Jeffrey S Taube

List of Publications by Year
in descending order

97 papers	8,302 citations	47006 47 h-index	49909 87 g-index
98 all docs	98 docs citations	98 times ranked	3207 citing authors

#	Article	IF	Citations
1	Landmark-modulated directional coding in postrhinal cortex. Science Advances, 2022, 8, eabg8404.	10.3	18
2	Spatial context and the functional role of the postrhinal cortex. Neurobiology of Learning and Memory, 2022, 189, 107596.	1.9	8
3	Current Promises and Limitations of Combined Virtual Reality and Functional Magnetic Resonance Imaging Research in Humans: A Commentary on Huffman and Ekstrom (). Journal of Cognitive Neuroscience, 2021, 33, 159-166.	2.3	16
4	Anatomical projections to the dorsal tegmental nucleus and abducens nucleus arise from separate cell populations in the nucleus prepositus hypoglossi, but overlapping cell populations in the medial vestibular nucleus. Journal of Comparative Neurology, 2021, 529, 2706-2726.	1.6	0
5	Visualâ€"vestibular interactions. , 2020, , 201-219.		7
6	On the absence or presence of 3D tuned head direction cells in rats: a review and rebuttal. Journal of Neurophysiology, 2020, 123, 1808-1827.	1.8	1
7	Commutative Properties of Head Direction Cells during Locomotion in 3D: Are All Routes Equal?. Journal of Neuroscience, 2020, 40, 3035-3051.	3.6	6
8	The Impact of Vestibular Signals on Cells Responsible for Orientation and Navigation. , 2020, , 496-511.		0
9	A sense of space in postrhinal cortex. Science, 2019, 365, .	12.6	85
10	Reply to Laurens and Angelaki: A model-based reassessment of the three-dimensional tuning of head direction cells in rats. Journal of Neurophysiology, 2019, 122, 1288-1289.	1.8	2
11	A Comparison of Neural Decoding Methods and Population Coding Across Thalamo-Cortical Head Direction Cells. Frontiers in Neural Circuits, 2019, 13, 75.	2.8	12
12	Functional and anatomical relationships between the medial precentral cortex, dorsal striatum, and head direction cell circuitry. I. Recording studies. Journal of Neurophysiology, 2019, 121, 350-370.	1.8	23
13	Functional and anatomical relationships between the medial precentral cortex, dorsal striatum, and head direction cell circuitry. II. Neuroanatomical studies. Journal of Neurophysiology, 2019, 121, 371-395.	1.8	9
14	Three-dimensional tuning of head direction cells in rats. Journal of Neurophysiology, 2019, 121, 4-37.	1.8	24
15	Bilateral postsubiculum lesions impair visual and nonvisual homing performance in rats.. Behavioral Neuroscience, 2019, 133, 496-507.	1.2	8
16	In Vivo Electrophysiological Approaches for Studying Head Direction Cells. Handbook of Behavioral Neuroscience, 2018, , 169-187.	0.7	1
17	New building blocks for navigation. Nature Neuroscience, 2017, 20, 131-133.	14.8	4
18	The Head-Direction Signal Plays a Functional Role as a Neural Compass during Navigation. Current Biology, 2017, 27, 1259-1267.	3.9	63

