

Cornelia I Bargmann

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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	Genes that act downstream of DAF-16 to influence the lifespan of <i>Caenorhabditis elegans</i> . <i>Nature</i> , 2003 , 424, 277-83	50.4	1705
158	Imaging neural activity in worms, flies and mice with improved GCaMP calcium indicators. <i>Nature Methods</i> , 2009 , 6, 875-81	21.6	1449
157	The neu oncogene encodes an epidermal growth factor receptor-related protein. <i>Nature</i> , 1986 , 319, 226-30	50.4	1022
156	Multiple independent activations of the neu oncogene by a point mutation altering the transmembrane domain of p185. <i>Cell</i> , 1986 , 45, 649-57	56.2	973
155	Optimization of a GCaMP calcium indicator for neural activity imaging. <i>Journal of Neuroscience</i> , 2012 , 32, 13819-40	6.6	864
154	Odorant-selective genes and neurons mediate olfaction in <i>C. elegans</i> . <i>Cell</i> , 1993 , 74, 515-27	56.2	856
153	Neurobiology of the <i>Caenorhabditis elegans</i> genome. <i>Science</i> , 1998 , 282, 2028-33	33.3	684
152	Natural variation in a neuropeptide Y receptor homolog modifies social behavior and food response in <i>C. elegans</i> . <i>Cell</i> , 1998 , 94, 679-89	56.2	619
151	An optimized fluorescent probe for visualizing glutamate neurotransmission. <i>Nature Methods</i> , 2013 , 10, 162-70	21.6	564
150	Divergent seven transmembrane receptors are candidate chemosensory receptors in <i>C. elegans</i> . <i>Cell</i> , 1995 , 83, 207-18	56.2	564
149	Chemosensory neurons with overlapping functions direct chemotaxis to multiple chemicals in <i>C. elegans</i> . <i>Neuron</i> , 1991 , 7, 729-42	13.9	530
148	A circuit for navigation in <i>Caenorhabditis elegans</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005 , 102, 3184-91	11.5	527
147	Pathogenic bacteria induce aversive olfactory learning in <i>Caenorhabditis elegans</i> . <i>Nature</i> , 2005 , 438, 179-84	50.4	524
146	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> , 1997 , 17, 8259-69	6.6	496
145	Genetically encoded calcium indicators for multi-color neural activity imaging and combination with optogenetics. <i>Frontiers in Molecular Neuroscience</i> , 2013 , 6, 2	6.1	487
144	GFP Reconstitution Across Synaptic Partners (GRASP) defines cell contacts and synapses in living nervous systems. <i>Neuron</i> , 2008 , 57, 353-63	13.9	487
143	Sensitive red protein calcium indicators for imaging neural activity. <i>ELife</i> , 2016 , 5,	8.9	484

142	Oxygen sensation and social feeding mediated by a <i>C. elegans</i> guanylate cyclase homologue. <i>Nature</i> , 2004 , 430, 317-22	50.4	442
141	Dissecting a circuit for olfactory behaviour in <i>Caenorhabditis elegans</i> . <i>Nature</i> , 2007 , 450, 63-70	50.4	438
140	Chemosensation in <i>C. elegans</i> . <i>WormBook</i> , 2006 , 1-29		436
139	odr-10 encodes a seven transmembrane domain olfactory receptor required for responses to the odorant diacetyl. <i>Cell</i> , 1996 , 84, 899-909	56.2	419
138	Microfluidics for in vivo imaging of neuronal and behavioral activity in <i>Caenorhabditis elegans</i> . <i>Nature Methods</i> , 2007 , 4, 727-31	21.6	404
137	Comparing genomic expression patterns across species identifies shared transcriptional profile in aging. <i>Nature Genetics</i> , 2004 , 36, 197-204	36.3	362
136	Combinatorial expression of TRPV channel proteins defines their sensory functions and subcellular localization in <i>C. elegans</i> neurons. <i>Neuron</i> , 2002 , 35, 307-18	13.9	355
