Steven M Chase

List of Publications by Year in descending order

41 papers	2,721 citations	304743 22 h-index	345221 36 g-index
50 all docs	50 docs citations	50 times ranked	2018 citing authors

#	Article	IF	Citations
1	Existing function in primary visual cortex is not perturbed by new skill acquisition of a non-matched sensory task. Nature Communications, 2022, 13, .	12.8	5
2	Development of Natural Scene Representation in Primary Visual Cortex Requires Early Postnatal Experience. Current Biology, 2021, 31, 369-380.e5.	3.9	9
3	Learning is shaped by abrupt changes in neural engagement. Nature Neuroscience, 2021, 24, 727-736.	14.8	39
4	Distinct Kinematic Adjustments over Multiple Timescales Accompany Locomotor Skill Development in Mice. Neuroscience, 2021, 466, 260-272.	2.3	2
5	Monkeys exhibit a paradoxical decrease in performance in high-stakes scenarios. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	7
6	How learning unfolds in the brain: toward an optimization view. Neuron, 2021, 109, 3720-3735.	8.1	19
7	Stabilization of a brainâ€"computer interface via the alignment of low-dimensional spaces of neural activity. Nature Biomedical Engineering, 2020, 4, 672-685.	22.5	118
8	Intracortical Brainâ€"Machine Interfaces. , 2020, , 185-221.		5
9	Neural manifolds: from basic science to practical improvements in brain-computer intefaces. , 2019, , .		1
10	New neural activity patterns emerge with long-term learning. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 15210-15215.	7.1	145
11	Distinct types of neural reorganization during long-term learning. Journal of Neurophysiology, 2019, 121, 1329-1341.	1.8	40
12	Intracortical recording stability in human brainâ€"computer interface users. Journal of Neural Engineering, 2018, 15, 046016.	3.5	100
13	Learning by neural reassociation. Nature Neuroscience, 2018, 21, 607-616.	14.8	170
14	Feature selectivity is stable in primary visual cortex across a range of spatial frequencies. Scientific Reports, 2018, 8, 15288.	3.3	30
15	Constraints on neural redundancy. ELife, 2018, 7, .	6.0	56
16	Workshops of the Sixth International Brainâ€"Computer Interface Meeting: brainâ€"computer interfaces past, present, and future. Brain-Computer Interfaces, 2017, 4, 3-36.	1.8	24
17	Population activity structure of excitatory and inhibitory neurons. PLoS ONE, 2017, 12, e0181773.	2.5	24
18	Dynamic range adaptation in primary motor cortical populations. ELife, 2017, 6, .	6.0	22

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19	Extracellular voltage threshold settings can be tuned for optimal encoding of movement and stimulus parameters. Journal of Neural Engineering, 2016, 13, 036009.	3.5	30
20	A control-theoretic approach to brain-computer interface design. , 2016, , .		1
21	Brainâ€"computer interfaces for dissecting cognitive processes underlying sensorimotor control. Current Opinion in Neurobiology, 2016, 37, 53-58.	4.2	82
22	Internal models for interpreting neural population activity during sensorimotor control. ELife, 2015, 4, .	6.0	41
23	Comprehensive chronic laminar single-unit, multi-unit, and local field potential recording performance with planar single shank electrode arrays. Journal of Neuroscience Methods, 2015, 242, 15-40.	2.5	116
24	Recasting brain-machine interface design from a physical control system perspective. Journal of Computational Neuroscience, 2015, 39, 107-118.	1.0	12
25	Single-unit activity, threshold crossings, and local field potentials in motor cortex differentially encode reach kinematics. Journal of Neurophysiology, 2015, 114, 1500-1512.	1.8	53
26	Shedding light on learning. Nature Neuroscience, 2014, 17, 746-747.	14.8	1
27	Motor cortical control of movement speed with implications for brain-machine interface control. Journal of Neurophysiology, 2014, 112, 411-429.	1.8	52
28	Neural constraints on learning. Nature, 2014, 512, 423-426.	27.8	535
29	Direction and speed tuning of motor-cortex multi-unit activity and local field potentials during reaching movements. , 2013, 2013, 299-302.		8
30	Learning an Internal Dynamics Model from Control Demonstration. JMLR Workshop and Conference Proceedings, 2013, , 606-614.	1.4	8
31	Behavioral and neural correlates of visuomotor adaptation observed through a brain-computer interface in primary motor cortex. Journal of Neurophysiology, 2012, 108, 624-644.	1.8	106
32	Internal models engaged by brain-computer interface control. , 2012, 2012, 1327-30.		19
33	Inference from populations: going beyond models. Progress in Brain Research, 2011, 192, 103-112.	1.4	15
34	Comparison of brainâ€"computer interface decoding algorithms in open-loop and closed-loop control. Journal of Computational Neuroscience, 2010, 29, 73-87.	1.0	127
35	Latent Inputs Improve Estimates of Neural Encoding in Motor Cortex. Journal of Neuroscience, 2010, 30, 13873-13882.	3.6	28
36	A Reward-Modulated Hebbian Learning Rule Can Explain Experimentally Observed Network Reorganization in a Brain Control Task. Journal of Neuroscience, 2010, 30, 8400-8410.	3.6	104

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37	Bias, optimal linear estimation, and the differences between open-loop simulation and closed-loop performance of spiking-based brainâ€“computer interface algorithms. Neural Networks, 2009, 22, 1203-1213.	5.9	114
38	Control of a brainâ€“computer interface without spike sorting. Journal of Neural Engineering, 2009, 6, 055004.	3.5	148
39	Functional network reorganization in motor cortex can be explained by reward-modulated Hebbian learning. Advances in Neural Information Processing Systems, 2009, 2009, 1105-1113.	2.8	2
40	Functional network reorganization during learning in a brain-computer interface paradigm. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 19486-19491.	7.1	248
41	Cues for Sound Localization Are Encoded in Multiple Aspects of Spike Trains in the Inferior Colliculus. Journal of Neurophysiology, 2008, 99, 1672-1682.	1.8	43