

# Cornelia I Bargmann

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

159  
papers

30,975  
citations

91  
h-index

175  
g-index

181  
ext. papers

35,745  
ext. citations

23.4  
avg, IF

7.23  
L-index

#	Paper	IF	Citations
159	Behavioral control by depolarized and hyperpolarized states of an integrating neuron. <i>ELife</i> , <b>2021</b> , 10,	8.9	4
158	An oxytocin/vasopressin-related neuropeptide modulates social foraging behavior in the clonal raider ant. <i>PLoS Biology</i> , <b>2021</b> , 19, e3001305	9.7	4
157	An Adaptive-Threshold Mechanism for Odor Sensation and Animal Navigation. <i>Neuron</i> , <b>2020</b> , 105, 534-548. e136	13.9	31
156	Parallel Multimodal Circuits Control an Innate Foraging Behavior. <i>Neuron</i> , <b>2019</b> , 102, 407-419. e8	13.9	31
155	Reliability of an interneuron response depends on an integrated sensory state. <i>ELife</i> , <b>2019</b> , 8,	8.9	16
154	A natural variant and engineered mutation in a GPCR promote DEET resistance in <i>C. elegans</i> . <i>Nature</i> , <b>2018</b> , 562, 119-123	50.4	14
153	<i>C. elegans</i> AWA Olfactory Neurons Fire Calcium-Mediated All-or-None Action Potentials. <i>Cell</i> , <b>2018</b> , 175, 57-70. e17	56.2	45
152	Dissection of neuronal gap junction circuits that regulate social behavior in. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, E1263-E1272	11.5	24
151	Neuromodulatory Control of Long-Term Behavioral Patterns and Individuality across Development. <i>Cell</i> , <b>2017</b> , 171, 1649-1662. e10	56.2	60
150	Oxytocin mediated behavior in invertebrates: An evolutionary perspective. <i>Developmental Neurobiology</i> , <b>2017</b> , 77, 128-142	3.2	24
149	Diverse modes of synaptic signaling, regulation, and plasticity distinguish two classes of glutamatergic neurons. <i>ELife</i> , <b>2017</b> , 6,	8.9	14
148	Balancing selection shapes density-dependent foraging behaviour. <i>Nature</i> , <b>2016</b> , 539, 254-258	50.4	89
147	Multifocus microscopy with precise color multi-phase diffractive optics applied in functional neuronal imaging. <i>Biomedical Optics Express</i> , <b>2016</b> , 7, 855-69	3.5	30
146	Distinct Circuits for the Formation and Retrieval of an Imprinted Olfactory Memory. <i>Cell</i> , <b>2016</b> , 164, 632-43. e8	56.2	81
145	. <i>ELife</i> , <b>2016</b> , 5,	8.9	67
144	Author response: Sensitive red protein calcium indicators for imaging neural activity <b>2016</b> ,		9
143	Regulatory changes in two chemoreceptor genes contribute to a QTL for foraging behavior. <i>ELife</i> , <b>2016</b> , 5,	8.9	49

