Erik M Jorgensen

List of Publications by Year
in descending order

126 papers	15,500 citations	19636 61 h-index	19726 117 g-index
136 all docs	136 docs citations	136 times ranked	12400 citing authors

#	Article	IF	Citations
1	Single-copy insertion of transgenes in Caenorhabditis elegans. Nature Genetics, 2008, 40, 1375-1383.	9.4	1,057
2	Identification and characterization of the vesicular GABA transporter. Nature, 1997, 389, 870-876.	13.7	809
3	UNC-13 is required for synaptic vesicle fusion in C. elegans. Nature Neuroscience, 1999, 2, 959-964.	7.1	547
4	One GABA and two acetylcholine receptors function at the C. elegans neuromuscular junction. Nature Neuroscience, 1999, 2, 791-797.	7.1	538
5	Ultrafast endocytosis at mouse hippocampal synapses. Nature, 2013, 504, 242-247.	13.7	502
6	Improved Mos1-mediated transgenesis in C. elegans. Nature Methods, 2012, 9, 117-118.	9.0	397
7	Axon Regeneration Requires a Conserved MAP Kinase Pathway. Science, 2009, 323, 802-806.	6.0	387
8	The art and design of genetic screens: Caenorhabditis elegans. Nature Reviews Genetics, 2002, 3, 356-369.	7.7	385
9	An open form of syntaxin bypasses the requirement for UNC-13 in vesicle priming. Nature, 2001, 412, 338-341.	13.7	380
10	Caenorhabditis elegans rab-3Mutant Synapses Exhibit Impaired Function and Are Partially Depleted of Vesicles. Journal of Neuroscience, 1997, 17, 8061-8073.	1.7	350
11	Protein localization in electron micrographs using fluorescence nanoscopy. Nature Methods, 2011, 8, 80-84.	9.0	339
12	Random and targeted transgene insertion in Caenorhabditis elegans using a modified Mos1 transposon. Nature Methods, 2014, 11, 529-534.	9.0	321
13	Rapid single nucleotide polymorphism mapping in C. elegans. BMC Genomics, 2005, 6, 118.	1.2	314
14	Defective recycling of synaptic vesicles in synaptotagmin mutants of Caenorhabditis elegans. Nature, 1995, 378, 196-199.	13.7	303
15	A post-docking role for active zone protein Rim. Nature Neuroscience, 2001, 4, 997-1005.	7.1	291
16	Clathrin regenerates synaptic vesicles from endosomes. Nature, 2014, 515, 228-233.	13.7	272
17	UNC-31 (CAPS) Is Required for Dense-Core Vesicle But Not Synaptic Vesicle Exocytosis in Caenorhabditis elegans. Journal of Neuroscience, 2007, 27, 6150-6162.	1.7	261
18	Endophilin Is Required for Synaptic Vesicle Endocytosis by Localizing Synaptojanin. Neuron, 2003, 40, 749-762.	3.8	253

