Kim A Caldwell

List of Publications by Year
in descending order

102 papers	9,331 citations	46984 47 h-index	42364 92 g-index
111 all docs	111 docs citations	111 times ranked	10916 citing authors

#	Article	IF	Citations
1	Â-Synuclein Blocks ER-Golgi Traffic and Rab1 Rescues Neuron Loss in Parkinson's Models. Science, 2006, 313, 324-328.	6.0	1,268
2	arrow encodes an LDL-receptor-related protein essential for Wingless signalling. Nature, 2000, 407, 527-530.	13.7	794
3	Î±-Synuclein is part of a diverse and highly conserved interaction network that includes PARK9 and manganese toxicity. Nature Genetics, 2009, 41, 308-315.	9.4	501
4	The Parkinson's disease protein Î±-synuclein disrupts cellular Rab homeostasis. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 145-150.	3.3	479
5	Functional Links Between AÎ² Toxicity, Endocytic Trafficking, and Alzheimerâ€™s Disease Risk Factors in Yeast. Science, 2011, 334, 1241-1245.	6.0	345
6	Hypothesis-based RNAi screening identifies neuroprotective genes in a Parkinson's disease model. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 728-733.	3.3	278
7	Lysosomal impairment in Parkinson's disease. Movement Disorders, 2013, 28, 725-732.	2.2	270
8	Torsin-Mediated Protection from Cellular Stress in the Dopaminergic Neurons of Caenorhabditis elegans. Journal of Neuroscience, 2005, 25, 3801-3812.	1.7	269
9	Deletion of the Ubiquitin Ligase CHIP Leads to the Accumulation, But Not the Aggregation, of Both Endogenous Phospho- and Caspase-3-Cleaved Tau Species. Journal of Neuroscience, 2006, 26, 6985-6996.	1.7	234
10	Yeast Reveal a â€œDruggableâ€• Rsp5/Nedd4 Network that Ameliorates Î±-Synuclein Toxicity in Neurons. Science, 2013, 342, 979-983.	6.0	234
11	Lysosomal enzyme cathepsin D protects against alpha-synuclein aggregation and toxicity. Molecular Brain, 2008, 1, 17.	1.3	212
12	Potentiated Hsp104 Variants Antagonize Diverse Proteotoxic Misfolding Events. Cell, 2014, 156, 170-182.	13.5	205
13	Using Caenorhabditis elegans to probe toxicity of 1-alkyl-3-methylimidazolium chloride based ionic liquids. Chemical Communications, 2004, , 668.	2.2	182
14	Dopamine induces soluble Î±-synuclein oligomers and nigrostriatal degeneration. Nature Neuroscience, 2017, 20, 1560-1568.	7.1	181
15	Compounds from an unbiased chemical screen reverse both ER-to-Golgi trafficking defects and mitochondrial dysfunction in Parkinsonâ€™s disease models. DMM Disease Models and Mechanisms, 2010, 3, 194-208.	1.2	159
16	Clioquinol promotes the degradation of metal-dependent amyloid-Î² (AÎ²) oligomers to restore endocytosis and ameliorate AÎ² toxicity. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 4013-4018.	3.3	150
17	Rapid selection of cyclic peptides that reduce Î±-synuclein toxicity in yeast and animal models. Nature Chemical Biology, 2009, 5, 655-663.	3.9	130
18	Induced Premature G2/M-Phase Transition in Pachytene Spermatocytes Includes Events Unique to Meiosis. Developmental Biology, 1995, 169, 557-567.	0.9	127

