

# Olfactory oscillations: the what, how and what for

Trends in Neurosciences

32, 207-214

DOI: [10.1016/j.tins.2008.11.008](https://doi.org/10.1016/j.tins.2008.11.008)

Citation Report

#	ARTICLE	IF	CITATIONS
2	The Olfactory System. , 2008, , 611-622.		19
3	Ablation of mouse adult neurogenesis alters olfactory bulb structure and olfactory fear conditioning. <i>Frontiers in Neuroscience</i> , 2009, 3, 51.	1.4	75
5	Specific Entrainment of Mitral Cells during Gamma Oscillation in the Rat Olfactory Bulb. <i>PLoS Computational Biology</i> , 2009, 5, e1000551.	1.5	43
6	Fast oscillations in corticalâ€”striatal networks switch frequency following rewarding events and stimulant drugs. <i>European Journal of Neuroscience</i> , 2009, 30, 848-859.	1.2	189
7	From the top down: flexible reading of a fragmented odor map. <i>Trends in Neurosciences</i> , 2009, 32, 525-531.	4.2	45
8	Rhythmic behaviour and pattern-generating circuits in the locust: Key concepts and recent updates. <i>Journal of Insect Physiology</i> , 2010, 56, 834-843.	0.9	35
9	Physiological evidence for two classes of mitral cells in the rat olfactory bulb. <i>Brain Research</i> , 2010, 1358, 81-88.	1.1	8
11	Central mechanisms of odour object perception. <i>Nature Reviews Neuroscience</i> , 2010, 11, 628-641.	4.9	430
12	Decorrelation of odor representations via spike timing dependent plasticity. <i>Frontiers in Computational Neuroscience</i> , 2010, 4, 157.	1.2	40
13	Integrating early results on ventral striatal gamma oscillations in the rat. <i>Frontiers in Neuroscience</i> , 2010, 4, 300.	1.4	58
14	A Beta Oscillation Network in the Rat Olfactory System During a 2-Alternative Choice Odor Discrimination Task. <i>Journal of Neurophysiology</i> , 2010, 104, 829-839.	0.9	113
15	Distinctive Classes of GABAergic Interneurons Provide Layer-Specific Phasic Inhibition in the Anterior Piriform Cortex. <i>Cerebral Cortex</i> , 2010, 20, 2971-2984.	1.6	79
16	Directional Coupling From the Olfactory Bulb to the Hippocampus During a Go/No-Go Odor Discrimination Task. <i>Journal of Neurophysiology</i> , 2010, 103, 2633-2641.	0.9	62
17	Sleep-Like States Modulate Functional Connectivity in the Rat Olfactory System. <i>Journal of Neurophysiology</i> , 2010, 104, 3231-3239.	0.9	47
18	Smelling Sounds: Olfactory-Auditory Sensory Convergence in the Olfactory Tubercle. <i>Journal of Neuroscience</i> , 2010, 30, 3013-3021.	1.7	114
19	Cortical Networks Produce Three Distinct 7â€”12 Hz Rhythms during Single Sensory Responses in the Awake Rat. <i>Journal of Neuroscience</i> , 2010, 30, 4315-4324.	1.7	40
20	Somatostatin Contributes to <i>In Vivo</i> Gamma Oscillation Modulation and Odor Discrimination in the Olfactory Bulb. <i>Journal of Neuroscience</i> , 2010, 30, 870-875.	1.7	39
21	Late-Expiratory Activity: Emergence and Interactions With the Respiratory CPG. <i>Journal of Neurophysiology</i> , 2010, 104, 2713-2729.	0.9	82

#	ARTICLE	IF	CITATIONS
22	How Global Are Olfactory Bulb Oscillations?. Journal of Neurophysiology, 2010, 104, 1768-1773.	0.9	31
23	State-dependent coherences between the olfactory bulbs for delta and theta oscillations. Neuroscience Letters, 2010, 480, 44-48.	1.0	14
24	Fast and Slow Oscillations in Human Primary Motor Cortex Predict Oncoming Behaviorally Relevant Cues. Neuron, 2010, 65, 461-471.	3.8	226
25	Short term treatment with estradiol decreases the rate of newly generated cells in the subventricular zone and main olfactory bulb of adult female mice. Neuroscience, 2010, 166, 368-376.	1.1	50
26	Neurophysiological and Computational Principles of Cortical Rhythms in Cognition. Physiological Reviews, 2010, 90, 1195-1268.	13.1	1,634
27	Sensory Network Dysfunction, Behavioral Impairments, and Their Reversibility in an Alzheimer's $\beta$ 2-Amyloidosis Mouse Model. Journal of Neuroscience, 2011, 31, 15962-15971.	1.7	123
28	Sniffing shapes the dynamics of olfactory bulb gamma oscillations in awake behaving rats. European Journal of Neuroscience, 2011, 34, 787-799.	1.2	27
29	Loss of olfactory cell adhesion molecule reduces the synchrony of mitral cell activity in olfactory glomeruli. Journal of Physiology, 2011, 589, 1927-1941.	1.3	16
30	Stability of fast oscillations in the mammalian olfactory bulb: Experiments and modeling. Journal of Physiology (Paris), 2011, 105, 59-70.	2.1	12
31	Interacting oscillations in neural control of breathing: modeling and qualitative analysis. Journal of Computational Neuroscience, 2011, 30, 607-632.	0.6	65
32	Visualizing odor representation in the brain: a review of imaging techniques for the mapping of sensory activity in the olfactory glomeruli. Cellular and Molecular Life Sciences, 2011, 68, 2689-2709.	2.4	105
33	Brain-state-independent neural representation of peripheral stimulation in rat olfactory bulb. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 5087-5092.	3.3	42
34	Nonlinear effects of noradrenergic modulation of olfactory bulb function in adult rodents. Journal of Neurophysiology, 2011, 105, 1432-1443.	0.9	72
35	Advances in Cognitive Neurodynamics (II)., 2011, , .		2
36	Rat behavior in go/no-go and two-alternative choice odor discrimination: Differences and similarities.. Behavioral Neuroscience, 2011, 125, 588-603.	0.6	31
37	Low-magnesium medium induces epileptiform activity in mouse olfactory bulb slices. Journal of Neurophysiology, 2011, 106, 2593-2605.	0.9	13
38	Phase dependency of long-term potentiation induction during the intermittent bursts of carbachol-induced $\beta$ 2 oscillation in rat hippocampal slices. Biophysics (Nagoya-shi, Japan), 2012, 8, 173-181.	0.4	1
39	From chemotaxis to the cognitive map: The function of olfaction. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 10693-10700.	3.3	171

