T Michael Redmond

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3263896/publications.pdf

Version: 2024-02-01

113 papers	10,198 citations	94433 37 h-index	38395 95 g-index
117 all docs	117 docs citations	117 times ranked	6497 citing authors

#	Article	IF	Citations
1	Safety and Efficacy of Gene Transfer for Leber's Congenital Amaurosis. New England Journal of Medicine, 2008, 358, 2240-2248.	27.0	1,941
2	Rpe65 is necessary for production of 11-cis-vitamin A in the retinal visual cycle. Nature Genetics, 1998, 20, 344-351.	21.4	917
3	Age-dependent effects of RPE65 gene therapy for Leber's congenital amaurosis: a phase 1 dose-escalation trial. Lancet, The, 2009, 374, 1597-1605.	13.7	774
4	Mutations in RPE65 cause Leber's congenital amaurosis. Nature Genetics, 1997, 17, 139-141.	21.4	572
5	Gene Therapy for Leber's Congenital Amaurosis is Safe and Effective Through 1.5 Years After Vector Administration. Molecular Therapy, 2010, 18, 643-650.	8.2	503
6	Mutation of key residues of RPE65 abolishes its enzymatic role as isomerohydrolase in the visual cycle. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 13658-13663.	7.1	374
7	Identification, Expression, and Substrate Specificity of a Mammalian Î²-Carotene 15,15â€²-Dioxygenase. Journal of Biological Chemistry, 2001, 276, 6560-6565.	3.4	257
8	Protection of Rpe65-deficient mice identifies rhodopsin as a mediator of light-induced retinal degeneration. Nature Genetics, 2000, 25, 63-66.	21.4	253
9	Functional and Structural Recovery of the Retina after Gene Therapy in the RPE65 Null Mutation Dog. , 2003, 44, 1663.		235
10	New views on RPE65 deficiency: the rod system is the source of vision in a mouse model of Leber congenital amaurosis. Nature Genetics, 2001, 29, 70-74.	21.4	222
11	Intrachoroidal Neovascularization in Transgenic Mice Overexpressing Vascular Endothelial Growth Factor in the Retinal Pigment Epithelium. American Journal of Pathology, 2001, 158, 1161-1172.	3.8	206
12	Spectral Domain Optical Coherence Tomography in Mouse Models of Retinal Degeneration. , 2009, 50, 5888.		193
13	In Utero Gene Therapy Rescues Vision in a Murine Model of Congenital Blindness. Molecular Therapy, 2004, 9, 182-188.	8.2	191
14	Spontaneous activity of opsin apoprotein is a cause of Leber congenital amaurosis. Nature Genetics, 2003, 35, 158-164.	21.4	163
15	Cone Opsin Mislocalization inRpe65â^'/â^'Mice: A Defect That Can Be Corrected by 11-cisRetinal. , 2005, 46, 3876.		128
16	Retinyl Esters Are the Substrate for Isomerohydrolaseâ€. Biochemistry, 2003, 42, 2229-2238.	2.5	113
17	Expression of ABCA4 in the retinal pigment epithelium and its implications for Stargardt macular degeneration. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E11120-E11127.	7.1	112
18	A developmentally regulated microsomal protein specific for the pigment epithelium of the vertebrate retina. Journal of Neuroscience Research, 1993, 34, 414-425.	2.9	111

