitionâ€memory signals in human perirhinal cortex. Hippocampus, 2016, 26, 423-436.	1.9	22
59	A rapid visuomotor response on the human upper limb is selectively influenced by implicit motor learning. Journal of Neurophysiology, 2019, 121, 85-95.	1.8	22
60	Wrist muscle activation, interaction torque and mechanical properties in unskilled throws of different speeds. Experimental Brain Research, 2011, 208, 115-125.	1.5	20
61	Distinct Haptic Cues Do Not Reduce Interference when Learning to Reach in Multiple Force Fields. PLoS ONE, 2008, 3, e1990.	2.5	20
62	Does the sensorimotor system minimize prediction error or select the most likely prediction during object lifting?. Journal of Neurophysiology, 2017, 117, 260-274.	1.8	19
63	Time course of changes in the long-latency feedback response parallels the fast process of short-term motor adaptation. Journal of Neurophysiology, 2020, 124, 388-399.	1.8	19
64	Somatosensory perceptual training enhances motor learning by observing. Journal of Neurophysiology, 2018, 120, 3017-3025.	1.8	18
65	The effect of instruction on motor skill learning. Journal of Neurophysiology, 2020, 124, 1449-1457.	1.8	18
66	Compensation for the Effects of Head Acceleration on Jaw Movement in Speech. Journal of Neuroscience, 2001, 21, 6447-6456.	3.6	16
67	Shape Distortion Produced by Isolated Mismatch Between Vision and Proprioception. Journal of Neurophysiology, 2008, 99, 231-243.	1.8	16
68	Method for assessing directional characteristics of non-uniformly sampled neural activity. Journal of Neuroscience Methods, 2002, 113, 187-197.	2.5	15
69	Optimizing the Distribution of Leg Muscles for Vertical Jumping. PLoS ONE, 2016, 11, e0150019.	2.5	15
70	Movements following force-field adaptation are aligned with altered sense of limb position. Experimental Brain Research, 2019, 237, 1303-1313.	1.5	14
71	Spinal stretch reflexes support efficient control of reaching. Journal of Neurophysiology, 2021, 125, 1339-1347.	1.8	14
72	Neck muscle responses evoked by transcranial magnetic stimulation of the human frontal eye fields. European Journal of Neuroscience, 2011, 33, 2155-2167.	2.6	13

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73	The human motor system alters its reaching movement plan for task-irrelevant, positional forces. Journal of Neurophysiology, 2015, 113, 2137-2149.	1.8	13
74	A novel shoulderâ€“elbow mechanism for increasing speed in a multijoint arm movement. Experimental Brain Research, 2010, 203, 601-613.	1.5	12
75	Deliberate utilization of interaction torques brakes elbow extension in a fast throwing motion. Experimental Brain Research, 2011, 211, 63-72.	1.5	12
76	Sensitivity to error during visuomotor adaptation is similarly modulated by abrupt, gradual, and random perturbation schedules. Journal of Neurophysiology, 2021, 126, 934-945.	1.8	12
77	Rapid feedback responses are flexibly coordinated across arm muscles to support goal-directed reaching. Journal of Neurophysiology, 2018, 119, 537-547.	1.8	10
78	Null effects of levodopa on reward- and error-based motor adaptation, savings, and anterograde interference. Journal of Neurophysiology, 2021, 126, 47-67.	1.8	9
79	Generalizing movement patterns following shoulder fixation. Journal of Neurophysiology, 2020, 123, 1193-1205.	1.8	8
80	Skin and muscle receptors shape coordinated fast feedback responses in the upper limb. Current Opinion in Physiology, 2021, 20, 198-205.	1.8	8
81	EEG correlates of physical effort and reward processing during reinforcement learning. Journal of Neurophysiology, 2020, 124, 610-622.	1.8	6
82	Changes in corticospinal excitability associated with motor learning by observing. Experimental Brain Research, 2018, 236, 2829-2838.	1.5	5
83	Differential Dopamine Receptor-Dependent Sensitivity Improves the Switch Between Hard and Soft Selection in a Model of the Basal Ganglia. Neural Computation, 2022, 34, 1588-1615.	2.2	2
84	Observational Motor Learning. , 0, , 525-540.		1
85	The role of feedback in the production of skilled finger sequences. Journal of Neurophysiology, 2022, 127, 829-839.	1.8	1
86	Command invariants and the frame of reference for human movement. Behavioral and Brain Sciences, 1995, 18, 770-772.	0.7	0