Stephen G Lisberger

List of Publications by Year
in descending order

73 papers	5,926 citations	94433 37 h-index	85541 71 g-index
83 all docs	83 docs citations	83 times ranked	3682 citing authors

#	Article	IF	Citations
1	Neural structure of a sensory decoder for motor control. Nature Communications, 2022, 13, 1829.	12.8	5
2	The Rules of Cerebellar Learning: Around the Ito Hypothesis. Neuroscience, 2021, 462, 175-190.	2.3	23
3	Diversity and dynamism in the cerebellum. Nature Neuroscience, 2021, 24, 160-167.	14.8	114
4	Evaluation and resolution of many challenges of neural spike sorting: a new sorter. Journal of Neurophysiology, 2021, 126, 2065-2090.	1.8	9
5	The Neural Basis for Response Latency in a Sensory-Motor Behavior. Cerebral Cortex, 2020, 30, 3055-3073.	2.9	12
6	Different mechanisms for modulation of the initiation and steady-state of smooth pursuit eye movements. Journal of Neurophysiology, 2020, 123, 1265-1276.	1.8	12
7	Mechanisms that allow cortical preparatory activity without inappropriate movement. ELife, 2020, 9, .	6.0	15
8	Principles of operation of a cerebellar learning circuit. ELife, 2020, 9, .	6.0	19
9	Neural implementation of Bayesian inference in a sensorimotor behavior. Nature Neuroscience, 2018, 21, 1442-1451.	14.8	73
10	Multiple components in direction learning in smooth pursuit eye movements of monkeys. Journal of Neurophysiology, 2018, 120, 2020-2035.	1.8	12
11	Responses of Purkinje cells in the oculomotor vermis of monkeys during smooth pursuit eye movements and saccades: comparison with floccular complex. Journal of Neurophysiology, 2017, 118, 986-1001.	1.8	9
12	Control of the strength of visual-motor transmission as the mechanism of rapid adaptation of priors for Bayesian inference in smooth pursuit eye movements. Journal of Neurophysiology, 2017, 118, 1173-1189.	1.8	37
13	Modulation of Complex-Spike Duration and Probability during Cerebellar Motor Learning in Visually Guided Smooth-Pursuit Eye Movements of Monkeys. ENeuro, 2017, 4, ENEURO.0115-17.2017.	1.9	15
14	Signal, Noise, and Variation in Neural and Sensory-Motor Latency. Neuron, 2016, 90, 165-176.	8.1	43
15	Visual Guidance of Smooth Pursuit Eye Movements. Annual Review of Vision Science, 2015, 1, 447-468.	4.4	68
16	Interactions between target location and reward size modulate the rate of microsaccades in monkeys. Journal of Neurophysiology, 2015, 114, 2616-2624.	1.8	8
17	How and why neural and motor variation are related. Current Opinion in Neurobiology, 2015, 33, 110-116.	4.2	31
18	Role of Plasticity at Different Sites across the Time Course of Cerebellar Motor Learning. Journal of Neuroscience, 2014, 34, 7077-7090.	3.6	59

