Xiaodong Sun

List of Publications by Citations

115 papers	3,234 citations	22 h-index	56 g-index
125 ext. papers	4,592 ext. citations	5.6 avg, IF	5.3 L-index

#	Paper	IF	Citations
115	Identifying Medical Diagnoses and Treatable Diseases by Image-Based Deep Learning. *Cell*, **2018**, 172, 1122-1131.e9	56.2	1563
114	Lanosterol reverses protein aggregation in cataracts. *Nature*, **2015**, 523, 607-11	50.4	242
113	Hallmarks of Endothelial Cell Metabolism in Health and Disease. *Cell Metabolism*, **2019**, 30, 414-433	24.6	124
112	Resistance to anti-VEGF therapy in neovascular age-related macular degeneration: a comprehensive review. *Drug Design, Development and Therapy*, **2016**, 10, 1857-67	4.4	111
111	Human retinal progenitor cell transplantation preserves vision. *Journal of Biological Chemistry*, **2014**, 289, 6362-6371	5.4	83
110	Conbercept for Treatment of Neovascular Age-related Macular Degeneration: Results of the Randomized Phase 3 PHOENIX Study. *American Journal of Ophthalmology*, **2019**, 197, 156-167	4.9	79
109	Necrostatin-1 protects photoreceptors from cell death and improves functional outcome after experimental retinal detachment. *American Journal of Pathology*, **2012**, 181, 1634-41	5.8	52
108	Profile of conbercept in the treatment of neovascular age-related macular degeneration. *Drug Design, Development and Therapy*, **2015**, 9, 2311-20	4.4	50
107	The Diagnostic Accuracy of Optical Coherence Tomography Angiography for Neovascular Age-Related Macular Degeneration: A Comparison with Fundus Fluorescein Angiography. *Journal of Ophthalmology*, **2016**, 2016, 7521478	2	50
106	Homocysteine and the risk of age-related macular degeneration: a systematic review and meta-analysis. *Scientific Reports*, **2015**, 5, 10585	4.9	42
105	P16INK4a Upregulation Mediated by SIX6 Defines Retinal Ganglion Cell Pathogenesis in Glaucoma. *Molecular Cell*, **2015**, 59, 931-40	17.6	39
104	Complement system and age-related macular degeneration: drugs and challenges. *Drug Design, Development and Therapy*, **2019**, 13, 2413-2425	4.4	35
103	Quantitative assessment of the retinal microvasculature and choriocapillaris in myopic patients using swept-source optical coherence tomography angiography. *Graefe's Archive for Clinical and Experimental Ophthalmology*, **2020**, 258, 1173-1180	3.8	34
102	Appearance of Polypoidal Lesions in Patients With Polypoidal Choroidal Vasculopathy Using Swept-Source Optical Coherence Tomographic Angiography. *JAMA Ophthalmology*, **2019**, 137, 642-650	3.9	31
101	UMSC-derived exosomes promote retinal ganglion cells survival in a rat model of optic nerve crush. *Journal of Chemical Neuroanatomy*, **2019**, 96, 134-139	3.2	26
100	Lentiviral delivery of co-packaged Cas9 mRNA and a Vegfa-targeting guide RNA prevents wet age-related macular degeneration in mice. *Nature Biomedical Engineering*, **2021**, 5, 144-156	19	26
99	Macular perfusion changes assessed with optical coherence tomography angiography after vitrectomy for rhegmatogenous retinal detachment. *Graefe's Archive for Clinical and Experimental Ophthalmology*, **2019**, 257, 733-740	3.8	24

98	Photosensitization of A2E triggers telomere dysfunction and accelerates retinal pigment epithelium senescence. *Cell Death and Disease*, **2018**, 9, 178	9.8	24
