Bo Chang

List of Publications by Year
in descending order

98 papers	7,075 citations	76326 40 h-index	71685 76 g-index
102 all docs	102 docs citations	102 times ranked	7334 citing authors

#	Article	IF	Citations
1	Mutations in genes encoding melanosomal proteins cause pigmentary glaucoma in DBA/2J mice. Nature Genetics, 2002, 30, 81-85.	21.4	427
2	In-frame deletion in a novel centrosomal/ciliary protein CEP290/NPHP6 perturbs its interaction with RPGR and results in early-onset retinal degeneration in the rd16 mouse. Human Molecular Genetics, 2006, 15, 1847-1857.	2.9	353
3	CRB1 is essential for external limiting membrane integrity and photoreceptor morphogenesis in the mammalian retina. Human Molecular Genetics, 2003, 12, 2179-2189.	2.9	329
4	Interacting loci cause severe iris atrophy and glaucoma in DBA/2J mice. Nature Genetics, 1999, 21, 405-409.	21.4	280
5	Restoration of vision after de novo genesis of rod photoreceptors in mammalian retinas. Nature, 2018, 560, 484-488.	27.8	234
6	Biology and therapy of inherited retinal degenerative disease: insights from mouse models. DMM Disease Models and Mechanisms, 2015, 8, 109-129.	2.4	207
7	Restoration of cone vision in a mouse model of achromatopsia. Nature Medicine, 2007, 13, 685-687.	30.7	200
8	Thenob2mouse, a null mutation inCacna1f: Anatomical and functional abnormalities in the outer retina and their consequences on ganglion cell visual responses. Visual Neuroscience, 2006, 23, 11-24.	1.0	194
9	Gene Therapy Restores Vision-Dependent Behavior as Well as Retinal Structure and Function in a Mouse Model of RPE65 Leber Congenital Amaurosis. Molecular Therapy, 2006, 13, 565-572.	8.2	185
10	A homologous genetic basis of the murine cpfl1 mutant and human achromatopsia linked to mutations in the PDE6C gene. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 19581-19586.	7.1	178
11	Retinal degeneration 12 (rd12): a new, spontaneously arising mouse model for human Leber congenital amaurosis (LCA). Molecular Vision, 2005, 11, 152-62.	1.1	159
12	Centrosomal-ciliary geneCEP290/NPHP6 mutations result in blindness with unexpected sparing of photoreceptors and visual brain: implications for therapy of Leber congenital amaurosis. Human Mutation, 2007, 28, 1074-1083.	2.5	148
13	Cone Photoreceptor Function Loss-3, a Novel Mouse Model of Achromatopsia Due to a Mutation inGnat2. , 2006, 47, 5017.		143
14	Mouse models of USH1C and DFNB18: phenotypic and molecular analyses of two new spontaneous mutations of the Ush1c gene. Human Molecular Genetics, 2003, 12, 3075-3086.	2.9	138
15	MOUSE MODEL OF SUBRETINAL NEOVASCULARIZATION WITH CHOROIDAL ANASTOMOSIS. Retina, 2003, 23, 518-522.	1.7	138
16	Long-term Retinal Function and Structure Rescue Using Capsid Mutant AAV8 Vector in the rd10 Mouse, a Model of Recessive Retinitis Pigmentosa. Molecular Therapy, 2011, 19, 234-242.	8.2	135
17	AAV-Mediated Gene Therapy for Retinal Degeneration in therd10Mouse Containing a Recessive PDEÎ² Mutation. , 2008, 49, 4278.		133
18	Haploinsufficient Bmp4 ocular phenotypes include anterior segment dysgenesis with elevated intraocular pressure. BMC Genetics, 2001, 2, 18.	2.7	132