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19	Oscillatory synchrony between head direction cells recorded bilaterally in the anterodorsal thalamic nuclei. Journal of Neurophysiology, 2017, 117, 1847-1852.	1.8	13
20	Our sense of direction: progress, controversies and challenges. Nature Neuroscience, 2017, 20, 1465-1473.	14.8	154
21	Acetylcholine contributes to the integration of self-movement cues in head direction cells.. Behavioral Neuroscience, 2017, 131, 312-324.	1.2	6
22	Head Direction Cell Activity Is Absent in Mice without the Horizontal Semicircular Canals. Journal of Neuroscience, 2016, 36, 741-754.	3.6	61
23	The neural correlates of navigation beyond the hippocampus. Progress in Brain Research, 2015, 219, 83-102.	1.4	36
24	Visual Landmark Information Gains Control of the Head Direction Signal at the Lateral Mammillary Nuclei. Journal of Neuroscience, 2015, 35, 1354-1367.	3.6	51
25	Disruption of the head direction cell network impairs the parahippocampal grid cell signal. Science, 2015, 347, 870-874.	12.6	199
26	The Nucleus Prepositus Hypoglossi Contributes to Head Direction Cell Stability in Rats. Journal of Neuroscience, 2015, 35, 2547-2558.	3.6	26
27	Passive Transport Disrupts Grid Signals in the Parahippocampal Cortex. Current Biology, 2015, 25, 2493-2502.	3.9	82
28	Neural Representations of Direction (Head Direction Cells). , 2015, , 623-627.		0
29	The vestibular contribution to the head direction signal and navigation. Frontiers in Integrative Neuroscience, 2014, 8, 32.	2.1	128
30	Self-motion improves head direction cell tuning. Journal of Neurophysiology, 2014, 111, 2479-2492.	1.8	30
31	Resolving the active versus passive conundrum for head direction cells. Neuroscience, 2014, 270, 123-138.	2.3	13
32	Head Direction Cells: From Generation to Integration. , 2014, , 83-106.		15
33	Is Navigation in Virtual Reality with fMRI Really Navigation?. Journal of Cognitive Neuroscience, 2013, 25, 1008-1019.	2.3	127
34	On the nature of threeâ€dimensional encoding in the cognitive map: Commentary on Hayman, Verriotis, Jovalekic, Fenton, and Jeffery. Hippocampus, 2013, 23, 14-21.	1.9	18
35	Lesions of the dorsal tegmental nuclei disrupt control of navigation by distal landmarks in cued, directional, and place variants of the Morris water task.. Behavioral Neuroscience, 2013, 127, 566-581.	1.2	35
36	Updating of the spatial reference frame of head direction cells in response to locomotion in the vertical plane. Journal of Neurophysiology, 2013, 109, 873-888.	1.8	61

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37	Head direction cell activity in the anterodorsal thalamus requires intact supragenual nuclei. Journal of Neurophysiology, 2012, 108, 2767-2784.	1.8	39
38	Path integration: how the head direction signal maintains and corrects spatial orientation. Nature Neuroscience, 2012, 15, 1445-1453.	14.8	118
39	Vestibular and attractor network basis of the head direction cell signal in subcortical circuits. Frontiers in Neural Circuits, 2012, 6, 7.	2.8	114
40	Control of anterodorsal thalamic head direction cells by environmental boundaries: Comparison with conflicting distal landmarks. Hippocampus, 2012, 22, 172-187.	1.9	39
41	Origins of landmark encoding in the brain. Trends in Neurosciences, 2011, 34, 561-571.	8.6	122
42	Head direction cell firing properties and behavioural performance in 3â€Ð space. Journal of Physiology, 2011, 589, 835-841.	2.9	20
43	Both visual and idiothetic cues contribute to head direction cell stability during navigation along complex routes. Journal of Neurophysiology, 2011, 105, 2989-3001.	1.8	63
44	Projections to the anterodorsal thalamus and lateral mammillary nuclei arise from different cell populations within the postsubiculum: Implications for the control of head direction cells. Hippocampus, 2011, 21, 1062-1073.	1.9	35
45	Intact landmark control and angular path integration by head direction cells in the anterodorsal thalamus after lesions of the medial entorhinal cortex. Hippocampus, 2011, 21, 767-782.	1.9	43
46	Active and passive movement are encoded equally by head direction cells in the anterodorsal thalamus. Journal of Neurophysiology, 2011, 106, 788-800.	1.8	62
47	Impaired Head Direction Cell Representation in the Anterodorsal Thalamus after Lesions of the Retrosplenial Cortex. Journal of Neuroscience, 2010, 30, 5289-5302.	3.6	102
48	Interspike Interval Analyses Reveal Irregular Firing Patterns at Short, But Not Long, Intervals in Rat Head Direction Cells. Journal of Neurophysiology, 2010, 104, 1635-1648.	1.8	23
49	Differentiating ascending vestibular pathways to the cortex involved in spatial cognition. Journal of Vestibular Research: Equilibrium and Orientation, 2010, 20, 3-23.	2.0	79
50	Directional learning, but no spatial mapping by rats performing a navigational task in an inverted orientation. Neurobiology of Learning and Memory, 2010, 93, 495-505.	1.9	58
51	Head Direction Cell Instability in the Anterior Dorsal Thalamus after Lesions of the Interpeduncular Nucleus. Journal of Neuroscience, 2009, 29, 493-507.	3.6	36
52	Disruption of the Head Direction Cell Signal after Occlusion of the Semicircular Canals in the Freely Moving Chinchilla. Journal of Neuroscience, 2009, 29, 14521-14533.	3.6	109
53	Head Direction Cell Activity in Mice: Robust Directional Signal Depends on Intact Otolith Organs. Journal of Neuroscience, 2009, 29, 1061-1076.	3.6	120
54	Where am I and how will I get there from here? A role for posterior parietal cortex in the integration of spatial information and route planning. Neurobiology of Learning and Memory, 2009, 91, 186-196.	1.9	103