97	Reliability of Vessel Density Measurements in the Peripapillary Retina and Correlation with Retinal Nerve Fiber Layer Thickness in Healthy Subjects Using Optical Coherence Tomography Angiography. *Ophthalmologica*, **2018**, 240, 183-190	3.7	23
96	Chitinase-3-Like-1 Promotes M2 Macrophage Differentiation and Induces Choroidal Neovascularization in Neovascular Age-Related Macular Degeneration **2019**, 60, 4596-4605		23
95	The Relationship Between Aldose Reductase C106T Polymorphism and Diabetic Retinopathy: An Updated Meta-Analysis **2015**, 56, 2279-89		23
94	MicroRNA-155 Inhibits Polarization of Macrophages to M2-Type and Suppresses Choroidal Neovascularization. *Inflammation*, **2018**, 41, 143-153	5.1	22
93	Recent Advancements in the Loading and Modification of Therapeutic Exosomes. *Frontiers in Bioengineering and Biotechnology*, **2020**, 8, 586130	5.8	22
92	Cooperation of Rel family members in regulating A□mediated pro-inflammatory cytokine secretion by retinal pigment epithelial cells. *Cell Death and Disease*, **2017**, 8, e3115	9.8	21
91	Epigallocatechin-3-gallate stimulates autophagy and reduces apoptosis levels in retinal M□ller cells under high-glucose conditions. *Experimental Cell Research*, **2019**, 380, 149-158	4.2	19
90	Quantification of Macular Vascular Density Using Optical Coherence Tomography Angiography and Its Relationship with Retinal Thickness in Myopic Eyes of Young Adults. *Journal of Ophthalmology*, **2017**, 2017, 1397179	2	19
89	Efficacy of intravitreal ranibizumab combined with Ahmed glaucoma valve implantation for the treatment of neovascular glaucoma. *BMC Ophthalmology*, **2016**, 16, 7	2.3	19
88	A prodrug of epigallocatechin-3-gallate alleviates high glucose-induced pro-angiogenic factor production by inhibiting the ROS/TXNIP/NLRP3 inflammasome axis in retinal M□ller cells. *Experimental Eye Research*, **2020**, 196, 108065	3.7	18
87	Prolyl-4-Hydroxylases Inhibitor Stabilizes HIF-1□and Increases Mitophagy to Reduce Cell Death After Experimental Retinal Detachment **2016**, 57, 1807-15		17
86	MicroRNA Expression Patterns Involved in Amyloid Beta-Induced Retinal Degeneration **2017**, 58, 1726-1735		16
85	CasRx-mediated RNA targeting prevents choroidal neovascularization in a mouse model of age-related macular degeneration. *National Science Review*, **2020**, 7, 835-837	10.8	15
84	Antimicrobial Blue Light Therapy for Infectious Keratitis: Ex Vivo and In Vivo Studies **2017**, 58, 586-593		15
83	A meta-analysis of anti-vascular endothelial growth factor remedy for macular edema secondary to central retinal vein occlusion. *PLoS ONE*, **2013**, 8, e82454	3.7	15
82	Prodrug of epigallocatechin-3-gallate alleviates choroidal neovascularization via down-regulating HIF-1□/VEGF/VEGFR2 pathway and M1 type macrophage/microglia polarization. *Biomedicine and Pharmacotherapy*, **2020**, 121, 109606	7.5	14
81	Paravascular abnormalities observed by spectral domain optical coherence tomography are risk factors for retinoschisis in eyes with high myopia. *Acta Ophthalmologica*, **2018**, 96, e515-e523	3.7	14

80	Autophagy activated by SIRT6 regulates A□nduced inflammatory response in RPEs. *Biochemical and Biophysical Research Communications*, **2018**, 496, 1148-1154	3.4	12
79	Choroidal pericytes promote subretinal fibrosis after experimental photocoagulation. *DMM Disease Models and Mechanisms*, **2018**, 11,	4.1	12
78	A2E Suppresses Regulatory Function of RPE Cells in Th1 Cell Differentiation Via Production of IL-1□ and Inhibition of PGE2 **2015**, 56, 7728-38		12
