

# Kang Shen

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9124968/publications.pdf>

Version: 2024-02-01

68

papers

5,059

citations

94433

37

h-index

110387

64

g-index

88

all docs

88

docs citations

88

times ranked

5976

citing authors

#	ARTICLE	IF	CITATIONS
1	The Immunoglobulin Superfamily Protein SYG-1 Determines the Location of Specific Synapses in <i>C. elegans</i> . <i>Cell</i> , 2003, 112, 619-630.	28.9	287
2	Synaptic Specificity Is Generated by the Synaptic Guidepost Protein SYG-2 and Its Receptor, SYG-1. <i>Cell</i> , 2004, 116, 869-881.	28.9	277
3	Genetics and Cell Biology of Building Specific Synaptic Connectivity. <i>Annual Review of Neuroscience</i> , 2010, 33, 473-507.	10.7	203
4	Guidance Molecules in Synapse Formation and Plasticity. <i>Cold Spring Harbor Perspectives in Biology</i> , 2010, 2, a001842-a001842.	5.5	199
5	Non-invasive intravital imaging of cellular differentiation with a bright red-excitable fluorescent protein. <i>Nature Methods</i> , 2014, 11, 572-578.	19.0	196
6	Hierarchical assembly of presynaptic components in defined <i>C. elegans</i> synapses. <i>Nature Neuroscience</i> , 2006, 9, 1488-1498.	14.8	166
7	UNC-33 (CRMP) and ankyrin organize microtubules and localize kinesin to polarize axon-dendrite sorting. <i>Nature Neuroscience</i> , 2012, 15, 48-56.	14.8	152
8	Optical control of cell signaling by single-chain photoswitchable kinases. <i>Science</i> , 2017, 355, 836-842.	12.6	151
9	Parkinson's Disease Genes VPS35 and EIF4G1 Interact Genetically and Converge on $\alpha$ -Synuclein. <i>Neuron</i> , 2015, 85, 76-87.	8.1	149
10	An Extracellular Adhesion Molecule Complex Patterns Dendritic Branching and Morphogenesis. <i>Cell</i> , 2013, 155, 296-307.	28.9	146
11	Prevalent presence of periodic actin-spectrin-based membrane skeleton in a broad range of neuronal cell types and animal species. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 6029-6034.	7.1	145
12	Genetically targeted chemical assembly of functional materials in living cells, tissues, and animals. <i>Science</i> , 2020, 367, 1372-1376.	12.6	132
13	Local F-actin Network Links Synapse Formation and Axon Branching. <i>Cell</i> , 2014, 156, 208-220.	28.9	128
14	Intrinsic and Extrinsic Mechanisms of Dendritic Morphogenesis. <i>Annual Review of Physiology</i> , 2015, 77, 271-300.	13.1	123
15	The Balance between Capture and Dissociation of Presynaptic Proteins Controls the Spatial Distribution of Synapses. <i>Neuron</i> , 2013, 78, 994-1011.	8.1	119
16	Microtubule Organization Determines Axonal Transport Dynamics. <i>Neuron</i> , 2016, 92, 449-460.	8.1	116
17	Autoinhibition of a Neuronal Kinesin UNC-104/KIF1A Regulates the Size and Density of Synapses. <i>Cell Reports</i> , 2016, 16, 2129-2141.	6.4	105
18	Kinesin-1 regulates dendrite microtubule polarity in <i>Caenorhabditis elegans</i> . <i>ELife</i> , 2013, 2, e00133.	6.0	103