142	Author response: Regulatory changes in two chemoreceptor genes contribute to a <i>Caenorhabditis elegans</i> QTL for foraging behavior <b>2016</b> ,		2
141	Parallel encoding of sensory history and behavioral preference during <i>Caenorhabditis elegans</i> olfactory learning. <i>ELife</i> , <b>2016</b> , 5,	8.9	32
140	Sensitive red protein calcium indicators for imaging neural activity. <i>ELife</i> , <b>2016</b> , 5,	8.9	484
139	How the New Neuroscience Will Advance Medicine. <i>JAMA - Journal of the American Medical Association</i> , <b>2015</b> , 314, 221-2	27.4	3
138	MultiFocus Polarization Microscope (MF-PolScope) for 3D polarization imaging of up to 25 focal planes simultaneously. <i>Optics Express</i> , <b>2015</b> , 23, 7734-54	3.3	46
137	Feedback from network states generates variability in a probabilistic olfactory circuit. <i>Cell</i> , <b>2015</b> , 161, 215-27	56.2	137
136	The BRAIN Initiative: developing technology to catalyse neuroscience discovery. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2015</b> , 370,	5.8	119
135	A Circuit for Gradient Climbing in <i>C. elegans</i> Chemotaxis. <i>Cell Reports</i> , <b>2015</b> , 12, 1748-60	10.6	76
134	Temporal responses of <i>C. elegans</i> chemosensory neurons are preserved in behavioral dynamics. <i>Neuron</i> , <b>2014</b> , 81, 616-28	13.9	84
133	Inducible and titratable silencing of <i>Caenorhabditis elegans</i> neurons in vivo with histamine-gated chloride channels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, 2770-5	11.5	132
132	Multigenic natural variation underlies <i>Caenorhabditis elegans</i> olfactory preference for the bacterial pathogen <i>Serratia marcescens</i> . <i>G3: Genes, Genomes, Genetics</i> , <b>2014</b> , 4, 265-76	3.2	48
131	What the BRAIN Initiative means for psychiatry. <i>American Journal of Psychiatry</i> , <b>2014</b> , 171, 1038-40	11.9	4
130	The Brain Research Through Advancing Innovative Neurotechnologies (BRAIN) initiative and neurology. <i>JAMA Neurology</i> , <b>2014</b> , 71, 675-6	17.2	46
129	Serotonin and the neuropeptide PDF initiate and extend opposing behavioral states in <i>C. elegans</i> . <i>Cell</i> , <b>2013</b> , 154, 1023-1035	56.2	230
128	From the connectome to brain function. <i>Nature Methods</i> , <b>2013</b> , 10, 483-90	21.6	324
127	Fast multicolor 3D imaging using aberration-corrected multifocus microscopy. <i>Nature Methods</i> , <b>2013</b> , 10, 60-3	21.6	269
126	An optimized fluorescent probe for visualizing glutamate neurotransmission. <i>Nature Methods</i> , <b>2013</b> , 10, 162-70	21.6	564
125	Genetically encoded calcium indicators for multi-color neural activity imaging and combination with optogenetics. <i>Frontiers in Molecular Neuroscience</i> , <b>2013</b> , 6, 2	6.1	487

124	High-throughput imaging of neuronal activity in <i>Caenorhabditis elegans</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, E4266-73	11.5	125
123	Acute behavioral responses to pheromones in <i>C. elegans</i> (adult behaviors: attraction, repulsion). <i>Methods in Molecular Biology</i> , <b>2013</b> , 1068, 285-92	1.4	8
122	Neuromodulatory state and sex specify alternative behaviors through antagonistic synaptic pathways in <i>C. elegans</i> . <i>Neuron</i> , <b>2012</b> , 75, 585-92	13.9	100
121	Oxytocin/vasopressin-related peptides have an ancient role in reproductive behavior. <i>Science</i> , <b>2012</b> , 338, 540-3	33.3	179
120	Optimization of a GCaMP calcium indicator for neural activity imaging. <i>Journal of Neuroscience</i> , <b>2012</b> , 32, 13819-40	6.6	864
119	Neuroscience. The mind of a male?. <i>Science</i> , <b>2012</b> , 337, 416-7	33.3	
118	Beyond the connectome: how neuromodulators shape neural circuits. <i>BioEssays</i> , <b>2012</b> , 34, 458-65	4.1	294
117	Long-range regulatory polymorphisms affecting a GABA receptor constitute a quantitative trait locus (QTL) for social behavior in <i>Caenorhabditis elegans</i> . <i>PLoS Genetics</i> , <b>2012</b> , 8, e1003157	6	36
116	Laser microsurgery in <i>Caenorhabditis elegans</i> . <i>Methods in Cell Biology</i> , <b>2012</b> , 107, 177-206	1.8	77
115	Specific expression of channelrhodopsin-2 in single neurons of <i>Caenorhabditis elegans</i> . <i>PLoS ONE</i> , <b>2012</b> , 7, e43164	3.7	53
114	UNC-33 (CRMP) and ankyrin organize microtubules and localize kinesin to polarize axon-dendrite sorting. <i>Nature Neuroscience</i> , <b>2011</b> , 15, 48-56	25.5	110
113	Genetic contributions to behavioural diversity at the gene-environment interface. <i>Nature Reviews Genetics</i> , <b>2011</b> , 12, 809-20	30.1	70
112	Catecholamine receptor polymorphisms affect decision-making in <i>C. elegans</i> . <i>Nature</i> , <b>2011</b> , 472, 313-8	50.4	141
111	Parallel evolution of domesticated <i>Caenorhabditis</i> species targets pheromone receptor genes. <i>Nature</i> , <b>2011</b> , 477, 321-5	50.4	182
110	Microtubule-based localization of a synaptic calcium-signaling complex is required for left-right neuronal asymmetry in <i>C. elegans</i> . <i>Development (Cambridge)</i> , <b>2011</b> , 138, 3509-18	6.6	34
109	Behavioral choice between conflicting alternatives is regulated by a receptor guanylyl cyclase, GCY-28, and a receptor tyrosine kinase, SCD-2, in AIA interneurons of <i>Caenorhabditis elegans</i> . <i>Journal of Neuroscience</i> , <b>2011</b> , 31, 3007-15	6.6	78
108	High-content behavioral analysis of <i>Caenorhabditis elegans</i> in precise spatiotemporal chemical environments. <i>Nature Methods</i> , <b>2011</b> , 8, 599-605	21.6	168
107	Neuropeptide feedback modifies odor-evoked dynamics in <i>Caenorhabditis elegans</i> olfactory neurons. <i>Nature Neuroscience</i> , <b>2010</b> , 13, 615-21	25.5	164

