

# John R Carlson

## List of Publications by Year in descending order

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87  
papers

15,466  
citations

31976

53  
h-index

51608

86  
g-index

97  
all docs

97  
docs citations

97  
times ranked

6147  
citing authors

#	ARTICLE	IF	CITATIONS
1	Ir56b is an atypical ionotropic receptor that underlies appetitive salt response in <i>Drosophila</i> . <i>Current Biology</i> , 2022, 32, 1776-1787.e4.	3.9	20
2	Meeting a threat of the Anthropocene: Taste avoidance of metal ions by <i>Drosophila</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	7.1	13
3	Evolutionary shifts in taste coding in the fruit pest <i>Drosophila suzukii</i> . <i>ELife</i> , 2021, 10, .	6.0	38
4	Sight of parasitoid wasps accelerates sexual behavior and upregulates a micropeptide gene in <i>Drosophila</i> . <i>Nature Communications</i> , 2021, 12, 2453.	12.8	18
5	Molecular Logic and Evolution of Bitter Taste in <i>Drosophila</i> . <i>Current Biology</i> , 2020, 30, 17-30.e3.	3.9	60
6	Olfaction: Receptor Antagonistes. <i>Current Biology</i> , 2020, 30, R815-R817.	3.9	2
7	The mosquito taste system and disease control. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 32848-32856.	7.1	21
8	Odor coding in the antenna of the tsetse fly <i>Glossina morsitans</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 14300-14308.	7.1	19
9	Chemosensory sensilla of the <i>Drosophila</i> wing express a candidate ionotropic pheromone receptor. <i>PLoS Biology</i> , 2019, 17, e2006619.	5.6	44
10	The molecular and cellular basis of olfactory response to tsetse fly attractants. <i>PLoS Genetics</i> , 2019, 15, e1008005.	3.5	34
11	Robust olfactory responses in the absence of odorant binding proteins. <i>ELife</i> , 2019, 8, .	6.0	69
12	Physiological responses of the <i>Drosophila</i> labellum to amino acids. <i>Journal of Neurogenetics</i> , 2018, 32, 27-36.	1.4	15
13	The diverse small proteins called odorant-binding proteins. <i>Open Biology</i> , 2018, 8, 180208.	3.6	100
14	Sensory Biology: Structure of an Insect Chemoreceptor. <i>Current Biology</i> , 2018, 28, R1202-R1205.	3.9	6
15	Humidity response depends on the small soluble protein Obp59a in <i>Drosophila</i> . <i>ELife</i> , 2018, 7, .	6.0	49
16	Molecules That Can Rewire the Taste System. <i>Biochemistry</i> , 2017, 56, 6075-6076.	2.5	1
17	A receptor and neuron that activate a circuit limiting sucrose consumption. <i>ELife</i> , 2017, 6, .	6.0	51
18	Symbiont-induced odorant binding proteins mediate insect host hematopoiesis. <i>ELife</i> , 2017, 6, .	6.0	125

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19	Bitter taste receptors confer diverse functions to neurons. <i>ELife</i> , 2016, 5, .	6.0	52
20	Organization and function of <i>Drosophila</i> odorant binding proteins. <i>ELife</i> , 2016, 5, .	6.0	194
21	Malaria Parasites Produce Volatile Mosquito Attractants. <i>MBio</i> , 2015, 6, .	4.1	61
22	Candidate ionotropic taste receptors in the <i>Drosophila</i> larva. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 4195-4201.	7.1	97
23	<i>Drosophila</i> Chemoreceptors: A Molecular Interface Between the Chemical World and the Brain. <i>Trends in Genetics</i> , 2015, 31, 683-695.	6.7	289
24	Editorial overview: Molecular biology of sensation. <i>Current Opinion in Neurobiology</i> , 2015, 34, v-vi.	4.2	2
25	Reverse-correlation analysis of navigation dynamics in <i>Drosophila</i> larva using optogenetics. <i>ELife</i> , 2015, 4, .	6.0	90
26	An RNA-Seq Screen of the <i>Drosophila</i> Antenna Identifies a Transporter Necessary for Ammonia Detection. <i>PLoS Genetics</i> , 2014, 10, e1004810.	3.5	130
27	Electrophysiological Recording From <i>Drosophila</i> Labellar Taste Sensilla. <i>Journal of Visualized Experiments</i> , 2014, , e51355.	0.3	14
28	The Molecular and Cellular Basis of Taste Coding in the Legs of <i>Drosophila</i> . <i>Journal of Neuroscience</i> , 2014, 34, 7148-7164.	3.6	139
29	The <i>Drosophila</i> IR20a Clade of Ionotropic Receptors Are Candidate Taste and Pheromone Receptors. <i>Neuron</i> , 2014, 83, 850-865.	8.1	301
30	A map of taste neuron projections in the <i>Drosophila</i> CNS. <i>Journal of Biosciences</i> , 2014, 39, 565-574.	1.1	49
31	Intensity Invariant Dynamics and Odor-Specific Latencies in Olfactory Receptor Neuron Response. <i>Journal of Neuroscience</i> , 2013, 33, 6285-6297.	3.6	122
32	Functional diversity among sensory receptors in a <i>Drosophila</i> olfactory circuit. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, E2134-43.	7.1	105
33	A Welcome to <i>Drosophila</i> Olfaction. <i>Journal of Neurogenetics</i> , 2012, 26, 262-263.	1.4	1
34	The Molecular and Cellular Basis of Bitter Taste in <i>Drosophila</i> . <i>Neuron</i> , 2011, 69, 258-272.	8.1	346
35	Molecular and Cellular Organization of the Taste System in the <i>Drosophila</i> Larva. <i>Journal of Neuroscience</i> , 2011, 31, 15300-15309.	3.6	105
36	Similar Odorants Elicit Different Behavioral and Physiological Responses, Some Supersustained. <i>Journal of Neuroscience</i> , 2011, 31, 7891-7899.	3.6	37