#	ARTICLE	IF	CITATIONS
40	Microcircuits Mediating Feedforward and Feedback Synaptic Inhibition in the Piriform Cortex. Journal of Neuroscience, 2012, 32, 919-931.	1.7	88
41	Intrinsic heterogeneity in oscillatory dynamics limits correlation-induced neural synchronization. Journal of Neurophysiology, 2012, 108, 2115-2133.	0.9	45
42	Coding Odorant Concentration through Activation Timing between the Medial and Lateral Olfactory Bulb. Cell Reports, 2012, 2, 1143-1150.	2.9	52
43	Neurocognitive networks: Findings, models, and theory. Neuroscience and Biobehavioral Reviews, 2012, 36, 2232-2247.	2.9	66
44	Microelectrode recording of tissue neural oscillations for a bionic olfactory biosensor. Journal of Bionic Engineering, 2012, 9, 494-500.	2.7	5
45	Basal Ganglia Beta Oscillations Accompany Cue Utilization. Neuron, 2012, 73, 523-536.	3.8	252
46	Spectral fingerprints of large-scale neuronal interactions. Nature Reviews Neuroscience, 2012, 13, 121-134.	4.9	1,122
47	Bidirectional plasticity of cortical pattern recognition and behavioral sensory acuity. Nature Neuroscience, 2012, 15, 155-161.	7.1	182
48	Encoding Odorant Identity by Spiking Packets of Rate-Invariant Neurons in Awake Mice. PLoS ONE, 2012, 7, e30155.	1.1	58
49	Alteration of sensory-evoked metabolic and oscillatory activities in the olfactory bulb of GLAST-deficient mice. Frontiers in Neural Circuits, 2012, 6, 1.	1.4	104
50	Characterization of axo-axonic synapses in the piriform cortex of <i>Mus musculus</i> . Journal of Comparative Neurology, 2012, 520, 832-847.	0.9	28
51	Predictive Suppression of Cortical Excitability and Its Deficit in Schizophrenia. Journal of Neuroscience, 2013, 33, 11692-11702.	1.7	106
52	20 Years of Computational Neuroscience. , 2013, , .		16
53	Odor Discrimination Requires Proper Olfactory Fast Oscillations in Awake Mice. Neuron, 2013, 80, 1010-1024.	3.8	138
54	Lateral Entorhinal Modulation of Piriform Cortical Activity and Fine Odor Discrimination. Journal of Neuroscience, 2013, 33, 13449-13459.	1.7	91
55	The Impact of Adult Neurogenesis on Olfactory Bulb Circuits and Computations. Annual Review of Physiology, 2013, 75, 339-363.	5.6	147
56	Cortical gamma oscillations: the functional key is activation, not cognition. Neuroscience and Biobehavioral Reviews, 2013, 37, 401-417.	2.9	136
57	Neurons and circuits for odor processing in the piriform cortex. Trends in Neurosciences, 2013, 36, 429-438.	4.2	176

