Zhigang He

List of Publications by Year
in descending order

72 papers	13,755 citations	50276 46 h-index	88630 70 g-index
90 all docs	90 docs citations	90 times ranked	9960 citing authors

#	Article	IF	Citations
1	Axon Regeneration: A Subcellular Extension in Multiple Dimensions. Cold Spring Harbor Perspectives in Biology, 2022, 14, a040923.	5.5	9
2	Neuronal mitochondria transport Pink1 mRNA via synaptojanin 2 to support local mitophagy. Neuron, 2022, 110, 1516-1531.e9.	8.1	55
3	Solving neurodegeneration: common mechanisms and strategies for new treatments. Molecular Neurodegeneration, 2022, 17, 23.	10.8	83
4	Overlapping transcriptional programs promote survival and axonal regeneration of injured retinal ganglion cells. Neuron, 2022, 110, 2625-2645.e7.	8.1	48
5	Core transcription programs controlling injury-induced neurodegeneration of retinal ganglion cells. Neuron, 2022, 110, 2607-2624.e8.	8.1	45
6	Microglia coordinate cellular interactions during spinal cord repair in mice. Nature Communications, 2022, 13, .	12.8	61
7	Lipidomics dataset of PTEN deletion-induced optic nerve regeneration mouse model. Data in Brief, 2021, 34, 106699.	1.0	6
8	Improving hindlimb locomotor function by Non-invasive AAV-mediated manipulations of propriospinal neurons in mice with complete spinal cord injury. Nature Communications, 2021, 12, 781.	12.8	50
9	Meeting Proceedings for SCI 2020: Launching a Decade of Disruption in Spinal Cord Injury Research. Journal of Neurotrauma, 2021, 38, 1251-1266.	3.4	14
10	MyelTracer: A Semi-Automated Software for Myeling-Ratio Quantification. ENeuro, 2021, 8, ENEURO.0558-20.2021.	1.9	32
11	Reciprocal repulsions instruct the precise assembly of parallel hippocampal networks. Science, 2021, 372, 1068-1073.	12.6	38
12	Utilizing mouse optic nerve crush to examine CNS remyelination. STAR Protocols, 2021, 2, 100796.	1.2	2
13	Microglia-organized scar-free spinal cord repair in neonatal mice. Nature, 2020, 587, 613-618.	27.8	197
14	Reprogramming to recover youthful epigenetic information and restore vision. Nature, 2020, 588, 124-129.	27.8	424
15	Robust Myelination of Regenerated Axons Induced by Combined Manipulations of GPR17 and Microglia. Neuron, 2020, 108, 876-886.e4.	8.1	76
16	Axon Regeneration in the Mammalian Optic Nerve. Annual Review of Vision Science, 2020, 6, 195-213.	4.4	101
17	Activating Transcription Factor 3 (ATF3) Protects Retinal Ganglion Cells and Promotes Functional Preservation After Optic Nerve Crush. , 2020, 61, 31.		46
18	LATS suppresses mTORC1 activity to directly coordinate Hippo and mTORC1 pathways in growth control. Nature Cell Biology, 2020, 22, 246-256.	10.3	56

