Mark A Stopfer

List of Publications by Year
in descending order

73	4,544	185998 28	114278 63
papers	citations	h-index	g-index

80	80	80	2972
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Argos: A toolkit for tracking multiple animals in complex visual environments. Methods in Ecology and Evolution, 2022, 13, 585-595.	2.2	3
2	Insect neuroscience: Filling the knowledge gap on gap junctions. Current Biology, 2022, 32, R420-R423.	1.8	0
3	Olfactory Computation in Antennal Lobe and Mushroom Bodies. , 2022, , 2505-2508.		0
4	Insect Olfaction: A Model System for Neural Circuit Modeling. , 2022, , 1677-1682.		0
5	Myelination of peripheral nerves is controlled by PI4KB through regulation of Schwann cell Golgi function. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 28102-28113.	3.3	15
6	Optimality of sparse olfactory representations is not affected by network plasticity. PLoS Computational Biology, 2020, 16, e1007461.	1.5	13
7	Feedback inhibition and its control in an insect olfactory circuit. ELife, 2020, 9, .	2.8	11
8	Decision Making: How Fruit Flies Integrate Olfactory Evidence. Current Biology, 2018, 28, R757-R759.	1.8	2
9	Schwann-Cell-Specific Deletion of Phosphatidylinositol 4-Kinase Alpha Causes Aberrant Myelination. Cell Reports, 2018, 23, 2881-2890.	2.9	33
10	New Methods to Study Gustatory Coding. Journal of Visualized Experiments, 2017, , .	0.2	0
11	A Population of Projection Neurons that Inhibits the Lateral Horn but Excites the Antennal Lobe through Chemical Synapses in Drosophila. Frontiers in Neural Circuits, 2017, 11, 30.	1.4	14
12	Classification of odorants across layers in locust olfactory pathway. Journal of Neurophysiology, 2016, 115, 2303-2316.	0.9	14
13	Oscillatory integration windows in neurons. Nature Communications, 2016, 7, 13808.	5.8	24
14	Matrix Metalloproteinase-9 Regulates Neuronal Circuit Development and Excitability. Molecular Neurobiology, 2016, 53, 3477-3493.	1.9	30
15	Feed-Forward versus Feedback Inhibition in a Basic Olfactory Circuit. PLoS Computational Biology, 2015, 11, e1004531.	1.5	34
16	A gustatory second-order neuron that connects sucrose-sensitive primary neurons and a distinct region of the gnathal ganglion in theDrosophilabrain. Journal of Neurogenetics, 2015, 29, 144-155.	0.6	27
17	Trade-Off between Information Format and Capacity in the Olfactory System. Journal of Neuroscience, 2015, 35, 1521-1529.	1.7	13
18	Neural Encoding of Odors during Active Sampling and in Turbulent Plumes. Neuron, 2015, 88, 403-418.	3.8	47

#	Article	IF	Citations
19	Spatiotemporal Coding of Individual Chemicals by the Gustatory System. Journal of Neuroscience, 2015, 35, 12309-12321.	1.7	43
20	Central processing in the mushroom bodies. Current Opinion in Insect Science, 2014, 6, 99-103.	2.2	35
21	A Temporal Channel for Information in Sparse Sensory Coding. Current Biology, 2014, 24, 2247-2256.	1.8	43
22	Gap junctions. Current Biology, 2013, 23, R1026-R1031.	1.8	37
23	Insect Olfaction: A Model System for Neural Circuit Modeling. , 2013, , 1-7.		0
24	Olfactory Computation in Antennal Lobe and Mushroom Bodies. , 2013, , 1-4.		0
25	Peripheral and Central Olfactory Tuning in a Moth. Chemical Senses, 2012, 37, 455-461.	1.1	5
26	Excitatory Local Interneurons Enhance Tuning of Sensory Information. PLoS Computational Biology, 2012, 8, e1002563.	1.5	21
27	Functional Analysis of a Higher Olfactory Center, the Lateral Horn. Journal of Neuroscience, 2012, 32, 8138-8148.	1.7	92
28	Spontaneous Olfactory Receptor Neuron Activity Determines Follower Cell Response Properties. Journal of Neuroscience, 2012, 32, 2900-2910.	1.7	36
29	Intimate neuronal whispers. Nature, 2012, 492, 44-45.	13.7	6
30	Dye fills reveal additional olfactory tracts in the protocerebrum of wildâ€type Drosophila. Journal of Comparative Neurology, 2012, 520, 4131-4140.	0.9	38
31	Olfactory Coding: Tagging and Tuning Odor-Activated Synapses for Memory. Current Biology, 2012, 22, R227-R229.	1.8	3
32	Mimicking Biological Design and Computing Principles in Artificial Olfaction. ACS Chemical Neuroscience, 2011, 2, 487-499.	1.7	39
33	Using the Structure of Inhibitory Networks to Unravel Mechanisms of Spatiotemporal Patterning. Neuron, 2011, 69, 373-386.	3.8	41
34	Negative results need airing too. Nature, 2011, 470, 39-39.	13.7	9
35	Mosquitoes bamboozled. Nature, 2011, 474, 40-41.	13.7	7
36	Insect olfactory coding and memory at multiple timescales. Current Opinion in Neurobiology, 2011, 21, 768-773.	2.0	18