106	The homeodomain protein hmbx-1 maintains asymmetric gene expression in adult <i>C. elegans</i> olfactory neurons. <i>Genes and Development</i> , <b>2010</b> , 24, 1802-15	12.6	28
105	The tripartite motif protein MADD-2 functions with the receptor UNC-40 (DCC) in Netrin-mediated axon attraction and branching. <i>Developmental Cell</i> , <b>2010</b> , 18, 950-60	10.2	53
104	Wnt-Ror signaling to SIA and SIB neurons directs anterior axon guidance and nerve ring placement in <i>C. elegans</i> . <i>Development (Cambridge)</i> , <b>2009</b> , 136, 3801-10	6.6	51
103	Transcriptional regulation and stabilization of left-right neuronal identity in <i>C. elegans</i> . <i>Genes and Development</i> , <b>2009</b> , 23, 345-58	12.6	44
102	A hub-and-spoke circuit drives pheromone attraction and social behaviour in <i>C. elegans</i> . <i>Nature</i> , <b>2009</b> , 458, 1171-5	50.4	350
101	Imaging neural activity in worms, flies and mice with improved GCaMP calcium indicators. <i>Nature Methods</i> , <b>2009</b> , 6, 875-81	21.6	1449
100	Presynaptic CaV2 calcium channel traffic requires CALF-1 and the alpha(2)delta subunit UNC-36. <i>Nature Neuroscience</i> , <b>2009</b> , 12, 1257-65	25.5	67
99	Quantitative mapping of a digenic behavioral trait implicates globin variation in <i>C. elegans</i> sensory behaviors. <i>Neuron</i> , <b>2009</b> , 61, 692-9	13.9	177
98	Neurons detect increases and decreases in oxygen levels using distinct guanylate cyclases. <i>Neuron</i> , <b>2009</b> , 61, 865-79	13.9	196
97	GFP Reconstitution Across Synaptic Partners (GRASP) defines cell contacts and synapses in living nervous systems. <i>Neuron</i> , <b>2008</b> , 57, 353-63	13.9	487
96	A behavioral switch: cGMP and PKC signaling in olfactory neurons reverses odor preference in <i>C. elegans</i> . <i>Neuron</i> , <b>2008</b> , 59, 959-71	13.9	93
95	Innate immunity in <i>Caenorhabditis elegans</i> is regulated by neurons expressing NPR-1/GPCR. <i>Science</i> , <b>2008</b> , 322, 460-4	33.3	166
94	Hypoxia and the HIF-1 transcriptional pathway reorganize a neuronal circuit for oxygen-dependent behavior in <i>Caenorhabditis elegans</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2008</b> , 105, 7321-6	11.5	72
93	Left-right olfactory asymmetry results from antagonistic functions of voltage-activated calcium channels and the Raw repeat protein OLRN-1 in <i>C. elegans</i> . <i>Neural Development</i> , <b>2007</b> , 2, 24	3.9	52
92	Microfluidics for in vivo imaging of neuronal and behavioral activity in <i>Caenorhabditis elegans</i> . <i>Nature Methods</i> , <b>2007</b> , 4, 727-31	21.6	404
91	Dissecting a circuit for olfactory behaviour in <i>Caenorhabditis elegans</i> . <i>Nature</i> , <b>2007</b> , 450, 63-70	50.4	438
90	Detection and avoidance of a natural product from the pathogenic bacterium <i>Serratia marcescens</i> by <i>Caenorhabditis elegans</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2007</b> , 104, 2295-300	11.5	252
89	An innexin-dependent cell network establishes left-right neuronal asymmetry in <i>C. elegans</i> . <i>Cell</i> , <b>2007</b> , 129, 787-99	56.2	100