77	Second Primary Malignancies in Patients with Colorectal Cancer: A Population-Based Analysis. *Oncologist*, **2020**, 25, e644-e650	5.7	11
76	Electrically Evoked Responses in the Rabbit Cortex Induced by Current Steering With Penetrating Optic Nerve Electrodes **2016**, 57, 6327-6338		11
75	Choroidal and Retinal Thickness of Highly Myopic Eyes with Early Stage of Myopic Chorioretinopathy: Tessellation. *Journal of Ophthalmology*, **2018**, 2018, 2181602	2	11
74	Autophagy activated via GRP78 to alleviate endoplasmic reticulum stress for cell survival in blue light-mediated damage of A2E-laden RPEs. *BMC Ophthalmology*, **2019**, 19, 249	2.3	10
73	Identification of novel PROM1 mutations responsible for autosomal recessive maculopathy with rod-cone dystrophy. *Graefe's Archive for Clinical and Experimental Ophthalmology*, **2019**, 257, 619-628	3.8	10
72	3-Methyladenine Alleviates Experimental Subretinal Fibrosis by Inhibiting Macrophages and M2 Polarization Through the PI3K/Akt Pathway. *Journal of Ocular Pharmacology and Therapeutics*, **2020**, 36, 618-628	2.6	9
71	BNIP3-mediated Autophagy Induced Inflammatory Response and Inhibited VEGF Expression in Cultured Retinal Pigment Epithelium Cells Under Hypoxia. *Current Molecular Medicine*, **2019**, 19, 395-404	2.5	9
70	Modulation of □adrenoceptor signalling protects photoreceptors after retinal detachment by inhibiting oxidative stress and inflammation. *British Journal of Pharmacology*, **2019**, 176, 801-813	8.6	9
69	Clinical applications of retinal gene therapies. *Precision Clinical Medicine*, **2018**, 1, 5-20	6.7	9
68	Antiangiogenic Effects of Doxazosin on Experimental Choroidal Neovascularization in Mice. *Journal of Ocular Pharmacology and Therapeutics*, **2017**, 33, 50-56	2.6	8
67	OBSERVATION OF VITREOUS FEATURES USING ENHANCED VITREOUS IMAGING OPTICAL COHERENCE TOMOGRAPHY IN HIGHLY MYOPIC RETINOSCHISIS. *Retina*, **2019**, 39, 1732-1741	3.6	8
66	Interocular Symmetry of Macular Ganglion Cell Complex Thickness in Young Chinese Subjects. *PLoS ONE*, **2016**, 11, e0159583	3.7	8
65	ROS production and mitochondrial dysfunction driven by PU.1-regulated NOX4-p22 activation in A□nduced retinal pigment epithelial cell injury. *Theranostics*, **2020**, 10, 11637-11655	12.1	7
64	Short-Term Changes in Retinal Vasculature and Layer Thickness after Phacoemulsification Surgery. *Current Eye Research*, **2020**, 45, 31-37	2.9	7
63	Long noncoding RNAs as potential biomarkers in retinoblastoma: a systematic review and meta-analysis. *Cancer Cell International*, **2020**, 20, 201	6.4	6

62	Erythropoietin maintains VE-cadherin expression and barrier function in experimental diabetic retinopathy via inhibiting VEGF/VEGFR2/Src signaling pathway. *Life Sciences*, **2020**, 259, 118273	6.8	6
61	Glaucoma Characterization by Machine Learning of Tear Metabolic Fingerprinting.. *Small Methods*, **2022**, e2200264	12.8	6
60	RNA Interference Reveals the Coregulatory Effects of Cylindromatosis on Apoptosis and Necroptosis of Photoreceptor Cells in Experimental Retinal Detachment. *American Journal of Pathology*, **2017**, 187, 1763-1771	5.8	5
59	Comparison of fundus changes following silicone oil and sterilized air tamponade for macular-on retinal detachment patients. *BMC Ophthalmology*, **2020**, 20, 249	2.3	5