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19	Preclinical insights into therapeutic targeting of KCC2 for disorders of neuronal hyperexcitability. Expert Opinion on Therapeutic Targets, 2020, 24, 629-637.	3.4	8
20	Viral vectors for neuronal cell type-specific visualization and manipulations. Current Opinion in Neurobiology, 2020, 63, 67-76.	4.2	16
21	Elevating Growth Factor Responsiveness and Axon Regeneration by Modulating Presynaptic Inputs. Neuron, 2019, 103, 39-51.e5.	8.1	89
22	Neuronal deletion of Gtf2i, associated with Williams syndrome, causes behavioral and myelin alterations rescuable by a remyelinating drug. Nature Neuroscience, 2019, 22, 700-708.	14.8	92
23	Single-Cell Profiles of Retinal Ganglion Cells Differing in Resilience to Injury Reveal Neuroprotective Genes. Neuron, 2019, 104, 1039-1055.e12.	8.1	396
24	Touch and tactile neuropathic pain sensitivity are set by corticospinal projections. Nature, 2018, 561, 547-550.	27.8	171
25	Required growth facilitators propel axon regeneration across complete spinal cord injury. Nature, 2018, 561, 396-400.	27.8	341
26	Reactivation of Dormant Relay Pathways in Injured Spinal Cord by KCC2 Manipulations. Cell, 2018, 174, 521-535.e13.	28.9	165
27	Reaching the brain: Advances in optic nerve regeneration. Experimental Neurology, 2017, 287, 365-373.	4.1	173
28	An Intrinsic Epigenetic Barrier for Functional Axon Regeneration. Neuron, 2017, 94, 337-346.e6.	8.1	130
29	Sox11 Expression Promotes Regeneration of Some Retinal Ganglion Cell Types but Kills Others. Neuron, 2017, 94, 1112-1120.e4.	8.1	151
30	Deconstruction of Corticospinal Circuits for Goal-Directed Motor Skills. Cell, 2017, 171, 440-455.e14.	28.9	155
31	A Sensitized IGF1 Treatment Restores Corticospinal Axon-Dependent Functions. Neuron, 2017, 95, 817-833.e4.	8.1	155
32	Retinal ganglion cell survival and axon regeneration after optic nerve injury in naked moleâ€rats. Journal of Comparative Neurology, 2017, 525, 380-388.	1.6	17
33	A high mitochondrial transport rate characterizes CNS neurons with high axonal regeneration capacity. PLoS ONE, 2017, 12, e0184672.	2.5	37
34	Neural activity promotes long-distance, target-specific regeneration of adult retinal axons. Nature Neuroscience, 2016, 19, 1073-1084.	14.8	246
35	Variable laterality of corticospinal tract axons that regenerate after spinal cord injury as a result of PTEN deletion or knockâ€down. Journal of Comparative Neurology, 2016, 524, 2654-2676.	1.6	18
36	The Mammalian-Specific Protein Armcx1 Regulates Mitochondrial Transport during Axon Regeneration. Neuron, 2016, 92, 1294-1307.	8.1	150

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37	Intrinsic Control of Axon Regeneration. Neuron, 2016, 90, 437-451.	8.1	469
38	The Brain Metabolome of Male Rats across the Lifespan. Scientific Reports, 2016, 6, 24125.	3.3	51
39	Building bridges to regenerate axons. Science, 2016, 354, 544-545.	12.6	2
40	Restoration of Visual Function by Enhancing Conduction in Regenerated Axons. Cell, 2016, 164, 219-232.	28.9	209
41	A Systems-Level Analysis of the Peripheral Nerve Intrinsic Axonal Growth Program. Neuron, 2016, 89, 956-970.	8.1	314
42	Intrinsic Neuronal Mechanisms in Axon Regeneration After Spinal Cord Injury. , 2016, , 399-414.		0
43	Two-photon microscopy as a tool to investigate the therapeutic time window of methylprednisolone in a mouse spinal cord injury model. Restorative Neurology and Neuroscience, 2015, 33, 291-300.	0.7	5
44	In Vivo Two-Photon Imaging of Axonal Dieback, Blood Flow and Calcium Influx withMethylprednisolone Therapy after Spinal Cord Injury. Scientific Reports, 2015, 5, 9691.	3.3	48
45	Robust Axonal Regeneration Occurs in the Injured CAST/Ei Mouse CNS. Neuron, 2015, 86, 1215-1227.	8.1	87
46	Effects of PTEN and Nogo Codeletion on Corticospinal Axon Sprouting and Regeneration in Mice. Journal of Neuroscience, 2015, 35, 6413-6428.	3.6	95
47	Subtype-Specific Regeneration of Retinal Ganglion Cells following Axotomy: Effects of Osteopontin and mTOR Signaling. Neuron, 2015, 85, 1244-1256.	8.1	421
48	Injury-Induced Decline of Intrinsic Regenerative Ability Revealed by Quantitative Proteomics. Neuron, 2015, 86, 1000-1014.	8.1	220
49	Doublecortin-Like Kinases Promote Neuronal Survival and Induce Growth Cone Reformation via Distinct Mechanisms. Neuron, 2015, 88, 704-719.	8.1	104
50	Restoration of skilled locomotion by sprouting corticospinal axons induced by co-deletion of PTEN and SOCS3. Nature Communications, 2015, 6, 8074.	12.8	154
51	SOCS3: A common target for neuronal protection and axon regeneration after spinal cord injury. Experimental Neurology, 2015, 263, 364-367.	4.1	24
52	Characterization of Long Descending Premotor Propriospinal Neurons in the Spinal Cord. Journal of Neuroscience, 2014, 34, 9404-9417.	3.6	51
53	B-RAF kinase drives developmental axon growth and promotes axon regeneration in the injured mature CNS. Journal of Experimental Medicine, 2014, 211, 801-814.	8.5	86
54	Signaling regulations of neuronal regenerative ability. Current Opinion in Neurobiology, 2014, 27, 135-142.	4.2	102