#	ARTICLE	IF	CITATIONS
58	Temporal Processing in the Olfactory System: Can We See a Smell?. Neuron, 2013, 78, 416-432.	3.8	101
59	The Form and Functions of Neural Circuits in the Olfactory Bulb. , 2013, , 3-19.		0
60	Amyloid Beta Inhibits Olfactory Bulb Activity and the Ability to Smell. PLoS ONE, 2013, 8, e75745.	1.1	44
61	Frontal theta and beta synchronizations for monetary reward increase visual working memory capacity. Social Cognitive and Affective Neuroscience, 2013, 8, 523-530.	1.5	53
62	Advances in Cognitive Neurodynamics (III). , 2013, , .		5
63	Timing at Multiple Scales in Olfactory Perception. , 2013, , 17-22.		1
64	Odor representations in the olfactory bulb evolve after the first breath and persist as an odor afterimage. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E3340-9.	3.3	84
65	Hierarchical excitatory synaptic connectivity in mouse olfactory cortex. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 16193-16198.	3.3	7
66	Multiple sources of conscious odor integration and propagation in olfactory cortex. Frontiers in Psychology, 2013, 4, 930.	1.1	7
67	Temporal Characteristics of Gustatory Responses in Rat Parabrachial Neurons Vary by Stimulus and Chemosensitive Neuron Type. PLoS ONE, 2013, 8, e76828.	1.1	10
68	The olfactory system as the gateway to the neural correlates of consciousness. Frontiers in Psychology, 2014, 4, 1011.	1.1	32
69	Context-driven activation of odor representations in the absence of olfactory stimuli in the olfactory bulb and piriform cortex. Frontiers in Behavioral Neuroscience, 2014, 8, 138.	1.0	35
70	Beta and gamma oscillatory activities associated with olfactory memory tasks: different rhythms for different functional networks?. Frontiers in Behavioral Neuroscience, 2014, 8, 218.	1.0	94
71	Persistent barrage firing in cortical interneurons can be induced in vivo and may be important for the suppression of epileptiform activity. Frontiers in Cellular Neuroscience, 2014, 8, 76.	1.8	33
72	A network that performs brute-force conversion of a temporal sequence to a spatial pattern: relevance to odor recognition. Frontiers in Computational Neuroscience, 2014, 8, 108.	1.2	13
73	Construction of functional neuronal circuitry in the olfactory bulb. Seminars in Cell and Developmental Biology, 2014, 35, 180-188.	2.3	65
74	Coding Odor Identity and Odor Value in Awake Rodents. Progress in Brain Research, 2014, 208, 205-222.	0.9	24
75	Anesthetic regimes modulate the temporal dynamics of local field potential in the mouse olfactory bulb. Journal of Neurophysiology, 2014, 111, 908-917.	0.9	26

#	ARTICLE	IF	CITATIONS
76	Top-down inputs from the olfactory cortex in the postprandial period promote elimination of granule cells in the olfactory bulb. <i>European Journal of Neuroscience</i> , 2014, 40, 2724-2733.	1.2	19
77	Lack of Respiratory Coupling with Neocortical and Hippocampal Slow Oscillations. <i>Journal of Neuroscience</i> , 2014, 34, 3937-3946.	1.7	26
78	Odor- and state-dependent olfactory tubercle local field potential dynamics in awake rats. <i>Journal of Neurophysiology</i> , 2014, 111, 2109-2123.	0.9	21
79	Construction of Odor Representations by Olfactory Bulb Microcircuits. <i>Progress in Brain Research</i> , 2014, 208, 177-203.	0.9	45
80	Dark matter of the bulb. <i>Nature Neuroscience</i> , 2014, 17, 485-487.	7.1	1
81	Increase in hippocampal theta oscillations during spatial decision making. <i>Hippocampus</i> , 2014, 24, 693-702.	0.9	47
82	Thorough GABAergic innervation of the entire axon initial segment revealed by an optogenetic "laserspritzer". <i>Journal of Physiology</i> , 2014, 592, 4257-4276.	1.3	13
83	Broadly tuned and respiration-independent inhibition in the olfactory bulb of awake mice. <i>Nature Neuroscience</i> , 2014, 17, 569-576.	7.1	77
84	Slow Oscillations in the Mouse Hippocampus Entrained by Nasal Respiration. <i>Journal of Neuroscience</i> , 2014, 34, 5949-5964.	1.7	148
85	Independent control of gamma and theta activity by distinct interneuron networks in the olfactory bulb. <i>Nature Neuroscience</i> , 2014, 17, 1208-1216.	7.1	185
86	Persistence of amygdala gamma oscillations during extinction learning predicts spontaneous fear recovery. <i>Neurobiology of Learning and Memory</i> , 2014, 113, 82-89.	1.0	58
87	Complex relationship between BOLD-fMRI and electrophysiological signals in different olfactory bulb layers. <i>NeuroImage</i> , 2014, 95, 29-38.	2.1	18
89	Circadian Disruption Alters the Effects of Lipopolysaccharide Treatment on Circadian and Ultradian Locomotor Activity and Body Temperature Rhythms of Female Siberian Hamsters. <i>Journal of Biological Rhythms</i> , 2015, 30, 543-556.	1.4	13
90	Computational modeling suggests distinct, location-specific function of norepinephrine in olfactory bulb and piriform cortex. <i>Frontiers in Computational Neuroscience</i> , 2015, 9, 73.	1.2	18
91	The Olfactory System. , 2015, , 761-803.		26
92	Afterhyperpolarization (AHP) regulates the frequency and timing of action potentials in the mitral cells of the olfactory bulb: role of olfactory experience. <i>Physiological Reports</i> , 2015, 3, e12344.	0.7	18
93	Dynamic cortical lateralization during olfactory discrimination learning. <i>Journal of Physiology</i> , 2015, 593, 1701-1714.	1.3	38
94	Coding of odor stimulus features among secondary olfactory structures. <i>Journal of Neurophysiology</i> , 2015, 114, 736-745.	0.9	13