#	Article	IF	Citations
19	RPE65 Is an Iron(II)-dependent Isomerohydrolase in the Retinoid Visual Cycle. Journal of Biological Chemistry, 2006, 281, 2835-2840.	3.4	111
20	A QTL on distal Chromosome 3 that influences the severity of light-induced damage to mouse photoreceptors. Mammalian Genome, 2000, 11, 422-427.	2.2	109
21	In Vivo Gene Therapy in Young and Adult RPE65-/- Dogs Produces Long-Term Visual Improvement. , 2003, 94, 31-37.		109
22	Inflammatory cytokines regulate microRNA-155 expression in human retinal pigment epithelial cells by activating JAK/STAT pathway. Biochemical and Biophysical Research Communications, 2010, 402, 390-395.	2.1	106
23	Appropriately differentiated ARPE-19 cells regain phenotype and gene expression profiles similar to those of native RPE cells. Molecular Vision, 2017, 23, 60-89.	1.1	100
24	Identification of betaâ€carotene 15,15â€²â€monooxygenase as a peroxisome proliferatorâ€activated receptor target gene. FASEB Journal, 2003, 17, 1304-1306.	0.5	97
25	Impairment of the Transient Pupillary Light Reflex inRpe65^{â^'/â^'}Mice and Humans with Leber Congenital Amaurosis. , 2004, 45, 1259.		92
26	Recombinant adeno-associated virus type 2-mediated gene delivery into the knockout mouse eye results in limited rescue. Genetic Vaccines and Therapy, 2004, 2, 3.	1.5	88
27	Key Role of Conserved Histidines in Recombinant Mouse Î²-Carotene 15,15â€²-Monooxygenase-1 Activity. Journal of Biological Chemistry, 2005, 280, 29217-29223.	3.4	78
28	11-cis-Retinal Reduces Constitutive Opsin Phosphorylation and Improves Quantum Catch in Retinoid-deficient Mouse Rod Photoreceptors. Journal of Biological Chemistry, 2002, 277, 40491-40498.	3.4	75
29	A Comprehensive Clinical and Biochemical Functional Study of a NovelRPE65Hypomorphic Mutation. , 2008, 49, 5235.		73
30	Differential regulation of microRNA-146a and microRNA-146b-5p in human retinal pigment epithelial cells by interleukin-1Î², tumor necrosis factor-Î±, and interferon-Î³. Molecular Vision, 2013, 19, 737-50.	1.1	73
31	The Gene for the Retinal Pigment Epithelium-Specific Protein RPE65 Is Localized to Human 1p31 and Mouse 3. Genomics, 1994, 20, 509-512.	2.9	62
32	Correlation of Regenerable Opsin with Rod ERG Signal inRpe65â^'/â^'Mice during Development and Aging. , 2003, 44, 310.		62
33	Experimental autoimmune uveoretinitis (EAU) induced by retinal interphotoreceptor retinoid-binding protein (IRBP): Differences between EAU induced by IRBP and by S-antigen. Clinical Immunology and Immunopathology, 1987, 43, 256-264.	2.0	59
34	RPE65, Visual Cycle Retinol Isomerase, Is Not Inherently 11-cis-specific. Journal of Biological Chemistry, 2010, 285, 1919-1927.	3.4	58
35	[46] Genetic analysis of RPE65: From human disease to mouse model. Methods in Enzymology, 2000, 316, 705-724.	1.0	57
36	Mole Quantity of RPE65 and Its Productivity in the Generation of 11-cis-Retinal from Retinyl Esters in the Living Mouse Eye. Biochemistry, 2005, 44, 9880-9888.	2.5	53

#	Article	IF	Citations
37	MicroRNA expression in human retinal pigment epithelial (ARPE-19) cells: increased expression of microRNA-9 by N-(4-hydroxyphenyl)retinamide. Molecular Vision, 2010, 16, 1475-86.	1.1	52
38	Suppressing thyroid hormone signaling preserves cone photoreceptors in mouse models of retinal degeneration. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 3602-3607.	7.1	47
39	RPE65, the Major Retinal Pigment Epithelium Microsomal Membrane Protein, Associates with Phospholipid Liposomes. Archives of Biochemistry and Biophysics, 1997, 346, 21-27.	3.0	46
40	The Upstream Region of the Rpe65 Gene Confers Retinal Pigment Epithelium-specific Expression in Vivo and in Vitro and Contains Critical Octamer and E-box Binding Sites. Journal of Biological Chemistry, 2000, 275, 31274-31282.	3.4	45
41	Lymphocyte responses to retinal-specific antigens in uveitis patients and healthy subjects. Current Eye Research, 1988, 7, 393-402.	1.5	44
42	Transgenic expression of an immunologically privileged retinal antigen extraocularly enhances self tolerance and abrogates susceptibility to autoimmune uveitis. European Journal of Immunology, 2000, 30, 272-278.	2.9	42
43	Functional and Structural Evaluation after AAV.RPE65 Gene Transfer in the Canine Model of Leberâ€™s Congenital Amaurosis. Advances in Experimental Medicine and Biology, 2003, 533, 423-430.	1.6	40
44	Localization of corneal superoxide dismutase by biochemical and histocytochemical techniques. Experimental Eye Research, 1984, 38, 369-378.	2.6	39
45	Synthetic peptides derived from IRBP induce EAU and EAP in Lewis rats. Current Eye Research, 1988, 7, 727-735.	1.5	37
46	Origin and Evolution of Retinoid Isomerization Machinery in Vertebrate Visual Cycle: Hint from Jawless Vertebrates. PLoS ONE, 2012, 7, e49975.	2.5	37
47	Cloning and localization of RPE65 mRNA in salamander cone photoreceptor cells. Biochimica Et Biophysica Acta Gene Regulatory Mechanisms, 1998, 1443, 255-261.	2.4	34
48	Expression of Î²-Carotene 15,15â€² Monooxygenase in Retina and RPE-Choroid. , 2003, 44, 44.		34
49	A History of the Classical Visual Cycle. Progress in Molecular Biology and Translational Science, 2015, 134, 433-448.	1.7	34
50	Proinflammatory cytokines decrease the expression of genes critical for RPE function. Molecular Vision, 2016, 22, 1156-1168.	1.1	34
51	Rat T-cell lines specific to a nonimmunodominant determinant of a retinal protein (IRBP) produce uveoretinitis and pinealitis. Cellular Immunology, 1989, 122, 251-261.	3.0	31
52	Cloning of cDNAs encoding human interphotoreceptor retinoid-binding protein (IRBP) and comparison with bovine IRBP sequences. Gene, 1989, 80, 99-108.	2.2	30
53	Acute Radiolabeling of Retinoids in Eye Tissues of Normal andRpe65-Deficient Mice. , 2003, 44, 1435.		30
54	Focus on Molecules: RPE65, the visual cycle retinol isomerase. Experimental Eye Research, 2009, 88, 846-847.	2.6	29