135	A putative cyclic nucleotide-gated channel is required for sensory development and function in <i>C. elegans</i> . <i>Neuron</i> , 1996 , 17, 695-706	13.9	353
134	A hub-and-spoke circuit drives pheromone attraction and social behaviour in <i>C. elegans</i> . <i>Nature</i> , 2009 , 458, 1171-5	50.4	350
133	Control of larval development by chemosensory neurons in <i>Caenorhabditis elegans</i> . <i>Science</i> , 1991 , 251, 1243-6	33.3	331
132	From the connectome to brain function. <i>Nature Methods</i> , 2013 , 10, 483-90	21.6	324
131	Reprogramming chemotaxis responses: sensory neurons define olfactory preferences in <i>C. elegans</i> . <i>Cell</i> , 1997 , 91, 161-9	56.2	321
130	Beyond the connectome: how neuromodulators shape neural circuits. <i>BioEssays</i> , 2012 , 34, 458-65	4.1	294
129	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> , 2003 , 100 Suppl 2, 14531-6	11.5	288
128	Mechanosensory signalling in <i>C. elegans</i> mediated by the GLR-1 glutamate receptor. <i>Nature</i> , 1995 , 378, 78-81	50.4	281
127	Fast multicolor 3D imaging using aberration-corrected multifocus microscopy. <i>Nature Methods</i> , 2013 , 10, 60-3	21.6	269
126	A central role of the BK potassium channel in behavioral responses to ethanol in <i>C. elegans</i> . <i>Cell</i> , 2003 , 115, 655-66	56.2	267
125	Dynamic regulation of axon guidance. <i>Nature Neuroscience</i> , 2001 , 4 Suppl, 1169-76	25.5	260

124	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> , 1998 , 20, 55-67	13.9	255
123	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> , 2007 , 104, 2295-300	11.5	252
122	The conserved immunoglobulin superfamily member SAX-3/Robo directs multiple aspects of axon guidance in <i>C. elegans</i> . <i>Cell</i> , 1998 , 92, 217-27	56.2	243
121	Comparative chemosensation from receptors to ecology. <i>Nature</i> , 2006 , 444, 295-301	50.4	238
120	Odorant-specific adaptation pathways generate olfactory plasticity in <i>C. elegans</i> . <i>Neuron</i> , 1995 , 14, 803-813	13.9	238
119	The immunoglobulin superfamily protein SYG-1 determines the location of specific synapses in <i>C. elegans</i> . <i>Cell</i> , 2003 , 112, 619-30	56.2	237
118	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> , 1999 , 147, 519-30	7.3	237
117	Synaptic specificity is generated by the synaptic guidepost protein SYG-2 and its receptor, SYG-1. <i>Cell</i> , 2004 , 116, 869-81	56.2	234
116	Serotonin and the neuropeptide PDF initiate and extend opposing behavioral states in <i>C. elegans</i> . <i>Cell</i> , 2013 , 154, 1023-1035	56.2	230
115	Lateral signaling mediated by axon contact and calcium entry regulates asymmetric odorant receptor expression in <i>C. elegans</i> . <i>Cell</i> , 1999 , 99, 387-98	56.2	217
114	Odorant receptor localization to olfactory cilia is mediated by ODR-4, a novel membrane-associated protein. <i>Cell</i> , 1998 , 93, 455-66	56.2	213
113	UNC-6/Netrin induces neuronal asymmetry and defines the site of axon formation. <i>Nature Neuroscience</i> , 2006 , 9, 511-8	25.5	212
112	Laser killing of cells in <i>Caenorhabditis elegans</i> . <i>Methods in Cell Biology</i> , 1995 , 48, 225-50	1.8	209
111	<i>C. elegans</i> responds to chemical repellents by integrating sensory inputs from the head and the tail. <i>Current Biology</i> , 2002 , 12, 730-4	6.3	200
110	Neurons detect increases and decreases in oxygen levels using distinct guanylate cyclases. <i>Neuron</i> , 2009 , 61, 865-79	13.9	196
109	The netrin receptor UNC-40/DCC stimulates axon attraction and outgrowth through enabled and, in parallel, Rac and UNC-115/AbLIM. <i>Neuron</i> , 2003 , 37, 53-65	13.9	194
