Xiaorong Liu

List of Publications by Year
in descending order

50 papers	2,749 citations	218677 26 h-index	233421 45 g-index
53 all docs	53 docs citations	53 times ranked	2929 citing authors

#	Article	IF	Citations
1	In Vivo Sublayer Analysis of Human Retinal Inner Plexiform Layer Obtained by Visible-Light Optical Coherence Tomography. , 2022, 63, 18.		17
2	Differential effects of experimental glaucoma on intrinsically photosensitive retinal ganglion cells in mice. Journal of Comparative Neurology, 2022, 530, 1494-1506.	1.6	9
3	Long-term retinal protection by MEK inhibition in Pax6 haploinsufficiency mice. Experimental Eye Research, 2022, 218, 109012.	2.6	5
4	A standardized crush tool to produce consistent retinal ganglion cell damage in mice. Neural Regeneration Research, 2021, 16, 1442.	3.0	1
5	In vivo imaging of the inner retinal layer structure in mice after eye-opening using visible-light optical coherence tomography. Experimental Eye Research, 2021, 211, 108756.	2.6	8
6	Nano-in-Nano dendrimer gel particles for efficient topical delivery of antiglaucoma drugs into the eye. Chemical Engineering Journal, 2021, 425, 130498.	12.7	27
7	Global and Regional Damages in Retinal Ganglion Cell Axon Bundles Monitored Non-Invasively by Visible-Light Optical Coherence Tomography Fibergraphy. Journal of Neuroscience, 2021, 41, 10179-10193.	3.6	8
8	Angiopoietin-1 Knockout Mice as a Genetic Model of Open-Angle Glaucoma. Translational Vision Science and Technology, 2020, 9, 16.	2.2	22
9	Visible-Light Optical Coherence Tomography Fibergraphy for Quantitative Imaging of Retinal Ganglion Cell Axon Bundles. Translational Vision Science and Technology, 2020, 9, 11.	2.2	14
10	Gene dosage manipulation alleviates manifestations of hereditary <i>PAX6</i> haploinsufficiency in mice. Science Translational Medicine, 2020, 12, .	12.4	19
11	Correlation between retinal ganglion cell loss and nerve crush force-impulse established with instrumented tweezers in mice. Neurological Research, 2020, 42, 379-386.	1.3	4
12	Mesenchymal stem cell-derived extracellular vesicles and retinal ischemia-reperfusion. Biomaterials, 2019, 197, 146-160.	11.4	182
13	Speckle reduction in visible-light optical coherence tomography using scan modulation. Neurophotonics, 2019, 6, 1.	3.3	24
14	Visual Function, Organization, and Development of the Mouse Superior Colliculus. Annual Review of Vision Science, 2018, 4, 239-262.	4.4	81
15	Selective permeability of mouse blood-aqueous barrier as determined by ¹⁵ N-heavy isotope tracing and mass spectrometry. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 9032-9037.	7.1	13
16	Retinal origin of direction selectivity in the superior colliculus. Nature Neuroscience, 2017, 20, 550-558.	14.8	79
17	Different functional susceptibilities of mouse retinal ganglion cell subtypes to optic nerve crush injury. Experimental Eye Research, 2017, 162, 97-103.	2.6	39
18	Angiopoietin-1 is required for Schlemmâ€™s canal development in mice and humans. Journal of Clinical Investigation, 2017, 127, 4421-4436.	8.2	94

