Mei Zhen

List of Publications by Year
in descending order

82 papers	6,324 citations	94433 37 h-index	82547 72 g-index
116 all docs	116 docs citations	116 times ranked	7189 citing authors

#	Article	IF	Citations
1	Escape steering by cholecystokinin peptidergic signaling. Cell Reports, 2022, 38, 110330.	6.4	11
2	Signal requirement for cortical potential of transplantable human neuroepithelial stem cells. Nature Communications, 2022, 13, .	12.8	5
3	Real-time volumetric reconstruction of biological dynamics with light-field microscopy and deep learning. Nature Methods, 2021, 18, 551-556.	19.0	124
4	Corollary discharge promotes a sustained motor state in a neural circuit for navigation. ELife, 2021, 10, .	6.0	16
5	Toward a living soft microrobot through optogenetic locomotion control of Caenorhabditis elegans. Science Robotics, 2021, 6, .	17.6	33
6	Connectomes across development reveal principles of brain maturation. Nature, 2021, 596, 257-261.	27.8	205
7	Natural sensory context drives diverse brain-wide activity during C.Âelegans mating. Cell, 2021, 184, 5122-5137.e17.	28.9	39
8	Structural Analysis of the Caenorhabditis elegans Dauer Larval Anterior Sensilla by Focused Ion Beam-Scanning Electron Microscopy. Frontiers in Neuroanatomy, 2021, 15, 732520.	1.7	12
9	Open syntaxin overcomes exocytosis defects of diverse mutants in C. elegans. Nature Communications, 2020, 11, 5516.	12.8	18
10	Overexpression of an ALS-associated FUS mutation in C. elegans disrupts NMJ morphology and leads to defective neuromuscular transmission. Biology Open, 2020, 9, .	1.2	20
11	Optogenetic Manipulation of Postsynaptic cAMP Using a Novel Transgenic Mouse Line Enables Synaptic Plasticity and Enhances Depolarization Following Tetanic Stimulation in the Hippocampal Dentate Gyrus. Frontiers in Neural Circuits, 2020, 14, 24.	2.8	6
12	Efficient and costâ€effective 3D cellular imaging by subâ€voxelâ€resolving lightâ€sheet addâ€on microscopy. Journal of Biophotonics, 2020, 13, e201960243.	2.3	9
13	Flexible motor sequence generation during stereotyped escape responses. ELife, 2020, 9, .	6.0	33
14	An Upconversion Nanoparticle Enables Near Infrared-Optogenetic Manipulation of the Caenorhabditis elegans Motor Circuit. ACS Nano, 2019, 13, 3373-3386.	14.6	52
15	A 3D culture model of innervated human skeletal muscle enables studies of the adult neuromuscular junction. ELife, 2019, 8, .	6.0	169
16	Gain-of-function mutations in the UNC-2/CaV2Î± channel lead to excitation-dominant synaptic transmission in Caenorhabditis elegans. ELife, 2019, 8, .	6.0	27
17	C. elegans neurons have functional dendritic spines. ELife, 2019, 8, .	6.0	24
18	Descending pathway facilitates undulatory wave propagation in Caenorhabditis elegans through gap junctions. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E4493-E4502.	7.1	53