108	Olfaction and odor discrimination are mediated by the <i>C. elegans</i> guanylyl cyclase ODR-1. <i>Neuron</i> , 2000 , 25, 575-86	13.9	191
107	Ca ²⁺ signaling via the neuronal calcium sensor-1 regulates associative learning and memory in <i>C. elegans</i> . <i>Neuron</i> , 2001 , 30, 241-8	13.9	190

106	Social feeding in <i>Caenorhabditis elegans</i> is induced by neurons that detect aversive stimuli. <i>Nature</i> , 2002 , 419, 899-903	50.4	188
105	<i>C. elegans</i> slit acts in midline, dorsal-ventral, and anterior-posterior guidance via the SAX-3/Robo receptor. <i>Neuron</i> , 2001 , 32, 25-38	13.9	184
104	Parallel evolution of domesticated <i>Caenorhabditis</i> species targets pheromone receptor genes. <i>Nature</i> , 2011 , 477, 321-5	50.4	182
103	Oxytocin/vasopressin-related peptides have an ancient role in reproductive behavior. <i>Science</i> , 2012 , 338, 540-3	33.3	179
102	Quantitative mapping of a digenic behavioral trait implicates globin variation in <i>C. elegans</i> sensory behaviors. <i>Neuron</i> , 2009 , 61, 692-9	13.9	177
101	<i>C. elegans</i> odour discrimination requires asymmetric diversity in olfactory neurons. <i>Nature</i> , 2001 , 410, 698-701	50.4	176
100	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> , 2001 , 128, 4475-4488	6.6	170
99	High-content behavioral analysis of <i>Caenorhabditis elegans</i> in precise spatiotemporal chemical environments. <i>Nature Methods</i> , 2011 , 8, 599-605	21.6	168
98	Innate immunity in <i>Caenorhabditis elegans</i> is regulated by neurons expressing NPR-1/GPCR. <i>Science</i> , 2008 , 322, 460-4	33.3	166
97	Neuropeptide feedback modifies odor-evoked dynamics in <i>Caenorhabditis elegans</i> olfactory neurons. <i>Nature Neuroscience</i> , 2010 , 13, 615-21	25.5	164
96	A distributed chemosensory circuit for oxygen preference in <i>C. elegans</i> . <i>PLoS Biology</i> , 2006 , 4, e274	9.7	163
95	The CaMKII UNC-43 activates the MAPKKK NSY-1 to execute a lateral signaling decision required for asymmetric olfactory neuron fates. <i>Cell</i> , 2001 , 105, 221-32	56.2	162
94	Wnt signals and frizzled activity orient anterior-posterior axon outgrowth in <i>C. elegans</i> . <i>Developmental Cell</i> , 2006 , 10, 379-90	10.2	154
93	The SAD-1 kinase regulates presynaptic vesicle clustering and axon termination. <i>Neuron</i> , 2001 , 29, 115-29	33.9	151
92	The <i>C. elegans</i> gene <i>odr-7</i> encodes an olfactory-specific member of the nuclear receptor superfamily. <i>Cell</i> , 1994 , 79, 971-80	56.2	148
91	The cyclic GMP-dependent protein kinase EGL-4 regulates olfactory adaptation in <i>C. elegans</i> . <i>Neuron</i> , 2002 , 36, 1079-89	13.9	145
90	Catecholamine receptor polymorphisms affect decision-making in <i>C. elegans</i> . <i>Nature</i> , 2011 , 472, 313-8	50.4	141
89	Feedback from network states generates variability in a probabilistic olfactory circuit. <i>Cell</i> , 2015 , 161, 215-27	56.2	137

88	Hierarchical assembly of presynaptic components in defined <i>C. elegans</i> synapses. <i>Nature Neuroscience</i> , 2006 , 9, 1488-98	25.5	137
87	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> , 2002 , 5, 1147-54	25.5	135
86	Polarized dendritic transport and the AP-1 mu1 clathrin adaptor UNC-101 localize odorant receptors to olfactory cilia. <i>Neuron</i> , 2001 , 31, 277-87	13.9	135
85	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> , 2014 , 111, 2770-5	11.5	132
84	Multiple Wnts and frizzled receptors regulate anteriorly directed cell and growth cone migrations in <i>Caenorhabditis elegans</i> . <i>Developmental Cell</i> , 2006 , 10, 367-77	10.2	132