#	ARTICLE	IF	CITATIONS
95	Detection and classification of natural odors with an in vivo bioelectronic nose. Biosensors and Bioelectronics, 2015, 67, 694-699.	5.3	31
96	Looking for the roots of cortical sensory computation in three-layered cortices. Current Opinion in Neurobiology, 2015, 31, 119-126.	2.0	56
97	Bioinspired early detection through gas flow modulation in chemo-sensory systems. Sensors and Actuators B: Chemical, 2015, 206, 538-547.	4.0	33
98	Tasks for inhibitory interneurons in intact brain circuits. Neuropharmacology, 2015, 88, 10-23.	2.0	176
99	Respiration Gates Sensory Input Responses in the Mitral Cell Layer of the Olfactory Bulb. PLoS ONE, 2016, 11, e0168356.	1.1	13
101	Conscious content generated by unconscious action-related adjustments. Behavioral and Brain Sciences, 2016, 39, e190.	0.4	0
102	At what timescale does consciousness operate?. Behavioral and Brain Sciences, 2016, 39, e181.	0.4	0
103	Classification of odorants across layers in locust olfactory pathway. Journal of Neurophysiology, 2016, 115, 2303-2316.	0.9	14
104	Consciousness for perception and for action: A perspective from unconscious binding. Behavioral and Brain Sciences, 2016, 39, e185.	0.4	0
105	An "ecological" action-based synthesis. Behavioral and Brain Sciences, 2016, 39, e173.	0.4	5
106	Granule cell excitability regulates gamma and beta oscillations in a model of the olfactory bulb dendrodendritic microcircuit. Journal of Neurophysiology, 2016, 116, 522-539.	0.9	45
107	How does consciousness for action relate to attention for action?. Behavioral and Brain Sciences, 2016, 39, e176.	0.4	0
108	Homing in on consciousness: Why is a dream conscious?. Behavioral and Brain Sciences, 2016, 39, e192.	0.4	0
109	Explaining consciousness: From correlations to foundations. Behavioral and Brain Sciences, 2016, 39, e193.	0.4	0
110	The chemosensory brain requires a distributed cellular mechanism to harness information and resolve conflicts—Is consciousness the forum?. Behavioral and Brain Sciences, 2016, 39, e184.	0.4	0
111	What if consciousness has no function?. Behavioral and Brain Sciences, 2016, 39, e171.	0.4	0
112	Conscious olfaction: Content, function, and localization. Behavioral and Brain Sciences, 2016, 39, e188.	0.4	1
113	The primary (dis)function of consciousness: (Non)Integration. Behavioral and Brain Sciences, 2016, 39, e189.	0.4	1

#	ARTICLE	IF	CITATIONS
114	The science of consciousness must include its more advanced forms. Behavioral and Brain Sciences, 2016, 39, e198.	0.4	0
115	Infer yourself: Interoception and internal "action" in conscious selfhood. Behavioral and Brain Sciences, 2016, 39, e196.	0.4	2
116	Human consciousness is fundamental for perception and highest emotions. Behavioral and Brain Sciences, 2016, 39, e191.	0.4	4
117	Calling for a developmental perspective on action-based consciousness. Behavioral and Brain Sciences, 2016, 39, e174.	0.4	0
118	Consciousness of emotions and action selection. Behavioral and Brain Sciences, 2016, 39, e177.	0.4	0
119	Metacognition and conscious experience. Behavioral and Brain Sciences, 2016, 39, e195.	0.4	0
120	Insights on consciousness from taste memory research. Behavioral and Brain Sciences, 2016, 39, e178.	0.4	1
121	Getting back from the basics: What is the role for attention and fronto-parietal circuits in consciousness?. Behavioral and Brain Sciences, 2016, 39, e175.	0.4	0
122	A gustocentric perspective to understanding primary sensory cortices. Current Opinion in Neurobiology, 2016, 40, 118-124.	2.0	32
123	GABAB Receptors Tune Cortical Feedback to the Olfactory Bulb. Journal of Neuroscience, 2016, 36, 8289-8304.	1.7	26
124	Gamma and Beta Oscillations Define a Sequence of Neurocognitive Modes Present in Odor Processing. Journal of Neuroscience, 2016, 36, 7750-7767.	1.7	85
125	Locating consciousness: We are conflicted by the role of conflict. Behavioral and Brain Sciences, 2016, 39, e186.	0.4	0
126	Four questions for passive frame theory. Behavioral and Brain Sciences, 2016, 39, e194.	0.4	0
127	Consciousness weaves our internal view of the outside world. Behavioral and Brain Sciences, 2016, 39, e179.	0.4	1
128	Origins of emotional consciousness. Behavioral and Brain Sciences, 2016, 39, e187.	0.4	0
129	Is conscious content available only to the skeletal muscle system?. Behavioral and Brain Sciences, 2016, 39, e183.	0.4	0
130	Consciousness around the time of saccadic eye movements. Behavioral and Brain Sciences, 2016, 39, e172.	0.4	0
131	Content encapsulation in consciousness is likely to be incomplete. Behavioral and Brain Sciences, 2016, 39, e170.	0.4	0