88	MIG-10/lamellipodin and AGE-1/PI3K promote axon guidance and outgrowth in response to slit and netrin. <i>Current Biology</i> , <b>2006</b> , 16, 854-62	6.3	108
87	A distributed chemosensory circuit for oxygen preference in <i>C. elegans</i> . <i>PLoS Biology</i> , <b>2006</b> , 4, e274	9.7	163
86	TRP channels in <i>C. elegans</i> . <i>Annual Review of Physiology</i> , <b>2006</b> , 68, 719-36	23.1	81
85	Wnt signals and frizzled activity orient anterior-posterior axon outgrowth in <i>C. elegans</i> . <i>Developmental Cell</i> , <b>2006</b> , 10, 379-90	10.2	154
84	Multiple Wnts and frizzled receptors regulate anteriorly directed cell and growth cone migrations in <i>Caenorhabditis elegans</i> . <i>Developmental Cell</i> , <b>2006</b> , 10, 367-77	10.2	132
83	The claudin superfamily protein nsy-4 biases lateral signaling to generate left-right asymmetry in <i>C. elegans</i> olfactory neurons. <i>Neuron</i> , <b>2006</b> , 51, 291-302	13.9	36
82	UNC-6/Netrin induces neuronal asymmetry and defines the site of axon formation. <i>Nature Neuroscience</i> , <b>2006</b> , 9, 511-8	25.5	212
81	Hierarchical assembly of presynaptic components in defined <i>C. elegans</i> synapses. <i>Nature Neuroscience</i> , <b>2006</b> , 9, 1488-98	25.5	137
80	Comparative chemosensation from receptors to ecology. <i>Nature</i> , <b>2006</b> , 444, 295-301	50.4	238
79	Chemosensation in <i>C. elegans</i> . <i>WormBook</i> , <b>2006</b> , 1-29		436
78	In appreciation of Lawrence C. Katz, 1956-2005. <i>Neuron</i> , <b>2005</b> , 48, 897-900	13.9	
77	Pathogenic bacteria induce aversive olfactory learning in <i>Caenorhabditis elegans</i> . <i>Nature</i> , <b>2005</b> , 438, 179-84	50.4	524
76	Identification of transcriptional regulatory elements in chemosensory receptor genes by probabilistic segmentation. <i>Current Biology</i> , <b>2005</b> , 15, 347-52	6.3	35
75	Neuroscience: comradie and nostalgia in nematodes. <i>Current Biology</i> , <b>2005</b> , 15, R832-3	6.3	2
74	A circuit for navigation in <i>Caenorhabditis elegans</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 3184-91	11.5	527
73	A Toll-interleukin 1 repeat protein at the synapse specifies asymmetric odorant receptor expression via ASK1 MAPKKK signaling. <i>Genes and Development</i> , <b>2005</b> , 19, 270-81	12.6	131
72	Inhibition of netrin-mediated axon attraction by a receptor protein tyrosine phosphatase. <i>Science</i> , <b>2004</b> , 305, 103-6	33.3	55
71	Comparing genomic expression patterns across species identifies shared transcriptional profile in aging. <i>Nature Genetics</i> , <b>2004</b> , 36, 197-204	36.3	362