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19	Purkinje-cell plasticity and cerebellar motor learning are graded by complex-spike duration. Nature, 2014, 510, 529-532.	27.8	189
20	A framework for using signal, noise, and variation to determine whether the brain controls movement synergies or single muscles. Journal of Neurophysiology, 2014, 111, 733-745.	1.8	23
21	The Neural Code for Motor Control in the Cerebellum and Oculomotor Brainstem. ENeuro, 2014, 1, ENEURO.0004-14.2014.	1.9	17
22	Gamma Synchrony Predicts Neuron–Neuron Correlations and Correlations with Motor Behavior in Extrastriate Visual Area MT. Journal of Neuroscience, 2013, 33, 19677-19688.	3.6	29
23	Sensory Population Decoding for Visually Guided Movements. Neuron, 2013, 79, 167-179.	8.1	47
24	Diversity of Neural Responses in the Brainstem during Smooth Pursuit Eye Movements Constrains the Circuit Mechanisms of Neural Integration. Journal of Neuroscience, 2013, 33, 6633-6647.	3.6	36
25	Control of the Gain of Visual-Motor Transmission Occurs in Visual Coordinates for Smooth Pursuit Eye Movements. Journal of Neuroscience, 2013, 33, 9420-9430.	3.6	13
26	Interaction of plasticity and circuit organization during the acquisition of cerebellum-dependent motor learning. ELife, 2013, 2, e01574.	6.0	32
27	Reward Action in the Initiation of Smooth Pursuit Eye Movements. Journal of Neuroscience, 2012, 32, 2856-2867.	3.6	28
28	The Interaction of Bayesian Priors and Sensory Data and Its Neural Circuit Implementation in Visually Guided Movement. Journal of Neuroscience, 2012, 32, 17632-17645.	3.6	45
29	Sensory versus motor loci for integration of multiple motion signals in smooth pursuit eye movements and human motion perception. Journal of Neurophysiology, 2011, 106, 741-753.	1.8	11
30	Learned Timing of Motor Behavior in the Smooth Eye Movement Region of the Frontal Eye Fields. Neuron, 2011, 69, 159-169.	8.1	14
31	A Neurally Efficient Implementation of Sensory Population Decoding. Journal of Neuroscience, 2011, 31, 4868-4877.	3.6	12
32	Learning on Multiple Timescales in Smooth Pursuit Eye Movements. Journal of Neurophysiology, 2010, 104, 2850-2862.	1.8	42
33	Visual Guidance of Smooth-Pursuit Eye Movements: Sensation, Action, and What Happens in Between. Neuron, 2010, 66, 477-491.	8.1	189
34	Stimulus onset quenches neural variability: a widespread cortical phenomenon. Nature Neuroscience, 2010, 13, 369-378.	14.8	907
35	Encoding and Decoding of Learned Smooth-Pursuit Eye Movements in the Floccular Complex of the Monkey Cerebellum. Journal of Neurophysiology, 2009, 102, 2039-2054.	1.8	62
36	Noise Correlations in Cortical Area MT and Their Potential Impact on Trial-by-Trial Variation in the Direction and Speed of Smooth-Pursuit Eye Movements. Journal of Neurophysiology, 2009, 101, 3012-3030.	1.8	115

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37	Links from complex spikes to local plasticity and motor learning in the cerebellum of awake-behaving monkeys. Nature Neuroscience, 2008, 11, 1185-1192.	14.8	250
38	Cortical Mechanisms of Smooth Eye Movements Revealed by Dynamic Covariations of Neural and Behavioral Responses. Neuron, 2008, 58, 248-260.	8.1	59
39	The Neural Basis for Combinatorial Coding in a Cortical Population Response. Journal of Neuroscience, 2008, 28, 13522-13531.	3.6	132
40	Variation, Signal, and Noise in Cerebellar Sensory-Motor Processing for Smooth-Pursuit Eye Movements. Journal of Neuroscience, 2007, 27, 6832-6842.	3.6	106
41	Time Course of Precision in Smooth-Pursuit Eye Movements of Monkeys. Journal of Neuroscience, 2007, 27, 2987-2998.	3.6	69
42	Saccades Exert Spatial Control of Motion Processing for Smooth Pursuit Eye Movements. Journal of Neuroscience, 2006, 26, 7607-7618.	3.6	18
43	Directional Cuing of Target Choice in Human Smooth Pursuit Eye Movements. Journal of Neuroscience, 2006, 26, 12479-12486.	3.6	36
44	A sensory source for motor variation. Nature, 2005, 437, 412-416.	27.8	267
45	Discharge Properties of MST Neurons That Project to the Frontal Pursuit Area in Macaque Monkeys. Journal of Neurophysiology, 2005, 94, 1084-1090.	1.8	27
46	Normal Performance and Expression of Learning in the Vestibulo-Ocular Reflex (VOR) at High Frequencies. Journal of Neurophysiology, 2005, 93, 2028-2038.	1.8	79
47	The Representation of Time for Motor Learning. Neuron, 2005, 45, 157-167.	8.1	79
48	Time Course of Information about Motion Direction in Visual Area MT of Macaque Monkeys. Journal of Neuroscience, 2004, 24, 3210-3222.	3.6	130
49	A Population Decoding Framework for Motion Aftereffects on Smooth Pursuit Eye Movements. Journal of Neuroscience, 2004, 24, 9035-9048.	3.6	21
50	Estimating Target Speed from the Population Response in Visual Area MT. Journal of Neuroscience, 2004, 24, 1907-1916.	3.6	119
51	Evidence for Object Permanence in the Smooth-Pursuit Eye Movements of Monkeys. Journal of Neurophysiology, 2003, 90, 2205-2218.	1.8	78
52	The Neural Representation of Speed in Macaque Area MT/V5. Journal of Neuroscience, 2003, 23, 5650-5661.	3.6	246
53	Role of Arcuate Frontal Cortex of Monkeys in Smooth Pursuit Eye Movements. II. Relation to Vector Averaging Pursuit. Journal of Neurophysiology, 2002, 87, 2700-2714.	1.8	30
54	Role of Arcuate Frontal Cortex of Monkeys in Smooth Pursuit Eye Movements. I. Basic Response Properties to Retinal Image Motion and Position. Journal of Neurophysiology, 2002, 87, 2684-2699.	1.8	80

