Carlos D Brody

List of Publications by Year
in descending order

58	7,765	117571	149623
papers	citations	34 h-index	56 g-index

89	89	89	5082
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Sequential and efficient neural-population coding of complex task information. Neuron, 2022, 110, 328-349.e11.	3.8	37
2	Stable choice coding in rat frontal orienting fields across model-predicted changes of mind. Nature Communications, 2022, 13, .	5.8	5
3	Extracting the dynamics of behavior in sensory decision-making experiments. Neuron, 2021, 109, 597-610.e6.	3.8	55
4	Collicular circuits for flexible sensorimotor routing. Nature Neuroscience, 2021, 24, 1110-1120.	7.1	29
5	Geometry of abstract learned knowledge in the hippocampus. Nature, 2021, 595, 80-84.	13.7	155
6	Interrogating theoretical models of neural computation with emergent property inference. ELife, 2021, 10, .	2.8	16
7	Subpopulations of neurons in lOFC encode previous and current rewards at time of choice. ELife, 2021, 10, .	2.8	20
8	An approach for long-term, multi-probe Neuropixels recordings in unrestrained rats. ELife, 2020, 9, .	2.8	39
9	Amplitude modulations of cortical sensory responses in pulsatile evidence accumulation. ELife, 2020, 9, .	2.8	18
10	An Analysis of Decision under Risk in Rats. Current Biology, 2019, 29, 2066-2074.e5.	1.8	41
11	Coarse Graining, Fixed Points, and Scaling in a Large Population of Neurons. Physical Review Letters, 2019, 123, 178103.	2.9	61
12	Task-Dependent Changes in the Large-Scale Dynamics and Necessity of Cortical Regions. Neuron, 2019, 104, 810-824.e9.	3.8	155
13	Lateral orbitofrontal cortex promotes trial-by-trial learning of risky, but not spatial, biases. ELife, 2019, 8, .	2.8	31
14	Posterior parietal cortex represents sensory history and mediates its effects on behaviour. Nature, 2018, 554, 368-372.	13.7	302
15	Imaging Cortical Dynamics in GCaMP Transgenic Rats with a Head-Mounted Widefield Macroscope. Neuron, 2018, 100, 1045-1058.e5.	3.8	119
16	Rats adopt the optimal timescale for evidence integration in a dynamic environment. Nature Communications, 2018, 9, 4265.	5.8	49
17	An Accumulation-of-Evidence Task Using Visual Pulses for Mice Navigating in Virtual Reality. Frontiers in Behavioral Neuroscience, 2018, 12, 36.	1.0	80
18	Causal contribution and dynamical encoding in the striatum during evidence accumulation. ELife, 2018, 7, .	2.8	113

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19	Efficient inference for time-varying behavior during learning. Advances in Neural Information Processing Systems, 2018, 31, 5695-5705.	2.8	5
20	Dorsal hippocampus contributes to model-based planning. Nature Neuroscience, 2017, 20, 1269-1276.	7.1	177
21	Rat Prefrontal Cortex Inactivations during Decision Making Are Explained by Bistable Attractor Dynamics. Neural Computation, 2017, 29, 2861-2886.	1.3	29
22	Collective Behavior of Place and Non-place Neurons in the Hippocampal Network. Neuron, 2017, 96, 1178-1191.e4.	3.8	107
23	Fronto-parietal Cortical Circuits Encode Accumulated Evidence with a Diversity of Timescales. Neuron, 2017, 95, 385-398.e5.	3.8	137
24	Neural underpinnings of the evidence accumulator. Current Opinion in Neurobiology, 2016, 37, 149-157.	2.0	155
25	Distinct relationships of parietal and prefrontal cortices to evidence accumulation. Nature, 2015, 520, 220-223.	13.7	447
26	Requirement of Prefrontal and Midbrain Regions for Rapid Executive Control of Behavior in the Rat. Neuron, 2015, 86, 1491-1503.	3.8	72
27	Cortical and Subcortical Contributions to Short-Term Memory for Orienting Movements. Neuron, 2015, 88, 367-377.	3.8	106
28	Distinct effects of prefrontal and parietal cortex inactivations on an accumulation of evidence task in the rat. ELife, 2015, 4, .	2.8	192
29	Sources of noise during accumulation of evidence in unrestrained and voluntarily head-restrained rats. ELife, 2015, 4, e11308.	2.8	78
30	What to do and how. Nature, 2013, 503, 45-47.	13.7	1
31	Cellular Resolution Functional Imaging in Behaving Rats Using Voluntary Head Restraint. Neuron, 2013, 80, 371-384.	3.8	85
32	A low-frequency oscillatory neural signal in humans encodes a developing decision variable. NeuroImage, 2013, 83, 795-808.	2.1	15
33	Rats and Humans Can Optimally Accumulate Evidence for Decision-Making. Science, 2013, 340, 95-98.	6.0	526
34	A Cortical Substrate for Memory-Guided Orienting in the Rat. Neuron, 2011, 72, 330-343.	3.8	286
35	Minimal Impairment in a Rat Model of Duration Discrimination Following Excitotoxic Lesions of Primary Auditory and Prefrontal Cortices. Frontiers in Systems Neuroscience, 2011, 5, 74.	1.2	14
36	Semi-automated atlas-based analysis of brain histological sections. Journal of Neuroscience Methods, 2011, 196, 12-19.	1.3	17