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37	Insect olfaction from model systems to disease control. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 12987-12995.	7.1	182
38	Temporal coding of odor mixtures in an olfactory receptor neuron. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 5075-5080.	7.1	81
39	Odorant reception in the malaria mosquito <i>Anopheles gambiae</i> . Nature, 2010, 464, 66-71.	27.8	515
40	Regulation of Odor Receptor Genes in Trichoid Sensilla of the <i>Drosophila</i> Antenna. Genetics, 2010, 186, 79-95.	2.9	22
41	Distinct Functions of <i>Acj6</i> Splice Forms in Odor Receptor Gene Choice. Journal of Neuroscience, 2010, 30, 5028-5036.	3.6	29
42	Molecular basis of odor coding in the malaria vector mosquito <i>Anopheles gambiae</i> . Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 4418-4423.	7.1	358
43	Role of G-Proteins in Odor-Sensing and CO <sub>2</sub> -Sensing Neurons in <i>Drosophila</i> . Journal of Neuroscience, 2010, 30, 4562-4572.	3.6	89
44	Positive and Negative Regulation of Odor Receptor Gene Choice in <i>Drosophila</i> by <i>Acj6</i> . Journal of Neuroscience, 2009, 29, 12940-12947.	3.6	38
45	Olfactory Perception: Receptors, Cells, and Circuits. Cell, 2009, 139, 45-59.	28.9	476
46	Translation of Sensory Input into Behavioral Output via an Olfactory System. Neuron, 2008, 59, 110-124.	8.1	258
47	A Regulatory Code for Neuron-Specific Odor Receptor Expression. PLoS Biology, 2008, 6, e125.	5.6	62
48	The molecular basis of CO <sub>2</sub> reception in <i>Drosophila</i> . Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 3574-3578.	7.1	498
49	Mechanisms of Odor Receptor Gene Choice in <i>Drosophila</i> . Neuron, 2007, 53, 353-369.	8.1	101
50	Two Gr Genes Underlie Sugar Reception in <i>Drosophila</i> . Neuron, 2007, 56, 503-516.	8.1	401
51	Generalization of Courtship Learning in <i>Drosophila</i> Is Mediated by <i>cis</i> -Vaccenyl Acetate. Current Biology, 2007, 17, 599-605.	3.9	257
52	Receptors and Neurons for Fly Odors in <i>Drosophila</i> . Current Biology, 2007, 17, 606-612.	3.9	315
53	Odor Coding in the Maxillary Palp of the Malaria Vector Mosquito <i>Anopheles gambiae</i> . Current Biology, 2007, 17, 1533-1544.	3.9	314
54	Coding of Odors by a Receptor Repertoire. Cell, 2006, 125, 143-160.	28.9	1,143

