Leslie B Vosshall

List of Publications by Year
in descending order

86	21,314	28274 55	53230 85
papers	citations	h-index	g-index

112	112	112	12700
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A persistent behavioral state enables sustained predation of humans by mosquitoes. ELife, 2022, 11, .	6.0	17
2	Sensory Discrimination of Blood and Floral Nectar by Aedes aegypti Mosquitoes. Neuron, 2020, 108, 1163-1180.e12.	8.1	57
3	Genome editing in non-model organisms opens new horizons for comparative physiology. Journal of Experimental Biology, 2020, 223, .	1.7	15
4	How to turn an organism into a model organism in 10 â€˜easyâ€™ steps. Journal of Experimental Biology, 2020, 223, .	1.7	73
5	Fruitless mutant male mosquitoes gain attraction to human odor. ELife, 2020, 9, .	6.0	39
6	General Visual and Contingent Thermal Cues Interact to Elicit Attraction in Female Aedes aegypti Mosquitoes. Current Biology, 2019, 29, 2250-2257.e4.	3.9	50
7	Aedes aegypti Mosquitoes Use Their Legs to Sense DEET on Contact. Current Biology, 2019, 29, 1551-1556.e5.	3.9	79
8	Genetic variation across the human olfactory receptor repertoire alters odor perception. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 9475-9480.	7.1	124
9	Small-Molecule Agonists of Ae. aegypti Neuropeptide Y Receptor Block Mosquito Biting. Cell, 2019, 176, 687-701.e5.	28.9	74
10	The ion channel ppk301 controls freshwater egg-laying in the mosquito Aedes aegypti. ELife, 2019, 8, .	6.0	74
11	Improved reference genome of Aedes aegypti informs arbovirus vector control. Nature, 2018, 563, 501-507.	27.8	426
12	A natural variant and engineered mutation in a GPCR promote DEET resistance in C. elegans. Nature, 2018, 562, 119-123.	27.8	18
13	Predicting human olfactory perception from chemical features of odor molecules. Science, 2017, 355, 820-826.	12.6	194
14	SMELL-S and SMELL-R: Olfactory tests not influenced by odor-specific insensitivity or prior olfactory experience. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 11275-11284.	7.1	47
15	A Peptide Signaling System that Rapidly Enforces Paternity in the Aedes aegypti Mosquito. Current Biology, 2017, 27, 3734-3742.e5.	3.9	43
16	A Taste Circuit that Regulates Ingestion by Integrating Food and Hunger Signals. Cell, 2016, 165, 715-729.	28.9	119
17	The neurotranscriptome of the Aedes aegypti mosquito. BMC Genomics, 2016, 17, 32.	2.8	188
18	Olfactory perception of chemically diverse molecules. BMC Neuroscience, 2016, 17, 55.	1.9	103