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19	UNC-11, aCaenorhabditis elegansAP180 Homologue, Regulates the Size and Protein Composition of Synaptic Vesicles. Molecular Biology of the Cell, 1999, 10, 2343-2360.	0.9	251
20	Mutations in Synaptojanin Disrupt Synaptic Vesicle Recycling. Journal of Cell Biology, 2000, 150, 589-600.	2.3	247
21	Defects in synaptic vesicle docking in unc-18 mutants. Nature Neuroscience, 2003, 6, 1023-1030.	7.1	244
22	Glycolytic Enzymes Localize to Synapses under Energy Stress to Support Synaptic Function. Neuron, 2016, 90, 278-291.	3.8	222
23	Ultrafast endocytosis at Caenorhabditis elegans neuromuscular junctions. ELife, 2013, 2, e00723.	2.8	209
24	Axons break in animals lacking Î²-spectrin. Journal of Cell Biology, 2007, 176, 269-275.	2.3	207
25	The Inositol Trisphosphate Receptor Regulates a 50-Second Behavioral Rhythm in C. elegans. Cell, 1999, 98, 757-767.	13.5	195
26	TheCaenorhabditis elegans unc-49Locus Encodes Multiple Subunits of a Heteromultimeric GABA Receptor. Journal of Neuroscience, 1999, 19, 5348-5359.	1.7	193
27	C. elegans AP-2 and Retromer Control Wnt Signaling by Regulating MIG-14/Wntless. Developmental Cell, 2008, 14, 132-139.	3.1	189
28	Induction and repair of zinc-finger nuclease-targeted double-strand breaks in Caenorhabditis elegans somatic cells. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 16370-16375.	3.3	175
29	Open Syntaxin Docks Synaptic Vesicles. PLoS Biology, 2007, 5, e198.	2.6	164
30	EXP-1 is an excitatory GABA-gated cation channel. Nature Neuroscience, 2003, 6, 1145-1152.	7.1	159
31	SapTrap, a Toolkit for High-Throughput CRISPR/Cas9 Gene Modification in Caenorhabditis elegans. Genetics, 2016, 202, 1277-1288.	1.2	157
32	The Sensory Circuitry for Sexual Attraction in C. elegans Males. Current Biology, 2007, 17, 1847-1857.	1.8	156
33	UNC119 is required for G protein trafficking in sensory neurons. Nature Neuroscience, 2011, 14, 874-880.	7.1	154
34	The GABA nervous system in C. elegans. Trends in Neurosciences, 2004, 27, 407-414.	4.2	148
35	Mobilization of a Drosophila transposon in the Caenorhabditis elegans germ line. Nature, 2001, 413, 70-74.	13.7	147
36	Two Cyclin-Dependent Kinase Pathways Are Essential for Polarized Trafficking of Presynaptic Components. Cell, 2010, 141, 846-858.	13.5	144

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37	Complexin Maintains Vesicles in the Primed State in C.Âelegans. Current Biology, 2011, 21, 106-113.	1.8	141
38	Long chain polyunsaturated fatty acids are required for efficient neurotransmission in C. elegans. Journal of Cell Science, 2003, 116, 4965-4975.	1.2	139
39	Graded synaptic transmission at the Caenorhabditis elegans neuromuscular junction. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 10823-10828.	3.3	134
40	Membrane tension regulates motility by controlling lamellipodium organization. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 11429-11434.	3.3	126
41	Gene Activation Using FLP Recombinase in C. elegans. PLoS Genetics, 2008, 4, e1000028.	1.5	120
42	Protons Act as a Transmitter for MuscleÂContraction in C. elegans. Cell, 2008, 132, 149-160.	13.5	117
43	Preservation of Immunoreactivity and Fine Structure of Adult C. elegans Tissues Using High-pressure Freezing. Journal of Histochemistry and Cytochemistry, 2004, 52, 1-12.	1.3	116
44	Syntaxin N-terminal peptide motif is an initiation factor for the assembly of the SNAREâ€“Sec1/Munc18 membrane fusion complex. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 22399-22406.	3.3	114
45	Mutations in Î²-Spectrin Disrupt Axon Outgrowth and Sarcomere Structure. Journal of Cell Biology, 2000, 149, 931-942.	2.3	112
46	Visualizing presynaptic function. Nature Neuroscience, 2014, 17, 10-16.	7.1	112
47	A Neuronal Acetylcholine Receptor Regulates the Balance of Muscle Excitation and Inhibition in Caenorhabditis elegans. PLoS Biology, 2009, 7, e1000265.	2.6	111
48	Targeted gene deletions in C. elegans using transposon excision. Nature Methods, 2010, 7, 451-453.	9.0	94
49	An Abundant Class of Non-coding DNA Can Prevent Stochastic Gene Silencing in the C.Âelegans Germline. Cell, 2016, 166, 343-357.	13.5	92
50	Synaptic vesicles transiently dock to refill release sites. Nature Neuroscience, 2020, 23, 1329-1338.	7.1	92
51	UNC-80 and the NCA Ion Channels Contribute to Endocytosis Defects in Synaptojanin Mutants. Current Biology, 2007, 17, 1595-1600.	1.8	90
52	CAPS and syntaxin dock dense core vesicles to the plasma membrane in neurons. Journal of Cell Biology, 2008, 180, 483-491.	2.3	88
53	Axon Regeneration Genes Identified by RNAi Screening inC. elegans. Journal of Neuroscience, 2014, 34, 629-645.	1.7	87
54	Axons Degenerate in the Absence of Mitochondria in C.Âelegans. Current Biology, 2014, 24, 760-765.	1.8	86

