Rachael A Pearson

List of Publications by Year
in descending order

55	5,451	117625 34	189892 50
papers	citations	h-index	g-index

55	55	55	3676
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Retinal repair by transplantation of photoreceptor precursors. Nature, 2006, 444, 203-207.	27.8	999
2	Restoration of vision after transplantation of photoreceptors. Nature, 2012, 485, 99-103.	27.8	447
3	Photoreceptor precursors derived from three-dimensional embryonic stem cell cultures integrate and mature within adult degenerate retina. Nature Biotechnology, 2013, 31, 741-747.	17.5	345
4	ATP Released via Gap Junction Hemichannels from the Pigment Epithelium Regulates Neural Retinal Progenitor Proliferation. Neuron, 2005, 46, 731-744.	8.1	290
5	Repair of the degenerate retina by photoreceptor transplantation. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 354-359.	7.1	246
6	Donor and host photoreceptors engage in material transfer following transplantation of post-mitotic photoreceptor precursors. Nature Communications, 2016, 7, 13029.	12.8	239
7	Recapitulation of Human Retinal Development from Human Pluripotent Stem Cells Generates Transplantable Populations of Cone Photoreceptors. Stem Cell Reports, 2017, 9, 820-837.	4.8	186
8	Long-term and age-dependent restoration of visual function in a mouse model of CNGB3-associated achromatopsia following gene therapy. Human Molecular Genetics, 2011, 20, 3161-3175.	2.9	157
9	Pharmacological disruption of the outer limiting membrane leads to increased retinal integration of transplanted photoreceptor precursors. Experimental Eye Research, 2008, 86, 601-611.	2.6	147
10	Defining the Integration Capacity of Embryonic Stem Cell-Derived Photoreceptor Precursors. Stem Cells, 2012, 30, 1424-1435.	3.2	119
11	Long-Term Survival of Photoreceptors Transplanted into the Adult Murine Neural Retina Requires Immune Modulation. Stem Cells, 2010, 28, 1997-2007.	3.2	117
12	Targeted Disruption of Outer Limiting Membrane Junctional Proteins (Crb1 and ZO-1) Increases Integration of Transplanted Photoreceptor Precursors into the Adult Wild-Type and Degenerating Retina. Cell Transplantation, 2010, 19, 487-503.	2.5	115
13	Cellular strategies for retinal repair by photoreceptor replacement. Progress in Retinal and Eye Research, 2015, 46, 31-66.	15.5	114
14	Adult Ciliary Epithelial Cells, Previously Identified as Retinal Stem Cells with Potential for Retinal Repair, Fail to Differentiate into New Rod Photoreceptors. Stem Cells, 2010, 28, 1048-1059.	3.2	107
15	Effective Transplantation of Photoreceptor Precursor Cells Selected via Cell Surface Antigen Expression. Stem Cells, 2011, 29, 1391-1404.	3.2	107
16	Control of cell proliferation by neurotransmitters in the developing vertebrate retina. Brain Research, 2008, 1192, 37-60.	2.2	106
17	MÃ¼ller Glia Activation in Response to Inherited Retinal Degeneration Is Highly Varied and Disease-Specific. PLoS ONE, 2015, 10, e0120415.	2.5	103
18	Cone and rod photoreceptor transplantation in models of the childhood retinopathy Leber congenital amaurosis using flow-sorted Crx-positive donor cells. Human Molecular Genetics, 2010, 19, 4545-4559.	2.9	96