#	ARTICLE	IF	CITATIONS
19	Axon and dendritic trafficking. <i>Current Opinion in Neurobiology</i> , 2014, 27, 165-170.	4.2	96
20	Genetic defects in $\beta$ -spectrin and tau sensitize <i>C. elegans</i> axons to movement-induced damage via torque-tension coupling. <i>ELife</i> , 2017, 6, .	6.0	93
21	The transmembrane LRR protein DMA-1 promotes dendrite branching and growth in <i>C. elegans</i> . <i>Nature Neuroscience</i> , 2012, 15, 57-63.	14.8	91
22	Assembly of synaptic active zones requires phase separation of scaffold molecules. <i>Nature</i> , 2020, 588, 454-458.	27.8	91
23	MADD-4/Punctin and Neurexin Organize <i>C. elegans</i> GABAergic Postsynapses through Neuroligin. <i>Neuron</i> , 2015, 86, 1420-1432.	8.1	83
24	Establishing Neuronal Polarity with Environmental and Intrinsic Mechanisms. <i>Neuron</i> , 2017, 96, 638-650.	8.1	81
25	PTRN-1, a microtubule minus end-binding CAMSAP homolog, promotes microtubule function in <i>Caenorhabditis elegans</i> neurons. <i>ELife</i> , 2014, 3, e01498.	6.0	78
26	NAB-1 instructs synapse assembly by linking adhesion molecules and F-actin to active zone proteins. <i>Nature Neuroscience</i> , 2012, 15, 234-242.	14.8	77
27	BORC Regulates the Axonal Transport of Synaptic Vesicle Precursors by Activating ARL-8. <i>Current Biology</i> , 2017, 27, 2569-2578.e4.	3.9	72
28	RAB-10 Regulates Dendritic Branching by Balancing Dendritic Transport. <i>PLoS Genetics</i> , 2015, 11, e1005695.	3.5	68
29	Structural mechanisms of selectivity and gating in anion channelrhodopsins. <i>Nature</i> , 2018, 561, 349-354.	27.8	67
30	Clarinet (CLA-1), a novel active zone protein required for synaptic vesicle clustering and release. <i>ELife</i> , 2017, 6, .	6.0	63
31	Parallel Processing of Two Mechanosensory Modalities by a Single Neuron in <i>C. elegans</i> . <i>Developmental Cell</i> , 2019, 51, 617-631.e3.	7.0	62
32	A multi-protein receptor-ligand complex underlies combinatorial dendrite guidance choices in <i>C. elegans</i> . <i>ELife</i> , 2016, 5, .	6.0	62
33	Extracellular Architecture of the SYG-1/SYG-2 Adhesion Complex Instructs Synaptogenesis. <i>Cell</i> , 2014, 156, 482-494.	28.9	59
34	$\beta$ -Neurexin and Frizzled Mediate Parallel Synapse Assembly Pathways Antagonized by Receptor Endocytosis. <i>Neuron</i> , 2018, 100, 150-166.e4.	8.1	57
35	A Dendritic Guidance Receptor Complex Brings Together Distinct Actin Regulators to Drive Efficient F-Actin Assembly and Branching. <i>Developmental Cell</i> , 2018, 45, 362-375.e3.	7.0	56
36	Sarcomeres Pattern Proprioceptive Sensory Dendritic Endings through UNC-52/Perlecan in <i>C. elegans</i> . <i>Developmental Cell</i> , 2015, 33, 388-400.	7.0	55