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55	Synaptojanin and Endophilin Mediate Neck Formation during Ultrafast Endocytosis. Neuron, 2018, 98, 1184-1197.e6.	3.8	85
56	Trioâ€™s Rho-specific GEF domain is the missing GÎ±_q effector in C. elegans. Genes and Development, 2007, 21, 2731-2746.	2.7	84
57	Detection of neuron membranes in electron microscopy images using a serial neural network architecture. Medical Image Analysis, 2010, 14, 770-783.	7.0	81
58	Differential requirements for clathrin in receptor-mediated endocytosis and maintenance of synaptic vesicle pools. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 1139-1144.	3.3	75
59	The membrane-associated proteins FCHo and SGIP are allosteric activators of the AP2 clathrin adaptor complex. ELife, 2014, 3, .	2.8	75
60	Exciting Cell Membranes with a Blustering Heat Shock. Biophysical Journal, 2014, 106, 1570-1577.	0.2	69
61	Two Rab2 Interactors Regulate Dense-Core Vesicle Maturation. Neuron, 2014, 82, 167-180.	3.8	69
62	GABA. WormBook, 2005, , 1-13.	5.3	69
63	CYY-1/Cyclin Y and CDK-5 Differentially Regulate Synapse Elimination and Formation for Rewiring Neural Circuits. Neuron, 2011, 70, 742-757.	3.8	68
64	Synapse Location during Growth Depends on Glia Location. Cell, 2013, 154, 337-350.	13.5	68
65	Transcriptional profiling of C. elegans DAF-19 uncovers a ciliary base-associated protein and a CDK/CCRK/LF2p-related kinase required for intraflagellar transport. Developmental Biology, 2011, 357, 235-247.	0.9	65
66	Molecular basis of synaptic vesicle cargo recognition by the endocytic sorting adaptor stonin 2. Journal of Cell Biology, 2007, 179, 1497-1510.	2.3	64
67	AP2 hemicomplexes contribute independently to synaptic vesicle endocytosis. ELife, 2013, 2, e00190.	2.8	63
68	A Calcium Wave Mediated by Gap Junctions Coordinates a Rhythmic Behavior in C. elegans. Current Biology, 2007, 17, 1601-1608.	1.8	61
69	NECAP 1 Regulates AP-2 Interactions to Control Vesicle Size, Number, and Cargo During Clathrin-Mediated Endocytosis. PLoS Biology, 2013, 11, e1001670.	2.6	61
70	Î³-Neurexin and Frizzled Mediate Parallel Synapse Assembly Pathways Antagonized by Receptor Endocytosis. Neuron, 2018, 100, 150-166.e4.	3.8	57
71	Controversies in synaptic vesicle exocytosis. Journal of Cell Science, 2003, 116, 3661-3666.	1.2	56
72	Sensation in a Single Neuron Pair Represses Male Behavior in Hermaphrodites. Neuron, 2012, 75, 593-600.	3.8	55