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55	Independent Control of Aging and Axon Regeneration. Cell Metabolism, 2014, 19, 354-356.	16.2	5
56	Short Hairpin RNA against PTEN Enhances Regenerative Growth of Corticospinal Tract Axons after Spinal Cord Injury. Journal of Neuroscience, 2013, 33, 15350-15361.	3.6	245
57	No simpler than mammals: axon and dendrite regeneration in Drosophila. Genes and Development, 2012, 26, 1509-1514.	5.9	15
58	Differential Effects of Unfolded Protein Response Pathways on Axon Injury-Induced Death of Retinal Ganglion Cells. Neuron, 2012, 73, 445-452.	8.1	174
59	Neuronal Intrinsic Mechanisms of Axon Regeneration. Annual Review of Neuroscience, 2011, 34, 131-152.	10.7	404
60	Sustained axon regeneration induced by co-deletion of PTEN and SOCS3. Nature, 2011, 480, 372-375.	27.8	637
61	PTEN deletion enhances the regenerative ability of adult corticospinal neurons. Nature Neuroscience, 2010, 13, 1075-1081.	14.8	841
62	Intrinsic control of axon regeneration. Journal of Biomedical Research, 2010, 24, 2-5.	1.6	19
63	Intrinsic control of axon regeneration. FASEB Journal, 2010, 24, 173.3.	0.5	0
64	SOCS3 Deletion Promotes Optic Nerve Regeneration In Vivo. Neuron, 2009, 64, 617-623.	8.1	442
65	Promoting Axon Regeneration in the Adult CNS by Modulation of the PTEN/mTOR Pathway. Science, 2008, 322, 963-966.	12.6	1,455
66	Glial inhibition of CNS axon regeneration. Nature Reviews Neuroscience, 2006, 7, 617-627.	10.2	1,329
67	Counteracting the Nogo Receptor Enhances Optic Nerve Regeneration If Retinal Ganglion Cells Are in an Active Growth State. Journal of Neuroscience, 2004, 24, 1646-1651.	3.6	258
68	THE NOGO SIGNALING PATHWAY FOR REGENERATION BLOCK. Annual Review of Neuroscience, 2004, 27, 341-368.	10.7	201
69	Knowing How to Navigate: Mechanisms of Semaphorin Signaling in the Nervous System. Science Signaling, 2002, 2002, re1.	3.6	87
70	Myelin-Associated Glycoprotein Interacts with the Nogo66 Receptor to Inhibit Neurite Outgrowth. Neuron, 2002, 35, 283-290.	8.1	533
71	p75 interacts with the Nogo receptor as a co-receptor for Nogo, MAG and OMgp. Nature, 2002, 420, 74-78.	27.8	748
72	How Oligodendrocytes Help The Brain Function. Frontiers for Young Minds, 0, 9, .	0.8	0