70	Invertebrate nociception: behaviors, neurons and molecules. <i>Journal of Neurobiology</i> , <b>2004</b> , 61, 161-74		74
69	Specific polyunsaturated fatty acids drive TRPV-dependent sensory signaling in vivo. <i>Cell</i> , <b>2004</b> , 119, 889-900	56.2	132
68	Mechanosensory neurite termination and tiling depend on SAX-2 and the SAX-1 kinase. <i>Neuron</i> , <b>2004</b> , 44, 239-49	13.9	95
67	Synaptic specificity is generated by the synaptic guidepost protein SYG-2 and its receptor, SYG-1. <i>Cell</i> , <b>2004</b> , 116, 869-81	56.2	234
66	Synaptic Specificity Is Generated by the Synaptic Guidepost Protein SYG-2 and Its Receptor, SYG-1. <i>Cell</i> , <b>2004</b> , 117, 553	56.2	3
65	Oxygen sensation and social feeding mediated by a <i>C. elegans</i> guanylate cyclase homologue. <i>Nature</i> , <b>2004</b> , 430, 317-22	50.4	442
64	Genes that act downstream of DAF-16 to influence the lifespan of <i>Caenorhabditis elegans</i> . <i>Nature</i> , <b>2003</b> , 424, 277-83	50.4	1705
63	The immunoglobulin superfamily protein SYG-1 determines the location of specific synapses in <i>C. elegans</i> . <i>Cell</i> , <b>2003</b> , 112, 619-30	56.2	237
62	A central role of the BK potassium channel in behavioral responses to ethanol in <i>C. elegans</i> . <i>Cell</i> , <b>2003</b> , 115, 655-66	56.2	267
61	The netrin receptor UNC-40/DCC stimulates axon attraction and outgrowth through enabled and, in parallel, Rac and UNC-115/AbLIM. <i>Neuron</i> , <b>2003</b> , 37, 53-65	13.9	194
60	Otx/otd homeobox genes specify distinct sensory neuron identities in <i>C. elegans</i> . <i>Developmental Cell</i> , <b>2003</b> , 5, 621-33	10.2	114
59	Mammalian TRPV4 (VR-OAC) directs behavioral responses to osmotic and mechanical stimuli in <i>Caenorhabditis elegans</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2003</b> , 100 Suppl 2, 14531-6	11.5	288
58	<i>C. elegans</i> responds to chemical repellents by integrating sensory inputs from the head and the tail. <i>Current Biology</i> , <b>2002</b> , 12, 730-4	6.3	200
57	Single ionic channels of two <i>Caenorhabditis elegans</i> chemosensory neurons in native membrane. <i>Journal of Membrane Biology</i> , <b>2002</b> , 189, 55-66	2.3	20
56	Social feeding in <i>Caenorhabditis elegans</i> is induced by neurons that detect aversive stimuli. <i>Nature</i> , <b>2002</b> , 419, 899-903	50.4	188
55	Shared receptors in axon guidance: SAX-3/Robo signals via UNC-34/Enabled and a Netrin-independent UNC-40/DCC function. <i>Nature Neuroscience</i> , <b>2002</b> , 5, 1147-54	25.5	135
54	Control of neuronal subtype identity by the <i>C. elegans</i> ARID protein CFI-1. <i>Genes and Development</i> , <b>2002</b> , 16, 972-83	12.6	30
53	SEK-1 MAPKK mediates Ca <sup>2+</sup> signaling to determine neuronal asymmetric development in <i>Caenorhabditis elegans</i> . <i>EMBO Reports</i> , <b>2002</b> , 3, 56-62	6.5	104



