Erika L F Holzbaur

List of Publications by Year
in descending order

106 papers	12,877 citations	26610 56 h-index	33869 99 g-index
125 all docs	125 docs citations	125 times ranked	13916 citing authors

#	Article	IF	Citations
1	Mutant dynactin in motor neuron disease. Nature Genetics, 2003, 33, 455-456.	9.4	884
2	Differential Regulation of Dynein and Kinesin Motor Proteins by Tau. Science, 2008, 319, 1086-1089.	6.0	860
3	Optineurin is an autophagy receptor for damaged mitochondria in parkin-mediated mitophagy that is disrupted by an ALS-linked mutation. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E4439-48.	3.3	646
4	Autophagosomes initiate distally and mature during transport toward the cell soma in primary neurons. Journal of Cell Biology, 2012, 196, 407-417.	2.3	558
5	Axonal Transport: Cargo-Specific Mechanisms of Motility and Regulation. Neuron, 2014, 84, 292-309.	3.8	542
6	Motor Coordination via a Tug-of-War Mechanism Drives Bidirectional Vesicle Transport. Current Biology, 2010, 20, 697-702.	1.8	377
7	The Regulation of Autophagosome Dynamics by Huntingtin and HAP1 Is Disrupted by Expression of Mutant Huntingtin, Leading to Defective Cargo Degradation. Journal of Neuroscience, 2014, 34, 1293-1305.	1.7	310
8	Autophagosome Biogenesis in Primary Neurons Follows an Ordered and Spatially Regulated Pathway. Developmental Cell, 2014, 30, 71-85.	3.1	293
9	Processive bidirectional motion of dyneinâ€"dynactin complexes in vitro. Nature Cell Biology, 2006, 8, 562-570.	4.6	274
10	Dynamic recruitment and activation of ALS-associated TBK1 with its target optineurin are required for efficient mitophagy. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E3349-58.	3.3	267
11	Huntingtin facilitates dynein/dynactin-mediated vesicle transport. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 10045-10050.	3.3	261
12	Compartment-Specific Regulation of Autophagy in Primary Neurons. Journal of Neuroscience, 2016, 36, 5933-5945.	1.7	243
13	JIP1 regulates the directionality of APP axonal transport by coordinating kinesin and dynein motors. Journal of Cell Biology, 2013, 202, 495-508.	2.3	235
14	Integrated regulation of motor-driven organelle transport by scaffolding proteins. Trends in Cell Biology, 2014, 24, 564-574.	3.6	232
15	Huntingtin as an essential integrator of intracellular vesicular trafficking. Trends in Cell Biology, 2009, 19, 147-155.	3.6	221
16	Axonal transport: Driving synaptic function. Science, 2019, 366, .	6.0	206
17	Amyotrophic lateral sclerosis-linked mutations increase the viscosity of liquid-like TDP-43 RNP granules in neurons. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E2466-E2475.	3.3	204
18	Dynamic actin cycling through mitochondrial subpopulations locally regulates the fissionâ€"fusion balance within mitochondrial networks. Nature Communications, 2016, 7, 12886.	5.8	201