#	Article	IF	Citations
19	Transplantation of Photoreceptor Precursors Isolated via a Cell Surface Biomarker Panel from Embryonic Stem Cell-Derived Self-Forming Retina. Stem Cells, 2015, 33, 2469-2482.	3.2	96
20	Transplanted Donor- or Stem Cell-Derived Cone Photoreceptors Can Both Integrate and Undergo Material Transfer in an Environment-Dependent Manner. Stem Cell Reports, 2018, 10, 406-421.	4.8	96
21	Cell transplantation strategies for retinal repair. Progress in Brain Research, 2009, 175, 3-21.	1.4	87
22	Comparative Analysis of Progenitor Cells Isolated from the Iris, Pars Plana, and Ciliary Body of the Adult Porcine Eye. Stem Cells, 2007, 25, 2430-2438.	3.2	82
23	Differentiation and Transplantation of Embryonic Stem Cell-Derived Cone Photoreceptors into a Mouse Model of End-Stage Retinal Degeneration. Stem Cell Reports, 2017, 8, 1659-1674.	4.8	82
24	Stem cell therapy and the retina. Eye, 2007, 21, 1352-1359.	2.1	75
25	Gap Junctions Modulate Interkinetic Nuclear Movement in Retinal Progenitor Cells. Journal of Neuroscience, 2005, 25, 10803-10814.	3.6	74
26	Long-Term Preservation of Cones and Improvement in Visual Function Following Gene Therapy in a Mouse Model of Leber Congenital Amaurosis Caused by Guanylate Cyclase-1 Deficiency. Human Gene Therapy, 2011, 22, 1179-1190.	2.7	70
27	Migration, Integration and Maturation of Photoreceptor Precursors Following Transplantation in the Mouse Retina. Stem Cells and Development, 2014, 23, 941-954.	2.1	68
28	Restoration of visual function in advanced disease after transplantation of purified human pluripotent stem cell-derived cone photoreceptors. Cell Reports, 2021, 35, 109022.	6.4	65
29	Ca2+ signalling and gap junction coupling within and between pigment epithelium and neural retina in the developing chick. European Journal of Neuroscience, 2004, 19, 2435-2445.	2.6	57
30	Assessment of AAV Vector Tropisms for Mouse and Human Pluripotent Stem Cellâ€"Derived RPE and Photoreceptor Cells. Human Gene Therapy, 2018, 29, 1124-1139.	2.7	53
31	Advances in repairing the degenerate retina by rod photoreceptor transplantation. Biotechnology Advances, 2014, 32, 485-491.	11.7	46
32	Nanotubeâ€like processes facilitate material transfer between photoreceptors. EMBO Reports, 2021, 22, e53732.	4.5	42
33	Photoreceptor replacement therapy: Challenges presented by the diseased recipient retinal environment. Visual Neuroscience, 2014, 31, 333-344.	1.0	39
34	Rescue of mutant rhodopsin traffic by metformin-induced AMPK activation accelerates photoreceptor degeneration. Human Molecular Genetics, 2017, 26, ddw387.	2.9	39
35	Prevention of Photoreceptor Cell Loss in a Cln6 Mouse Model of Batten Disease Requires CLN6 Gene Transfer to Bipolar Cells. Molecular Therapy, 2018, 26, 1343-1353.	8.2	39
36	MÃ¼ller Glia Reactivity and Development of Gliosis in Response to Pathological Conditions. Advances in Experimental Medicine and Biology, 2018, 1074, 303-308.	1.6	36

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37	Manipulation of the Recipient Retinal Environment by Ectopic Expression of Neurotrophic Growth Factors Can Improve Transplanted Photoreceptor Integration and Survival. Cell Transplantation, 2012, 21, 871-887.	2.5	35
38	Absence ofChx10Causes Neural Progenitors to Persist in the Adult Retina. , 2006, 47, 386.		33
39	Dominant Cone-Rod Dystrophy: A Mouse Model Generated by Gene Targeting of the GCAP1/Guca1a Gene. PLoS ONE, 2011, 6, e18089.	2.5	28
40	Harnessing the Potential of Human Pluripotent Stem Cells and Gene Editing for the Treatment of Retinal Degeneration. Current Stem Cell Reports, 2017, 3, 112-123.	1.6	27
41	Comparative Analysis of the Retinal Potential of Embryonic Stem Cells and Amniotic Fluid-Derived Stem Cells. Stem Cells and Development, 2011, 20, 851-863.	2.1	22
42	Pluripotent stem cells and their utility in treating photoreceptor degenerations. Progress in Brain Research, 2017, 231, 191-223.	1.4	19
43	Rebuilding the Retina: Prospects for MÃ¼ller Glial-mediated Self-repair. Current Eye Research, 2020, 45, 349-360.	1.5	18
44	Gliosis Can Impede Integration Following Photoreceptor Transplantation into the Diseased Retina. Advances in Experimental Medicine and Biology, 2016, 854, 579-585.	1.6	18
45	RNAiâ€mediated suppression of vimentin or glial fibrillary acidic protein prevents the establishment of MÃ¼ller glial cell hypertrophy in progressive retinal degeneration. Glia, 2021, 69, 2272-2290.	4.9	17
46	Unlocking the Potential for Endogenous Repair to Restore Sight. Neuron, 2018, 100, 524-526.	8.1	11
47	Isolation and characterisation of neural progenitor cells from the adult Chx10orJ/orJ central neural retina. Molecular and Cellular Neurosciences, 2008, 38, 359-373.	2.2	10
48	Repeated nuclear translocations underlie photoreceptor positioning and lamination of the outer nuclear layer in the mammalian retina. Cell Reports, 2021, 36, 109461.	6.4	9
49	Conditional Dicer1 depletion using Chrnb4-Cre leads to cone cell death and impaired photopic vision. Scientific Reports, 2019, 9, 2314.	3.3	8
50	Use of pIRES Vectors to Express EGFP and Connexin Constructs in Studies of the Role of Gap Junctional Communication in the Early Development of the Chick Retina and Brain. Cell Communication and Adhesion, 2001, 8, 355-359.	1.0	6
51	Isolation and Culture of Adult Ciliary Epithelial Cells, Previously Identified as Retinal Stem Cells, and Retinal Progenitor Cells. Current Protocols in Stem Cell Biology, 2011, 19, Unit 1H.4.	3.0	2
52	Neurotransmitters and neurotrophins. , 0, , 99-125.		1
53	Photoreceptor Transplantation: Re-evaluating the Mechanisms That Underlie Rescue. , 2020, , 614-629.		1
54	Cover Image, Volume 69, Issue 9. Glia, 2021, 69, C1.	4.9	0

#	Article	IF	Citations
55	Tracking neuronal motility in live murine retinal explants. STAR Protocols, 2021, 2, 101008.	1.2	0