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19	Digenic inheritance of deafness caused by mutations in genes encoding cadherin 23 and protocadherin 15 in mice and humans. Human Molecular Genetics, 2005, 14, 103-111.	2.9	122
20	Loss-of-Function Mutations in TBC1D20 Cause Cataracts and Male Infertility in blind sterile Mice and Warburg Micro Syndrome in Humans. American Journal of Human Genetics, 2013, 93, 1001-1014.	6.2	119
21	Mfrp, a gene encoding a frizzled related protein, is mutated in the mouse retinal degeneration 6. Human Molecular Genetics, 2002, 11, 1879-1886.	2.9	118
22	Fierce: a new mouse deletion of Nr2e1; violent behaviour and ocular abnormalities are background-dependent. Behavioural Brain Research, 2002, 132, 145-158.	2.2	118
23	Premature Truncation of a Novel Protein, RD3, Exhibiting Subnuclear Localization Is Associated with Retinal Degeneration. American Journal of Human Genetics, 2006, 79, 1059-1070.	6.2	112
24	New Mouse Primary Retinal Degeneration (rd-3). Genomics, 1993, 16, 45-49.	2.9	111
25	AAV-Mediated Cone Rescue in a Naturally Occurring Mouse Model of CNGA3-Achromatopsia. PLoS ONE, 2012, 7, e35250.	2.5	105
26	Expression of VLDLR in the Retina and Evolution of Subretinal Neovascularization in the Knockout Mouse Modelâ€™s Retinal Angiomatous Proliferation. , 2008, 49, 407.		101
27	Mouse models of age-related macular degeneration. Experimental Eye Research, 2006, 82, 741-752.	2.6	97
28	A model for familial exudative vitreoretinopathy caused by LPR5 mutations. Human Molecular Genetics, 2008, 17, 1605-1612.	2.9	93
29	Adiponectin receptor 1 conserves docosahexaenoic acid and promotes photoreceptor cell survival. Nature Communications, 2015, 6, 6228.	12.8	93
30	Survey of Common Eye Diseases in Laboratory Mouse Strains. , 2013, 54, 4974.		92
31	Genetic modification of glaucoma associated phenotypes between AKXD-28/Ty and DBA/2J mice. BMC Genetics, 2001, 2, 1.	2.7	81
32	Tool from ancient pharmacopoeia prevents vision loss. Molecular Vision, 2006, 12, 1706-14.	1.1	79
33	Study of Rod- and Cone-Driven Oscillatory Potentials in Mice. , 2006, 47, 2732.		77
34	Rd9 Is a Naturally Occurring Mouse Model of a Common Form of Retinitis Pigmentosa Caused by Mutations in RPGR-ORF15. PLoS ONE, 2012, 7, e35865.	2.5	69
35	Characterization of the MouseProx1Gene. Biochemical and Biophysical Research Communications, 1998, 248, 684-689.	2.1	68
36	A Gja8 (Cx50) point mutation causes an alteration of alpha3 connexin (Cx46) in semi-dominant cataracts of Lop10 mice. Human Molecular Genetics, 2002, 11, 507-513.	2.9	68

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37	Mouse Model Resources for Vision Research. Journal of Ophthalmology, 2011, 2011, 1-12.	1.3	67
38	Allelic variance between GRM6 mutants, Grm6^{nob3} and Grm6^{nob4} results in differences in retinal ganglion cell visual responses. Journal of Physiology, 2008, 586, 4409-4424.	2.9	63
39	A Missense Mutation in the Mouse Col2a1 Gene Causes Spondyloepiphyseal Dysplasia Congenita, Hearing Loss, and Retinoschisis. Journal of Bone and Mineral Research, 2003, 18, 1612-1621.	2.8	61
40	OTX2 loss causes rod differentiation defect in CRX-associated congenital blindness. Journal of Clinical Investigation, 2014, 124, 631-643.	8.2	59
41	Gene Therapy Rescues Cone Structure and Function in the 3-Month-Oldrd12Mouse: A Model for Midcourse RPE65 Leber Congenital Amaurosis. , 2011, 52, 7.		58
42	Lop12, a Mutation in Mouse Crygd Causing Lens Opacity Similar to Human Coppock Cataract. Genomics, 2000, 63, 314-320.	2.9	57
43	Mouse Models of Inherited Retinal Degeneration with Photoreceptor Cell Loss. Cells, 2020, 9, 931.	4.1	56
44	Loss of lysophosphatidylcholine acyltransferase 1 leads to photoreceptor degeneration in rd11 mice. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 15523-15528.	7.1	55
45	Exome sequencing reveals pathogenic mutations in 91 strains of mice with Mendelian disorders. Genome Research, 2015, 25, 948-957.	5.5	54
46	Characterization of the MouseMyoc/TigrGene. Biochemical and Biophysical Research Communications, 1998, 245, 887-893.	2.1	51
47	Genetic Dependence of Central Corneal Thickness among Inbred Strains of Mice. , 2010, 51, 160.		47
48	Spontaneous CNV in a Novel Mutant Mouse Is Associated With Early VEGF-Aâ€“Driven Angiogenesis and Late-Stage Focal Edema, Neural Cell Loss, and Dysfunction. , 2014, 55, 3709.		43
49	The podosomal-adaptor protein SH3PXD2B is essential for normal postnatal development. Mammalian Genome, 2009, 20, 462-475.	2.2	42
50	Mouse Models for Studies of Retinal Degeneration and Diseases. Methods in Molecular Biology, 2012, 935, 27-39.	0.9	41
51	Gene therapy following subretinal AAV5 vector delivery is not affected by a previous intravitreal AAV5 vector administration in the partner eye. Molecular Vision, 2009, 15, 267-75.	1.1	40
52	Arginine 54 and Tyrosine 118 Residues of Î±A-Crystallin Are Crucial for Lens Formation and Transparency. , 2006, 47, 3004.		39
53	Iris phenotypes and pigment dispersion caused by genes influencing pigmentation. Pigment Cell and Melanoma Research, 2008, 21, 565-578.	3.3	39
54	Functional interchangeability of rod and cone transducin Î±-subunits. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 17681-17686.	7.1	39