#	Article	IF	Citations
19	Autophagy in Neurons. Annual Review of Cell and Developmental Biology, 2019, 35, 477-500.	4.0	191
20	LC3 Binding to the Scaffolding Protein JIP1 Regulates Processive Dynein-Driven Transport of Autophagosomes. Developmental Cell, 2014, 29, 577-590.	3.1	178
21	Microtubule plus-end tracking by CLIP-170 requires EB1. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 492-497.	3.3	176
22	A motor neuron diseaseâ€"associated mutation in p150Glued perturbs dynactin function and induces protein aggregation. Journal of Cell Biology, 2006, 172, 733-745.	2.3	172
23	Cytoplasmic dynein nomenclature. Journal of Cell Biology, 2005, 171, 411-413.	2.3	171
24	Dynactin Is Required for Transport Initiation from the Distal Axon. Neuron, 2012, 74, 331-343.	3.8	170
25	A Switch in Retrograde Signaling from Survival to Stress in Rapid-Onset Neurodegeneration. Journal of Neuroscience, 2009, 29, 9903-9917.	1.7	168
26	Dynein activators and adaptors at a glance. Journal of Cell Science, 2019, 132, .	1.2	168
27	Force measurements on cargoes in living cells reveal collective dynamics of microtubule motors. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 18447-18452.	3.3	163
28	The Microtubule Plus-End Proteins EB1 and Dynactin Have Differential Effects on Microtubule Polymerization. Molecular Biology of the Cell, 2003, 14, 1405-1417.	0.9	160
29	Î±-Tubulin Tyrosination and CLIP-170 Phosphorylation Regulate the Initiation of Dynein-Driven Transport in Neurons. Cell Reports, 2016, 14, 2637-2652.	2.9	154
30	Ordered Recruitment of Dynactin to the Microtubule Plus-End is Required for Efficient Initiation of Retrograde Axonal Transport. Journal of Neuroscience, 2013, 33, 13190-13203.	1.7	151
31	The ADP/ATP translocase drives mitophagy independent of nucleotide exchange. Nature, 2019, 575, 375-379.	13.7	149
32	Nesprins anchor kinesin-1 motors to the nucleus to drive nuclear distribution in muscle cells. Development (Cambridge), 2015, 142, 218-228.	1.2	132
33	Kinesin-3 Responds to Local Microtubule Dynamics to Target Synaptic Cargo Delivery to the Presynapse. Current Biology, 2019, 29, 268-282.e8.	1.8	127
34	Local Cytoskeletal and Organelle Interactions Impact Molecular-Motor-Driven Early Endosomal Trafficking. Current Biology, 2013, 23, 1173-1180.	1.8	126
35	Autophagy and mitophagy in ALS. Neurobiology of Disease, 2019, 122, 35-40.	2.1	125
36	Adeno-Associated Virus Serotypes 1, 8, and 9 Share Conserved Mechanisms for Anterograde and Retrograde Axonal Transport. Human Gene Therapy, 2014, 25, 705-720.	1.4	123

#	Article	IF	Citations
37	Coordination of molecular motors: from in vitro assays to intracellular dynamics. Current Opinion in Cell Biology, 2010, 22, 4-13.	2.6	118
38	Autophagosome dynamics in neurodegeneration at a glance. Journal of Cell Science, 2015, 128, 1259-1267.	1.2	114
39	Huntingtin coordinates the dynein-mediated dynamic positioning of endosomes and lysosomes. Molecular Biology of the Cell, 2011, 22, 478-492.	0.9	108
40	WHAMM Directs the Arp2/3 Complex to the ER for Autophagosome Biogenesis through an Actin Comet Tail Mechanism. Current Biology, 2015, 25, 1791-1797.	1.8	107
41	Hook Adaptors Induce Unidirectional Processive Motility by Enhancing the Dynein-Dynactin Interaction. Journal of Biological Chemistry, 2016, 291, 18239-18251.	1.6	99
42	Increased LRRK2 kinase activity alters neuronal autophagy by disrupting the axonal transport of autophagosomes. Current Biology, 2021, 31, 2140-2154.e6.	1.8	99
43	The Dynamic Localization of Cytoplasmic Dynein in Neurons Is Driven by Kinesin-1. Neuron, 2016, 90, 1000-1015.	3.8	95
44	Actin cables and comet tails organize mitochondrial networks in mitosis. Nature, 2021, 591, 659-664.	13.7	92
45	A conserved interaction of the dynein light intermediate chain with dynein-dynactin effectors necessary for processivity. Nature Communications, 2018, 9, 986.	5.8	85
46	Dynactin functions as both a dynamic tether and brake during dynein-driven motility. Nature Communications, 2014, 5, 4807.	5.8	80
47	Degradation of engulfed mitochondria is rate-limiting in Optineurin-mediated mitophagy in neurons. ELife, 2020, 9, .	2.8	79
48	Lysosomal proliferation and distal degeneration in motor neurons expressing the G59S mutation in the p150Glued subunit of dynactin. Human Molecular Genetics, 2008, 17, 1946-1955.	1.4	78
49	Force-Dependent Detachment of Kinesin-2 Biases Track Switching at Cytoskeletal Filament Intersections. Biophysical Journal, 2012, 103, 48-58.	0.2	75
50	Trim58 Degrades Dynein and Regulates Terminal Erythropoiesis. Developmental Cell, 2014, 30, 688-700.	3.1	75
51	Optogenetic control of organelle transport using a photocaged chemical inducer of dimerization. Current Biology, 2015, 25, R407-R408.	1.8	75
52	Long-distance Axonal Transport of AAV9 Is Driven by Dynein and Kinesin-2 and Is Trafficked in a Highly Motile Rab7-positive Compartment. Molecular Therapy, 2014, 22, 554-566.	3.7	74
53	The impact of cytoskeletal organization on the local regulation of neuronal transport. Nature Reviews Neuroscience, 2017, 18, 585-597.	4.9	74
54	Mitochondrial dynamics: Shaping and remodeling an organelle network. Current Opinion in Cell Biology, 2021, 68, 28-36.	2.6	74