83	Specific polyunsaturated fatty acids drive TRPV-dependent sensory signaling in vivo. <i>Cell</i> , 2004 , 119, 889-900	56.2	132
82	A Toll-interleukin 1 repeat protein at the synapse specifies asymmetric odorant receptor expression via ASK1 MAPKKK signaling. <i>Genes and Development</i> , 2005 , 19, 270-81	12.6	131
81	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> , 2013 , 110, E4266-73	11.5	125
80	Signal transduction in the <i>Caenorhabditis elegans</i> nervous system. <i>Annual Review of Neuroscience</i> , 1998 , 21, 279-308	17	122
79	The BRAIN Initiative: developing technology to catalyse neuroscience discovery. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2015 , 370,	5.8	119
78	Genetic and cellular analysis of behavior in <i>C. elegans</i> . <i>Annual Review of Neuroscience</i> , 1993 , 16, 47-71	17	119
77	Otx/otd homeobox genes specify distinct sensory neuron identities in <i>C. elegans</i> . <i>Developmental Cell</i> , 2003 , 5, 621-33	10.2	114
76	UNC-33 (CRMP) and ankyrin organize microtubules and localize kinesin to polarize axon-dendrite sorting. <i>Nature Neuroscience</i> , 2011 , 15, 48-56	25.5	110
75	MIG-10/lamellipodin and AGE-1/PI3K promote axon guidance and outgrowth in response to slit and netrin. <i>Current Biology</i> , 2006 , 16, 854-62	6.3	108
74	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> , 1997 , 94, 10438-43	11.5	106
73	SEK-1 MAPKK mediates Ca ²⁺ signaling to determine neuronal asymmetric development in <i>Caenorhabditis elegans</i> . <i>EMBO Reports</i> , 2002 , 3, 56-62	6.5	104
72	Neuromodulatory state and sex specify alternative behaviors through antagonistic synaptic pathways in <i>C. elegans</i> . <i>Neuron</i> , 2012 , 75, 585-92	13.9	100
71	An innexin-dependent cell network establishes left-right neuronal asymmetry in <i>C. elegans</i> . <i>Cell</i> , 2007 , 129, 787-99	56.2	100

70	Mechanosensory neurite termination and tiling depend on SAX-2 and the SAX-1 kinase. <i>Neuron</i> , 2004 , 44, 239-49	13.9	95
69	A behavioral switch: cGMP and PKC signaling in olfactory neurons reverses odor preference in <i>C. elegans</i> . <i>Neuron</i> , 2008 , 59, 959-71	13.9	93
68	Balancing selection shapes density-dependent foraging behaviour. <i>Nature</i> , 2016 , 539, 254-258	50.4	89
67	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> , 1997 , 94, 12162-7	11.5	89
66	Functional reconstitution of a heteromeric cyclic nucleotide-gated channel of <i>Caenorhabditis elegans</i> in cultured cells. <i>Brain Research</i> , 1999 , 821, 160-8	3.7	87
65	Temporal responses of <i>C. elegans</i> chemosensory neurons are preserved in behavioral dynamics. <i>Neuron</i> , 2014 , 81, 616-28	13.9	84
64	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> , 2000 , 11, 3177-90	3.5	83
63	UNC-115, a conserved protein with predicted LIM and actin-binding domains, mediates axon guidance in <i>C. elegans</i> . <i>Neuron</i> , 1998 , 21, 385-92	13.9	82
62	Distinct Circuits for the Formation and Retrieval of an Imprinted Olfactory Memory. <i>Cell</i> , 2016 , 164, 632-46	46.2	81
61	TRP channels in <i>C. elegans</i> . <i>Annual Review of Physiology</i> , 2006 , 68, 719-36	23.1	81
60	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> , 2001 , 98, 11032-8	11.5	80
59	Olfactory receptors, vomeronasal receptors, and the organization of olfactory information. <i>Cell</i> , 1997 , 90, 585-7	56.2	79
58	The <i>Caenorhabditis elegans</i> odr-2 gene encodes a novel Ly-6-related protein required for olfaction. <i>Genetics</i> , 2001 , 157, 211-24	4	79
