Christine Holt

List of Publications by Year
in descending order

110 papers	16,784 citations	20817 60 h-index	24258 110 g-index
145 all docs	145 docs citations	145 times ranked	13393 citing authors

#	Article	IF	Citations
1	Receptor-Ribosome Coupling: A Link Between Extrinsic Signals and mRNA Translation in Neuronal Compartments. Annual Review of Neuroscience, 2022, 45, .	10.7	5
2	Axonal mRNA translation in neurological disorders. RNA Biology, 2021, 18, 936-961.	3.1	21
3	The structure and global distribution of the endoplasmic reticulum network are actively regulated by lysosomes. Science Advances, 2020, 6, .	10.3	58
4	Axon microdissection and transcriptome profiling reveals the in vivo RNA content of fully differentiated myelinated motor axons. Rna, 2020, 26, 595-612.	3.5	13
5	A Protocol for Single-Molecule Translation Imaging in Xenopus Retinal Ganglion Cells. Neuromethods, 2020, , 295-308.	0.3	0
6	Local translation in neurons: visualization and function. Nature Structural and Molecular Biology, 2019, 26, 557-566.	8.2	355
7	On-Site Ribosome Remodeling by Locally Synthesized Ribosomal Proteins in Axons. Cell Reports, 2019, 29, 3605-3619.e10.	6.4	103
8	Noncanonical Modulation of the eIF2 Pathway Controls an Increase in Local Translation during Neural Wiring. Molecular Cell, 2019, 73, 474-489.e5.	9.7	70
9	Late Endosomes Act as mRNA Translation Platforms and Sustain Mitochondria in Axons. Cell, 2019, 176, 56-72.e15.	28.9	300
10	Rapid changes in tissue mechanics regulate cell behaviour in the developing embryonic brain. ELife, 2019, 8, .	6.0	101
11	Receptor-specific interactome as a hub for rapid cue-induced selective translation in axons. ELife, 2019, 8, .	6.0	48
12	Axon-Axon Interactions Regulate Topographic Optic Tract Sorting via CYFIP2-Dependent WAVE Complex Function. Neuron, 2018, 97, 1078-1093.e6.	8.1	59
13	FUS Phase Separation Is Modulated by a Molecular Chaperone and Methylation of Arginine Cation-Ï€ Interactions. Cell, 2018, 173, 720-734.e15.	28.9	662
14	Molecular control of local translation in axon development and maintenance. Current Opinion in Neurobiology, 2018, 51, 86-94.	4.2	125
15	Axon-TRAP-RiboTag: Affinity Purification of Translated mRNAs from Neuronal Axons in Mouse In Vivo. Methods in Molecular Biology, 2018, 1649, 85-94.	0.9	20
16	Growth Cone Tctp Is Dynamically Regulated by Guidance Cues. Frontiers in Molecular Neuroscience, 2018, 11, 399.	2.9	14
17	Cue-Polarized Transport of Î²-actin mRNA Depends on 3â€²UTR and Microtubules in Live Growth Cones. Frontiers in Cellular Neuroscience, 2018, 12, 300.	3.7	20
18	Single-molecule analysis of endogenous Î²-actin mRNA trafficking reveals a mechanism for compartmentalized mRNA localization in axons. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E9697-E9706.	7.1	69