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19	A Pipeline for Volume Electron Microscopy of the Caenorhabditis elegans Nervous System. Frontiers in Neural Circuits, 2018, 12, 94.	2.8	33
20	Automated classification of synaptic vesicles in electron tomograms of C. elegans using machine learning. PLoS ONE, 2018, 13, e0205348.	2.5	8
21	Caenorhabditis elegans excitatory ventral cord motor neurons derive rhythm for body undulation. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170370.	4.0	33
22	Excitatory motor neurons are local oscillators for backward locomotion. ELife, 2018, 7, .	6.0	79
23	The UBR-1 ubiquitin ligase regulates glutamate metabolism to generate coordinated motor pattern in Caenorhabditis elegans. PLoS Genetics, 2018, 14, e1007303.	3.5	5
24	Myrf ER-Bound Transcription Factors Drive C.Âelegans Synaptic Plasticity via Cleavage-Dependent Nuclear Translocation. Developmental Cell, 2017, 41, 180-194.e7.	7.0	27
25	The HECT Family Ubiquitin Ligase EEL-1 Regulates Neuronal Function and Development. Cell Reports, 2017, 19, 822-835.	6.4	24
26	UNC-18 and Tomosyn Antagonistically Control Synaptic Vesicle Priming Downstream of UNC-13 in Caenorhabditis elegans. Journal of Neuroscience, 2017, 37, 8797-8815.	3.6	39
27	A hybrid microfluidic device for on-demand orientation and multidirectional imaging of C. elegans organs and neurons. Biomicrofluidics, 2016, 10, 064111.	2.4	15
28	Filling the gap: adding super-resolution to array tomography for correlated ultrastructural and molecular identification of electrical synapses at theC. elegansconnectome. Neurophotonics, 2016, 3, 041802.	3.3	41
29	Conformational states of syntaxin-1 govern the necessity of N-peptide binding in exocytosis of PC12 cells and Caenorhabditis elegans. Molecular Biology of the Cell, 2016, 27, 669-685.	2.1	13
30	Pan-neuronal imaging in roaming Caenorhabditis elegans. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E1082-8.	7.1	188
31	Neuroendocrine modulation sustains the C. elegans forward motor state. ELife, 2016, 5, .	6.0	48
32	MADD-4/Punctin and Neurexin Organize C.Âelegans GABAergic Postsynapses through Neuroligin. Neuron, 2015, 86, 1420-1432.	8.1	83
33	The NCA sodium leak channel is required for persistent motor circuit activity that sustains locomotion. Nature Communications, 2015, 6, 6323.	12.8	65
34	The C. elegans COE transcription factor UNC-3 activates lineage-specific apoptosis and affects neurite growth in the RID lineage. Development (Cambridge), 2015, 142, 1447-57.	2.5	12
35	CCM-3/STRIPAK promotes seamless tube extension through endocytic recycling. Nature Communications, 2015, 6, 6449.	12.8	85
36	C. elegans locomotion: small circuits, complex functions. Current Opinion in Neurobiology, 2015, 33, 117-126.	4.2	158

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37	A Gain-of-Function Mutation inNALCNin a Child with Intellectual Disability, Ataxia, and Arthrogryposis. Human Mutation, 2015, 36, 753-757.	2.5	46
38	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
39	ACaenorhabditis elegansdevelopmental decision requires insulin signaling-mediated neuron-intestine communication. Development (Cambridge), 2014, 141, 1767-1779.	2.5	92
40	A Pair of RNA-Binding Proteins Controls Networks of Splicing Events Contributing to Specialization of Neural Cell Types. Molecular Cell, 2014, 54, 946-959.	9.7	62
41	NLF-1 Delivers a Sodium Leak Channel to Regulate Neuronal Excitability and Modulate Rhythmic Locomotion. Neuron, 2013, 77, 1069-1082.	8.1	78
42	Attenuation of insulin signalling contributes to FSN-1-mediated regulation of synapse development. EMBO Journal, 2013, 32, 1745-1760.	7.8	24
43	Hyperactivation of B-Type Motor Neurons Results in Aberrant Synchrony of theCaenorhabditis elegansMotor Circuit. Journal of Neuroscience, 2013, 33, 5319-5325.	3.6	25
44	Caenorhabditis elegansFlamingo Cadherinfmi-1Regulates GABAergic Neuronal Development. Journal of Neuroscience, 2012, 32, 4196-4211.	3.6	37
45	ALS mutations in FUS cause neuronal dysfunction and death in Caenorhabditis elegans by a dominant gain-of-function mechanism. Human Molecular Genetics, 2012, 21, 1-9.	2.9	148
46	Releasing the Inner Inhibition for Axon Regeneration. Neuron, 2012, 73, 207-209.	8.1	8
47	Proprioceptive Coupling within Motor Neurons Drives C.Âelegans Forward Locomotion. Neuron, 2012, 76, 750-761.	8.1	219
48	An Imbalancing Act: Gap Junctions Reduce the Backward Motor Circuit Activity to Bias C.Âelegans for Forward Locomotion. Neuron, 2011, 72, 572-586.	8.1	218
49	Lack of association of NALCN genetic variants with schizophrenia. Psychiatry Research, 2011, 185, 450-452.	3.3	6
50	A Co-operative Regulation of Neuronal Excitability by UNC-7 Innexin and NCA/NALCN Leak Channel. Molecular Brain, 2011, 4, 16.	2.6	28
51	Networking in a global world: Establishing functional connections between neural splicing regulators and their target transcripts. Rna, 2011, 17, 775-791.	3.5	65
52	Genome-wide analysis of alternative splicing in Caenorhabditis elegans. Genome Research, 2011, 21, 342-348.	5.5	137
53	The Dystrophin-associated Protein Complex Maintains Muscle Excitability by Regulating Ca2+-dependent K+ (BK) Channel Localization. Journal of Biological Chemistry, 2011, 286, 33501-33510.	3.4	21
54	The Presynaptic Dense Projection of theCaenorhabiditis elegansCholinergic Neuromuscular Junction Localizes Synaptic Vesicles at the Active Zone through SYD-2/Liprin and UNC-10/RIM-Dependent Interactions. Journal of Neuroscience, 2011, 31, 4388-4396.	3.6	103

