

# Timothy P Lillicrap

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1877567/publications.pdf>

Version: 2024-02-01

24  
papers

21,388  
citations

430442

18  
h-index

610482

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. <i>Frontiers in Computer Science</i> , 2022, 4, .	1.7	7
2	dm_control: Software and tasks for continuous control. <i>Software Impacts</i> , 2020, 6, 100022.	0.8	48
3	Mastering Atari, Go, chess and shogi by planning with a learned model. <i>Nature</i> , 2020, 588, 604-609.	13.7	570
4	Backpropagation and the brain. <i>Nature Reviews Neuroscience</i> , 2020, 21, 335-346.	4.9	385
5	Grandmaster level in StarCraft II using multi-agent reinforcement learning. <i>Nature</i> , 2019, 575, 350-354.	13.7	1,491
6	A deep learning framework for neuroscience. <i>Nature Neuroscience</i> , 2019, 22, 1761-1770.	7.1	563
7	Backpropagation through time and the brain. <i>Current Opinion in Neurobiology</i> , 2019, 55, 82-89.	2.0	60
8	Optimizing agent behavior over long time scales by transporting value. <i>Nature Communications</i> , 2019, 10, 5223.	5.8	22
9	Dendritic solutions to the credit assignment problem. <i>Current Opinion in Neurobiology</i> , 2019, 54, 28-36.	2.0	88
10	A general reinforcement learning algorithm that masters chess, shogi, and Go through self-play. <i>Science</i> , 2018, 362, 1140-1144.	6.0	1,704
11	Vector-based navigation using grid-like representations in artificial agents. <i>Nature</i> , 2018, 557, 429-433.	13.7	414
12	Can neocortical feedback alter the sign of plasticity?. <i>Nature Reviews Neuroscience</i> , 2018, 19, 636-636.	4.9	6
13	Deep Learning with Dynamic Spiking Neurons and Fixed Feedback Weights. <i>Neural Computation</i> , 2017, 29, 578-602.	1.3	47
14	Mastering the game of Go without human knowledge. <i>Nature</i> , 2017, 550, 354-359.	13.7	5,208
15	Towards deep learning with segregated dendrites. <i>ELife</i> , 2017, 6, .	2.8	237
16	Random synaptic feedback weights support error backpropagation for deep learning. <i>Nature Communications</i> , 2016, 7, 13276.	5.8	412
17	Mastering the game of Go with deep neural networks and tree search. <i>Nature</i> , 2016, 529, 484-489.	13.7	9,796
18	Temporal evolution of both premotor and motor cortical tuning properties reflect changes in limb biomechanics. <i>Journal of Neurophysiology</i> , 2015, 113, 2812-2823.	0.9	16

#	ARTICLE	IF	CITATIONS
19	Clonal Relationships Impact Neuronal Tuning within a Phylogenetically Ancient Vertebrate Brain Structure. <i>Current Biology</i> , 2014, 24, 1929-1933.	1.8	10
20	Adapting to inversion of the visual field: a new twist on an old problem. <i>Experimental Brain Research</i> , 2013, 228, 327-339.	0.7	42
21	Preference Distributions of Primary Motor Cortex Neurons Reflect Control Solutions Optimized for Limb Biomechanics. <i>Neuron</i> , 2013, 77, 168-179.	3.8	111
22	Complex Spatiotemporal Tuning in Human Upper-Limb Muscles. <i>Journal of Neurophysiology</i> , 2010, 103, 564-572.	0.9	7
23	Temporal Evolution of "Automatic Gain-Scaling". <i>Journal of Neurophysiology</i> , 2009, 102, 992-1003.	0.9	128
24	Temporal Encoding of Movement in Motor Cortical Neurons. <i>Journal of Neuroscience</i> , 2007, 27, 10076-10077.	1.7	1