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55	Deficits in landmark navigation and path integration after lesions of the interpeduncular nucleus.. Behavioral Neuroscience, 2009, 123, 490-503.	1.2	33
56	Landmark control and updating of self-movement cues are largely maintained in head direction cells after lesions of the posterior parietal cortex.. Behavioral Neuroscience, 2008, 122, 827-840.	1.2	31
57	Lesions of the Tegmentomammillary Circuit in the Head Direction System Disrupt the Head Direction Signal in the Anterior Thalamus. Journal of Neuroscience, 2007, 27, 7564-7577.	3.6	118
58	The Head Direction Signal: Origins and Sensory-Motor Integration. Annual Review of Neuroscience, 2007, 30, 181-207.	10.7	1,021
59	Neural Representations Supporting Spatial Navigation and Memory. , 2007, , 219-248.		2
60	Path integration and lesions within the head direction cell circuit: Comparison between the roles of the anterodorsal thalamus and dorsal tegmental nucleus.. Behavioral Neuroscience, 2006, 120, 135-149.	1.2	72
61	Passive Movements of the Head Do Not Abolish Anticipatory Firing Properties of Head Direction Cells. Journal of Neurophysiology, 2005, 93, 1304-1316.	1.8	38
62	Degradation of Head Direction Cell Activity during Inverted Locomotion. Journal of Neuroscience, 2005, 25, 2420-2428.	3.6	101
63	Head direction cell activity and behavior in a navigation task requiring a cognitive mapping strategy. Behavioural Brain Research, 2004, 153, 249-253.	2.2	29
64	Rat Head Direction Cell Responses in Zero-Gravity Parabolic Flight. Journal of Neurophysiology, 2004, 92, 2887-2997.	1.8	75
65	Persistent Neural Activity in Head Direction Cells. Cerebral Cortex, 2003, 13, 1162-1172.	2.9	159
66	Passive Transport Disrupts Directional Path Integration by Rat Head Direction Cells. Journal of Neurophysiology, 2003, 90, 2862-2874.	1.8	144
67	Hippocampal Place Cell Instability after Lesions of the Head Direction Cell Network. Journal of Neuroscience, 2003, 23, 9719-9731.	3.6	153
68	The Neural Correlates of Navigation: Do Head Direction and Place Cells Guide Spatial Behavior?. Behavioral and Cognitive Neuroscience Reviews, 2002, 1, 297-317.	3.9	29
69	Differences between appetitive and aversive reinforcement on reorientation in a spatial working memory task. Behavioural Brain Research, 2002, 136, 309-316.	2.2	26
70	Hippocampal spatial representations require vestibular input. Hippocampus, 2002, 12, 291-303.	1.9	329
71	Sensory Determinants of Head Direction Cell Activity. , 2002, , 141-161.		2
72	Neural Correlates for Angular Head Velocity in the Rat Dorsal Tegmental Nucleus. Journal of Neuroscience, 2001, 21, 5740-5751.	3.6	176

