Sen Cheng

List of Publications by Year
in descending order

50 papers	1,601 citations	361413 20 h-index	345221 36 g-index
60 all docs	60 docs citations	60 times ranked	1349 citing authors

#	Article	IF	Citations
1	New Experiences Enhance Coordinated Neural Activity in the Hippocampus. Neuron, 2008, 57, 303-313.	8.1	242
2	Modeling Sensorimotor Learning with Linear Dynamical Systems. Neural Computation, 2006, 18, 760-793.	2.2	123
3	Modeling Sensorimotor Learning with Linear Dynamical Systems. Neural Computation, 2006, 18, 760-793.	2.2	99
4	Dissociating memory traces and scenario construction in mental time travel. Neuroscience and Biobehavioral Reviews, 2016, 60, 82-89.	6.1	97
5	Reactivation, Replay, and Preplay: How It Might All Fit Together. Neural Plasticity, 2011, 2011, 1-11.	2.2	91
6	What is episodic memory if it is a natural kind?. Synthêse, 2016, 193, 1345-1385.	1.1	80
7	Calibration of Visually Guided Reaching Is Driven by Error-Corrective Learning and Internal Dynamics. Journal of Neurophysiology, 2007, 97, 3057-3069.	1.8	76
8	The CRISP theory of hippocampal function in episodic memory. Frontiers in Neural Circuits, 2013, 7, 88.	2.8	70
9	Hippocampal Reactivation Extends for Several Hours Following Novel Experience. Journal of Neuroscience, 2019, 39, 866-875.	3.6	69
10	The structure of networks that produce the transformation from grid cells to place cells. Neuroscience, 2011, 197, 293-306.	2.3	56
11	A computational model for preplay in the hippocampus. Frontiers in Computational Neuroscience, 2013, 7, 161.	2.1	52
12	Composition and replay of mnemonic sequences: The contributions of REM and slow-wave sleep to episodic memory. Behavioral and Brain Sciences, 2013, 36, 610-611.	0.7	40
13	Taxonomy and unity of memory. , 2017, , 7-20.		39
14	Statistical and dynamic models of charge balance functions. Physical Review C, 2004, 69, .	2.9	36
15	Effect of finite-range interactions in classical transport theory. Physical Review C, 2002, 65, .	2.9	34
16	The reduction of adult neurogenesis in depression impairs the retrieval of new as well as remote episodic memory. PLoS ONE, 2018, 13, e0198406.	2.5	31
17	Topological Schemas of Cognitive Maps and Spatial Learning. Frontiers in Computational Neuroscience, 2016, 10, 18.	2.1	28
18	Removing distortions from charge balance functions. Physical Review C, 2003, 68, .	2.9	24

#	ARTICLE	IF	CITATIONS
19	Identification of two forebrain structures that mediate execution of memorized sequences in the pigeon. Journal of Neurophysiology, 2013, 109, 958-968.	1.8	24
20	Emerging category representation in the visual forebrain hierarchy of pigeons (Columba livia). Behavioural Brain Research, 2019, 356, 423-434.	2.2	24
21	From grid cells to place cells with realistic field sizes. PLoS ONE, 2017, 12, e0181618.	2.5	24
22	Modeling the Dynamics of Disease States in Depression. PLoS ONE, 2014, 9, e110358.	2.5	23
23	Self-organization of synchronous activity propagation in neuronal networks driven by local excitation. Frontiers in Computational Neuroscience, 2015, 9, 69.	2.1	23
24	Memory Storage Fidelity in the Hippocampal Circuit: The Role of Subregions and Input Statistics. PLoS Computational Biology, 2015, 11, e1004250.	3.2	21
25	The cerebellum contributes to context-effects during fear extinction learning: A 7T fMRI study. NeuroImage, 2022, 253, 119080.	4.2	21
26	Trial-by-trial dynamics of reward prediction error-associated signals during extinction learning and renewal. Progress in Neurobiology, 2021, 197, 101901.	5.7	18
27	The transformation from grid cells to place cells is robust to noise in the grid pattern. Hippocampus, 2014, 24, 912-919.	1.9	16
28	Context-dependent extinction learning emerging from raw sensory inputs: a reinforcement learning approach. Scientific Reports, 2021, 11, 2713.	3.3	13
29	Parametric Anatomical Modeling: a method for modeling the anatomical layout of neurons and their projections. Frontiers in Neuroanatomy, 2014, 8, 91.	1.7	11
30	The Interaction between Semantic Representation and Episodic Memory. Neural Computation, 2018, 30, 293-332.	2.2	10
31	Storage fidelity for sequence memory in the hippocampal circuit. PLoS ONE, 2018, 13, e0204685.	2.5	9
32	Pattern Association and Consolidation Emerges from Connectivity Properties between Cortex and Hippocampus. PLoS ONE, 2014, 9, e85016.	2.5	9
33	Neuronal sequences during theta rely on behavior-dependent spatial maps. ELife, 2021, 10, .	6.0	8
34	Emergence of complex dynamics of choice due to repeated exposures to extinction learning. Animal Cognition, 2021, 24, 1279-1297.	1.8	6
35	Isospin fluctuations from a thermally equilibrated hadron gas. Physical Review C, 2003, 67, .	2.9	5
36	Constraints on the synchronization of entorhinal cortex stellate cells. Physical Review E, 2012, 86, 011908.	2.1	5

#	Article	IF	Citations
37	Learning Cognitive Map Representations for Navigation by Sensory–Motor Integration. IEEE Transactions on Cybernetics, 2022, 52, 508-521.	9.5	5
38	Self-referential false associations: A self-enhanced constructive effect for verbal but not pictorial stimuli. Quarterly Journal of Experimental Psychology, 2021, 74, 1512-1524.	1.1	5
39	Automatic Tuning of RatSLAM's Parameters by Irace and Iterative Closest Point. , 2020, , .		5
40	A Neuro-Inspired Approach to Solve a Simultaneous Location and Mapping Task Using Shared Information in Multiple Robots Systems. , 2018, , .		4
41	Consolidation of Episodic Memory: An Epiphenomenon of Semantic Learning. Studies in Neuroscience, Psychology and Behavioral Economics, 2017, , 57-72.	0.3	4
42	Quantum corrections for pion correlations involving resonance decays. Physical Review C, 2001, 63, .	2.9	2
43	Doing without metarepresentation: Scenario construction explains the epistemic generativity and privileged status of episodic memory. Behavioral and Brain Sciences, 2018, 41, e34.	0.7	2
44	Recognition Receiver Operating Characteristic Curves: The Complex Influence of Input Statistics, Memory, and Decision-making. Journal of Cognitive Neuroscience, 2021, 33, 1032-1055.	2.3	2
45	How do memory modules differentially contribute to familiarity and recollection?. Behavioral and Brain Sciences, 2019, 42, e288.	0.7	2
46	A Parallel RatSlam C++ Library Implementation. Communications in Computer and Information Science, 2019, , 173-183.	0.5	2
47	Autonomous Exploration Guided by Optimisation Metaheuristic. , 2018, , .		1
48	Improving sensory representations using episodic memory. Hippocampus, 2020, 30, 638-656.	1.9	1
49	Cover Image, Volume 30, Issue 6. Hippocampus, 2020, 30, C1.	1.9	0
50	A multistage retrieval account of associative recognition ROC curves. Learning and Memory, 2021, 28, 400-404.	1.3	0