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37	Heterogenous Population Coding of a Short-Term Memory and Decision Task. Journal of Neuroscience, 2010, 30, 916-929.	1.7	89
38	Functional, But Not Anatomical, Separation of â€œWhatâ€•and â€œWhenâ€•in Prefrontal Cortex. Journal of Neuroscience, 2010, 30, 350-360.	1.7	243
39	Human performance on the temporal bisection task. Brain and Cognition, 2010, 74, 262-272.	0.8	107
40	Context-Dependent Modulation of Functional Connectivity: Secondary Somatosensory Cortex to Prefrontal Cortex Connections in Two-Stimulus-Interval Discrimination Tasks. Journal of Neuroscience, 2009, 29, 7238-7245.	1.7	18
41	Rate-specific synchrony: Using noisy oscillations to detect equally active neurons. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 8422-8427.	3.3	23
42	Design of Continuous Attractor Networks with Monotonic Tuning Using a Symmetry Principle. Neural Computation, 2008, 20, 452-485.	1.3	33
43	Neural codes for perceptual discrimination in primary somatosensory cortex. Nature Neuroscience, 2005, 8, 1210-1219.	7.1	216
44	Flexible Control of Mutual Inhibition: A Neural Model of Two-Interval Discrimination. Science, 2005, 307, 1121-1124.	6.0	458
45	Learning rules and network repair in spike-timing-based computation networks. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 337-342.	3.3	38
46	Basic mechanisms for graded persistent activity: discrete attractors, continuous attractors, and dynamic representations. Current Opinion in Neurobiology, 2003, 13, 204-211.	2.0	256
47	Simple Networks for Spike-Timing-Based Computation, with Application to Olfactory Processing. Neuron, 2003, 37, 843-852.	3.8	194
48	Separating objects and â€˜neuralâ€™ computation. Comptes Rendus - Biologies, 2003, 326, 219-222.	0.1	1
49	Timing and Neural Encoding of Somatosensory Parametric Working Memory in Macaque Prefrontal Cortex. Cerebral Cortex, 2003, 13, 1196-1207.	1.6	300
50	From sensation to action. Behavioural Brain Research, 2002, 135, 105-118.	1.2	36
51	Neuronal correlates of decision-making in secondary somatosensory cortex. Nature Neuroscience, 2002, 5, 1217-1225.	7.1	334
52	Sensing without Touching. Neuron, 2000, 26, 273-278.	3.8	273
53	Disambiguating Different Covariation Types. Neural Computation, 1999, 11, 1527-1535.	1.3	105
54	Correlations Without Synchrony. Neural Computation, 1999, 11, 1537-1551.	1.3	287

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55	Neuronal correlates of parametric working memory in the prefrontal cortex. Nature, 1999, 399, 470-473.	13.7	750
56	Slow Covariations in Neuronal Resting Potentials Can Lead to Artefactually Fast Cross-Correlations in Their Spike Trains. Journal of Neurophysiology, 1998, 80, 3345-3351.	0.9	84
57	Limitations of a proposed correction for slow drifts in decision criterion. Neurons, Behavior, Data Analysis, and Theory, 0, , .	1.8	2
58	Multiple timescales of sensory-evidence accumulation across the dorsal cortex. ELife, 0, 11, .	2.8	17