#	ARTICLE	IF	CITATIONS
132	Passive frame theory: A new synthesis. Behavioral and Brain Sciences, 2016, 39, e199.	0.4	10
133	Action-based synthesis of parental brain consciousness. Behavioral and Brain Sciences, 2016, 39, e197.	0.4	0
134	Oscillations in the embryonic chick olfactory bulb: initial expression and development revealed by optical imaging with a voltage-sensitive dye. European Journal of Neuroscience, 2016, 43, 1111-1121.	1.2	3
135	Interdependent Conductances Drive Infralow Intrinsic Rhythmogenesis in a Subset of Accessory Olfactory Bulb Projection Neurons. Journal of Neuroscience, 2016, 36, 3127-3144.	1.7	26
136	Hippocampal Respiration-Driven Rhythm Distinct from Theta Oscillations in Awake Mice. Journal of Neuroscience, 2016, 36, 162-177.	1.7	146
137	Intracellular Oscillations and Waves. Annual Review of Condensed Matter Physics, 2017, 8, 239-264.	5.2	70
138	The shaping of intrinsic membrane potential oscillations: positive/negative feedback, ionic resonance/amplification, nonlinearities and time scales. Journal of Computational Neuroscience, 2017, 42, 133-166.	0.6	31
139	Home-cage odors spatial cues elicit theta phase/gamma amplitude coupling between olfactory bulb and dorsal hippocampus. Neuroscience, 2017, 363, 97-106.	1.1	18
140	Synchronized Activity in The Main and Accessory Olfactory Bulbs and Vomeronasal Amygdala Elicited by Chemical Signals in Freely Behaving Mice. Scientific Reports, 2017, 7, 9924.	1.6	25
141	Functionogenesis of the embryonic central nervous system revealed by optical recording with a voltage-sensitive dye. Journal of Physiological Sciences, 2017, 67, 107-119.	0.9	6
142	Volume Conduction Coupling of Whisker-Evoked Cortical LFP in the Mouse Olfactory Bulb. Cell Reports, 2017, 21, 919-925.	2.9	36
143	Cell Type-specific Intrinsic Perithreshold Oscillations in Hippocampal GABAergic Interneurons. Neuroscience, 2018, 376, 80-93.	1.1	15
144	Schizophrenia-like olfactory dysfunction induced by acute and postnatal phencyclidine exposure in rats. Schizophrenia Research, 2018, 199, 274-280.	1.1	2
145	Respiration-Entrained Brain Rhythms Are Global but Often Overlooked. Trends in Neurosciences, 2018, 41, 186-197.	4.2	218
146	In the Piriform Cortex, the Primary Impetus for Information Encoding through Synaptic Plasticity Is Provided by Descending Rather than Ascending Olfactory Inputs. Cerebral Cortex, 2018, 28, 764-776.	1.6	19
147	Parallel detection of theta and respiration-coupled oscillations throughout the mouse brain. Scientific Reports, 2018, 8, 6432.	1.6	125
148	Olfaction Warps Visual Time Perception. Cerebral Cortex, 2018, 28, 1718-1728.	1.6	7
149	In vivo bioelectronic nose using transgenic mice for specific odor detection. Biosensors and Bioelectronics, 2018, 102, 150-156.	5.3	26

#	ARTICLE	IF	CITATIONS
150	In vivo beta and gamma subthreshold oscillations in rat mitral cells: origin and gating by respiratory dynamics. <i>Journal of Neurophysiology</i> , 2018, 119, 274-289.	0.9	10
151	Olfactory bulb drives respiration-coupled beta oscillations in the rat hippocampus. <i>European Journal of Neuroscience</i> , 2018, 48, 2663-2673.	1.2	30
152	The mechanisms underlying olfactory deficits in apolipoprotein E-deficient mice: focus on olfactory epithelium and olfactory bulb. <i>Neurobiology of Aging</i> , 2018, 62, 20-33.	1.5	20
153	An Information Theoretic Approach to Stimulus Processing in the Olfactory System. <i>Lecture Notes in Bioengineering</i> , 2018, , 341-366.	0.3	0
154	Harnessing olfactory bulb oscillations to perform fully brain-based sleep-scoring and real-time monitoring of anaesthesia depth. <i>PLoS Biology</i> , 2018, 16, e2005458.	2.6	28
155	Respiration Modulates Olfactory Memory Consolidation in Humans. <i>Journal of Neuroscience</i> , 2018, 38, 10286-10294.	1.7	76
156	Neuronal dynamics supporting formation and recombination of cross-modal olfactory-tactile association in the rat hippocampal formation. <i>Journal of Neurophysiology</i> , 2018, 119, 1140-1152.	0.9	2
157	A transformation from temporal to ensemble coding in a model of piriform cortex. <i>ELife</i> , 2018, 7, .	2.8	38
158	Long-Term Plasticity at the Mitral and Tufted Cell to Granule Cell Synapse of the Olfactory Bulb Investigated with a Custom Multielectrode in Acute Brain Slice Preparations. <i>Methods in Molecular Biology</i> , 2018, 1820, 157-167.	0.4	2
159	Pharmacological manipulation of the olfactory bulb modulates beta oscillations: testing model predictions. <i>Journal of Neurophysiology</i> , 2018, 120, 1090-1106.	0.9	23
160	Olfactory Receptors. <i>Methods in Molecular Biology</i> , 2018, , .	0.4	3
161	Neural Dynamics of Olfactory Perception: Low- and High-Frequency Modulations of Local Field Potential Spectra in Mice Revealed by an Oddball Stimulus. <i>Frontiers in Neuroscience</i> , 2019, 13, 478.	1.4	7
162	Partial depletion of dopaminergic neurons in the substantia nigra impairs olfaction and alters neural activity in the olfactory bulb. <i>Scientific Reports</i> , 2019, 9, 254.	1.6	40
163	Leptin modulates olfactory discrimination and neural activity in the olfactory bulb. <i>Acta Physiologica</i> , 2019, 227, e13319.	1.8	37
164	Odorant features differentially modulate beta/gamma oscillatory patterns in anterior versus posterior piriform cortex. <i>Neuroscience</i> , 2019, 409, 26-34.	1.1	8
165	Impairment of Dendrodendritic Inhibition in the Olfactory Bulb of APP/PS1 Mice. <i>Frontiers in Aging Neuroscience</i> , 2019, 11, 2.	1.7	24
166	Top-down inputs drive neuronal network rewiring and context-enhanced sensory processing in olfaction. <i>PLoS Computational Biology</i> , 2019, 15, e1006611.	1.5	16
167	High beta rhythm amplitude in olfactory learning signs a well-consolidated and non-flexible behavioral state. <i>Scientific Reports</i> , 2019, 9, 20259.	1.6	7