#	Article	IF	Citations
55	CIB2 regulates mTORC1 signaling and is essential for autophagy and visual function. Nature Communications, 2021, 12, 3906.	12.8	28
56	Immunohistochemical Analysis of Experimental Autoimmune Uveoretinitis (Eau) Induced by Interphotoreceptor Retinoid-Binding Protein (Irbp) in the Rat. Immunological Investigations, 1987, 16, 63-74.	2.0	25
57	Role of the 3â€²-Untranslated Region of RPE65 mRNA in the Translational Regulation of the RPE65 Gene: Identification of a Specific Translation Inhibitory Element. Archives of Biochemistry and Biophysics, 1998, 357, 37-44.	3.0	25
58	Identification of RPE65 in transformed kidney cells1. FEBS Letters, 1999, 452, 199-204.	2.8	24
59	Multiple A2E treatments lead to melanization of rod outer segment-challenged ARPE-19 cells. Molecular Vision, 2014, 20, 285-300.	1.1	24
60	RPE65 is highly uveitogenic in rats. Investigative Ophthalmology and Visual Science, 2002, 43, 2258-63.	3.3	24
61	cDNA clones encoding bovine interphotoreceptor retinoid binding protein. Biochemical and Biophysical Research Communications, 1985, 131, 1086-1093.	2.1	23
62	Proinflammatory cytokine interferon-Î³ increases the expression of BANCR, a long non-coding RNA, in retinal pigment epithelial cells. Cytokine, 2018, 104, 147-150.	3.2	23
63	Uveitis induced in primates by IRBP: Humoral and cellular immune responses. Experimental Eye Research, 1987, 45, 695-702.	2.6	22
64	Aberrant RNA splicing is the major pathogenic effect in a knockâ€in mouse model of the dominantly inherited c.1430A>G humanRPE65mutation. Human Mutation, 2019, 40, 426-443.	2.5	22
65	mRNA for interphotoreceptor retinoid-binding protein (IRBP): Distribution and size diversity in vertebrate species. Experimental Eye Research, 1989, 49, 171-180.	2.6	20
66	Localization of the gene for interphotoreceptor retinoid-binding protein to mouse chromosome 14 near Np-1. Genomics, 1990, 8, 727-731.	2.9	20
67	Biochemical evidence for the tyrosine involvement in cationic intermediate stabilization in mouse Î²-carotene 15, 15'-monooxygenase. BMC Biochemistry, 2009, 10, 31.	4.4	20
68	Phylogenetic analysis of the metazoan carotenoid oxygenase superfamily: a new ancestral gene assemblage of BCO-like (BCOL) proteins. Scientific Reports, 2017, 7, 13192.	3.3	20
69	Aromatic Lipophilic Spin Traps Effectively Inhibit RPE65 Isomerohydrolase Activity. Biochemistry, 2011, 50, 6739-6741.	2.5	19
70	Mouse model of humanRPE65P25L hypomorph resembles wild type under normal light rearing but is fully resistant to acute light damage. Human Molecular Genetics, 2015, 24, 4417-4428.	2.9	19
71	The dual roles of RPE65 S-palmitoylation in membrane association and visual cycle function. Scientific Reports, 2019, 9, 5218.	3.3	19
72	Repeated determinants within the retinal interphotoreceptor retinoid-binding protein (IRBP): Immunological properties of the repeats of an immunodominant determinant. Cellular Immunology, 1990, 126, 331-342.	3.0	18