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19	Overexpression of Brain-Derived Neurotrophic Factor Protects Large Retinal Ganglion Cells After Optic Nerve Crush in Mice. ENeuro, 2017, 4, ENEURO.0331-16.2016.	1.9	41
20	Optical Detection of Early Damage in Retinal Ganglion Cells in a Mouse Model of Partial Optic Nerve Crush Injury. , 2016, 57, 5665.		25
21	Long-Term Protection of Retinal Ganglion Cells and Visual Function by Brain-Derived Neurotrophic Factor in Mice With Ocular Hypertension. , 2016, 57, 3793.		43
22	Angiopoietin receptor TEK mutations underlie primary congenital glaucoma with variable expressivity. Journal of Clinical Investigation, 2016, 126, 2575-2587.	8.2	175
23	Retinal Ganglion Cell Loss is Delayed Following Optic Nerve Crush in NLRP3 Knockout Mice. Scientific Reports, 2016, 6, 20998.	3.3	59
24	NLRP3 inflammasome in retinal ganglion cell loss in optic neuropathy. Neural Regeneration Research, 2016, 11, 1077.	3.0	9
25	Progressive Degeneration of Retinal and Superior Collicular Functions in Mice With Sustained Ocular Hypertension. , 2015, 56, 1971.		65
26	Neurons in the Most Superficial Lamina of the Mouse Superior Colliculus Are Highly Selective for Stimulus Direction. Journal of Neuroscience, 2015, 35, 7992-8003.	3.6	80
27	Subtype-dependent Morphological and Functional Degeneration of Retinal Ganglion Cells in Mouse Models of Experimental Glaucoma. Journal of Nature and Science, 2015, 1, e103.	1.1	11
28	Genetic disruption of the On visual pathway affects cortical orientation selectivity and contrast sensitivity in mice. Journal of Neurophysiology, 2014, 111, 2276-2286.	1.8	18
29	Subtype-dependent postnatal development of direction- and orientation-selective retinal ganglion cells in mice. Journal of Neurophysiology, 2014, 112, 2092-2101.	1.8	29
30	A lymphatic defect causes ocular hypertension and glaucoma in mice. Journal of Clinical Investigation, 2014, 124, 4320-4324.	8.2	151
31	Multimodal photoacoustic ophthalmoscopy in mouse. Journal of Biophotonics, 2013, 6, 505-512.	2.3	21
32	Orientation-selective Responses in the Mouse Lateral Geniculate Nucleus. Journal of Neuroscience, 2013, 33, 12751-12763.	3.6	120
33	Environmental Enrichment Rescues Binocular Matching of Orientation Preference in Mice that Have a Precocious Critical Period. Neuron, 2013, 80, 198-209.	8.1	65
34	A Laser-induced Mouse Model of Chronic Ocular Hypertension to Characterize Visual Defects. Journal of Visualized Experiments, 2013, , .	0.3	16
35	Sustained Ocular Hypertension Induces Dendritic Degeneration of Mouse Retinal Ganglion Cells That Depends on Cell Type and Location. , 2013, 54, 1106.		111
36	Overexpression of Neurotrophin-3 Stimulates a Second Wave of Dopaminergic Amacrine Cell Genesis after Birth in the Mouse Retina. Journal of Neuroscience, 2011, 31, 12663-12673.	3.6	17

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37	Detection of Visual Deficits in Aging DBA/2J Mice by Two Behavioral Assays. Current Eye Research, 2011, 36, 481-491.	1.5	18
38	Visual Receptive Field Properties of Neurons in the Superficial Superior Colliculus of the Mouse. Journal of Neuroscience, 2010, 30, 16573-16584.	3.6	191
39	Non-Centered Spike-Triggered Covariance Analysis Reveals Neurotrophin-3 as a Developmental Regulator of Receptive Field Properties of ON-OFF Retinal Ganglion Cells. PLoS Computational Biology, 2010, 6, e1000967.	3.2	38
40	Direction-Specific Disruption of Subcortical Visual Behavior and Receptive Fields in Mice Lacking the Î²2 Subunit of Nicotinic Acetylcholine Receptor. Journal of Neuroscience, 2009, 29, 12909-12918.	3.6	50
41	Regulation of neonatal development of retinal ganglion cell dendrites by neurotrophinâ€3 overexpression. Journal of Comparative Neurology, 2009, 514, 449-458.	1.6	39
42	Retinal TrkB receptors regulate neural development in the inner, but not outer, retina. Molecular and Cellular Neurosciences, 2008, 38, 431-443.	2.2	53
43	Selective Disruption of One Cartesian Axis of Cortical Maps and Receptive Fields by Deficiency inÂEphrin-As and Structured Activity. Neuron, 2008, 57, 511-523.	8.1	81
44	Vesicular Glutamate Transporter 1 Is Required for Photoreceptor Synaptic Signaling But Not For Intrinsic Visual Functions. Journal of Neuroscience, 2007, 27, 7245-7255.	3.6	45
45	Brain-Derived Neurotrophic Factor and TrkB Modulate Visual Experience-Dependent Refinement of Neuronal Pathways in Retina. Journal of Neuroscience, 2007, 27, 7256-7267.	3.6	77
46	Scotopic Visual Signaling in the Mouse Retina Is Modulated by High-Affinity Plasma Membrane Calcium Extrusion. Journal of Neuroscience, 2006, 26, 7201-7211.	3.6	41
47	Development of Precise Maps in Visual Cortex Requires Patterned Spontaneous Activity in the Retina. Neuron, 2005, 48, 797-809.	8.1	263
48	Expression of calcium transporters in the retina of the tiger salamander (Ambystoma tigrinum). Journal of Comparative Neurology, 2004, 475, 463-480.	1.6	30
49	Vesicular glutamate transporter 3 expression identifies glutamatergic amacrine cells in the rodent retina. Journal of Comparative Neurology, 2004, 477, 386-398.	1.6	95
50	Circadian Regulation of nocturnin Transcription by Phosphorylated CREB in Xenopus Retinal Photoreceptor Cells. Molecular and Cellular Biology, 2002, 22, 7501-7511.	2.3	25