#	ARTICLE	IF	CITATIONS
37	Two Clathrin Adaptor Protein Complexes Instruct Axon-Dendrite Polarity. <i>Neuron</i> , 2016, 90, 564-580.	8.1	55
38	The Neuronal Kinesin UNC-104/KIF1A Is a Key Regulator of Synaptic Aging and Insulin Signaling-Regulated Memory. <i>Current Biology</i> , 2016, 26, 605-615.	3.9	49
39	Metaxins are core components of mitochondrial transport adaptor complexes. <i>Nature Communications</i> , 2021, 12, 83.	12.8	48
40	RSY-1 Is a Local Inhibitor of Presynaptic Assembly in <i>C. elegans</i> . <i>Science</i> , 2009, 323, 1500-1503.	12.6	45
41	The unfolded protein response is required for dendrite morphogenesis. <i>ELife</i> , 2015, 4, e06963.	6.0	42
42	Atlastin-1 regulates morphology and function of endoplasmic reticulum in dendrites. <i>Nature Communications</i> , 2019, 10, 568.	12.8	41
43	Growth cone-localized microtubule organizing center establishes microtubule orientation in dendrites. <i>ELife</i> , 2020, 9, .	6.0	41
44	The inositol 5-phosphatase INPP5K participates in the fine control of ER organization. <i>Journal of Cell Biology</i> , 2018, 217, 3577-3592.	5.2	39
45	Deep phenotyping unveils hidden traits and genetic relations in subtle mutants. <i>Nature Communications</i> , 2016, 7, 12990.	12.8	37
46	Synaptogenic pathways. <i>Current Opinion in Neurobiology</i> , 2019, 57, 156-162.	4.2	36
47	Regulation of Synaptic Extracellular Matrix Composition Is Critical for Proper Synapse Morphology. <i>Journal of Neuroscience</i> , 2014, 34, 12678-12689.	3.6	32
48	Precise regulation of the guidance receptor DMA-1 by KPC-1/Furin instructs dendritic branching decisions. <i>ELife</i> , 2016, 5, .	6.0	32
49	An Endoplasmic Reticulum ATPase Safeguards Endoplasmic Reticulum Identity by Removing Ectopically Localized Mitochondrial Proteins. <i>Cell Reports</i> , 2020, 33, 108363.	6.4	32
50	Proximity labeling reveals non-centrosomal microtubule-organizing center components required for microtubule growth and localization. <i>Current Biology</i> , 2021, 31, 3586-3600.e11.	3.9	31
51	Rapid Assembly of Presynaptic Materials behind the Growth Cone in Dopaminergic Neurons Is Mediated by Precise Regulation of Axonal Transport. <i>Cell Reports</i> , 2018, 24, 2709-2722.	6.4	30
52	The THO Complex Coordinates Transcripts for Synapse Development and Dopamine Neuron Survival. <i>Cell</i> , 2018, 174, 1436-1449.e20.	28.9	25
53	Mice lacking the synaptic adhesion molecule Neph2/Kirrel3 display moderate hyperactivity and defective novel object preference. <i>Frontiers in Cellular Neuroscience</i> , 2015, 9, 283.	3.7	22
54	Dynein and EFF-1 control dendrite morphology through regulating the localization pattern of SAX-7 in epidermal cells. <i>Journal of Cell Science</i> , 2017, 130, 4063-4071.	2.0	22

#	ARTICLE	IF	CITATIONS
55	SLC-30A9 is required for Zn <sup>2+</sup> homeostasis, Zn <sup>2+</sup> mobilization, and mitochondrial health. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	21
56	A Myt1 family transcription factor defines neuronal fate by repressing non-neuronal genes. ELife, 2019, 8, .	6.0	21
57	Neurite Development and Repair in Worms and Flies. Annual Review of Neuroscience, 2019, 42, 209-226.	10.7	20
58	Local inhibition of microtubule dynamics by dynein is required for neuronal cargo distribution. Nature Communications, 2017, 8, 15063.	12.8	19
59	Receptor tyrosine phosphatase CLR-1 acts in skin cells to promote sensory dendrite outgrowth. Developmental Biology, 2016, 413, 60-69.	2.0	15
60	Increased Excitatory Synaptic Transmission of Dentate Granule Neurons in Mice Lacking PSD-95-Interacting Adhesion Molecule Neph2/Kirrel3 during the Early Postnatal Period. Frontiers in Molecular Neuroscience, 2017, 10, 81.	2.9	14
61	A novel bipartite $UNC-101/AP-1$ binding signal mediates $KVS-4/Kv2.1$ somatodendritic distribution in <i>Caenorhabditis elegans</i> . FEBS Letters, 2016, 590, 76-92.	2.8	12
62	A hormone receptor pathway cell-autonomously delays neuron morphological aging by suppressing endocytosis. PLoS Biology, 2019, 17, e3000452.	5.6	11
63	Dendrites use mechanosensitive channels to proofread ligand-mediated neurite extension during morphogenesis. Developmental Cell, 2022, 57, 1615-1629.e3.	7.0	11
64	A two-step actin polymerization mechanism drives dendrite branching. Neural Development, 2021, 16, 3.	2.4	10
65	Inherited apicobasal polarity defines the key features of axon-dendrite polarity in a sensory neuron. Current Biology, 2021, 31, 3768-3783.e3.	3.9	7
66	STORMing towards a clear picture of the cytoskeleton in neurons. ELife, 2015, 4, .	6.0	5
67	Finding functions of phase separation in the presynapse. Current Opinion in Neurobiology, 2021, 69, 178-184.	4.2	4
68	MTM-6, a Phosphoinositide Phosphatase, is Required to Promote Synapse Formation in <i>Caenorhabditis elegans</i> . PLoS ONE, 2014, 9, e114501.	2.5	1