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19	Laying a controversial smell theory to rest. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 6525-6526.	7.1	40
20	Genome Engineering with CRISPR-Cas9 in the Mosquito Aedes aegypti. Cell Reports, 2015, 11, 51-60.	6.4	351
21	The cation channel TRPA1 tunes mosquito thermotaxis to host temperatures. ELife, 2015, 4, .	6.0	98
22	Multimodal Integration of Carbon Dioxide and Other Sensory Cues Drives Mosquito Attraction to Humans. Cell, 2014, 156, 1060-1071.	28.9	380
23	A Systematic Nomenclature for the Insect Brain. Neuron, 2014, 81, 755-765.	8.1	564
24	Evolution of mosquito preference for humans linked to an odorant receptor. Nature, 2014, 515, 222-227.	27.8	389
25	Abdominal-B Neurons Control Drosophila Virgin Female Receptivity. Current Biology, 2014, 24, 1584-1595.	3.9	87
26	Opposing Dopaminergic and GABAergic Neurons Control the Duration and Persistence of Copulation in Drosophila. Cell, 2013, 155, 881-893.	28.9	64
27	orco mutant mosquitoes lose strong preference for humans and are not repelled by volatile DEET. Nature, 2013, 498, 487-491.	27.8	388
28	Small molecule drug screening in Drosophila identifies the 5HT2A receptor as a feeding modulation target. Scientific Reports, 2013, 3, srep02120.	3.3	182
29	Functional and Genetic Characterization of Neuropeptide Y-Like Receptors in Aedes aegypti. PLoS Neglected Tropical Diseases, 2013, 7, e2486.	3.0	86
30	The Glacial Pace of Scientific Publishing: Why It Hurts Everyone and What We Can Do To Fix It. FASEB Journal, 2012, 26, 3589-3593.	0.5	23
31	An olfactory demography of a diverse metropolitan population. BMC Neuroscience, 2012, 13, 122.	1.9	66
32	Behavioral Neuroscience: Learning toÂSuckle with Signature Odor. Current Biology, 2012, 22, R907-R909.	3.9	2
33	Amino Acid Residues Contributing to Function of the Heteromeric Insect Olfactory Receptor Complex. PLoS ONE, 2012, 7, e32372.	2.5	131
34	Post-fasting olfactory, transcriptional, and feeding responses in Drosophila. Physiology and Behavior, 2012, 105, 544-553.	2.1	60
35	A natural polymorphism alters odour and DEET sensitivity in an insect odorant receptor. Nature, 2011, 478, 511-514.	27.8	164
36	A Unified Nomenclature System for the Insect Olfactory Coreceptor. Chemical Senses, 2011, 36, 497-498.	2.0	280

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37	Single Sensillum Recordings in the Insects Drosophila melanogaster and Anopheles gambiae. Journal of Visualized Experiments, 2010, , 1-5.	0.3	38
38	Reprogramming a termite monarchy. Nature Chemical Biology, 2010, 6, 637-638.	8.0	2
39	Topographic Mapping--The Olfactory System. Cold Spring Harbor Perspectives in Biology, 2010, 2, a001776-a001776.	5.5	70
40	Controversy and consensus: noncanonical signaling mechanisms in the insect olfactory system. Current Opinion in Neurobiology, 2009, 19, 284-292.	4.2	141
41	Sensory systems. Current Opinion in Neurobiology, 2009, 19, 343-344.	4.2	5
42	A circuit supporting concentration-invariant odor perception in Drosophila. Journal of Biology, 2009, 8, 9.	2.7	126
43	Variant Ionotropic Glutamate Receptors as Chemosensory Receptors in Drosophila. Cell, 2009, 136, 149-162.	28.9	1,207
44	Sensing Odorants and Pheromones with Chemosensory Receptors. Annual Review of Physiology, 2009, 71, 307-332.	13.1	487
45	Insect olfactory receptors are heteromeric ligand-gated ion channels. Nature, 2008, 452, 1002-1006.	27.8	955
46	Bilateral olfactory sensory input enhances chemotaxis behavior. Nature Neuroscience, 2008, 11, 187-199.	14.8	167
47	Better smelling through genetics: mammalian odor perception. Current Opinion in Neurobiology, 2008, 18, 364-369.	4.2	52
48	The Survival Advantage of Olfaction in a Competitive Environment. Current Biology, 2008, 18, 1153-1155.	3.9	74
49	Scent of a Fly. Neuron, 2008, 59, 685-689.	8.1	32
50	Insect Odorant Receptors Are Molecular Targets of the Insect Repellent DEET. Science, 2008, 319, 1838-1842.	12.6	295
51	The Olfactory Sensory Map in Drosophila. Advances in Experimental Medicine and Biology, 2008, 628, 102-114.	1.6	96
52	High-resolution Measurement of Odor-Driven Behavior in Drosophila Larvae. Journal of Visualized Experiments, 2008, , .	0.3	21
53	Influence of odorant receptor repertoire on odor perception in humans and fruit flies. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 5614-5619.	7.1	54
54	Activity-Dependent Plasticity in an Olfactory Circuit. Neuron, 2007, 56, 838-850.	8.1	172

