

# Colin Lever

## List of Publications by Year in descending order

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45  
papers

4,848  
citations

218381

26  
h-index

276539

41  
g-index

84  
all docs

84  
docs citations

84  
times ranked

4331  
citing authors

#	ARTICLE	IF	CITATIONS
1	Boundary Vector Cells in the Subiculum of the Hippocampal Formation. <i>Journal of Neuroscience</i> , 2009, 29, 9771-9777.	1.7	626
2	Attractor Dynamics in the Hippocampal Representation of the Local Environment. <i>Science</i> , 2005, 308, 873-876.	6.0	574
3	Long-term plasticity in hippocampal place-cell representation of environmental geometry. <i>Nature</i> , 2002, 416, 90-94.	13.7	411
4	Space in the brain: how the hippocampal formation supports spatial cognition. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2014, 369, 20120510.	1.8	386
5	Modeling place fields in terms of the cortical inputs to the hippocampus. <i>Hippocampus</i> , 2000, 10, 369-379.	0.9	350
6	The Boundary Vector Cell Model of Place Cell Firing and Spatial Memory. <i>Reviews in the Neurosciences</i> , 2006, 17, 71-97.	1.4	316
7	Rearing on Hind Legs, Environmental Novelty, and the Hippocampal Formation. <i>Reviews in the Neurosciences</i> , 2006, 17, 111-33.	1.4	283
8	Effects of lesions to the dorsal and ventral hippocampus on defensive behaviors in rats. <i>European Journal of Neuroscience</i> , 2006, 23, 2185-2196.	1.2	209
9	Environmental novelty is signaled by reduction of the hippocampal theta frequency. <i>Hippocampus</i> , 2008, 18, 340-348.	0.9	151
10	Theta-Modulated Place-by-Direction Cells in the Hippocampal Formation in the Rat. <i>Journal of Neuroscience</i> , 2004, 24, 8265-8277.	1.7	144
11	Evidence for Encoding versus Retrieval Scheduling in the Hippocampus by Theta Phase and Acetylcholine. <i>Journal of Neuroscience</i> , 2013, 33, 8689-8704.	1.7	118
12	The Neurobiology of Mammalian Navigation. <i>Current Biology</i> , 2018, 28, R1023-R1042.	1.8	117
13	Reconciling the different faces of hippocampal theta: The role of theta oscillations in cognitive, emotional and innate behaviors. <i>Neuroscience and Biobehavioral Reviews</i> , 2018, 85, 65-80.	2.9	107
14	Which Memory Task for My Mouse? A Systematic Review of Spatial Memory Performance in the Tg2576 Alzheimer's Mouse Model. <i>Journal of Alzheimer's Disease</i> , 2011, 26, 105-126.	1.2	91
15	Theta phase precession of grid and place cell firing in open environments. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2014, 369, 20120532.	1.8	86
16	A specific role for septohippocampal acetylcholine in memory?. <i>Neuropsychologia</i> , 2012, 50, 3156-3168.	0.7	85
17	Novelty and Anxiolytic Drugs Dissociate Two Components of Hippocampal Theta in Behaving Rats. <i>Journal of Neuroscience</i> , 2013, 33, 8650-8667.	1.7	81
18	Boundary coding in the rat subiculum. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2014, 369, 20120514.	1.8	71