58	An improved method for establishment of murine retinal detachment model and its 3D vascular evaluation. *Experimental Eye Research*, **2020**, 193, 107949	3.7	5
57	Factors Affecting the Foveal Avascular Zone Area in Healthy Eyes among Young Chinese Adults. *BioMed Research International*, **2020**, 2020, 7361492	3	5
56	One-Year Outcomes of 1 Dose versus 3 Loading Doses Followed by Pro Re Nata Regimen Using Ranibizumab for Neovascular Age-Related Macular Degeneration: The ARTIS Trial. *Journal of Ophthalmology*, **2019**, 2019, 7530458	2	5
55	MicroRNA-191-5p ameliorates amyloid-β-mediated retinal pigment epithelium cell injury by suppressing the NLRP3 inflammasome pathway. *FASEB Journal*, **2021**, 35, e21184	0.9	5
54	The Interaction Between Microglia and Macroglia in Glaucoma. *Frontiers in Neuroscience*, **2021**, 15, 610788	3.1	5
53	DNMT1 and Sp1 competitively regulate the expression of BACE1 in A2E-mediated photo-oxidative damage in RPE cells. *Neurochemistry International*, **2018**, 121, 59-68	4.4	5
52	Inverted internal limiting membrane insertion combined with air tamponade in the treatment of macular hole retinal detachment in high myopia: study protocol for a randomized controlled clinical trial. *Trials*, **2018**, 19, 469	2.8	5
51	Progression and new onset of macular retinoschisis in myopic choroidal neovascularization eyes after Conbercept therapy: a post-hoc analysis. *Eye*, **2020**, 34, 523-529	4.4	4
50	Evaluation of the association of macular ganglion cell-inner plexiform layer thickness and myopia in Chinese young adults. *Eye*, **2021**, 35, 393-399	4.4	4
49	SLC7A11 Reduces Laser-Induced Choroidal Neovascularization by Inhibiting RPE Ferroptosis and VEGF Production. *Frontiers in Cell and Developmental Biology*, **2021**, 9, 639851	5.7	4
48	In vivo detection of severity of optic nerve crush using manganese-enhanced magnetic resonance imaging in rats. *Chinese Medical Journal*, **2014**, 127, 522-7	2.9	4
47	Highly efficient prime editing by introducing same-sense mutations in pegRNA or stabilizing its structure.. *Nature Communications*, **2022**, 13, 1669	17.4	4
46	VEGFR1-Targeted Contrast-Enhanced Ultrasound Imaging Quantification of Vasculogenic Mimicry Microcirculation in a Mouse Model of Choroidal Melanoma. *Translational Vision Science and Technology*, **2020**, 9, 4	3.3	3
45	Inhibition of Mitochondrial Fission Preserves Photoreceptors after Retinal Detachment. *American Journal of Pathology*, **2018**, 188, 1713-1722	5.8	3

44	Intraocular VEGF deprivation induces degeneration and fibrogenic response in retina. *FASEB Journal*, **2019**, 33, 13920-13934	0.9	3
43	Determination of Topographic Variations in Inner Retinal Blood Flow Areas in Young Chinese Subjects Using Optical Coherence Tomography Angiography. *Current Eye Research*, **2017**, 42, 1491-1496	2.9	3
42	Photoreceptors Degenerate Through Pyroptosis After Experimental Retinal Detachment **2020**, 61, 31		3
41	Properties of electrically evoked potentials activated by optic nerve stimulation with penetrating electrodes of different modes in rabbits. *Graefes Archive for Clinical and Experimental Ophthalmology*, **2015**, 253, 2171-80	3.8	2
40	Human retinal pigment epithelial cells are protected against hypoxia by BNIP3. *Annals of Translational Medicine*, **2020**, 8, 1502	3.2	2
39	Evaluation of Poly(glycidyl methacrylate)-Coated Column for Enantioseparation with Azithromycin Lactobionate and Clindamycin Phosphate as Chiral Selectors in Capillary Electrophoresis. *Chromatographia*, **2021**, 84, 499-505	2.1	2