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19	Rapid Cue-Specific Remodeling of the Nascent Axonal Proteome. Neuron, 2018, 99, 29-46.e4.	8.1	136
20	Targeted Electroporation in the CNS in Xenopus Embryos. Methods in Molecular Biology, 2018, 1865, 119-131.	0.9	21
21	miR-182 Regulates Slit2-Mediated Axon Guidance by Modulating the Local Translation of a Specific mRNA. Cell Reports, 2017, 18, 1171-1186.	6.4	82
22	Single Molecule Translation Imaging Visualizes the Dynamics of Local Î²-Actin Synthesis in Retinal Axons. Scientific Reports, 2017, 7, 709.	3.3	53
23	RNA Docking and Local Translation Regulate Site-Specific Axon Remodeling InÂVivo. Neuron, 2017, 95, 852-868.e8.	8.1	163
24	Tctp in Neuronal Circuitry Assembly. Results and Problems in Cell Differentiation, 2017, 64, 201-215.	0.7	4
25	Filopodyan: An open-source pipeline for the analysis of filopodia. Journal of Cell Biology, 2017, 216, 3405-3422.	5.2	46
26	ESCRT-II controls retinal axon growth by regulating DCC receptor levels and local protein synthesis. Open Biology, 2016, 6, 150218.	3.6	45
27	Mechanosensing is critical for axon growth in the developing brain. Nature Neuroscience, 2016, 19, 1592-1598.	14.8	478
28	Hermes Regulates Axon Sorting in the Optic Tract by Post-Trancriptional Regulation of Neuropilin 1. Journal of Neuroscience, 2016, 36, 12697-12706.	3.6	18
29	Dynamic Axonal Translation in Developing and Mature Visual Circuits. Cell, 2016, 166, 181-192.	28.9	385
30	Tumor protein Tctp regulates axon development in the embryonic visual system. Development (Cambridge), 2016, 143, 1134-48.	2.5	45
31	Differential requirement of F-actin and microtubule cytoskeleton in cue-induced local protein synthesis in axonal growth cones. Neural Development, 2015, 10, 3.	2.4	53
32	ALS/FTD Mutation-Induced Phase Transition of FUS Liquid Droplets and Reversible Hydrogels into Irreversible Hydrogels Impairs RNP Granule Function. Neuron, 2015, 88, 678-690.	8.1	716
33	NF-Protocadherin Regulates Retinal Ganglion Cell Axon Behaviour in the Developing Visual System. PLoS ONE, 2015, 10, e0141290.	2.5	11
34	Protein Synthesis Dependence of Growth Cone Collapse Induced by Different Nogo-A-Domains. PLoS ONE, 2014, 9, e86820.	2.5	10
35	RNAâ€binding protein Vg1RBP regulates terminal arbor formation but not longâ€range axon navigation in the developing visual system. Developmental Neurobiology, 2014, 74, 303-318.	3.0	23
36	Introduction to the special issue on local protein synthesis in axons. Developmental Neurobiology, 2014, 74, 207-209.	3.0	8

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37	Rab5 and Rab4 Regulate Axon Elongation in the<i>Xenopus</i>Visual System. Journal of Neuroscience, 2014, 34, 373-391.	3.6	53
38	Remote Control of Gene Function by Local Translation. Cell, 2014, 157, 26-40.	28.9	273
39	RNA-Binding Protein Hermes/RBPMS Inversely Affects Synapse Density and Axon Arbor Formation in Retinal Ganglion Cells In Vivo. Journal of Neuroscience, 2013, 33, 10384-10395.	3.6	50
40	The Central Dogma Decentralized: New Perspectives on RNA Function and Local Translation in Neurons. Neuron, 2013, 80, 648-657.	8.1	473
41	RNA-based mechanisms underlying axon guidance. Journal of Cell Biology, 2013, 202, 991-999.	5.2	32
42	Coupling of NF-protocadherin signaling to axon guidance by cue-induced translation. Nature Neuroscience, 2013, 16, 166-173.	14.8	70
43	Role of microRNAs in Semaphorin function and neural circuit formation. Seminars in Cell and Developmental Biology, 2013, 24, 146-155.	5.0	24
44	RNA-binding proteins and translational regulation in axons and growth cones. Frontiers in Neuroscience, 2013, 7, 81.	2.8	65
45	Differing Semaphorin 3A Concentrations Trigger Distinct Signaling Mechanisms in Growth Cone Collapse. Journal of Neuroscience, 2012, 32, 8554-8559.	3.6	47
46	Local Translation of Extranuclear Lamin B Promotes Axon Maintenance. Cell, 2012, 148, 752-764.	28.9	244
47	miR-124 acts through CoREST to control onset of Sema3A sensitivity in navigating retinal growth cones. Nature Neuroscience, 2012, 15, 29-38.	14.8	107
48	Axonal mRNA localization and local protein synthesis in nervous system assembly, maintenance and repair. Nature Reviews Neuroscience, 2012, 13, 308-324.	10.2	424
49	14â€3â€3 proteins regulate retinal axon growth by modulating ADF/cofilin activity. Developmental Neurobiology, 2012, 72, 600-614.	3.0	19
50	Translational regulation in growth cones. Current Opinion in Genetics and Development, 2011, 21, 458-464.	3.3	31
51	Local translation of mRNAs in neural development. Wiley Interdisciplinary Reviews RNA, 2011, 2, 153-165.	6.4	28
52	Regulation of chemotropic guidance of nerve growth cones by microRNA. Molecular Brain, 2011, 4, 40.	2.6	28
53	Transcriptome analysis of embryonic and adult sensory axons reveals changes in mRNA repertoire localization. Rna, 2011, 17, 85-98.	3.5	343
54	Subcellular Profiling Reveals Distinct and Developmentally Regulated Repertoire of Growth Cone mRNAs. Journal of Neuroscience, 2010, 30, 15464-15478.	3.6	299