#	Article	IF	Citations
37	Olfactory Coding: Giant Inhibitory Neuron Governs Sparse Odor Codes. Current Biology, 2011, 21, R504-R506.	1.8	7
38	Dual-labeling method for electron microscopy to characterize synaptic connectivity using genetically encoded fluorescent reporters in Drosophila. Journal of Neuroscience Methods, 2011, 194, 312-315.	1.3	3
39	Temporally Diverse Firing Patterns in Olfactory Receptor Neurons Underlie Spatiotemporal Neural Codes for Odors. Journal of Neuroscience, 2010, 30, 1994-2006.	1.7	108
40	Olfactory Coding: Unusual Conductances Contribute to Sparse Neural Representation. Focus on â€œIntrinsic Membrane Properties and Inhibitory Synaptic Input of Kenyon Cells as Mechanisms for Sparse Coding?â€• Journal of Neurophysiology, 2010, 103, 2-3.	0.9	0
41	Analysis of trial-by-trial variability in stimulus-evoked neural activity. , 2010, 2010, 4320-2.		1
42	Forward and Back: Motifs of Inhibition in Olfactory Processing. Neuron, 2010, 67, 357-358.	3.8	18
43	Odor-Evoked Neural Oscillations in Drosophila Are Mediated by Widely Branching Interneurons. Journal of Neuroscience, 2009, 29, 8595-8603.	1.7	112
44	Frequency Transitions in Odor-Evoked Neural Oscillations. Neuron, 2009, 64, 692-706.	3.8	68
45	Sparse odor representation and olfactory learning. Nature Neuroscience, 2008, 11, 1177-1184.	7.1	137
46	Olfactory Coding: Non-Linear Amplification Separates Smells. Current Biology, 2008, 18, R29-R32.	1.8	2
47	Bilateral olfaction: two is better than one for navigation. Genome Biology, 2008, 9, 212.	13.9	12
48	Olfactory learning and spike timing dependent plasticity. Communicative and Integrative Biology, 2008, 1, 170-171.	0.6	13
49	Synaptic Learning Rules and Sparse Coding in a Model Sensory System. PLoS Computational Biology, 2008, 4, e1000062.	1.5	64
50	Adaptive regulation of sparseness by feedforward inhibition. Nature Neuroscience, 2007, 10, 1176-1184.	7.1	92
51	Olfactory Processing: Massive Convergence onto Sparse Codes. Current Biology, 2007, 17, R363-R364.	1.8	14
52	Olfactory Coding: A Plastic Approach to Timing Precision. Current Biology, 2007, 17, R797-R799.	1.8	0
53	Information processing in the olfactory systems of insects and vertebrates. Seminars in Cell and Developmental Biology, 2006, 17, 433-442.	2.3	122
54	Encoding a temporally structured stimulus with a temporally structured neural representation. Nature Neuroscience, 2005, 8, 1568-1576.	7.1	155

#	Article	IF	Citations
55	Olfactory Coding: Inhibition Reshapes Odor Responses. Current Biology, 2005, 15, R996-R998.	1.8	9
56	Fast Odor Learning Improves Reliability of Odor Responses in the Locust Antennal Lobe. Neuron, 2005, 46, 483-492.	3.8	84
57	Intensity versus Identity Coding in an Olfactory System. Neuron, 2003, 39, 991-1004.	3.8	563
58	Model of Cellular and Network Mechanisms for Odor-Evoked Temporal Patterning in the Locust Antennal Lobe. Neuron, 2001, 30, 569-581.	3.8	137
59	Model of Transient Oscillatory Synchronization in the Locust Antennal Lobe. Neuron, 2001, 30, 553-567.	3.8	219
60	Odor Encoding as an Active, Dynamical Process: Experiments, Computation, and Theory. Annual Review of Neuroscience, 2001, 24, 263-297.	5.0	413
61	Recent dynamics in olfactory population coding. Current Opinion in Neurobiology, 2001, 11, 468-474.	2.0	60
62	Dynamic representation of odours by oscillating neural assemblies. Entomologia Experimentalis Et Applicata, 1999, 91, 7-18.	0.7	3
63	Short-term memory in olfactory network dynamics. Nature, 1999, 402, 664-668.	13.7	272
64	Dynamic representation of odours by oscillating neural assemblies. , 1999, , 7-18.		0
65	Spatiotemporal Structure of Olfactory Inputs to the Mushroom Bodies. Learning and Memory, 1998, 5, 124-132.	0.5	34
66	Impaired odour discrimination on desynchronization of odour-encoding neural assemblies. Nature, 1997, 390, 70-74.	13.7	912
67	Site Specificity of Short-Term and Long-Term Habituation in the Tail-Elicited Siphon Withdrawal Reflex ofAplysia. Journal of Neuroscience, 1996, 16, 4923-4932.	1.7	35
68	Heterosynaptic Facilitation of Tail Sensory Neuron Synaptic Transmission during Habituation in Tail-Induced Tail and Siphon Withdrawal Reflexes ofAplysia. Journal of Neuroscience, 1996, 16, 4933-4948.	1.7	55
69	Dynamic Encoding of Odors With Oscillating Neuronal Assemblies in the Locust Brain. Biological Bulletin, 1996, 191, 70-75.	0.7	20
70	Evoked ink release in Aplysia produces inhibition of the siphon withdrawal reflex in neighboring conspecifics. Behavioral and Neural Biology, 1993, 60, 196-204.	2.3	9
71	Identification of a reinforcement pathway necessary for operant conditioning of head waving in Aplysia californica. Behavioral and Neural Biology, 1991, 55, 313-337.	2.3	10
72	Development of behavior and learning inAplysia. Experientia, 1988, 44, 415-423.	1.2	8

#	Article	IF	Citations
73	Quantitative analysis of the relation between gill amplitude and siphon duration in the defensive withdrawal reflex of Aplysia... Behavioral Neuroscience, 1987, 101, 292-295.	0.6	7