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55	Action potentials drive body wall muscle contractions in Caenorhabditis elegans. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 2557-2562.	7.1	128
56	Mutations in a Guanylate Cyclase GCY-35/GCY-36 Modify Bardet-Biedl Syndromeâ€"Associated Phenotypes in Caenorhabditis elegans. PLoS Genetics, 2011, 7, e1002335.	3.5	19
57	PHRs: bridging axon guidance, outgrowth and synapse development. Current Opinion in Neurobiology, 2010, 20, 100-107.	4.2	36
58	Ciliary dysfunction and obesity. Clinical Genetics, 2010, 77, 18-27.	2.0	29
59	C. elegans STRADÎ± and SAD cooperatively regulate neuronal polarity and synaptic organization. Development (Cambridge), 2010, 137, 93-102.	2.5	36
60	The long and the short of SAD-1 kinase. Communicative and Integrative Biology, 2010, 3, 251-255.	1.4	5
61	Caenorhabditis elegansInnexins Regulate Active Zone Differentiation. Journal of Neuroscience, 2009, 29, 5207-5217.	3.6	28
62	Regulation of Vertebrate Nervous System Alternative Splicing and Development by an SR-Related Protein. Cell, 2009, 138, 898-910.	28.9	195
63	A chemical-genetic strategy reveals distinct temporal requirements for SAD-1 kinase in neuronal polarization and synapse formation. Neural Development, 2008, 3, 23.	2.4	32
64	ITSNâ€1 Controls Vesicle Recycling at the Neuromuscular Junction and Functions in Parallel with DABâ€1. Traffic, 2008, 9, 742-754.	2.7	43
65	The SCFFSN-1 ubiquitin ligase controls germline apoptosis through CEP-1/p53 in C. elegans. Cell Death and Differentiation, 2008, 15, 1054-1062.	11.2	39
66	Optogenetic analysis of synaptic function. Nature Methods, 2008, 5, 895-902.	19.0	184
67	Protons as Intercellular Messengers. Cell, 2008, 132, 21-22.	28.9	3
68	Absolute Threshold. , 2008, , 3-3.		0
69	A Putative Cation Channel, NCA-1, and a Novel Protein, UNC-80, Transmit Neuronal Activity in C. elegans. PLoS Biology, 2008, 6, e55.	5.6	109
70	An Essential Role for DYF-11/MIP-T3 in Assembling Functional Intraflagellar Transport Complexes. PLoS Genetics, 2008, 4, e1000044.	3.5	48
71	Neuronal polarity is regulated by a direct interaction between a scaffolding protein, Neurabin, and a presynaptic SAD-1 kinase in Caenorhabditis elegans. Development (Cambridge), 2007, 134, 237-249.	2.5	61
72	Presynaptic Terminal Differentiation. , 2007, , 75-94.		0

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73	Hierarchical assembly of presynaptic components in defined C. elegans synapses. Nature Neuroscience, 2006, 9, 1488-1498.	14.8	166
74	The C2H2 zinc-finger protein SYD-9 is a putative posttranscriptional regulator for synaptic transmission. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 10450-10455.	7.1	15
75	Identification of Genes Involved in Synaptogenesis Using a Fluorescent Active Zone Marker in Caenorhabditis elegans. Journal of Neuroscience, 2005, 25, 3833-3841.	3.6	89
76	An SCF-like ubiquitin ligase complex that controls presynaptic differentiation. Nature, 2004, 430, 345-350.	27.8	201
77	Presynaptic terminal differentiation: transport and assembly. Current Opinion in Neurobiology, 2004, 14, 280-287.	4.2	46
78	The SAD-1 Kinase Regulates Presynaptic Vesicle Clustering and Axon Termination. Neuron, 2001, 29, 115-129.	8.1	166
79	Regulation of Presynaptic Terminal Organization by C. elegans RPM-1, a Putative Guanine Nucleotide Exchanger with a RING-H2 Finger Domain. Neuron, 2000, 26, 331-343.	8.1	216
80	The liprin protein SYD-2 regulates the differentiation of presynaptic termini in C. elegans. Nature, 1999, 401, 371-375.	27.8	324
81	Title is missing!. Nature, 1999, 401, 371-375.	27.8	151
82	An essential ubiquitin-conjugating enzyme with tissue and developmental specificity in th nematode Caenorhabditis elegans. EMBO Journal, 1996, 15, 3229-37.	7.8	11