#	Article	IF	Citations
73	Aromatic Residues in the Substrate Cleft of RPE65 Protein Govern Retinol Isomerization and Modulate Its Progression. Journal of Biological Chemistry, 2012, 287, 30552-30559.	3.4	18
74	Subretinal Delivery and Electroporation in Pigmented and Nonpigmented Adult Mouse Eyes. Methods in Molecular Biology, 2012, 884, 53-69.	0.9	18
75	Uveitis and immune responses in primates immunized with IRBP-derived synthetic peptides. Current Eye Research, 1990, 9, 193-199.	1.5	16
76	Resveratrol attenuates CXCL11 expression induced by proinflammatory cytokines in retinal pigment epithelial cells. Cytokine, 2015, 74, 335-338.	3.2	16
77	Targeting iodothyronine deiodinases locally in the retina is a therapeutic strategy for retinal degeneration. FASEB Journal, 2016, 30, 4313-4325.	0.5	16
78	Evolutionary aspects and enzymology of metazoan carotenoid cleavage oxygenases. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2020, 1865, 158665.	2.4	16
79	Effect of Leu/Met variation at residue 450 on isomerase activity and protein expression of RPE65 and its modulation by variation at other residues. Molecular Vision, 2007, 13, 1813-21.	1.1	16
80	Immune responses to peptides derived from the retinal protein IRBP: Immunopathogenic determinants are not necessarily immunodominant. Clinical Immunology and Immunopathology, 1989, 53, 212-224.	2.0	15
81	Mitogenâ€activated protein kinase pathway mediates Nâ€(4â€hydroxyphenyl)retinamideâ€induced neuronal differentiation in the ARPEâ€19 human retinal pigment epithelial cell line. Journal of Neurochemistry, 2008, 106, 591-602.	3.9	14
82	TheRpe65rd12Allele Exerts a Semidominant Negative Effect on Vision in Mice. , 2014, 55, 2500.		14
83	Fenretinide Induces Ubiquitinâ€Dependent Proteasomal Degradation of Stearoylâ€CoA Desaturase in Human Retinal Pigment Epithelial Cells. Journal of Cellular Physiology, 2014, 229, 1028-1038.	4.1	13
84	Inhibitory effects of fenretinide metabolites N-[4-methoxyphenyl]retinamide (MPR) and 4-oxo-N-(4-hydroxyphenyl)retinamide (3-keto-HPR) on fenretinide molecular targets Î²-carotene oxygenase 1, stearoyl-CoA desaturase 1 and dihydroceramide Î”4-desaturase 1. PLoS ONE, 2017, 12, e0176487.	2.5	13
85	Cyanogen bromide fragments of bovine interphotoreceptor retinoid-binding protein induce experimental autoimmune uveoretinitis in Lewis rats. Current Eye Research, 1988, 7, 375-385.	1.5	12
86	Inhibition of thyroid hormone receptor locally in the retina is a therapeutic strategy for retinal degeneration. FASEB Journal, 2017, 31, 3425-3438.	0.5	12
87	The Functional Consequences of the Novel Ribosomal Pausing Site in SARS-CoV-2 Spike Glycoprotein RNA. International Journal of Molecular Sciences, 2021, 22, 6490.	4.1	12
88	Proposed therapy, developed in a Pcdh15-deficient mouse, for progressive loss of vision in human Usher syndrome. ELife, 2021, 10, .	6.0	12
89	Synthesis of an immunopathogenic fusion protein derived from a bovine interphotoreceptor retinoidbinding protein cDNA clone. Gene, 1989, 80, 109-118.	2.2	11
90	Expression and promoter activation of the Rpe65 gene in retinal pigment epithelium cell lines. Current Eye Research, 2002, 24, 368-375.	1.5	11