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19	Suppression of polyglutamine-induced protein aggregation in Caenorhabditis elegans by torsin proteins. Human Molecular Genetics, 2003, 12, 307-319.	1.4	126
20	Differential neuroprotective effects of 14-3-3 proteins in models of Parkinson's disease. Cell Death and Disease, 2010, 1, e2-e2.	2.7	120
21	Inhibitors of LRRK2 kinase attenuate neurodegeneration and Parkinson-like phenotypes in Caenorhabditis elegans and Drosophila Parkinson's disease models. Human Molecular Genetics, 2011, 20, 3933-3942.	1.4	120
22	<i>C. elegans</i> as a model organism to investigate molecular pathways involved with Parkinson's disease. Developmental Dynamics, 2010, 239, 1282-1295.	0.8	113
23	Role for NudC, a dynein-associated nuclear movement protein, in mitosis and cytokinesis. Journal of Cell Science, 2003, 116, 1991-2003.	1.2	112
24	Amelioration of Alzheimerâ€™s disease pathology by mitophagy inducers identified via machine learning and a cross-species workflow. Nature Biomedical Engineering, 2022, 6, 76-93.	11.6	110
25	Calcineurin determines toxic versus beneficial responses to Î±-synuclein. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E3544-52.	3.3	102
26	TorsinA participates in endoplasmic reticulum-associated degradation. Nature Communications, 2011, 2, 393.	5.8	99
27	Dysregulation of the Mitochondrial Unfolded Protein Response Induces Non-Apoptotic Dopaminergic Neurodegeneration in<i>C. elegans</i>Models of Parkinson's Disease. Journal of Neuroscience, 2017, 37, 11085-11100.	1.7	97
28	The early-onset torsion dystonia-associated protein, torsinA, is a homeostatic regulator of endoplasmic reticulum stress response. Human Molecular Genetics, 2010, 19, 3502-3515.	1.4	92
29	Mitochondrial dysfunction, oxidative stress, and neurodegeneration elicited by a bacterial metabolite in a C. elegans Parkinsonâ€™s model. Cell Death and Disease, 2014, 5, e984-e984.	2.7	92
30	The effects of pdr1, djr1.1 and pink1 loss in manganese-induced toxicity and the role of Î±-synuclein in C. elegans. Metallomics, 2014, 6, 476-490.	1.0	85
31	Modeling neurodegeneration in <i>Caenorhabditis</i>â€ˆ<i>elegans</i>. DMM Disease Models and Mechanisms, 2020, 13, .	1.2	83
32	The Glycolytic Enzyme, GPI, Is a Functionally Conserved Modifier of Dopaminergic Neurodegeneration in Parkinsonâ€™s Models. Cell Metabolism, 2014, 20, 145-157.	7.2	82
33	Epileptic-like convulsions associated with LIS-1 in the cytoskeletal control of neurotransmitter signaling in Caenorhabditis elegans. Human Molecular Genetics, 2004, 13, 2043-2059.	1.4	79
34	Functional Analysis of VPS41-Mediated Neuroprotection in<i>Caenorhabditis elegans</i>and Mammalian Models of Parkinson's Disease. Journal of Neuroscience, 2012, 32, 2142-2153.	1.7	79
35	Phosphatidylethanolamine deficiency disrupts Î±-synuclein homeostasis in yeast and worm models of Parkinson disease. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E3976-85.	3.3	74
36	Acetaminophen attenuates dopamine neuron degeneration in animal models of Parkinson's disease. Neuroscience Letters, 2008, 439, 129-133.	1.0	72

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37	VPS41, a protein involved in lysosomal trafficking, is protective in Caenorhabditis elegans and mammalian cellular models of Parkinson's disease. Neurobiology of Disease, 2010, 37, 330-338.	2.1	70
38	Different 8-Hydroxyquinolines Protect Models of TDP-43 Protein, Î±-Synuclein, and Polyglutamine Proteotoxicity through Distinct Mechanisms. Journal of Biological Chemistry, 2012, 287, 4107-4120.	1.6	70
39	Identification of novel ATP13A2 interactors and their role in Î±-synuclein misfolding and toxicity. Human Molecular Genetics, 2012, 21, 3785-3794.	1.4	66
40	Generation of Stable Transgenic C. elegans Using Microinjection. Journal of Visualized Experiments, 2008, , .	0.2	65
41	Lowâ€dose bafilomycin attenuates neuronal cell death associated with autophagyâ€lysosome pathway dysfunction. Journal of Neurochemistry, 2010, 114, 1193-1204.	2.1	57
42	Protective Role of DNJ-27/ERdj5 in<i>Caenorhabditis elegans</i>Models of Human Neurodegenerative Diseases. Antioxidants and Redox Signaling, 2014, 20, 217-235.	2.5	57
43	Chemical enhancement of torsinA function in cell and animal models of torsion dystonia. DMM Disease Models and Mechanisms, 2010, 3, 386-396.	1.2	55
44	Evolutionarily conserved nuclear migration genes required for early embryonic development in Caenorhabditis elegans. Development Genes and Evolution, 2001, 211, 434-441.	0.4	53
45	Genetic and Pharmacological Discovery for Alzheimerâ€™s Disease Using <i>Caenorhabditis elegans</i>. ACS Chemical Neuroscience, 2017, 8, 2596-2606.	1.7	53
46	The early-onset torsion dystonia-associated protein, torsinA, displays molecular chaperone activity in vitro. Cell Stress and Chaperones, 2010, 15, 605-617.	1.2	52
47	C . elegans as a model system to accelerate discovery for Parkinson disease. Current Opinion in Genetics and Development, 2017, 44, 102-109.	1.5	50
48	RTCB-1 Mediates Neuroprotection via XBP-1 mRNA Splicing in the Unfolded Protein Response Pathway. Journal of Neuroscience, 2014, 34, 16076-16085.	1.7	48
49	Investigating Bacterial Sources of Toxicity as an Environmental Contributor to Dopaminergic Neurodegeneration. PLoS ONE, 2009, 4, e7227.	1.1	45
50	Found in Translation: The Utility of C. elegans Alpha-Synuclein Models of Parkinsonâ€™s Disease. Brain Sciences, 2019, 9, 73.	1.1	44
51	The Small GTPase RAC1/CED-10 Is Essential in Maintaining Dopaminergic Neuron Function and Survival Against Î±-Synuclein-Induced Toxicity. Molecular Neurobiology, 2018, 55, 7533-7552.	1.9	40
52	Genetic interactions among cortical malformation genes that influence susceptibility to convulsions in C. elegans. Brain Research, 2006, 1120, 23-34.	1.1	39
53	Structural Features and Chaperone Activity of the NudC Protein Family. Journal of Molecular Biology, 2011, 409, 722-741.	2.0	38
54	A Predictable Worm: Application of Caenorhabditis elegans for Mechanistic Investigation of Movement Disorders. Neurotherapeutics, 2012, 9, 393-404.	2.1	37

