Praveen K Pilly

List of Publications by Year
in descending order

34 papers	1,078 citations	623734 14 h-index	501196 28 g-index
38 all docs	38 docs citations	38 times ranked	1120 citing authors

#	Article	IF	Citations
1	Deep Reinforcement Learning With Modulated Hebbian Plus Q-Network Architecture. IEEE Transactions on Neural Networks and Learning Systems, 2022, 33, 2045-2056.	11.3	8
2	Biological underpinnings for lifelong learning machines. Nature Machine Intelligence, 2022, 4, 196-210.	16.0	62
3	Context meta-reinforcement learning via neuromodulation. Neural Networks, 2022, 152, 70-79.	5.9	2
4	Brain connectivity alterations during sleep by closed-loop transcranial neurostimulation predict metamemory sensitivity. Network Neuroscience, 2021, 5, 1-23.	2.6	1
5	Detecting Changes and Avoiding Catastrophic Forgetting in Dynamic Partially Observable Environments. Frontiers in Neurorobotics, 2020, 14, 578675.	2.8	2
6	Neuromodulated attention and goal-driven perception in uncertain domains. Neural Networks, 2020, 125, 56-69.	5.9	10
7	Evolving inborn knowledge for fast adaptation in dynamic POMDP problems. , 2020, , .		3
8	Generative Continual Concept Learning. Proceedings of the AAAI Conference on Artificial Intelligence, 2020, 34, 5545-5552.	4.9	15
9	Transcranial alternating current stimulation entrains single-neuron activity in the primate brain. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 5747-5755.	7.1	218
10	Transcranial Current Stimulation During Sleep Facilitates Insight into Temporal Rules, but does not Consolidate Memories of Individual Sequential Experiences. Scientific Reports, 2019, 9, 1516.	3.3	13
11	Hypercolumn Sparsification for Low-Power Convolutional Neural Networks. ACM Journal on Emerging Technologies in Computing Systems, 2019, 15, 1-16.	2.3	1
12	Reply to Khatoun et al.: Speculation about brain stimulation must be constrained by observation. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 22440-22441.	7.1	9
13	One-Shot Tagging During Wake and Cueing During Sleep With Spatiotemporal Patterns of Transcranial Electrical Stimulation Can Boost Long-Term Metamemory of Individual Episodes in Humans. Frontiers in Neuroscience, 2019, 13, 1416.	2.8	6
14	Complementary Learning for Overcoming Catastrophic Forgetting Using Experience Replay. , 2019, , .		17
15	Probabilistic Program Neurogenesis. , 2019, , .		3
16	Probabilistic Program Neurogenesis. , 2019, , .		0
17	Modeling Contextual Modulation of Memory Associations in the Hippocampus. Frontiers in Human Neuroscience, 2018, 12, 442.	2.0	11
18	The Benefits of Closed-Loop Transcranial Alternating Current Stimulation on Subjective Sleep Quality. Brain Sciences, 2018, 8, 204.	2.3	19

#	Article	IF	Citations
19	Dose-Dependent Effects of Closed-Loop tACS Delivered During Slow-Wave Oscillations on Memory Consolidation. Frontiers in Neuroscience, 2018, 12, 867.	2.8	35
20	Closed-Loop Slow-Wave tACS Improves Sleep-Dependent Long-Term Memory Generalization by Modulating Endogenous Oscillations. Journal of Neuroscience, 2018, 38, 7314-7326.	3.6	109
21	Mental State Assessment and Validation Using Personalized Physiological Biometrics. Frontiers in Human Neuroscience, 2018, 12, 221.	2.0	10
22	Transcranial Direct Current Stimulation Facilitates Associative Learning and Alters Functional Connectivity in the Primate Brain. Current Biology, 2017, 27, 3086-3096.e3.	3.9	114
23	On comparing in vivo intracranial recordings in non-human primates to predictions of optimized transcranial electrical stimulation. , 2016, 2016, 1774-1777.		19
24	The neural basis of decision-making during sensemaking: Implications for human-system interaction. , 2015, , .		3
25	How does the modular organization of entorhinal grid cells develop?. Frontiers in Human Neuroscience, 2014, 8, 337.	2.0	11
26	Coordinated learning of grid cell and place cell spatial and temporal properties: multiple scales, attention and oscillations. Philosophical Transactions of the Royal Society B: Biological Sciences, 2014, 369, 20120524.	4.0	33
27	Spiking Neurons in a Hierarchical Self-Organizing Map Model Can Learn to Develop Spatial and Temporal Properties of Entorhinal Grid Cells and Hippocampal Place Cells. PLoS ONE, 2013, 8, e60599.	2.5	33
28	How reduction of theta rhythm by medial septum inactivation may covary with disruption of entorhinal grid cell responses due to reduced cholinergic transmission. Frontiers in Neural Circuits, 2013, 7, 173.	2.8	11
29	How Entorhinal Grid Cells May Learn Multiple Spatial Scales from a Dorsoventral Gradient of Cell Response Rates in a Self-organizing Map. PLoS Computational Biology, 2012, 8, e1002648.	3.2	46
30	How Do Spatial Learning and Memory Occur in the Brain? Coordinated Learning of Entorhinal Grid Cells and Hippocampal Place Cells. Journal of Cognitive Neuroscience, 2012, 24, 1031-1054.	2.3	64
31	Low-level sensory plasticity during task-irrelevant perceptual learning: Evidence from conventional and double training procedures. Vision Research, 2010, 50, 424-432.	1.4	19
32	What a difference a parameter makes: A psychophysical comparison of random dot motion algorithms. Vision Research, 2009, 49, 1599-1612.	1.4	98
33	Temporal dynamics of decision-making during motion perception in the visual cortex. Vision Research, 2008, 48, 1345-1373.	1.4	59
34	Interactions between contrast and spatial displacement in visual motion processing. Current Biology, 2008, 18, R904-R906.	3.9	13