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	Promoting Axon Regeneration in the Adult CNS by Modulation of the PTEN/mTOR Pathway. Science, 2008, 322, 963-966.	12.6	1,455
2	Glial inhibition of CNS axon regeneration. Nature Reviews Neuroscience, 2006, 7, 617-627.	10.2	1,329
3	PTEN deletion enhances the regenerative ability of adult corticospinal neurons. Nature Neuroscience, 2010, 13, 1075-1081.	14.8	841
4	p75 interacts with the Nogo receptor as a co-receptor for Nogo, MAG and OMgp. Nature, 2002, 420, 74-78.	27.8	748
5	Sustained axon regeneration induced by co-deletion of PTEN and SOCS3. Nature, 2011, 480, 372-375.	27.8	637
6	Myelin-Associated Glycoprotein Interacts with the Nogo66 Receptor to Inhibit Neurite Outgrowth. Neuron, 2002, 35, 283-290.	8.1	533
7	Intrinsic Control of Axon Regeneration. Neuron, 2016, 90, 437-451.	8.1	469
8	SOCS3 Deletion Promotes Optic Nerve Regeneration In Vivo. Neuron, 2009, 64, 617-623.	8.1	442
9	Reprogramming to recover youthful epigenetic information and restore vision. Nature, 2020, 588, 124-129.	27.8	424
10	Subtype-Specific Regeneration of Retinal Ganglion Cells following Axotomy: Effects of Osteopontin and mTOR Signaling. Neuron, 2015, 85, 1244-1256.	8.1	421
11	Neuronal Intrinsic Mechanisms of Axon Regeneration. Annual Review of Neuroscience, 2011, 34, 131-152.	10.7	404
12	Single-Cell Profiles of Retinal Ganglion Cells Differing in Resilience to Injury Reveal Neuroprotective Genes. Neuron, 2019, 104, 1039-1055.e12.	8.1	396
13	Required growth facilitators propel axon regeneration across complete spinal cord injury. Nature, 2018, 561, 396-400.	27.8	341
14	A Systems-Level Analysis of the Peripheral Nerve Intrinsic Axonal Growth Program. Neuron, 2016, 89, 956-970.	8.1	314
15	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
16	Neural activity promotes long-distance, target-specific regeneration of adult retinal axons. Nature Neuroscience, 2016, 19, 1073-1084.	14.8	246
17	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
18	Injury-Induced Decline of Intrinsic Regenerative Ability Revealed by Quantitative Proteomics. Neuron, 2015, 86, 1000-1014.	8.1	220

#	Article	IF	Citations
19	Restoration of Visual Function by Enhancing Conduction in Regenerated Axons. Cell, 2016, 164, 219-232.	28.9	209
20	THE NOGO SIGNALING PATHWAY FOR REGENERATION BLOCK. Annual Review of Neuroscience, 2004, 27, 341-368.	10.7	201
21	Microglia-organized scar-free spinal cord repair in neonatal mice. Nature, 2020, 587, 613-618.	27.8	197
22	Differential Effects of Unfolded Protein Response Pathways on Axon Injury-Induced Death of Retinal Ganglion Cells. Neuron, 2012, 73, 445-452.	8.1	174
23	Reaching the brain: Advances in optic nerve regeneration. Experimental Neurology, 2017, 287, 365-373.	4.1	173
24	Touch and tactile neuropathic pain sensitivity are set by corticospinal projections. Nature, 2018, 561, 547-550.	27.8	171
25	Reactivation of Dormant Relay Pathways in Injured Spinal Cord by KCC2 Manipulations. Cell, 2018, 174, 521-535.e13.	28.9	165
26	Deconstruction of Corticospinal Circuits for Goal-Directed Motor Skills. Cell, 2017, 171, 440-455.e14.	28.9	155
27	A Sensitized IGF1 Treatment Restores Corticospinal Axon-Dependent Functions. Neuron, 2017, 95, 817-833.e4.	8.1	155
28	Restoration of skilled locomotion by sprouting corticospinal axons induced by co-deletion of PTEN and SOCS3. Nature Communications, 2015, 6, 8074.	12.8	154
29	Sox11 Expression Promotes Regeneration of Some Retinal Ganglion Cell Types but Kills Others. Neuron, 2017, 94, 1112-1120.e4.	8.1	151
30	The Mammalian-Specific Protein Armcx1 Regulates Mitochondrial Transport during Axon Regeneration. Neuron, 2016, 92, 1294-1307.	8.1	150
31	An Intrinsic Epigenetic Barrier for Functional Axon Regeneration. Neuron, 2017, 94, 337-346.e6.	8.1	130
32	Doublecortin-Like Kinases Promote Neuronal Survival and Induce Growth Cone Reformation via Distinct Mechanisms. Neuron, 2015, 88, 704-719.	8.1	104
33	Signaling regulations of neuronal regenerative ability. Current Opinion in Neurobiology, 2014, 27, 135-142.	4.2	102
34	Axon Regeneration in the Mammalian Optic Nerve. Annual Review of Vision Science, 2020, 6, 195-213.	4.4	101
35	Effects of PTEN and Nogo Codeletion on Corticospinal Axon Sprouting and Regeneration in Mice. Journal of Neuroscience, 2015, 35, 6413-6428.	3.6	95
36	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