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55	Molecular Architecture of Smell and Taste inDrosophila. Annual Review of Neuroscience, 2007, 30, 505-533.	10.7	787
56	Two chemosensory receptors together mediate carbon dioxide detection in Drosophila. Nature, 2007, 445, 86-90.	27.8	601
57	Genetic variation in a human odorant receptor alters odour perception. Nature, 2007, 449, 468-472.	27.8	549
58	An essential role for a CD36-related receptor in pheromone detection in Drosophila. Nature, 2007, 450, 289-293.	27.8	504
59	Into the mind of a fly. Nature, 2007, 450, 193-197.	27.8	68
60	Atypical Membrane Topology and Heteromeric Function of Drosophila Odorant Receptors In Vivo. PLoS Biology, 2006, 4, e20.	5.6	852
61	Functional conservation of an insect odorant receptor gene across 250 million years of evolution. Current Biology, 2005, 15, R119-R121.	3.9	245
62	Social Signals: The Secret Language of Mice. Current Biology, 2005, 15, R255-R257.	3.9	19
63	Genetic and Functional Subdivision of the Drosophila Antennal Lobe. Current Biology, 2005, 15, 1548-1553.	3.9	540
64	Chemotaxis Behavior Mediated by Single Larval Olfactory Neurons in Drosophila. Current Biology, 2005, 15, 2086-2096.	3.9	224
65	Wake Up and Smell the Pheromones. Neuron, 2005, 45, 179-181.	8.1	18
66	A psychophysical test of the vibration theory of olfaction. Nature Neuroscience, 2004, 7, 337-338.	14.8	100
67	Human olfactory psychophysics. Current Biology, 2004, 14, R875-R878.	3.9	42
68	Olfaction: Attracting Both Sperm and the Nose. Current Biology, 2004, 14, R918-R920.	3.9	29
69	Or83b Encodes a Broadly Expressed Odorant Receptor Essential for Drosophila Olfaction. Neuron, 2004, 43, 703-714.	8.1	1,159
70	Diverse Odor-Conditioned Memories Require Uniquely Timed Dorsal Paired Medial Neuron Output. Neuron, 2004, 44, 521-533.	8.1	120
71	Decoding olfaction in Drosophila. Current Opinion in Neurobiology, 2003, 13, 103-110.	4.2	45
72	Two-Photon Calcium Imaging Reveals an Odor-Evoked Map of Activity in the Fly Brain. Cell, 2003, 112, 271-282.	28.9	752

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73	Putting smell on the map. Trends in Neurosciences, 2003, 26, 169-170.	8.6	10
74	Axonal Targeting of Olfactory Receptor Neurons in Drosophila Is Controlled by Dscam. Neuron, 2003, 37, 221-231.	8.1	194
75	Toward a Molecular Description of Pheromone Perception. Neuron, 2003, 39, 881-883.	8.1	9
76	Diversity and expression of odorant receptors in Drosophila. , 2003, , 567-591.		5
77	How the Brain Sees Smells. Developmental Cell, 2001, 1, 588-590.	7.0	5
78	The Molecular Logic of Olfaction in Drosophila. Chemical Senses, 2001, 26, 207-213.	2.0	79
79	Olfaction in Drosophila. Current Opinion in Neurobiology, 2000, 10, 498-503.	4.2	131
80	Comparative Genomics of the Eukaryotes. Science, 2000, 287, 2204-2215.	12.6	1,573
81	An Olfactory Sensory Map in the Fly Brain. Cell, 2000, 102, 147-159.	28.9	973
82	A Spatial Map of Olfactory Receptor Expression in the Drosophila Antenna. Cell, 1999, 96, 725-736.	28.9	1,104
83	Circadian rhythms in drosophila can be driven by period expression in a restricted group of central brain cells. Neuron, 1995, 15, 345-360.	8.1	135
84	Topographic organization of sensory projections to the olfactory bulb. Cell, 1994, 79, 981-991.	28.9	1,172
85	New short period mutations of the Drosophila clock gene per. Neuron, 1992, 9, 575-581.	8.1	76
86	New Clock Mutations in Drosophila. Annals of the New York Academy of Sciences, 1991, 618, 1-10.	3.8	18