Timothy P Lillicrap

List of Publications by Year
in descending order

24 papers	21,388 citations	430874 18 h-index	610901 24 g-index
25 all docs	25 docs citations	25 times ranked	16938 citing authors

#	Article	IF	Citations
1	The Brain-Computer Metaphor Debate Is Useless: A Matter of Semantics. Frontiers in Computer Science, 2022, 4, .	2.8	7
2	dm_control: Software and tasks for continuous control. Software Impacts, 2020, 6, 100022.	1.4	48
3	Mastering Atari, Go, chess and shogi by planning with a learned model. Nature, 2020, 588, 604-609.	27.8	570
4	Backpropagation and the brain. Nature Reviews Neuroscience, 2020, 21, 335-346.	10.2	385
5	Grandmaster level in StarCraft II using multi-agent reinforcement learning. Nature, 2019, 575, 350-354.	27.8	1,491
6	A deep learning framework for neuroscience. Nature Neuroscience, 2019, 22, 1761-1770.	14.8	563
7	Backpropagation through time and the brain. Current Opinion in Neurobiology, 2019, 55, 82-89.	4.2	60
8	Optimizing agent behavior over long time scales by transporting value. Nature Communications, 2019, 10, 5223.	12.8	22
9	Dendritic solutions to the credit assignment problem. Current Opinion in Neurobiology, 2019, 54, 28-36.	4.2	88
10	A general reinforcement learning algorithm that masters chess, shogi, and Go through self-play. Science, 2018, 362, 1140-1144.	12.6	1,704
11	Vector-based navigation using grid-like representations in artificial agents. Nature, 2018, 557, 429-433.	27.8	414
12	Can neocortical feedback alter the sign of plasticity?. Nature Reviews Neuroscience, 2018, 19, 636-636.	10.2	6
13	Deep Learning with Dynamic Spiking Neurons and Fixed Feedback Weights. Neural Computation, 2017, 29, 578-602.	2.2	47
14	Mastering the game of Go without human knowledge. Nature, 2017, 550, 354-359.	27.8	5,208
15	Towards deep learning with segregated dendrites. ELife, 2017, 6, .	6.0	237
16	Random synaptic feedback weights support error backpropagation for deep learning. Nature Communications, 2016, 7, 13276.	12.8	412
17	Mastering the game of Go with deep neural networks and tree search. Nature, 2016, 529, 484-489.	27.8	9,796
18	Temporal evolution of both premotor and motor cortical tuning properties reflect changes in limb biomechanics. Journal of Neurophysiology, 2015, 113, 2812-2823.	1.8	16

#	Article	IF	Citations
19	Clonal Relationships Impact Neuronal Tuning within a Phylogenetically Ancient Vertebrate Brain Structure. Current Biology, 2014, 24, 1929-1933.	3.9	10
20	Adapting to inversion of the visual field: a new twist on an old problem. Experimental Brain Research, 2013, 228, 327-339.	1.5	42
21	Preference Distributions of Primary Motor Cortex Neurons Reflect Control Solutions Optimized for Limb Biomechanics. Neuron, 2013, 77, 168-179.	8.1	111
22	Complex Spatiotemporal Tuning in Human Upper-Limb Muscles. Journal of Neurophysiology, 2010, 103, 564-572.	1.8	7
23	Temporal Evolution of "Automatic Gain-Scaling" Journal of Neurophysiology, 2009, 102, 992-1003.	1.8	128
24	Temporal Encoding of Movement in Motor Cortical Neurons. Journal of Neuroscience, 2007, 27, 10076-10077.	3.6	1