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55	Insects as chemosensors of humans and crops. <i>Nature</i> , 2006, 444, 302-307.	27.8	124
56	Chemosensory Coding by Neurons in the Coeloconic Sensilla of the <i>Drosophila</i> Antenna. <i>Journal of Neuroscience</i> , 2005, 25, 8359-8367.	3.6	280
57	Coexpression of Two Functional Odor Receptors in One Neuron. <i>Neuron</i> , 2005, 45, 661-666.	8.1	220
58	The Molecular Basis of Odor Coding in the <i>Drosophila</i> Larva. <i>Neuron</i> , 2005, 46, 445-456.	8.1	278
59	Mosquito receptor for human-sweat odorant. <i>Nature</i> , 2004, 427, 212-213.	27.8	189
60	The Molecular Basis of Odor Coding in the <i>Drosophila</i> Antenna. <i>Cell</i> , 2004, 117, 965-979.	28.9	799
61	Integrating the Molecular and Cellular Basis of Odor Coding in the <i>Drosophila</i> Antenna. <i>Neuron</i> , 2003, 37, 827-841.	8.1	504
62	Molecular evolution of the insect chemoreceptor gene superfamily in <i>Drosophila melanogaster</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 14537-14542.	7.1	703
63	<i>Drosophila</i> Gr5a encodes a taste receptor tuned to trehalose. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 14526-14530.	7.1	192
64	Targeted Mutation of a <i>Drosophila</i> Odor Receptor Defines Receptor Requirement in a Novel Class of Sensillum. <i>Journal of Neuroscience</i> , 2003, 23, 9906-9912.	3.6	124
65	Twelve ways to look at a receptor. <i>Journal of Cell Science</i> , 2002, 115, 3979-3979.	2.0	8
66	Viewing odors in the mushroom body of the fly. <i>Trends in Neurosciences</i> , 2001, 24, 497-498.	8.6	9
67	Odor Coding in the <i>Drosophila</i> Antenna. <i>Neuron</i> , 2001, 30, 537-552.	8.1	657
68	A Gr receptor is required for response to the sugar trehalose in taste neurons of <i>Drosophila</i> . <i>Nature Neuroscience</i> , 2001, 4, 1182-1186.	14.8	242
69	Candidate Taste Receptors in <i>Drosophila</i> . <i>Science</i> , 2000, 287, 1830-1834.	12.6	568
70	Odor Coding in a Model Olfactory Organ: The <i>Drosophila</i> Maxillary Palp. <i>Journal of Neuroscience</i> , 1999, 19, 4520-4532.	3.6	365
71	Olfactory Adaptation Depends on the Trp Ca <sup>2+</sup> Channel in <i>Drosophila</i> . <i>Journal of Neuroscience</i> , 1999, 19, 4839-4846.	3.6	95
72	Chemosensory behavior: the path from stimulus to response. <i>Current Opinion in Neurobiology</i> , 1999, 9, 766-771.	4.2	21

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73	A Novel Family of Divergent Seven-Transmembrane Proteins. <i>Neuron</i> , 1999, 22, 327-338.	8.1	1,092
74	The Odor Specificities of a Subset of Olfactory Receptor Neurons Are Governed by <i>Acj6</i> , a POU-Domain Transcription Factor. <i>Neuron</i> , 1999, 22, 339-347.	8.1	151
75	Olfactory Coding in a Compound Nose: Coexpression of Odorant-Binding Proteins in <i>Drosophila</i> . <i>Annals of the New York Academy of Sciences</i> , 1998, 855, 311-315.	3.8	9
76	Coexpression of Two Odorant-Binding Protein Homologs in <i>Drosophila</i> : Implications for Olfactory Coding. <i>Journal of Neuroscience</i> , 1997, 17, 1616-1624.	3.6	101
77	Odorant response of individual sensilla on the <i>Drosophila</i> antenna. <i>Invertebrate Neuroscience</i> , 1997, 3, 127-135.	1.8	184
78	The maxillary palp of <i>Drosophila</i> : ultrastructure and physiology depends on the <i>lozenge</i> gene. <i>Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology</i> , 1997, 180, 143-150.	1.6	18
79	Olfaction in <i>Drosophila</i> : from odor to behavior. <i>Trends in Genetics</i> , 1996, 12, 175-180.	6.7	128
80	Male-male courtship behavior induced by ectopic expression of the <i>Drosophila</i> <i>white</i> gene: Role of sensory function and age. , 1996, 30, 454-464.		60
81	Genetic and Molecular Studies of Olfaction in <i>Drosophila</i> . <i>Novartis Foundation Symposium</i> , 1996, 200, 285-301.	1.1	2
82	Scutoid mutation of <i>drosophila melanogaster</i> specifically decreases olfactory responses to short-chain acetate esters and ketones. <i>Journal of Neurobiology</i> , 1995, 28, 214-233.	3.6	32
83	OS9: A novel olfactory gene of <i>Drosophila</i> expressed in two olfactory organs. <i>Journal of Neurobiology</i> , 1994, 25, 169-184.	3.6	18
84	The <i>rdgB</i> Gene of <i>Drosophila</i> : A Link Between Vision and Olfaction. <i>Journal of Neurogenetics</i> , 1992, 8, 17-31.	1.4	52
85	Development and organization of the <i>Drosophila</i> olfactory system: An analysis using enhancer traps. <i>Journal of Neurobiology</i> , 1992, 23, 947-964.	3.6	64
86	Olfactory physiology in the <i>Drosophila</i> antenna and maxillary palp: <i>acj6</i> Distinguishes two classes of odorant pathways. <i>Journal of Neurobiology</i> , 1992, 23, 965-982.	3.6	103
87	Characterization of the larval olfactory response in <i>Drosophila</i> and its genetic basis. <i>Behavior Genetics</i> , 1989, 19, 267-283.	2.1	110