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73	Two Clathrin Adaptor Protein Complexes Instruct Axon-Dendrite Polarity. Neuron, 2016, 90, 564-580.	3.8	55
74	The composition of the GABA receptor at the Caenorhabditis elegans neuromuscular junction. British Journal of Pharmacology, 2005, 144, 502-509.	2.7	52
75	Pharmacological characterization of the homomeric and heteromeric UNC-49 GABA receptors in C. elegans. British Journal of Pharmacology, 2003, 138, 883-893.	2.7	50
76	UNC-46 is required for trafficking of the vesicular GABA transporter. Nature Neuroscience, 2007, 10, 846-853.	7.1	48
77	Opposing Activities of LIT-1/NLK and DAF-6/Patched-Related Direct Sensory Compartment Morphogenesis in C. elegans. PLoS Biology, 2011, 9, e1001121.	2.6	47
78	Î¼2 adaptin facilitates but is not essential for synaptic vesicle recycling inCaenorhabditis elegans. Journal of Cell Biology, 2008, 183, 881-892.	2.3	45
79	Rules of Nonallelic Noncomplementation at the Synapse in Caenorhabditis elegans. Genetics, 2001, 158, 209-220.	1.2	45
80	Characterization of Mos1-Mediated Mutagenesis in Caenorhabditis elegans. Genetics, 2005, 169, 1779-1785.	1.2	44
81	Betaine acts on a ligand-gated ion channel in the nervous system of the nematode C. elegans. Nature Neuroscience, 2013, 16, 1794-1801.	7.1	41
82	C. elegans neuroscience: genetics to genome. Trends in Genetics, 1998, 14, 506-512.	2.9	38
83	Heterozygous Insertions Alter Crossover Distribution but Allow Crossover Interference in Caenorhabditis elegans. Genetics, 2005, 171, 1047-1056.	1.2	38
84	Plasma membrane tension regulates eisosome structure and function. Molecular Biology of the Cell, 2020, 31, 287-303.	0.9	38
85	Neuromuscular junctions in the nematode C. elegans. Seminars in Developmental Biology, 1995, 6, 207-220.	1.3	37
86	Gene Conversion and End-Joining-Repair Double-Strand Breaks in the Caenorhabditis elegans Germline. Genetics, 2008, 180, 673-679.	1.2	36
87	NALCN channelopathies. Neurology, 2016, 87, 1131-1139.	1.5	36
88	NEUROSCIENCE: Vesicular Glutamate Transporter–Shooting Blanks. Science, 2004, 304, 1750-1752.	6.0	29
89	Synaptic tetraspan vesicle membrane proteins are conserved but not needed for synaptogenesis and neuronal function in Caenorhabditis elegans. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 8227-8232.	3.3	28
90	UNC-41/Stonin Functions with AP2 to Recycle Synaptic Vesicles in Caenorhabditis elegans. PLoS ONE, 2012, 7, e40095.	1.1	28

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91	Wormwholes: A Commentary on K. F. Schaffner's "Genes, Behavior, and Developmental Emergentism". Philosophy of Science, 1998, 65, 259-266.	0.5	26
92	The NCA-1 and NCA-2 Ion Channels Function Downstream of Gq and Rho To Regulate Locomotion in Caenorhabditis elegans. Genetics, 2017, 206, 265-282.	1.2	26
93	Hyperactivation of B-Type Motor Neurons Results in Aberrant Synchrony of theCaenorhabditis elegansMotor Circuit. Journal of Neuroscience, 2013, 33, 5319-5325.	1.7	25
94	Semi-Automated Neuron Boundary Detection and Nonbranching Process Segmentation in Electron Microscopy Images. Neuroinformatics, 2013, 11, 5-29.	1.5	24
95	Spillover Transmission Is Mediated by the Excitatory GABA Receptor LGC-35 inC. elegans. Journal of Neuroscience, 2015, 35, 2803-2816.	1.7	24
96	Animal Evolution: Looking for the First Nervous System. Current Biology, 2014, 24, R655-R658.	1.8	23
97	Studies of Synaptic Vesicle Endocytosis in the Nematode C. elegans. Traffic, 2001, 2, 597-605.	1.3	22
98	Visualizing Proteins in Electron Micrographs at Nanometer Resolution. Methods in Cell Biology, 2012, 111, 283-306.	0.5	22
99	SynapsEM: Computer-Assisted Synapse Morphometry. Frontiers in Synaptic Neuroscience, 2020, 12, 584549.	1.3	20
100	SLO BK Potassium Channels Couple Gap Junctions to Inhibition of Calcium Signaling in Olfactory Neuron Diversification. PLoS Genetics, 2016, 12, e1005654.	1.5	20
101	Characterization of a dominant negativeC. elegansTwist mutant protein with implications for human Saethre-Chotzen syndrome. Development (Cambridge), 2002, 129, 2761-2772.	1.2	20
102	Organometallic Derivatization of the Nematocidal Drug Monepantel Leads to Promising Antiparasitic Drug Candidates. Chemistry - A European Journal, 2016, 22, 16602-16612.	1.7	19
103	Unc13 Aligns SNAREs and Superprimes Synaptic Vesicles. Neuron, 2017, 95, 473-475.	3.8	19
104	Residues in the first transmembrane domain of the Caenorhabditis elegans GABAA receptor confer sensitivity to the neurosteroid pregnenolone sulfate. British Journal of Pharmacology, 2006, 148, 162-172.	2.7	18
105	Analysis of alin-42/periodNull Allele Implicates All Three Isoforms in Regulation ofCaenorhabditis elegansMolting and Developmental Timing. G3: Genes, Genomes, Genetics, 2016, 6, 4077-4086.	0.8	18
106	High-efficiency CRISPR gene editing in C. elegans using Cas9 integrated into the genome. PLoS Genetics, 2021, 17, e1009755.	1.5	18
107	V-ATPase V1 Sector Is Required for Corpse Clearance and Neurotransmission in Caenorhabditis elegans. Genetics, 2012, 191, 461-475.	1.2	17
108	Asymmetric packaging of polymerases within vesicular stomatitis virus. Biochemical and Biophysical Research Communications, 2013, 440, 271-276.	1.0	16