57	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> , 2011 , 31, 3007-15	6.6	78
56	Laser microsurgery in <i>Caenorhabditis elegans</i> . <i>Methods in Cell Biology</i> , 2012 , 107, 177-206	1.8	77
55	A Circuit for Gradient Climbing in <i>C. elegans</i> Chemotaxis. <i>Cell Reports</i> , 2015 , 12, 1748-60	10.6	76
54	Invertebrate nociception: behaviors, neurons and molecules. <i>Journal of Neurobiology</i> , 2004 , 61, 161-74		74
53	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> , 2008 , 105, 7321-6	11.5	72

52	Genetic contributions to behavioural diversity at the gene-environment interface. <i>Nature Reviews Genetics</i> , 2011 , 12, 809-20	30.1	70
51	Presynaptic CaV2 calcium channel traffic requires CALF-1 and the alpha(2)delta subunit UNC-36. <i>Nature Neuroscience</i> , 2009 , 12, 1257-65	25.5	67
50	. <i>ELife</i> , 2016 , 5,	8.9	67
49	Neuromodulatory Control of Long-Term Behavioral Patterns and Individuality across Development. <i>Cell</i> , 2017 , 171, 1649-1662.e10	56.2	60
48	Inhibition of netrin-mediated axon attraction by a receptor protein tyrosine phosphatase. <i>Science</i> , 2004 , 305, 103-6	33.3	55
47	The tripartite motif protein MADD-2 functions with the receptor UNC-40 (DCC) in Netrin-mediated axon attraction and branching. <i>Developmental Cell</i> , 2010 , 18, 950-60	10.2	53
46	Specific expression of channelrhodopsin-2 in single neurons of <i>Caenorhabditis elegans</i> . <i>PLoS ONE</i> , 2012 , 7, e43164	3.7	53
45	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> , 2007 , 2, 24	3.9	52
44	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> , 2009 , 136, 3801-10	6.6	51
43	Regulatory changes in two chemoreceptor genes contribute to a QTL for foraging behavior. <i>ELife</i> , 2016 , 5,	8.9	49
42	Multigenic natural variation underlies <i>Caenorhabditis elegans</i> olfactory preference for the bacterial pathogen <i>Serratia marcescens</i> . <i>G3: Genes, Genomes, Genetics</i> , 2014 , 4, 265-76	3.2	48
41	MultiFocus Polarization Microscope (MF-PolScope) for 3D polarization imaging of up to 25 focal planes simultaneously. <i>Optics Express</i> , 2015 , 23, 7734-54	3.3	46
40	The Brain Research Through Advancing Innovative Neurotechnologies (BRAIN) initiative and neurology. <i>JAMA Neurology</i> , 2014 , 71, 675-6	17.2	46
39	<i>C. elegans</i> AWA Olfactory Neurons Fire Calcium-Mediated All-or-None Action Potentials. <i>Cell</i> , 2018 , 175, 57-70.e17	56.2	45
38	Transcriptional regulation and stabilization of left-right neuronal identity in <i>C. elegans</i> . <i>Genes and Development</i> , 2009 , 23, 345-58	12.6	44
37	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> , 2012 , 8, e1003157	6	36
36	The claudin superfamily protein <i>nsy-4</i> biases lateral signaling to generate left-right asymmetry in <i>C. elegans</i> olfactory neurons. <i>Neuron</i> , 2006 , 51, 291-302	13.9	36
35	Identification of transcriptional regulatory elements in chemosensory receptor genes by probabilistic segmentation. <i>Current Biology</i> , 2005 , 15, 347-52	6.3	35

34	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> , 2011 , 138, 3509-18	6.6	34
33	Parallel encoding of sensory history and behavioral preference during <i>Caenorhabditis elegans</i> olfactory learning. <i>ELife</i> , 2016 , 5,	8.9	32
32	Parallel Multimodal Circuits Control an Innate Foraging Behavior. <i>Neuron</i> , 2019 , 102, 407-419.e8	13.9	31
31	Multifocus microscopy with precise color multi-phase diffractive optics applied in functional neuronal imaging. <i>Biomedical Optics Express</i> , 2016 , 7, 855-69	3.5	30