52	Accolade for elegans. <i>Cell</i> , <b>2002</b> , 111, 759-62	56.2	2
51	Combinatorial expression of TRPV channel proteins defines their sensory functions and subcellular localization in <i>C. elegans</i> neurons. <i>Neuron</i> , <b>2002</b> , 35, 307-18	13.9	355
50	The cyclic GMP-dependent protein kinase EGL-4 regulates olfactory adaptation in <i>C. elegans</i> . <i>Neuron</i> , <b>2002</b> , 36, 1079-89	13.9	145
49	Dynamic regulation of axon guidance. <i>Nature Neuroscience</i> , <b>2001</b> , 4 Suppl, 1169-76	25.5	260
48	<i>C. elegans</i> odour discrimination requires asymmetric diversity in olfactory neurons. <i>Nature</i> , <b>2001</b> , 410, 698-701	50.4	176
47	Sensory experience and sensory activity regulate chemosensory receptor gene expression in <i>Caenorhabditis elegans</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2001</b> , 98, 11032-8	11.5	80
46	The SAD-1 kinase regulates presynaptic vesicle clustering and axon termination. <i>Neuron</i> , <b>2001</b> , 29, 115-29	13.9	151
45	Ca <sup>2+</sup> signaling via the neuronal calcium sensor-1 regulates associative learning and memory in <i>C. elegans</i> . <i>Neuron</i> , <b>2001</b> , 30, 241-8	13.9	190
44	Polarized dendritic transport and the AP-1 mu1 clathrin adaptor UNC-101 localize odorant receptors to olfactory cilia. <i>Neuron</i> , <b>2001</b> , 31, 277-87	13.9	135
43	<i>C. elegans</i> slit acts in midline, dorsal-ventral, and anterior-posterior guidance via the SAX-3/Robo receptor. <i>Neuron</i> , <b>2001</b> , 32, 25-38	13.9	184
42	The CaMKII UNC-43 activates the MAPKKK NSY-1 to execute a lateral signaling decision required for asymmetric olfactory neuron fates. <i>Cell</i> , <b>2001</b> , 105, 221-32	56.2	162
41	Three <i>C. elegans</i> Rac proteins and several alternative Rac regulators control axon guidance, cell migration and apoptotic cell phagocytosis. <i>Development (Cambridge)</i> , <b>2001</b> , 128, 4475-4488	6.6	170
40	The <i>Caenorhabditis elegans</i> odr-2 gene encodes a novel Ly-6-related protein required for olfaction. <i>Genetics</i> , <b>2001</b> , 157, 211-24	4	79
39	Neuronal cell shape and neurite initiation are regulated by the Ndr kinase SAX-1, a member of the Orb6/COT-1/warts serine/threonine kinase family. <i>Molecular Biology of the Cell</i> , <b>2000</b> , 11, 3177-90	3.5	83
38	Simple organisms. <i>Neurobiology of Disease</i> , <b>2000</b> , 7, 520-2	7.5	1
37	Olfaction and odor discrimination are mediated by the <i>C. elegans</i> guanylyl cyclase ODR-1. <i>Neuron</i> , <b>2000</b> , 25, 575-86	13.9	191
36	Role of a class DHC1b dynein in retrograde transport of IFT motors and IFT raft particles along cilia, but not dendrites, in chemosensory neurons of living <i>Caenorhabditis elegans</i> . <i>Journal of Cell Biology</i> , <b>1999</b> , 147, 519-30	7.3	237
35	Functional reconstitution of a heteromeric cyclic nucleotide-gated channel of <i>Caenorhabditis elegans</i> in cultured cells. <i>Brain Research</i> , <b>1999</b> , 821, 160-8	3.7	87