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109	AIP limits neurotransmitter release by inhibiting calcium bursts from the ryanodine receptor. Nature Communications, 2017, 8, 1380.	5.8	16
110	Casein Kinase 1Î´ Stabilizes Mature Axons by Inhibiting Transcription Termination of Ankyrin. Developmental Cell, 2020, 52, 88-103.e18.	3.1	15
111	Comparative Peptidomic and Metatranscriptomic Analyses Reveal Improved Gamma-Amino Butyric Acid Production Machinery in Levilactobacillus brevis Strain NPS-QW 145 Cocultured with Streptococcus thermophilus Strain ASCC1275 during Milk Fermentation. Applied and Environmental Microbiology, 2020, 87, .	1.4	12
112	The Plasma Membrane Calcium ATPase MCA-3 is Required for Clathrin-Mediated Endocytosis in Scavenger Cells of Caenorhabditis elegans. Traffic, 2007, 8, 543-553.	1.3	11
113	Brain Slice Staining and Preparation for Three-Dimensional Super-Resolution Microscopy. Methods in Molecular Biology, 2017, 1663, 153-162.	0.4	10
114	Dopamine: should I stay or should I go now?. Nature Neuroscience, 2004, 7, 1019-1021.	7.1	9
115	Scan-less machine-learning-enabled incoherent microscopy for minimally-invasive deep-brain imaging. Optics Express, 2022, 30, 1546.	1.7	8
116	PKC Defends Crown Against Munc13. Neuron, 2007, 54, 179-180.	3.8	7
117	Improved localization accuracy in stochastic super-resolution fluorescence microscopy by K-factor image deshadowing. Biomedical Optics Express, 2014, 5, 244.	1.5	7
118	Muscle memory. Journal of Physiology, 2011, 589, 775-776.	1.3	4
119	Precisely Localizing Wavelength Sensitive Point-Spread Functions Engineered With a Silicon Oxide Phase Plate. Microscopy and Microanalysis, 2018, 24, 1364-1365.	0.2	4
120	Roles of SNARE Proteins in Synaptic Vesicle Fusion. , 2008, , 35-59.		4
121	Two views on light sheets. Nature Biotechnology, 2013, 31, 992-993.	9.4	2
122	A Proposed Method for Optimizing the Spectral Discernibility of Engineered Point-spread Functions for Localization Microscopy. Microscopy and Microanalysis, 2019, 25, 1232-1233.	0.2	2
123	Interspecies complementation identifies a pathway to assemble SNAREs. IScience, 2022, 25, 104506.	1.9	2
124	The mapping locus is encoded by a gain-of-function mutation in .. MicroPublication Biology, 2022, 2022, .	0.1	1
125	Calcium: an insignificant thing. Nature Neuroscience, 2009, 12, 1213-1214.	7.1	0
126	Image processing for super-resolution localization in fluorescence microscopy. , 2013, , .		0