38	Intravitreal Aflibercept versus Laser Photocoagulation in Asian Patients with Diabetic Macular Edema: The VIVID-East Study. *Clinical Ophthalmology*, **2020**, 14, 741-750	2.5	1
37	Efficacy and safety of intravitreal bevacizumab in eyes with neovascular glaucoma undergoing ahmed glaucoma valve implantation: 2-year follow-up. *Acta Ophthalmologica*, **2016**, 94, e78	3.7	1
36	xCT regulates redox homeostasis and promotes photoreceptor survival after retinal detachment. *Free Radical Biology and Medicine*, **2020**, 158, 32-43	7.8	1
35	Laser Capture Microdissection-Based RNA Microsequencing Reveals Optic Nerve Crush-Related Early mRNA Alterations in Retinal Ganglion Cell Layer. *Translational Vision Science and Technology*, **2020**, 9, 30	3.3	1
34	The Efficacy of Conbercept in Polypoidal Choroidal Vasculopathy: A Systematic Review. *Journal of Ophthalmology*, **2020**, 2020, 4924053	2	1
33	Effect of roasted peanut allergen Ara h 3 protein on the sensitization of Caco-2 cells. *Journal of the Science of Food and Agriculture*, **2021**, 101, 5325-5336	4.3	1
32	Replacement of polyps with type 1 macular neovascularization in polypoidal choroidal vasculopathy imaged with swept source OCT angiography. *American Journal of Ophthalmology Case Reports*, **2021**, 22, 101057	1.3	1
31	POSTERIOR PRECORTICAL VITREOUS POCKETS IN HIGH MYOPIA OBSERVED BY ENHANCED VITREOUS IMAGING OF SPECTRAL DOMAIN OPTICAL COHERENCE TOMOGRAPHY. *Retina*, **2019**, 39, 1100-1109	3.6	1
30	Retinitis pigmentosa sine pigmento masqueraded as myopia: A case report (CARE). *Medicine (United States)*, **2021**, 100, e24006	1.8	1
29	Safety of Receiving Anti-Vascular Endothelial Growth Factor Intravitreal Injection in Office-Based vs Operating Room Settings: A Meta-analysis. *JAMA Ophthalmology*, **2021**, 139, 1080-1088	3.9	1
28	Development of a valid and reliable pterygium surgery assessment scale for ophthalmology residents. *BMC Medical Education*, **2021**, 21, 511	3.3	1
27	Centromere protein E as a novel biomarker and potential therapeutic target for retinoblastoma. *Bioengineered*, **2021**, 12, 5950-5970	5.7	1

26	Predictors of anti-vascular endothelial growth factor treatment responses in macular edema following central vein occlusion. *Chinese Medical Journal*, **2014**, 127, 3019-23	2.9	1
25	Associations of sensory impairment and cognitive function in middle-aged and older Chinese population: The China Health and Retirement Longitudinal Study.. *Journal of Global Health*, **2021**, 11, 08008	4.3	1
24	Publication Trends of Research on Polypoidal Choroidal Vasculopathy During 2001-2020: A 20-Year Bibliometric Study.. *Frontiers in Medicine*, **2021**, 8, 785126	4.9	0
23	HMGB2 causes photoreceptor death via down-regulating Nrf2/HO-1 and up-regulating NF-B/NLRP3 signaling pathways in light-induced retinal degeneration model.. *Free Radical Biology and Medicine*, **2022**, 181, 14-14	7.8	0
22	Identification of a novel RPGR mutation associated with X-linked cone-rod dystrophy in a Chinese family. *BMC Ophthalmology*, **2021**, 21, 401	2.3	0
21	DIA Comparative Proteomic Analysis of Retro-oil Fluid and Vitreous Fluid From Retinal Detachment Patients.. *Frontiers in Molecular Biosciences*, **2021**, 8, 763002	5.6	0