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55	A bacterial metabolite induces glutathione-tractable proteostatic damage, proteasomal disturbances, and PINK1-dependent autophagy in C. elegans. Cell Death and Disease, 2015, 6, e1908-e1908.	2.7	32
56	Application of a C. elegans Dopamine Neuron Degeneration Assay for the Validation of Potential Parkinson's Disease Genes. Journal of Visualized Experiments, 2008, , .	0.2	31
57	Caenorhabditis elegans as a model system for identifying effectors of Î±-synuclein misfolding and dopaminergic cell death associated with Parkinsonâ€™s disease. Methods, 2011, 53, 220-225.	1.9	31
58	Cyclized NDGA modifies dynamic Î±-synuclein monomers preventing aggregation and toxicity. Scientific Reports, 2019, 9, 2937.	1.6	31
59	Modeling Dopamine Neuron Degeneration in Caenorhabditis elegans. Methods in Molecular Biology, 2011, 793, 129-148.	0.4	30
60	Alpha-synuclein inhibits Snx3â€"retromer-mediated retrograde recycling of iron transporters in S. cerevisiae and C. elegans models of Parkinsonâ€™s disease. Human Molecular Genetics, 2018, 27, 1514-1532.	1.4	29
61	Phenazine derivatives cause proteotoxicity and stress in C. elegans. Neuroscience Letters, 2015, 584, 23-27.	1.0	28
62	The microtubule-associated protein, NUD-1, exhibits chaperone activity in vitro. Cell Stress and Chaperones, 2009, 14, 95-103.	1.2	26
63	TorsinA rescues ER-associated stress and locomotive defects in <i>C. elegans</i> models of ALS. DMM Disease Models and Mechanisms, 2014, 7, 233-43.	1.2	26
64	NCEH-1 modulates cholesterol metabolism and protects against Î±-synuclein toxicity in a C. elegans model of Parkinsonâ€™s disease. Human Molecular Genetics, 2017, 26, 3823-3836.	1.4	26
65	Neurodegenerative <i>VPS41</i> variants inhibit HOPS function and mTORC1â€dependent TFEB/TFE3 regulation. EMBO Molecular Medicine, 2021, 13, e13258.	3.3	26
66	Gene-by-environment interactions that disrupt mitochondrial homeostasis cause neurodegeneration in C. elegans Parkinsonâ€™s models. Cell Death and Disease, 2018, 9, 555.	2.7	25
67	ApoE-associated modulation of neuroprotection from AÎ²-mediated neurodegeneration in transgenic <i>Caenorhabditis elegans</i>. DMM Disease Models and Mechanisms, 2019, 12, .	1.2	23
68	Animal models for drug discovery in dystonia. Expert Opinion on Drug Discovery, 2008, 3, 83-97.	2.5	22
69	Pharmacogenetic Analysis Reveals a Post-Developmental Role for Rac GTPases in<i>Caenorhabditis elegans</i>GABAergic Neurotransmission. Genetics, 2009, 183, 1357-1372.	1.2	21
70	Ubiquitin conjugating enzymes participate in polyglutamine protein aggregation. BMC Cell Biology, 2007, 8, 32.	3.0	19
71	Valproic acid ameliorates C. elegans dopaminergic neurodegeneration with implications for ERK-MAPK signaling. Neuroscience Letters, 2013, 541, 116-119.	1.0	19
72	Genetic Defects in Mitochondrial Dynamics in Caenorhabditis elegans Impact Ultraviolet C Radiation- and 6-hydroxydopamine-Induced Neurodegeneration. International Journal of Molecular Sciences, 2019, 20, 3202.	1.8	19