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73	On the behavioral significance of head direction cells: Neural and behavioral dynamics during spatial memory tasks.. Behavioral Neuroscience, 2001, 115, 285-304.	1.2	62
74	Statistical and information properties of head direction cells. Perception & Psychophysics, 2001, 63, 1026-1037.	2.3	4
75	Maintenance of Rat Head Direction Cell Firing During Locomotion in the Vertical Plane. Journal of Neurophysiology, 2000, 83, 393-405.	1.8	87
76	Head Direction Cells in Rats with Hippocampal or Overlying Neocortical Lesions: Evidence for Impaired Angular Path Integration. Journal of Neuroscience, 1999, 19, 7198-7211.	3.6	73
77	Some thoughts on place cells and the hippocampus. , 1999, 9, 452-457.		7
78	Recordings of postsubiculum head direction cells following lesions of the laterodorsal thalamic nucleus. Brain Research, 1998, 780, 9-19.	2.2	39
79	Comparisons of head direction cell activity in the postsubiculum and anterior thalamus of freely moving rats. Hippocampus, 1998, 8, 87-108.	1.9	381
80	Head direction cells and the neurophysiological basis for a sense of direction. Progress in Neurobiology, 1998, 55, 225-256.	5.7	400
81	Cue control and head direction cells.. Behavioral Neuroscience, 1998, 112, 749-761.	1.2	223
82	Firing Properties of Rat Lateral Mammillary Single Units: Head Direction, Head Pitch, and Angular Head Velocity. Journal of Neuroscience, 1998, 18, 9020-9037.	3.6	280
83	Comparisons of head direction cell activity in the postsubiculum and anterior thalamus of freely moving rats. , 1998, 8, 87.		3
84	Comparisons of head direction cell activity in the postsubiculum and anterior thalamus of freely moving rats. Hippocampus, 1998, 8, 87-108.	1.9	64
85	Effects of repeated disorientation on the acquisition of spatial tasks in rats: Dissociation between the appetitive radial arm maze and aversive water maze.. Journal of Experimental Psychology, 1997, 23, 194-210.	1.7	63
86	Correlation between head direction cell activity and spatial behavior on a radial arm maze.. Behavioral Neuroscience, 1997, 111, 3-19.	1.2	66
87	Firing Properties of Head Direction Cells in the Rat Anterior Thalamic Nucleus: Dependence on Vestibular Input. Journal of Neuroscience, 1997, 17, 4349-4358.	3.6	266
88	Interaction between the Postsubiculum and Anterior Thalamus in the Generation of Head Direction Cell Activity. Journal of Neuroscience, 1997, 17, 9315-9330.	3.6	210
89	Processing the head direction cell signal: A review and commentary. Brain Research Bulletin, 1996, 40, 477-484.	3.0	193
90	Head direction cells: properties and functional significance. Current Opinion in Neurobiology, 1996, 6, 196-206.	4.2	158

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91	Preferential use of the landmark navigational system by head direction cells in rats.. Behavioral Neuroscience, 1995, 109, 49-61.	1.2	120
92	Place cells recorded in the parasubiculum of freely moving rats. Hippocampus, 1995, 5, 569-583.	1.9	113
93	Electrophysiological properties of neurons in the rat subiculum in vitro. Experimental Brain Research, 1993, 96, 304-18.	1.5	107
94	Lesions of the rat postsubiculum impair performance on spatial tasks. Behavioral and Neural Biology, 1992, 57, 131-143.	2.2	116
95	Space, the final hippocampal frontier?. Hippocampus, 1991, 1, 247-249.	1.9	9
96	Intracellular recording from hippocampal CA1 interneurons before and after development of long-term potentiation. Brain Research, 1987, 419, 32-38.	2.2	48
97	Ineffectiveness of organic calcium channel blockers in antagonizing long-term potentiation. Brain Research, 1986, 379, 275-285.	2.2	45