#	ARTICLE	IF	CITATIONS
168	The Value of Homework: Exposure to Odors in the Home Cage Enhances Odor-Discrimination Learning in Mice. <i>Chemical Senses</i> , 2019, 44, 135-143.	1.1	17
169	Orchestration of Hippocampal Information Encoding by the Piriform Cortex. <i>Cerebral Cortex</i> , 2020, 30, 135-147.	1.6	17
170	Subpopulations of Projection Neurons in the Olfactory Bulb. <i>Frontiers in Neural Circuits</i> , 2020, 14, 561822.	1.4	48
171	Top-Down Control of Inhibitory Granule Cells in the Main Olfactory Bulb Reshapes Neural Dynamics Giving Rise to a Diversity of Computations. <i>Frontiers in Computational Neuroscience</i> , 2020, 14, 59.	1.2	9
172	Functional Alterations in the Olfactory Neuronal Circuit Occur before Hippocampal Plasticity Deficits in the P301S Mouse Model of Tauopathy: Implications for Early Diagnosis and Translational Research in Alzheimer's Disease. <i>International Journal of Molecular Sciences</i> , 2020, 21, 5431.	1.8	8
173	Perturbation of in vivo Neural Activity Following $\alpha$ -Synuclein Seeding in the Olfactory Bulb. <i>Journal of Parkinson's Disease</i> , 2020, 10, 1411-1427.	1.5	13
174	Nasal respiration is necessary for ketamine-dependent high frequency network oscillations and behavioral hyperactivity in rats. <i>Scientific Reports</i> , 2020, 10, 18981.	1.6	6
175	Anticipation-induced delta phase reset improves human olfactory perception. <i>PLoS Biology</i> , 2020, 18, e3000724.	2.6	8
176	Non-invasive recording from the human olfactory bulb. <i>Nature Communications</i> , 2020, 11, 648.	5.8	47
177	Assessment of direct knowledge of the human olfactory system. <i>Experimental Neurology</i> , 2020, 329, 113304.	2.0	18
178	Excitability of Neural Activity is Enhanced, but Neural Discrimination of Odors is Slightly Decreased, in the Olfactory Bulb of Fasted Mice. <i>Genes</i> , 2020, 11, 433.	1.0	18
179	Oscillations in the auditory system and their possible role. <i>Neuroscience and Biobehavioral Reviews</i> , 2020, 113, 507-528.	2.9	23
180	A biohybrid nose for evaluation of odor masking in the peripheral olfactory system. <i>Biosensors and Bioelectronics</i> , 2021, 171, 112737.	5.3	15
182	Topographic organization in the olfactory bulb. <i>Cell and Tissue Research</i> , 2021, 383, 457-472.	1.5	16
183	Network mechanism for insect olfaction. <i>Cognitive Neurodynamics</i> , 2021, 15, 103-129.	2.3	5
184	Oxytocin modulates neural processing of mitral/tufted cells in the olfactory bulb. <i>Acta Physiologica</i> , 2021, 231, e13626.	1.8	12
185	Odour Retrieval Processing in Mice: Cholinergic Modulation of Oscillatory Coupling in Olfactory Bulb-Piriform Networks. <i>Neuropsychobiology</i> , 2021, 80, 374-392.	0.9	3
187	Long-Range GABAergic Inhibition Modulates Spatiotemporal Dynamics of the Output Neurons in the Olfactory Bulb. <i>Journal of Neuroscience</i> , 2021, 41, 3610-3621.	1.7	22