20	Choroidal Changes in Eyes With Polypoidal Choroidal Vasculopathy After Anti-VEGF Therapy Imaged With Swept-Source OCT Angiography **2021**, 62, 5		0
19	Association Between Sensory Loss and Falls Among Middle-Aged and Older Chinese Population: Cross-Sectional and Longitudinal Analyses.. *Frontiers in Medicine*, **2021**, 8, 810159	4.9	0
18	Optical Coherence Tomography Angiography Characteristics Serve as Retinal Vein Occlusion Therapeutic Biomarkers for Dexamethasone Intravitreal Implant. *Disease Markers*, **2021**, 2021, 3510036	3.2	0
17	Myosin 1f-mediated activation of microglia contributes to the photoreceptor degeneration in a mouse model of retinal detachment. *Cell Death and Disease*, **2021**, 12, 926	9.8	0
16	Peripapillary Vessel Density in Eyes with Rhegmatogenous Retinal Detachment after Pars Plana Vitrectomy. *Journal of Ophthalmology*, **2021**, 2021, 6621820	2	0
15	Detection of Allergen Genes in Peanut and Soybean by Circular Fluorescence Probe-Mediated Isothermal Amplification. *Food Analytical Methods*, **2021**, 14, 453-464	3.4	0
14	Retinal degeneration in mice lacking the cyclic nucleotide-gated channel subunit CNGA1. *FASEB Journal*, **2021**, 35, e21859	0.9	0
13	Evaluation of Poly(Glycidyl Methacrylate) Nanocoating for Chiral Separation with Glu-ECD as Chiral Selector in Capillary Electrophoresis. *Journal of Nanomaterials*, **2021**, 2021, 1-6	3.2	0
12	Cysteine Substitution and Calcium-Binding Mutations in cbEGF-Like Domains Are Associated With Severe Ocular Involvement in Patients With Congenital Ectopia Lentis.. *Frontiers in Cell and Developmental Biology*, **2021**, 9, 816397	5.7	0
11	Contribution of Interleukin-17A to Retinal Degenerative Diseases.. *Frontiers in Immunology*, **2022**, 13, 847937	8.4	0
10	The maltose transporter subunit IICB of the phosphotransferase system: An important factor for biofilm formation of Cronobacter.. *International Journal of Food Microbiology*, **2021**, 109517	5.8	0
9	The Association of Sleep Duration With Vision Impairment in Middle-Aged and Elderly Adults: Evidence From the China Health and Retirement Longitudinal Study.. *Frontiers in Medicine*, **2021**, 8, 778117	4.9	0

8	Malondialdehyde-Modified Photoreceptor Outer Segments Promote Choroidal Neovascularization in Mice.. *Translational Vision Science and Technology*, **2022**, 11, 12	3.3
7	Eye Robotic System for Vitreoretinal Surgery. *Journal of Shanghai Jiaotong University (Science)*,1	0.6
6	Synthetic anti-angiogenic genomic therapeutics for treatment of neovascular age-related macular degeneration. *Asian Journal of Pharmaceutical Sciences*, **2021**, 16, 623-632	9
5	Geographic variations in idiopathic epiretinal membranes in China. *Annals of Translational Medicine*, **2021**, 9, 938	3.2
4	Modeling Cone/Cone-Rod Dystrophy Pathology by AAV-Mediated Overexpression of Mutant CRX Protein in the Mouse Retina. *Translational Vision Science and Technology*, **2021**, 10, 25	3.3
3	Prediction of the short-term efficacy of anti-VEGF therapy for neovascular age-related macular degeneration using optical coherence tomography angiography.. *Eye and Vision (London, England)*, **2022**, 9, 16	4.9
2	Development and Validation of a Novel Metabolic Signature-Based Prognostic Model for Uveal Melanoma.. *Translational Vision Science and Technology*, **2022**, 11, 9	3.3
1	Visual impairment and depression in China: a 7-year follow-up study from national longitudinal surveys.. *BMJ Open*, **2022**, 12, e055563	3