#	Article	IF	Citations
55	Temporal dynamics of PARK2/parkin and OPTN/optineurin recruitment during the mitophagy of damaged mitochondria. Autophagy, 2015, 11, 422-424.	4.3	73
56	Autophagosome assembly and cargo capture in the distal axon. Autophagy, 2012, 8, 858-860.	4.3	71
57	The Kinesin KIF21B Regulates Microtubule Dynamics and Is Essential for Neuronal Morphology, Synapse Function, and Learning and Memory. Cell Reports, 2016, 15, 968-977.	2.9	70
58	Sequential dynein effectors regulate axonal autophagosome motility in a maturation-dependent pathway. Journal of Cell Biology, 2021, 220, .	2.3	69
59	Mitochondrial adaptor TRAK2 activates and functionally links opposing kinesin and dynein motors. Nature Communications, 2021, 12, 4578.	5.8	69
60	Dynein activator Hook1 is required for trafficking of BDNF-signaling endosomes in neurons. Journal of Cell Biology, 2019, 218, 220-233.	2.3	68
61	Quality Control in Neurons: Mitophagy and Other Selective Autophagy Mechanisms. Journal of Molecular Biology, 2020, 432, 240-260.	2.0	66
62	Activity-Dependent Regulation of Distinct Transport and Cytoskeletal Remodeling Functions of the Dendritic Kinesin KIF21B. Neuron, 2016, 92, 857-872.	3.8	65
63	Stress-Induced CDK5 Activation Disrupts Axonal Transport via Lis1/Ndel1/Dynein. Cell Reports, 2015, 12, 462-473.	2.9	64
64	Mitochondrial-cytoskeletal interactions: dynamic associations that facilitate network function and remodeling. Current Opinion in Physiology, 2018, 3, 94-100.	0.9	63
65	Axonal autophagy: Mini-review for autophagy in the CNS. Neuroscience Letters, 2019, 697, 17-23.	1.0	59
66	ALS- and FTD-associated missense mutations in TBK1 differentially disrupt mitophagy. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	55
67	Selective motor activation in organelle transport along axons. Nature Reviews Molecular Cell Biology, 2022, 23, 699-714.	16.1	55
68	Expression of WIPI2B counteracts age-related decline in autophagosome biogenesis in neurons. ELife, 2019, 8, .	2.8	54
69	ALS-associated KIF5A mutations abolish autoinhibition resulting in a toxic gain of function. Cell Reports, 2022, 39, 110598.	2.9	47
70	Brain-derived autophagosome profiling reveals the engulfment of nucleoid-enriched mitochondrial fragments by basal autophagy in neurons. Neuron, 2022, 110, 967-976.e8.	3.8	43
71	The adaptor proteins HAP1a and GRIP1 collaborate to activate kinesin-1 isoform KIF5C. Journal of Cell Science, 2019, 132, .	1.2	41
72	A tunable LIC1-adaptor interaction modulates dynein activity in a cargo-specific manner. Nature Communications, 2020, 11, 5695.	5.8	41