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55	Age-related retinal degeneration (arrd2) in a novel mouse model due to a nonsense mutation in the Mdm1 gene. Human Molecular Genetics, 2008, 17, 3929-3941.	2.9	38
56	Achromatopsia as a Potential Candidate for Gene Therapy. Advances in Experimental Medicine and Biology, 2010, 664, 639-646.	1.6	38
57	A New Dominant Retinal Degeneration (Rd4) Associated with a Chromosomal Inversion in the Mouse. Genomics, 1997, 42, 393-396.	2.9	37
58	Knock-in of Î±3 connexin prevents severe cataracts caused by an Î±8 point mutation. Journal of Cell Science, 2006, 119, 2138-2144.	2.0	34
59	Scotopic and Photopic Visual Thresholds and Spatial and Temporal Discrimination Evaluated by Behavior of Mice in a Water Mazeâ€. Photochemistry and Photobiology, 2006, 82, 1489.	2.5	34
60	Characterization of a Spontaneous Retinal Neovascular Mouse Model. PLoS ONE, 2014, 9, e106507.	2.5	32
61	ADIPOR1 is essential for vision and its RPE expression is lost in the Mfrprd6 mouse. Scientific Reports, 2018, 8, 14339.	3.3	32
62	Chromosomal Localization of a New Mouse Lens Opacity Gene (lop18). Genomics, 1996, 36, 171-173.	2.9	28
63	A hypomorphic mutation of the gamma-1 adaptin gene (Ap1g1) causes inner ear, retina, thyroid, and testes abnormalities in mice. Mammalian Genome, 2016, 27, 200-212.	2.2	28
64	Chronic Dicer1 deficiency promotes atrophic and neovascular outer retinal pathologies in mice. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 2579-2587.	7.1	28
65	The Mouse Model of Down Syndrome Ts65Dn Presents Visual Deficits as Assessed by Pattern Visual Evoked Potentials. , 2010, 51, 3300.		25
66	Early transposable element insertion in intron 9 of the Hsf4 gene results in autosomal recessive cataracts in lop11 and ldis1 mice. Genomics, 2006, 88, 44-51.	2.9	23
67	Deficiency of SHP-1 Protein-Tyrosine Phosphatase in â€œViable Motheatenâ€•Mice Results in Retinal Degeneration. , 2006, 47, 1201.		23
68	Cataracts and Microphthalmia Caused by a Gja8 Mutation in Extracellular Loop 2. PLoS ONE, 2012, 7, e52894.	2.5	23
69	Cone Phosphodiesterase-6Â' Restores Rod Function and Confers Distinct Physiological Properties in the Rod Phosphodiesterase-6Â-Deficient rd10 Mouse. Journal of Neuroscience, 2013, 33, 11745-11753.	3.6	22
70	Rod Phosphodiesterase-6 (PDE6) Catalytic Subunits Restore Cone Function in a Mouse Model Lacking Cone PDE6 Catalytic Subunit. Journal of Biological Chemistry, 2011, 286, 33252-33259.	3.4	21
71	AAV-Mediated Lysophosphatidylcholine Acyltransferase 1 (Lpcat1) Gene Replacement Therapy Rescues Retinal Degeneration inrd11Mice. , 2014, 55, 1724.		21
72	Disruption of the Gene Encoding the Î²1-Subunit of Transducin in theRd4/+ Mouse. , 2006, 47, 1293.		19