#	ARTICLE	IF	CITATIONS
188	Enhancing GABAergic signaling ameliorates aberrant gamma oscillations of olfactory bulb in AD mouse models. <i>Molecular Neurodegeneration</i> , 2021, 16, 14.	4.4	34
190	Delta-range coupling between prefrontal cortex and hippocampus supported by respiratory rhythmic input from the olfactory bulb in freely behaving rats. <i>Scientific Reports</i> , 2021, 11, 8100.	1.6	24
191	Distinct Characteristics of Odor-evoked Calcium and Electrophysiological Signals in Mitral/Tufted Cells in the Mouse Olfactory Bulb. <i>Neuroscience Bulletin</i> , 2021, 37, 959-972.	1.5	5
193	Neural Probe Utilizing Programmable Micro-coil Magnetic Stimulation. , 2021, , .		0
194	Temporal Relations between Cortical Network Oscillations and Breathing Frequency during REM Sleep. <i>Journal of Neuroscience</i> , 2021, 41, 5229-5242.	1.7	32
195	Keeping the Breath in Mind: Respiration, Neural Oscillations, and the Free Energy Principle. <i>Frontiers in Neuroscience</i> , 2021, 15, 647579.	1.4	21
196	Chronic intermittent hypoxia alters main olfactory bulb activity and olfaction. <i>Experimental Neurology</i> , 2021, 340, 113653.	2.0	9
198	Human hippocampal connectivity is stronger in olfaction than other sensory systems. <i>Progress in Neurobiology</i> , 2021, 201, 102027.	2.8	28
199	EEG characteristics in "eyes-open" versus "eyes-closed" condition during vibrotactile stimulation. <i>Biomedical Signal Processing and Control</i> , 2021, 68, 102759.	3.5	7
200	Increased oscillatory power in a computational model of the olfactory bulb due to synaptic degeneration. <i>Physical Review E</i> , 2021, 104, 024405.	0.8	1
201	Thalamocortical Mechanisms Regulating the Relationship between Transient Beta Events and Human Tactile Perception. <i>Cerebral Cortex</i> , 2022, 32, 668-688.	1.6	26
202	The what and when of olfactory working memory in humans. <i>Current Biology</i> , 2021, 31, 4499-4511.e8.	1.8	15
203	Active Dendrites and Local Field Potentials: Biophysical Mechanisms and Computational Explorations. <i>Neuroscience</i> , 2022, 489, 111-142.	1.1	16
205	Odor-evoked increases in olfactory bulb mitral cell spiking variability. <i>IScience</i> , 2021, 24, 102946.	1.9	5
207	Tracking of informative gamma frequency range in local field potentials of anesthetized rat olfactory bulb for odor discrimination. <i>Biomedical Signal Processing and Control</i> , 2022, 71, 103139.	3.5	2
208	Simulation of Cortical Epileptic Discharge Using Freeman's KIII Model. <i>Lecture Notes in Computational Vision and Biomechanics</i> , 2018, , 280-290.	0.5	1
223	A coupled-oscillator model of olfactory bulb gamma oscillations. <i>PLoS Computational Biology</i> , 2017, 13, e1005760.	1.5	43
224	New Insights from 22-kHz Ultrasonic Vocalizations to Characterize Fear Responses: Relationship with Respiration and Brain Oscillatory Dynamics. <i>ENeuro</i> , 2019, 6, ENEURO.0065-19.2019.	0.9	23

#	ARTICLE	IF	CITATIONS
225	Emergence of $\beta$ -Band Oscillations in the Aged Rat Amygdala during Discrimination Learning and Decision Making Tasks. <i>ENeuro</i> , 2017, 4, ENEURO.0245-17.2017.	0.9	12
226	Effect of Xylazine+Tiletamine+Zolazepam on the Local Field Potential of the Rat Olfactory Bulb. <i>Comparative Medicine</i> , 2020, 70, 492-498.	0.4	7
227	Assessment of chemosensory function using electroencephalographic techniques. <i>Rhinology</i> , 2012, 50, 13-21.	0.7	22
228	The Dynamic Role of Breathing and Cellular Membrane Potentials in the Experience of Consciousness. <i>World Journal of Neuroscience</i> , 2017, 07, 66-81.	0.1	7
229	Nostril-specific and structure-based olfactory learning of chiral discrimination in human adults. <i>ELife</i> , 2019, 8, .	2.8	5
230	An update on anatomy and function of the teleost olfactory system. <i>PeerJ</i> , 2019, 7, e7808.	0.9	31
231	Convergent cross sorting for estimating dynamic coupling. <i>Scientific Reports</i> , 2021, 11, 20374.	1.6	7
232	Beyond Sensory Coding: The Cognitive Context of Olfactory Neurodynamics. , 2011, , 85-89.		0
233	Pattern Recognition Using a Recurrent Neural Network Inspired on the Olfactory Bulb. <i>Lecture Notes in Computer Science</i> , 2011, , 275-285.	1.0	0
234	Spatiotemporal Coding in the Olfactory System. , 2013, , 229-242.		1
235	Local Field Potential in Olfaction. , 2014, , 1-7.		0
236	In Vivo Bioelectronic Nose. , 2015, , 167-196.		0
237	Local Field Potential in Olfaction. , 2015, , 1527-1533.		0
240	Local Field Potentials in Olfaction. , 2019, , 1-10.		0
246	A brain-sensing fragrance diffuser for mental state regulation using electroencephalography. , 2021, , .		0
249	Effects of different anesthetics on oscillations in the rat olfactory bulb. <i>Journal of the American Association for Laboratory Animal Science</i> , 2012, 51, 458-63.	0.6	18
250	<scp>Hippocampal</scp>prefrontal</scp> interactions during spatial decision-making</scp>. <i>Hippocampus</i> , 2022, 32, 38-54.	0.9	16
251	Aberrant Patterns of Sensory-Evoked Activity in the Olfactory Bulb of LRRK2 Knockout Mice. <i>Cells</i> , 2021, 10, 3212.	1.8	3