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55	Enhancement of Multiple Components of Pursuit Eye Movement by Microstimulation in the Arcuate Frontal Pursuit Area in Monkeys. Journal of Neurophysiology, 2002, 87, 802-818.	1.8	75
56	Serial linkage of target selection for orienting and tracking eye movements. Nature Neuroscience, 2002, 5, 892-899.	14.8	46
57	Shifts in the Population Response in the Middle Temporal Visual Area Parallel Perceptual and Motor Illusions Produced by Apparent Motion. Journal of Neuroscience, 2001, 21, 9387-9402.	3.6	77
58	Experimental and Computational Analysis of Monkey Smooth Pursuit Eye Movements. Journal of Neurophysiology, 2001, 86, 741-759.	1.8	49
59	Linked Target Selection for Saccadic and Smooth Pursuit Eye Movements. Journal of Neuroscience, 2001, 21, 2075-2084.	3.6	70
60	Reconstruction of Target Speed for the Guidance of Pursuit Eye Movements. Journal of Neuroscience, 2001, 21, 3196-3206.	3.6	40
61	Regulation of the gain of visually guided smooth-pursuit eye movements by frontal cortex. Nature, 2001, 409, 191-194.	27.8	157
62	Apparent Motion Produces Multiple Deficits in Visually Guided Smooth Pursuit Eye Movements of Monkeys. Journal of Neurophysiology, 2000, 84, 216-235.	1.8	38
63	Changes in the Responses of Purkinje Cells in the Floccular Complex of Monkeys After Motor Learning in Smooth Pursuit Eye Movements. Journal of Neurophysiology, 2000, 84, 2945-2960.	1.8	64
64	Visual Motion Analysis for Pursuit Eye Movements in Area MT of Macaque Monkeys. Journal of Neuroscience, 1999, 19, 2224-2246.	3.6	303
65	Physiologic basis for motor learning in the vestibulo-ocular reflex. Otolaryngology - Head and Neck Surgery, 1998, 119, 43-48.	1.9	49
66	Neural Learning Rules for the Vestibulo-Ocular Reflex. Journal of Neuroscience, 1998, 18, 9112-9129.	3.6	191
67	Vector Averaging for Smooth Pursuit Eye Movements Initiated by Two Moving Targets in Monkeys. Journal of Neuroscience, 1997, 17, 7490-7502.	3.6	146
68	Neuronal Responses in Visual Areas MT and MST During Smooth Pursuit Target Selection. Journal of Neurophysiology, 1997, 78, 1433-1446.	1.8	84
69	Behavioral Analysis of Signals that Guide Learned Changes in the Amplitude and Dynamics of the Vestibulo-Ocular Reflex. Journal of Neuroscience, 1996, 16, 7791-7802.	3.6	67
70	Initial tracking conditions modulate the gain of visuo-motor transmission for smooth pursuit eye movements in monkeys. Visual Neuroscience, 1994, 11, 411-424.	1.0	120
71	A model of visually-guided smooth pursuit eye movements based on behavioral observations. Journal of Computational Neuroscience, 1994, 1, 265-283.	1.0	122
72	Eye movements and brainstem neuronal responses evoked by cerebellar and vestibular stimulation in chicks. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 1992, 171, 629-638.	1.6	20

#	ARTICLE	IF	CITATIONS
73	Toward a Biomimetic Neural Circuit Model of Sensory-Motor Processing. Neural Computation, 0, , 1-29.	2.2	0