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73	A Mutation inSyne2Causes Early Retinal Defects in Photoreceptors, Secondary Neurons, and MÃ¼ller Glia. , 2015, 56, 3776.		19
74	Dense Nuclear Cataract Caused by the Î³B-Crystallin S11R Point Mutation. , 2008, 49, 304.		18
75	Progressive Morphological and Functional Defects in Retinas from Î±1 Integrin-Null Mice. , 2008, 49, 4647.		14
76	The Frequency-Response Electroretinogram Distinguishes Cone and Abnormal Rod Function in rd12 Mice. PLoS ONE, 2015, 10, e0117570.	2.5	14
77	Ultraviolet Lightâ€“Induced and Green Lightâ€“Induced Transient Pupillary Light Reflex in Mice. Current Eye Research, 2006, 31, 925-933.	1.5	13
78	Hearing Impairment in Hypothyroid Dwarf Mice Caused by Mutations of the Thyroid Peroxidase Gene. JARO - Journal of the Association for Research in Otolaryngology, 2014, 15, 45-55.	1.8	13
79	A missense mutation in Grm6 reduces but does not eliminate mGluR6 expression or rod depolarizing bipolar cell function. Journal of Neurophysiology, 2017, 118, 845-854.	1.8	13
80	A spontaneous mutation in Srebf2 leads to cataracts and persistent skin wounds in the lens opacity 13 (lop13) mouse. Mammalian Genome, 2011, 22, 661-673.	2.2	12
81	NHE8 Is Essential for RPE Cell Polarity and Photoreceptor Survival. Scientific Reports, 2015, 5, 9358.	3.3	11
82	Lysosomal Trafficking Regulator (LYST). Advances in Experimental Medicine and Biology, 2016, 854, 745-750.	1.6	11
83	Spontaneous Posterior Segment Vascular Disease Phenotype of a Mouse Model,rnv3, Is Dependent on theCrb1rd8Allele. , 2018, 59, 5127.		11
84	Retinal Pigment Epithelium Atrophy 1 (rpea1): A New Mouse Model With Retinal Detachment Caused by a Disruption of Protein Kinase C, Î¸. , 2016, 57, 877.		9
85	The Degeneration and Apoptosis Patterns of Cone Photoreceptors in rd11 Mice. Journal of Ophthalmology, 2017, 2017, 1-13.	1.3	8
86	Photoreceptor degeneration in a new Cacna1f mutant mouse model. Experimental Eye Research, 2019, 179, 106-114.	2.6	8
87	Identification and cloning of a truncated isoform of the cardiac sodium-calcium exchanger in the BALB/c mouse heart. Biochemical Genetics, 1998, 36, 119-135.	1.7	7
88	Survey of the nob5 mutation in C3H substrains. Molecular Vision, 2015, 21, 1101-5.	1.1	7
89	Mouse Models of RP. , 2007, , 149-161.		5
90	Functional analysis of the Hsf4(lop11) allele responsible for cataracts in lop11 mice. Molecular Vision, 2011, 17, 3062-71.	1.1	5

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91	Mouse Models as Tools to Identify Genetic Pathways for Retinal Degeneration, as Exemplified by Leberâ€™s Congenital Amaurosis. Methods in Molecular Biology, 2016, 1438, 417-430.	0.9	4
92	Animal Models of Retinitis Pigmentosa (RP). Essentials in Ophthalmology, 2016, , 101-116.	0.1	4
93	New Retinal Degenerations in the Mouse. , 1995, , 77-85.		4
94	A missense mutation in Pitx2 leads to early-onset glaucoma via NRF2-YAP1 axis. Cell Death and Disease, 2021, 12, 1017.	6.3	4
95	Anatomical and Gene Expression Changes in the Retinal Pigmented Epithelium Atrophy 1 (rpea1) Mouse: A Potential Model of Serous Retinal Detachment. , 2016, 57, 4641.		3
96	Characterization of Mouse Mutants with Abnormal RPE Cells. , 2006, 572, 95-100.		2
97	Deficiency in Lyst function leads to accumulation of secreted proteases and reduced retinal adhesion. PLoS ONE, 2022, 17, e0254469.	2.5	1
98	Retina. Research Methods for Mutant Mice Series, 2001, , .	0.1	0