#	ARTICLE	IF	CITATIONS
252	A potential biomarker of preclinical Alzheimer's disease: The olfactory dysfunction and its pathogenesis-based neural circuitry impairments. Neuroscience and Biobehavioral Reviews, 2022, 132, 857-869.	2.9	11
253	Excitable Axonal Domains Adapt to Sensory Deprivation in the Olfactory System. Journal of Neuroscience, 2022, 42, 1491-1509.	1.7	3
254	Smell-induced gamma oscillations in human olfactory cortex are required for accurate perception of odor identity. PLoS Biology, 2022, 20, e3001509.	2.6	16
255	The voltage and spiking responses of subthreshold resonant neurons to structured and fluctuating inputs: persistence and loss of resonance and variability. Biological Cybernetics, 2022, 116, 163-190.	0.6	4
256	Spatial maps in piriform cortex during olfactory navigation. Nature, 2022, 601, 595-599.	13.7	54
257	A Study on the Relationship between Autistic Traits and Their Life Tendencies among University Students. Advances in Psychology, 2022, 12, 861-867.	0.0	0
258	Differential modulation of parietal cortex activity by respiration and $\delta$ oscillations. Journal of Neurophysiology, 2022, 127, 801-817.	0.9	12
259	Fast and slow feedforward inhibitory circuits for cortical odor processing. ELife, 2022, 11, .	2.8	3
260	Testing Emotional Vulnerability to Threat in Adults Using a Virtual Reality Paradigm of Fear Associated With Autonomic Variables. Frontiers in Psychiatry, 2022, 13, 860447.	1.3	0
261	How the evolution of air breathing shaped hippocampal function. Philosophical Transactions of the Royal Society B: Biological Sciences, 2022, 377, 20200532.	1.8	7
262	Organization and engagement of a prefrontal-olfactory network during olfactory selective attention. Cerebral Cortex, 2023, 33, 1504-1526.	1.6	11
265	Mobile Brain/Body Imaging: Challenges and opportunities for the implementation of research programs based on the 4E perspective to cognition. Adaptive Behavior, 2023, 31, 423-448.	1.1	3
268	How the sense of smell influences cognition throughout life. Neuroforum, 2022, 28, 177-185.	0.2	5
270	Time Is of the Essence: Neural Codes, Synchronies, Oscillations, Architectures. Frontiers in Computational Neuroscience, 0, 16, .	1.2	9
271	Local Field Potentials in Olfaction. , 2022, , 1886-1895.		0
273	An ErbB4-Positive Neuronal Network in the Olfactory Bulb for Olfaction. Journal of Neuroscience, 2022, 42, 6518-6535.	1.7	2
274	Inconclusive evidence that breathing shapes pupil dynamics in humans: a systematic review. Pflügers Archiv European Journal of Physiology, 2023, 475, 119-137.	1.3	3
275	Interactive neurorobotics: Behavioral and neural dynamics of agent interactions. Frontiers in Psychology, 0, 13, .	1.1	0

#	ARTICLE	IF	CITATIONS
276	Neural activity patterns in the chemosensory network encoding vomeronasal and olfactory information in mice. <i>Frontiers in Neuroanatomy</i> , 0, 16, .	0.9	4
277	Breathing modulates gamma synchronization across species. <i>Pflügers Archiv European Journal of Physiology</i> , 2023, 475, 49-63.	1.3	6
278	Neural underpinning of a respiration-associated resting-state fMRI network. <i>ELife</i> , 0, 11, .	2.8	11
279	The PROUST hypothesis: the embodiment of olfactory cognition. <i>Animal Cognition</i> , 2023, 26, 59-72.	0.9	3
281	Rhythmic coordination and ensemble dynamics in the hippocampal-prefrontal network during odor-place associative memory and decision making. <i>ELife</i> , 0, 11, .	2.8	10
282	Observation of respiration-entrained brain oscillations with scalp EEG. <i>Neuroscience Letters</i> , 2023, 797, 137079.	1.0	6
284	Mechanisms and functions of respiration-driven gamma oscillations in the primary olfactory cortex. <i>ELife</i> , 0, 12, .	2.8	5
286	Long-Term Flexible Neural Interface for Synchronous Recording of Cross-Regional Sensory Processing along the Olfactory Pathway. <i>Small</i> , 2023, 19, .	5.2	2
299	Spatiotemporal coding of natural odors in the olfactory bulb. <i>Journal of Zhejiang University: Science B</i> , 2023, 24, 1057-1061.	1.3	0