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55	E3 Ligase Nedd4 Promotes Axon Branching by Downregulating PTEN. Neuron, 2010, 65, 341-357.	8.1	220
56	Local Translation and mRNA Trafficking in Axon Pathfinding. Results and Problems in Cell Differentiation, 2009, 48, 108-138.	0.7	44
57	Cytoplasmic polyadenylation and cytoplasmic polyadenylation element-dependent mRNA regulation are involved in Xenopus retinal axon development. Neural Development, 2009, 4, 8.	2.4	47
58	Extracellular Engrailed Participates in the Topographic Guidance of Retinal Axons In Vivo. Neuron, 2009, 64, 355-366.	8.1	105
59	A functional equivalent of endoplasmic reticulum and Golgi in axons for secretion of locally synthesized proteins. Molecular and Cellular Neurosciences, 2009, 40, 128-142.	2.2	148
60	Axonal mRNAs: Characterisation and role in the growth and regeneration of dorsal root ganglion axons and growth cones. Molecular and Cellular Neurosciences, 2009, 42, 102-115.	2.2	81
61	Subcellular mRNA Localization in Animal Cells and Why It Matters. Science, 2009, 326, 1212-1216.	12.6	352
62	Live visualization of protein synthesis in axonal growth cones by microinjection of photoconvertible Kaede into Xenopus embryos. Nature Protocols, 2008, 3, 1318-1327.	12.0	49
63	Function and regulation of local axonal translation. Current Opinion in Neurobiology, 2008, 18, 60-68.	4.2	131
64	A Cytoskeletal Platform for Local Translation in Axons. Science Signaling, 2008, 1, pe11.	3.6	17
65	A role for S1P signalling in axon guidance in the<i>Xenopus</i>visual system. Development (Cambridge), 2008, 135, 333-342.	2.5	45
66	NF-Protocadherin and TAF1 Regulate Retinal Axon Initiation and Elongation<i>In Vivo</i>. Journal of Neuroscience, 2008, 28, 100-105.	3.6	66
67	Ena/VASP function in retinal axons is required for terminal arborization but not pathway navigation. Development (Cambridge), 2007, 134, 2137-2146.	2.5	62
68	Electroporation of cDNA/Morpholinos to targeted areas of embryonic CNS in Xenopus. BMC Developmental Biology, 2007, 7, 107.	2.1	95
69	Local translation and directional steering in axons. EMBO Journal, 2007, 26, 3729-3736.	7.8	169
70	The Role of Cyclic Nucleotides in Axon Guidance. Advances in Experimental Medicine and Biology, 2007, 621, 134-143.	1.6	33
71	Signaling Mechanisms Underlying Slit2-Induced Collapse of Xenopus Retinal Growth Cones. Neuron, 2006, 49, 215-228.	8.1	275
72	Asymmetrical Î²-actin mRNA translation in growth cones mediates attractive turning to netrin-1. Nature Neuroscience, 2006, 9, 1247-1256.	14.8	443

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73	Development. Current Opinion in Neurobiology, 2006, 16, 1-4.	4.2	86
74	A Molecular Mechanism for the Heparan Sulfate Dependence of Slit-Robo Signaling. Journal of Biological Chemistry, 2006, 281, 39693-39698.	3.4	99
75	Endocytosis-dependent desensitization and protein synthesisâ€“dependent resensitization in retinal growth cone adaptation. Nature Neuroscience, 2005, 8, 179-186.	14.8	161
76	SFRP1 regulates the growth of retinal ganglion cell axons through the Fz2 receptor. Nature Neuroscience, 2005, 8, 1301-1309.	14.8	132
77	The transcription factor Engrailed-2 guides retinal axons. Nature, 2005, 438, 94-98.	27.8	243
78	Axonal Protein Synthesis and Degradation Are Necessary for Efficient Growth Cone Regeneration. Journal of Neuroscience, 2005, 25, 331-342.	3.6	391
79	Sugar Codes for Axons?. Neuron, 2005, 46, 169-172.	8.1	102
80	Retinal axon guidance: novel mechanisms for steering. Current Opinion in Neurobiology, 2004, 14, 61-66.	4.2	55
81	Dedication to Friedrich Bonhoeffer. Journal of Neurobiology, 2004, 59, 1-2.	3.6	0
82	RNA TRANSLATION IN AXONS. Annual Review of Cell and Developmental Biology, 2004, 20, 505-523.	9.4	189
83	New views on retinal axon development: a navigation guide. International Journal of Developmental Biology, 2004, 48, 957-964.	0.6	57
84	B-type Eph receptors and ephrins induce growth cone collapse through distinct intracellular pathways. Journal of Neurobiology, 2003, 57, 323-336.	3.6	86
85	Apoptotic Pathway and MAPKs Differentially Regulate Chemotropic Responses of Retinal Growth Cones. Neuron, 2003, 37, 939-952.	8.1	271
86	Chondroitin sulfate disrupts axon pathfinding in the optic tract and alters growth cone dynamics. Journal of Neurobiology, 2002, 53, 330-342.	3.6	37
87	Specific heparan sulfate structures involved in retinal axon targeting. Development (Cambridge), 2002, 129, 61-70.	2.5	90
88	Chemotropic Responses of Retinal Growth Cones Mediated by Rapid Local Protein Synthesis and Degradation. Neuron, 2001, 32, 1013-1026.	8.1	754
89	Semaphorin 3A Elicits Stage-Dependent Collapse, Turning, and Branching in<i>Xenopus</i>Retinal Growth Cones. Journal of Neuroscience, 2001, 21, 8538-8547.	3.6	187
90	Receptor protein tyrosine phosphatases regulate retinal ganglion cell axon outgrowth in the developingXenopus visual system. Journal of Neurobiology, 2001, 49, 99-117.	3.6	45