30	Control of neuronal subtype identity by the <i>C. elegans</i> ARID protein CFI-1. <i>Genes and Development</i> , 2002 , 16, 972-83	12.6	30
29	The homeodomain protein hmbx-1 maintains asymmetric gene expression in adult <i>C. elegans</i> olfactory neurons. <i>Genes and Development</i> , 2010 , 24, 1802-15	12.6	28
28	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> , 2017 , 114, E1263-E1272	11.5	24
27	Oxytocin mediated behavior in invertebrates: An evolutionary perspective. <i>Developmental Neurobiology</i> , 2017 , 77, 128-142	3.2	24
26	Single ionic channels of two <i>Caenorhabditis elegans</i> chemosensory neurons in native membrane. <i>Journal of Membrane Biology</i> , 2002 , 189, 55-66	2.3	20
25	Molecular mechanisms of mechanosensation?. <i>Cell</i> , 1994 , 78, 729-31	56.2	20
24	Reliability of an interneuron response depends on an integrated sensory state. <i>ELife</i> , 2019 , 8,	8.9	16
23	Diverse modes of synaptic signaling, regulation, and plasticity distinguish two classes of glutamatergic neurons. <i>ELife</i> , 2017 , 6,	8.9	14
22	A natural variant and engineered mutation in a GPCR promote DEET resistance in <i>C. elegans</i> . <i>Nature</i> , 2018 , 562, 119-123	50.4	14
21	Cell fate specification and differentiation in the nervous system of <i>Caenorhabditis elegans</i> . <i>Genesis</i> , 1996 , 18, 73-80		11
20	Author response: Sensitive red protein calcium indicators for imaging neural activity 2016 ,		9
19	Acute behavioral responses to pheromones in <i>C. elegans</i> (adult behaviors: attraction, repulsion). <i>Methods in Molecular Biology</i> , 2013 , 1068, 285-92	1.4	8
18	An Adaptive-Threshold Mechanism for Odor Sensation and Animal Navigation. <i>Neuron</i> , 2020 , 105, 534-548.	13.9	136
17	The cellular and genetic basis of olfactory responses in <i>Caenorhabditis elegans</i> . <i>Novartis Foundation Symposium</i> , 1993 , 179, 235-44; discussion 244-50		6

16	Death from natural and unnatural causes. <i>Current Biology</i> , 1991 , 1, 388-90	6.3	5
15	What the BRAIN Initiative means for psychiatry. <i>American Journal of Psychiatry</i> , 2014 , 171, 1038-40	11.9	4
14	A complex sensory map for pheromones. <i>Neuron</i> , 1999 , 22, 640-2	13.9	4
13	Behavioral control by depolarized and hyperpolarized states of an integrating neuron. <i>ELife</i> , 2021 , 10,	8.9	4
12	An oxytocin/vasopressin-related neuropeptide modulates social foraging behavior in the clonal raider ant. <i>PLoS Biology</i> , 2021 , 19, e3001305	9.7	4
11	How the New Neuroscience Will Advance Medicine. <i>JAMA - Journal of the American Medical Association</i> , 2015 , 314, 221-2	27.4	3
10	Synaptic Specificity Is Generated by the Synaptic Guidepost Protein SYG-2 and Its Receptor, SYG-1. <i>Cell</i> , 2004 , 117, 553	56.2	3
9	Neuroscience: comradie and nostalgia in nematodes. <i>Current Biology</i> , 2005 , 15, R832-3	6.3	2
8	Accolade for elegans. <i>Cell</i> , 2002 , 111, 759-62	56.2	2
7	Author response: Regulatory changes in two chemoreceptor genes contribute to a <i>Caenorhabditis elegans</i> QTL for foraging behavior 2016 ,		2
6	Sensitive red protein calcium indicators for imaging neural activity		2
5	Behavioral control by depolarized and hyperpolarized states of an integrating neuron by		2
4	Simple organisms. <i>Neurobiology of Disease</i> , 2000 , 7, 520-2	7.5	1
3	Parallel multimodal circuits control an innate foraging behavior		1
2	Neuroscience. The mind of a male?. <i>Science</i> , 2012 , 337, 416-7	33.3	
1	In appreciation of Lawrence C. Katz, 1956-2005. <i>Neuron</i> , 2005 , 48, 897-900	13.9	