#	Article	IF	Citations
91	Utility of In Vitro Mutagenesis of RPE65 Protein for Verification of Mutational Pathogenicity Before Gene Therapy. JAMA Ophthalmology, 2019, 137, 1381.	2.5	11
92	Decreased expression of insulinâ€like growth factor binding proteinâ€5 during Nâ€(4â€hydroxyphenyl)retinamideâ€induced neuronal differentiation of ARPEâ€19 human retinal pigment epithelial cells: Regulation by CCAAT/enhancerâ€binding protein. Journal of Cellular Physiology, 2010, 224, 827-836.	4.1	10
93	Volatile Evolution of Long Non-Coding RNA Repertoire in Retinal Pigment Epithelium: Insights from Comparison of Bovine and Human RNA Expression Profiles. Genes, 2019, 10, 205.	2.4	10
94	The Mechanism of Fenretinide (4-HPR) Inhibition of Î²-carotene Monooxygenase 1. New Suspect for the Visual Side Effects of Fenretinide. Advances in Experimental Medicine and Biology, 2012, 723, 167-174.	1.6	9
95	Complementation Test ofRpe65Knockout and Tvrm148. , 2013, 54, 5111.		9
96	9-cis Retinal Increased in Retina of RPE65 Knockout Mice with Decrease in Coat Pigmentationâ€. Photochemistry and Photobiology, 2006, 82, 1461.	2.5	9
97	Assessment of rAAV-Mediated Gene Therapy in the Rpe65-/- Mouse. Advances in Experimental Medicine and Biology, 2003, 533, 431-438.	1.6	8
98	IRBP from bovine retina is poorly uveitogenic in guinea pigs and is identical to A-antigen. Current Eye Research, 1987, 6, 409-417.	1.5	7
99	Entrainment of circadian rhythm to a photoperiod reversal shows retinal dystrophy in RPE65â^'/â^' mice. Physiology and Behavior, 2003, 79, 701-711.	2.1	7
100	In Vivo Assessment of Rodent Retinal Structure Using Spectral Domain Optical Coherence Tomography. Advances in Experimental Medicine and Biology, 2012, 723, 489-494.	1.6	7
101	Immunological features of synthetic peptides derived from the retinal protein IRBP: Differences between immunodominant and non-dominant peptides. Current Eye Research, 1990, 9, 95-98.	1.5	6
102	The level of thymic expression of RPE65 inversely correlates with its capacity to induce experimental autoimmune uveitis (EAU) in different rodent strains. Experimental Eye Research, 2006, 83, 897-902.	2.6	6
103	9-cis Retinal Increased in Retina of RPE65 Knockout Mice with Decrease in Coat Pigmentation. Photochemistry and Photobiology, 2006, 82, 1461-1467.	2.5	6
104	Inhibition of RPE65 Retinol Isomerase Activity by Inhibitors of Lipid Metabolism. Journal of Biological Chemistry, 2016, 291, 4966-4973.	3.4	6
105	RPE65 takes on another role in the vertebrate retina. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 10818-10820.	7.1	5
106	Palmitoylation of Metazoan Carotenoid Oxygenases. Molecules, 2020, 25, 1942.	3.8	4
107	Xanthophylls Modulate Palmitoylation of Mammalian Î²-Carotene Oxygenase 2. Antioxidants, 2021, 10, 413.	5.1	4
108	Identification of a KRAB-Zinc Finger Protein Binding to theRpe65Gene Promoter. Current Eye Research, 2006, 31, 457-466.	1.5	3

#	Article	IF	Citations
109	Stable Intronic Sequences and Exon Skipping Events in the Human RPE65 Gene: Analysis of Expression in Retinal Pigment Epithelium Cells and Cell Culture Models. Frontiers in Genetics, 2019, 10, 634.	2.3	3
110	RPE65 Palmitoylation: A Tale of Lipid Posttranslational Modification. Advances in Experimental Medicine and Biology, 2019, 1185, 537-541.	1.6	3
111	Assessing the Efficacy of Gene Therapy in Rpe65 -/- Mice Using Photoentrainment of Circadian Phythm. , 2006, 572, 239-245.		1
112	Generation of Knockout Animal Models. , 2001, 47, 215-236.		0
113	Alteration of sphingolipid metabolism during 4â€HPR induced cell death in the ARPEâ€19 human retinal pigment epithelial cell line. FASEB Journal, 2012, 26, 792.1.	0.5	0