#	ARTICLE	IF	CITATIONS
19	Heterozygous deletion of $\hat{I}\pm$ -neurexin I or $\hat{I}\pm$ -neurexin II results in behaviors relevant to autism and schizophrenia.. Behavioral Neuroscience, 2015, 129, 765-776.	0.6	66
20	Experience-Dependent Increase in CA1 Place Cell Spatial Information, But Not Spatial Reproducibility, Is Dependent on the Autophosphorylation of the $\hat{I}\pm$ -Isoform of the Calcium/Calmodulin-Dependent Protein Kinase II. Journal of Neuroscience, 2007, 27, 7854-7859.	1.7	59
21	Environmental novelty elicits a later theta phase of firing in CA1 but not subiculum. Hippocampus, 2010, 20, 229-234.	0.9	58
22	How environment geometry affects grid cell symmetry and what we can learn from it. Philosophical Transactions of the Royal Society B: Biological Sciences, 2014, 369, 20130188.	1.8	52
23	Characterizing multiple independent behavioral correlates of cell firing in freely moving animals. Hippocampus, 2005, 15, 149-153.	0.9	45
24	Vector trace cells in the subiculum of the hippocampal formation. Nature Neuroscience, 2021, 24, 266-275.	7.1	40
25	What can the hippocampal representation of environmental geometry tell us about Hebbian learning?. Biological Cybernetics, 2002, 87, 356-372.	0.6	39
26	The Behavioural Inhibition System, anxiety and hippocampal volume in a non-clinical population. Biology of Mood & Anxiety Disorders, 2014, 4, 4.	4.7	34
27	Allocentric Spatial Memory Testing Predicts Conversion from Mild Cognitive Impairment to Dementia: An Initial Proof-of-Concept Study. Frontiers in Neurology, 2016, 7, 215.	1.1	30
28	Hippocampal CA1 activity correlated with the distance to the goal and navigation performance. Hippocampus, 2018, 28, 644-658.	0.9	29
29	Novel insights into false recollection: A model of $d\hat{A}\hat{J}\hat{v}\hat{A}\hat{c}u$ . Cognitive Neuropsychiatry, 2010, 15, 118-144.	0.7	26
30	Averaged and single-trial analysis of cortical activation sequences in movement preparation, initiation, and inhibition. , 1996, 4, 254-264.		25
31	Insoluble $\hat{A}\hat{I}^2$ overexpression in an <i>App</i> knock-in mouse model alters microstructure and gamma oscillations in the prefrontal cortex, and impacts on anxiety-related behaviours. DMM Disease Models and Mechanisms, 2019, 12, .	1.2	25
32	Know Your Limits: The Role of Boundaries in the Development of Spatial Representation. Neuron, 2014, 82, 1-3.	3.8	23
33	Changes to open field surfaces typically used to elicit hippocampal remapping elicit graded exploratory responses. Behavioural Brain Research, 2009, 197, 234-238.	1.2	17
34	The within-subject application of diffusion tensor MRI and CLARITY reveals brain structural changes in <i>Nrxn2</i> deletion mice. Molecular Autism, 2019, 10, 8.	2.6	13
35	Hippocampal theta frequency, novelty, and behavior. Hippocampus, 2009, 19, 409-410.	0.9	11
36	Distinct and combined responses to environmental geometry and features in a working-memory reorientation task in rats and chicks. Scientific Reports, 2020, 10, 7508.	1.6	8

#	ARTICLE	IF	CITATIONS
37	The Function of Oscillations in the Hippocampal Formation. , 2014, , 303-350.		8
38	En route to delineating hippocampal roles in spatial learning. Behavioural Brain Research, 2019, 369, 111936.	1.2	7
39	Anxiolytic drugs and altered hippocampal theta rhythms: The quantitative systems pharmacological approach. Network: Computation in Neural Systems, 2014, 25, 20-37.	2.2	6
40	Acetylcholine and Spontaneous Recognition Memory in Rodents and Primates. Current Topics in Behavioral Neurosciences, 2020, 45, 29-45.	0.8	4
41	The Virtues of Youth and Maturity (in Dentate Granule Cells). Cell, 2012, 149, 18-20.	13.5	3
42	Discovery and Validation of Biomarkers Based on Computational Models of Normal and Pathological Hippocampal Rhythms. Springer Series in Computational Neuroscience, 2015, , 15-42.	0.3	3
43	Neural correlates of distinct levels of predatory threat in dorsal periaqueductal grey neurons. European Journal of Neuroscience, 2022, 55, 1504-1518.	1.2	3
44	Spatial coding in the hippocampal formation: input, information type, plasticity, and behaviour. , 2003, , 199-225.		2
45	Anxiolytic Drugs and Altered Hippocampal Theta Rhythms: The Quantitative Systems Pharmacological Approach. Advances in Cognitive Neurodynamics, 2015, , 465-471.	0.1	0