#	Article	IF	Citations
73	CDK5â€dependent activation of dynein in the axon initial segment regulates polarized cargo transport in neurons. Traffic, 2017, 18, 808-824.	1.3	40
74	NIX initiates mitochondrial fragmentation via DRP1 to drive epidermal differentiation. Cell Reports, 2021, 34, 108689.	2.9	40
75	Microtubule binding proteins CLIP-170, EB1, and p150Gluedform distinct plus-end complexes. FEBS Letters, 2006, 580, 1327-1332.	1.3	39
76	Dynein Interacts with the Neural Cell Adhesion Molecule (NCAM180) to Tether Dynamic Microtubules and Maintain Synaptic Density in Cortical Neurons. Journal of Biological Chemistry, 2013, 288, 27812-27824.	1.6	39
77	Dynein efficiently navigates the dendritic cytoskeleton to drive the retrograde trafficking of BDNF/TrkB signaling endosomes. Molecular Biology of the Cell, 2017, 28, 2543-2554.	0.9	36
78	ToolBox: Live Imaging of intracellular organelle transport in induced pluripotent stem cellâ€derived neurons. Traffic, 2020, 21, 138-155.	1.3	36
79	Angular measurements of the dynein ring reveal a stepping mechanism dependent on a flexible stalk. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E4564-E4573.	3.3	35
80	Control of the Initiation and Termination of Kinesin-1-Driven Transport by Myosin-Ic and Nonmuscle Tropomyosin. Current Biology, 2015, 25, 523-529.	1.8	34
81	Structural basis for membrane recruitment of ATG16L1 by WIPI2 in autophagy. ELife, 2021, 10, .	2.8	32
82	Spatiotemporal dynamics of autophagy receptors in selective mitophagy. Autophagy, 2016, 12, 1956-1957.	4.3	31
83	Cytoskeletal regulation guides neuronal trafficking toÂeffectively supply the synapse. Current Biology, 2021, 31, R633-R650.	1.8	29
84	Walking Forward with Kinesin. Trends in Neurosciences, 2018, 41, 555-556.	4.2	23
85	Opposing Kinesin and Myosin-I Motors Drive Membrane Deformation and Tubulation along Engineered Cytoskeletal Networks. Current Biology, 2018, 28, 236-248.e5.	1.8	19
86	Vesicular degradation pathways in neurons: at the crossroads of autophagy and endo-lysosomal degradation. Current Opinion in Neurobiology, 2019, 57, 94-101.	2.0	19
87	Neuronal autophagy declines substantially with age and is rescued by overexpression of WIPI2. Autophagy, 2020, 16, 371-372.	4.3	17
88	Lysosomal degradation of depolarized mitochondria is rate-limiting in OPTN-dependent neuronal mitophagy. Autophagy, 2020, 16, 962-964.	4.3	17
89	SnapShot: Axonal Transport. Cell, 2012, 149, 950-950.e1.	13.5	15
90	TUBB4A mutations result in both glial and neuronal degeneration in an H-ABC leukodystrophy mouse model. ELife, 2020, 9, .	2.8	15

#	Article	IF	Citations
91	Synaptic Vesicle Distribution by Conveyor Belt. Cell, 2012, 148, 849-851.	13.5	11
92	Hyperactive LRRK2 kinase impairs the trafficking of axonal autophagosomes. Autophagy, 2021, 17, 2043-2045.	4.3	11
93	Microtubule dynamics influence the retrograde biased motility of kinesin-4 motor teams in neuronal dendrites. Molecular Biology of the Cell, 2022, 33, mbcE21100480.	0.9	11
94	Cytoplasmic dynein dysfunction and neurodegenerative disease. , 2018, , 286-315.		7
95	Cega: a single particle segmentation algorithm to identify moving particles in a noisy system. Molecular Biology of the Cell, 2021, 32, 931-941.	0.9	7
96	Axonal Transport: CDKs as Traffic Signals for Motor-ists along the Axon?. Current Biology, 2010, 20, R641-R642.	1.8	4
97	Proteomic profiling shows mitochondrial nucleoids are autophagy cargo in neurons: implications for neuron maintenance and neurodegenerative disease. Autophagy, 2022, 18, 2003-2005.	4.3	3
98	Methods for Assessing Nuclear Rotation and Nuclear Positioning in Developing Skeletal Muscle Cells. Methods in Molecular Biology, 2016, 1411, 269-290.	0.4	2
99	What Doesnâ€™t Kill You Makes You Stronger. Developmental Cell, 2018, 47, 402-403.	3.1	1
100	Imaging the Dynamics of Mitophagy in Live Cells. Methods in Molecular Biology, 2019, 1880, 601-610.	0.4	1
101	Presynaptic Homeostatic Plasticity Staves off Neurodegenerative Pathophysiology up to a Tipping Point. Neuron, 2020, 107, 6-8.	3.8	1
102	Actin mixes up mitochondria for inheritance. Nature, 2021, , .	13.7	1
103	3SA1-03 Modeling Cytoskeletal and Motor Dynamics In Vitro : Insights into Motor Function in a Complex Cellular Environment(3SA1 From protein motors to cell motility : regulation, coordination) Tj ETQq1 1 0.784314 rgBT /Overlo 49, S17.	0.0	0
104	Editorial overview: Cellular neuroscience. Current Opinion in Neurobiology, 2018, 51, iv-vi.	2.0	0
105	Live Imaging of Autophagosome Biogenesis and Maturation in Primary Neurons. Neuromethods, 2022, , 23-40.	0.2	0
106	Mentoring in the time of Coronavirus. Molecular Biology of the Cell, 2020, 31, 2761-2762.	0.9	0