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91	Control of retinal growth and axon divergence at the chiasm: lessons fromXenopus. BioEssays, 2001, 23, 319-326.	2.5	31
92	Xenopus Sprouty2 inhibits FGF-mediated gastrulation movements but does not affect mesoderm induction and patterning. Genes and Development, 2001, 15, 1152-1166.	5.9	141
93	The multiple decisions made by growth cones of RGCs as they navigate from the retina to the tectum inXenopus embryos. Journal of Neurobiology, 2000, 44, 246-259.	3.6	49
94	The multiple decisions made by growth cones of RGCs as they navigate from the retina to the tectum in Xenopus embryos. Journal of Neurobiology, 2000, 44, 246.	3.6	3
95	Growth-cone attraction to netrin-1 is converted to repulsion by laminin-1. Nature, 1999, 401, 69-73.	27.8	465
96	Fibroblast growth factor receptor signaling inXenopus retinal axon extension. Journal of Neurobiology, 1998, 37, 633-641.	3.6	65
97	A critical window for cooperation and competition among developing retinotectal synapses. Nature, 1998, 395, 37-44.	27.8	815
98	Overexpression of c-src and n-src in the DevelopingXenopusRetina Differentially Impairs Axonogenesis. Molecular and Cellular Neurosciences, 1997, 9, 276-292.	2.2	7
99	Turning of Retinal Growth Cones in a Netrin-1 Gradient Mediated by the Netrin Receptor DCC. Neuron, 1997, 19, 1211-1224.	8.1	284
100	cAMP-Dependent Growth Cone Guidance by Netrin-1. Neuron, 1997, 19, 1225-1235.	8.1	542
101	Growth factors: a role in guiding axons?. Trends in Cell Biology, 1997, 7, 424-430.	7.9	17
102	Inhibition of FGF Receptor Activity in Retinal Ganglion Cell Axons Causes Errors in Target Recognition. Neuron, 1996, 17, 245-254.	8.1	137
103	Cadherin Function Is Required for Axon Outgrowth in Retinal Ganglion Cells In Vivo. Neuron, 1996, 17, 837-848.	8.1	266
104	Expression and herbimycin A-sensitive localization of pp125FAK in retinal growth cones. NeuroReport, 1996, 7, 1133-1137.	1.2	9
105	FGF signaling and target recognition in the developing xenopus visual system. Neuron, 1995, 15, 1017-1028.	8.1	168
106	Position, guidance, and mapping in the developing visual system. Journal of Neurobiology, 1993, 24, 1400-1422.	3.6	117
107	Navigational errors made by growth cones without filopodia in the embryonic xenopus brain. Neuron, 1993, 11, 237-251.	8.1	264
108	Lipofection of cDNAs in the embryonic vertebrate central nervous system. Neuron, 1990, 4, 203-214.	8.1	259

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109	Effects of intraocular tetrodotoxin on the development of the retinocollicular pathway in the syrian hamster. Journal of Comparative Neurology, 1989, 282, 371-388.	1.6	69
110	Cellular determination in the xenopus retina is independent of lineage and birth date. Neuron, 1988, 1, 15-26.	8.1	624