#	Article	IF	Citations
37	Elevating Growth Factor Responsiveness and Axon Regeneration by Modulating Presynaptic Inputs. Neuron, 2019, 103, 39-51.e5.	8.1	89
38	Knowing How to Navigate: Mechanisms of Semaphorin Signaling in the Nervous System. Science Signaling, 2002, 2002, re1.	3.6	87
39	Robust Axonal Regeneration Occurs in the Injured CAST/Ei Mouse CNS. Neuron, 2015, 86, 1215-1227.	8.1	87
40	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
41	Solving neurodegeneration: common mechanisms and strategies for new treatments. Molecular Neurodegeneration, 2022, 17, 23.	10.8	83
42	Robust Myelination of Regenerated Axons Induced by Combined Manipulations of GPR17 and Microglia. Neuron, 2020, 108, 876-886.e4.	8.1	76
43	Microglia coordinate cellular interactions during spinal cord repair in mice. Nature Communications, 2022, 13, .	12.8	61
44	LATS suppresses mTORC1 activity to directly coordinate Hippo and mTORC1 pathways in growth control. Nature Cell Biology, 2020, 22, 246-256.	10.3	56
45	Neuronal mitochondria transport Pink1 mRNA via synaptojanin 2 to support local mitophagy. Neuron, 2022, 110, 1516-1531.e9.	8.1	55
46	Characterization of Long Descending Premotor Propriospinal Neurons in the Spinal Cord. Journal of Neuroscience, 2014, 34, 9404-9417.	3.6	51
47	The Brain Metabolome of Male Rats across the Lifespan. Scientific Reports, 2016, 6, 24125.	3.3	51
48	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
49	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
50	Overlapping transcriptional programs promote survival and axonal regeneration of injured retinal ganglion cells. Neuron, 2022, 110, 2625-2645.e7.	8.1	48
51	Activating Transcription Factor 3 (ATF3) Protects Retinal Ganglion Cells and Promotes Functional Preservation After Optic Nerve Crush. , 2020, 61, 31.		46
52	Core transcription programs controlling injury-induced neurodegeneration of retinal ganglion cells. Neuron, 2022, 110, 2607-2624.e8.	8.1	45
53	Reciprocal repulsions instruct the precise assembly of parallel hippocampal networks. Science, 2021, 372, 1068-1073.	12.6	38
54	A high mitochondrial transport rate characterizes CNS neurons with high axonal regeneration capacity. PLoS ONE, 2017, 12, e0184672.	2.5	37

#	Article	IF	Citations
55	MyelTracer: A Semi-Automated Software for Myeling-Ratio Quantification. ENeuro, 2021, 8, ENEURO.0558-20.2021.	1.9	32
56	SOCS3: A common target for neuronal protection and axon regeneration after spinal cord injury. Experimental Neurology, 2015, 263, 364-367.	4.1	24
57	Intrinsic control of axon regeneration. Journal of Biomedical Research, 2010, 24, 2-5.	1.6	19
58	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
59	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
60	Viral vectors for neuronal cell type-specific visualization and manipulations. Current Opinion in Neurobiology, 2020, 63, 67-76.	4.2	16
61	No simpler than mammals: axon and dendrite regeneration in Drosophila. Genes and Development, 2012, 26, 1509-1514.	5.9	15
62	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
63	Axon Regeneration: A Subcellular Extension in Multiple Dimensions. Cold Spring Harbor Perspectives in Biology, 2022, 14, a040923.	5.5	9
64	Preclinical insights into therapeutic targeting of KCC2 for disorders of neuronal hyperexcitability. Expert Opinion on Therapeutic Targets, 2020, 24, 629-637.	3.4	8
65	Lipidomics dataset of PTEN deletion-induced optic nerve regeneration mouse model. Data in Brief, 2021, 34, 106699.	1.0	6
66	Independent Control of Aging and Axon Regeneration. Cell Metabolism, 2014, 19, 354-356.	16.2	5
67	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
68	Building bridges to regenerate axons. Science, 2016, 354, 544-545.	12.6	2
69	Utilizing mouse optic nerve crush to examine CNS remyelination. STAR Protocols, 2021, 2, 100796.	1.2	2
70	How Oligodendrocytes Help The Brain Function. Frontiers for Young Minds, 0, 9, .	0.8	0
71	Intrinsic control of axon regeneration. FASEB Journal, 2010, 24, 173.3.	0.5	0
72	Intrinsic Neuronal Mechanisms in Axon Regeneration After Spinal Cord Injury. , 2016, , 399-414.		0