34	A complex sensory map for pheromones. <i>Neuron</i> , <b>1999</b> , 22, 640-2	13.9	4
33	Lateral signaling mediated by axon contact and calcium entry regulates asymmetric odorant receptor expression in <i>C. elegans</i> . <i>Cell</i> , <b>1999</b> , 99, 387-98	56.2	217
32	The G alpha protein ODR-3 mediates olfactory and nociceptive function and controls cilium morphogenesis in <i>C. elegans</i> olfactory neurons. <i>Neuron</i> , <b>1998</b> , 20, 55-67	13.9	255
31	UNC-115, a conserved protein with predicted LIM and actin-binding domains, mediates axon guidance in <i>C. elegans</i> . <i>Neuron</i> , <b>1998</b> , 21, 385-92	13.9	82
30	The conserved immunoglobulin superfamily member SAX-3/Robo directs multiple aspects of axon guidance in <i>C. elegans</i> . <i>Cell</i> , <b>1998</b> , 92, 217-27	56.2	243
29	Odorant receptor localization to olfactory cilia is mediated by ODR-4, a novel membrane-associated protein. <i>Cell</i> , <b>1998</b> , 93, 455-66	56.2	213
28	Natural variation in a neuropeptide Y receptor homolog modifies social behavior and food response in <i>C. elegans</i> . <i>Cell</i> , <b>1998</b> , 94, 679-89	56.2	619
27	Signal transduction in the <i>Caenorhabditis elegans</i> nervous system. <i>Annual Review of Neuroscience</i> , <b>1998</b> , 21, 279-308	17	122
26	Neurobiology of the <i>Caenorhabditis elegans</i> genome. <i>Science</i> , <b>1998</b> , 282, 2028-33	33.3	684
25	The <i>Caenorhabditis elegans</i> seven-transmembrane protein ODR-10 functions as an odorant receptor in mammalian cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>1997</b> , 94, 12162-7	11.5	89
24	Reprogramming chemotaxis responses: sensory neurons define olfactory preferences in <i>C. elegans</i> . <i>Cell</i> , <b>1997</b> , 91, 161-9	56.2	321
23	Olfactory receptors, vomeronasal receptors, and the organization of olfactory information. <i>Cell</i> , <b>1997</b> , 90, 585-7	56.2	79
22	OSM-9, a novel protein with structural similarity to channels, is required for olfaction, mechanosensation, and olfactory adaptation in <i>Caenorhabditis elegans</i> . <i>Journal of Neuroscience</i> , <b>1997</b> , 17, 8259-69	6.6	496
21	A dynamin GTPase mutation causes a rapid and reversible temperature-inducible locomotion defect in <i>C. elegans</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>1997</b> , 94, 10438-43	11.5	106
20	odr-10 encodes a seven transmembrane domain olfactory receptor required for responses to the odorant diacetyl. <i>Cell</i> , <b>1996</b> , 84, 899-909	56.2	419
19	A putative cyclic nucleotide-gated channel is required for sensory development and function in <i>C. elegans</i> . <i>Neuron</i> , <b>1996</b> , 17, 695-706	13.9	353
18	Cell fate specification and differentiation in the nervous system of <i>Caenorhabditis elegans</i> . <i>Genesis</i> , <b>1996</b> , 18, 73-80		11
17	Mechanosensory signalling in <i>C. elegans</i> mediated by the GLR-1 glutamate receptor. <i>Nature</i> , <b>1995</b> , 378, 78-81	50.4	281

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10	Genetic and cellular analysis of behavior in <i>C. elegans</i> . <i>Annual Review of Neuroscience</i> , <b>1993</b> , 16, 47-71	17 119
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7	Control of larval development by chemosensory neurons in <i>Caenorhabditis elegans</i> . <i>Science</i> , <b>1991</b> , 251, 1243-6	33.3 331
6	Chemosensory neurons with overlapping functions direct chemotaxis to multiple chemicals in <i>C. elegans</i> . <i>Neuron</i> , <b>1991</b> , 7, 729-42	13.9 530
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3	Parallel multimodal circuits control an innate foraging behavior	1
2	Sensitive red protein calcium indicators for imaging neural activity	2
1	Behavioral control by depolarized and hyperpolarized states of an integrating neuron by	2