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73	Dihydropyrimidine-Thiones and Clioquinol Synergize To Target Î²-Amyloid Cellular Pathologies through a Metal-Dependent Mechanism. ACS Chemical Neuroscience, 2017, 8, 2039-2055.	1.7	17
74	Therapeutic genetic variation revealed in diverse Hsp104 homologs. ELife, 2020, 9, .	2.8	17
75	Paradigms for Pharmacological Characterization of C. elegans Synaptic Transmission Mutants. Journal of Visualized Experiments, 2008, , .	0.2	16
76	Distinct functional roles of Vps41-mediated neuroprotection in Alzheimerâ€™s and Parkinsonâ€™s disease models of neurodegeneration. Human Molecular Genetics, 2018, 27, 4176-4193.	1.4	16
77	Traversing a wormhole to combat Parkinsonâ€™s disease. DMM Disease Models and Mechanisms, 2008, 1, 32-36.	1.2	14
78	A conformational switch driven by phosphorylation regulates the activity of the evolutionarily conserved SNARE Ykt6. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	12
79	Chemical Compensation of Mitochondrial Phospholipid Depletion in Yeast and Animal Models of Parkinsonâ€™s Disease. PLoS ONE, 2016, 11, e0164465.	1.1	10
80	No Country for Old Worms: A Systematic Review of the Application of C. elegans to Investigate a Bacterial Source of Environmental Neurotoxicity in Parkinsonâ€™s Disease. Metabolites, 2018, 8, 70.	1.3	8
81	Conserved nicotine-activated neuroprotective pathways involve mitochondrial stress. IScience, 2021, 24, 102140.	1.9	8
82	An animal model to discern torsin function: suppression of protein aggregation in C. elegans. Advances in Neurology, 2004, 94, 79-85.	0.8	7
83	A genetic strategy for differential screening of meiotic germ-cell cDNA libraries. Molecular Reproduction and Development, 1996, 43, 403-413.	1.0	6
84	The Prevalence and Distribution of Neurodegenerative Compound-Producing Soil Streptomyces spp.. Scientific Reports, 2016, 6, 22566.	1.6	6
85	Invertebrate Models of Dystonia. Current Neuropharmacology, 2013, 11, 16-29.	1.4	5
86	Lipase regulation of cellular fatty acid homeostasis as a Parkinsonâ€™s disease therapeutic strategy. Npj Parkinson's Disease, 2022, 8, .	2.5	5
87	Vacuolar protein sorting protein 41 (VPS41) at an intersection of endosomal traffic in neurodegenerative disease. Neural Regeneration Research, 2019, 14, 1210.	1.6	4
88	Invertebrate Models of Dystonia. Current Neuropharmacology, 2013, 11, 16-29.	1.4	3
89	The Nematode, Caenorhabditis elegans, as an Emerging Model for Investigating Epilepsy. Neuromethods, 2009, , 1-25.	0.2	1
90	Use of Caenorhabditis elegans to Model Human Movement Disorders. , 2015, , 97-116.		1

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91	Bcl-xL Is Required by Primary Hippocampal Neurons during Development to Support Local Energy Metabolism at Neurites. Biology, 2021, 10, 772.	1.3	1
92	Use of C. elegans to Model Human Movement Disorders. , 2005, , 111-126.		1
93	Using Caenorhabditis elegans to Probe Toxicity of 1-Alkyl-3-methylimidazolium Chloride Based Ionic Liquids.. ChemInform, 2004, 35, no.	0.1	0
94	Disinfecting dystonia? Drug discovery using worms identifies an antibiotic as a neuroprotective lead molecule for movement disorders. Future Neurology, 2010, 5, 473-476.	0.9	0
95	The early-onset torsion dystonia-associated protein, torsinA, is a homeostatic regulator of endoplasmic reticulum stress response. Human Molecular Genetics, 2012, 21, 1201-1201.	1.4	0
96	Investigating Molecular Chaperone Activity Associated with Human TorsinA. FASEB Journal, 2009, 23, 673.1.	0.2	0
97	Cell Culture to Investigate Neurotoxicity and Neurodegeneration Utilizing Caenorhabditis elegans. Neuromethods, 2011, , 129-143.	0.2	0
98	Methodological Strategies to Evaluate Functional Effectors Related to Parkinsonâ€™s Disease Through Application of Caenorhabditis elegans Models. Neuromethods, 2011, , 31-53.	0.2	0
99	TorsinA rescues ER-associated stress and locomotive defects in C. elegans models of ALS. Journal of Cell Science, 2014, 127, e1-e1.	1.2	0
100	Conserved Nicotine-Activated Neuroprotective Pathways Involve Mitochondrial Stress. SSRN Electronic Journal, 0, , .	0.4	0
101	Phenotypic modulation of pentylenetetrazole-induced convulsive behaviors in carrying a mutation associated with Alzheimer's disease. MicroPublication Biology, 2020, 2020, .	0.1	0
102	Enhanced pentylenetetrazole sensitivity in a mutant associated with encephalopathy. MicroPublication Biology, 2020, 2020, .	0.1	0