Constance L Cepko

List of Publications by Year
in descending order

140 papers	20,701 citations	12330 69 h-index	12272 133 g-index
161 all docs	161 docs citations	161 times ranked	18113 citing authors

#	Article	IF	Citations
1	A common progenitor for neurons and glia persists in rat retina late in development. Nature, 1987, 328, 131-136.	27.8	1,331
2	Comprehensive Classification of Retinal Bipolar Neurons by Single-Cell Transcriptomics. Cell, 2016, 166, 1308-1323.e30.	28.9	1,010
3	Electroporation and RNA interference in the rodent retina <i>in vivo</i> and <i>in vitro</i>. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 16-22.	7.1	978
4	Crx, a Novel otx-like Homeobox Gene, Shows Photoreceptor-Specific Expression and Regulates Photoreceptor Differentiation. Cell, 1997, 91, 531-541.	28.9	822
5	Lineage-independent determination of cell type in the embryonic mouse retina. Neuron, 1990, 4, 833-845.	8.1	647
6	Controlled expression of transgenes introduced byin vivoelectroporation. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 1027-1032.	7.1	588
7	Genomic Analysis of Mouse Retinal Development. PLoS Biology, 2004, 2, e247.	5.6	550
8	Light-activated channels targeted to ON bipolar cells restore visual function in retinal degeneration. Nature Neuroscience, 2008, 11, 667-675.	14.8	522
9	Cone-Rod Dystrophy Due to Mutations in a Novel Photoreceptor-Specific Homeobox Gene (CRX) Essential for Maintenance of the Photoreceptor. Cell, 1997, 91, 543-553.	28.9	520
10	rax, Hes1, and notch1 Promote the Formation of MÃ¼ller Glia by Postnatal Retinal Progenitor Cells. Neuron, 2000, 26, 383-394.	8.1	482
11	Retinopathy and attenuated circadian entrainment in Crx-deficient mice. Nature Genetics, 1999, 23, 466-470.	21.4	476
12	Stimulation of the insulin/mTOR pathway delays cone death in a mouse model of retinitis pigmentosa. Nature Neuroscience, 2009, 12, 44-52.	14.8	443
13	Embryonic Origin of Postnatal Neural Stem Cells. Cell, 2015, 161, 1644-1655.	28.9	403
14	Control of MÃ¼ller glial cell proliferation and activation following retinal injury. Nature Neuroscience, 2000, 3, 873-880.	14.8	400
15	Establishment and characterization of multipotent neural cell lines using retrovirus vectorâ€mediated oncogene transfer. Journal of Neurobiology, 1990, 21, 356-375.	3.6	374
16	Prox1 function controls progenitor cell proliferation and horizontal cell genesis in the mammalian retina. Nature Genetics, 2003, 34, 53-58.	21.4	364
17	The transcriptome of retinal MÃ¼ller glial cells. Journal of Comparative Neurology, 2008, 509, 225-238.	1.6	343
18	Comprehensive Analysis of Photoreceptor Gene Expression and the Identification of Candidate Retinal Disease Genes. Cell, 2001, 107, 579-589.	28.9	286

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19	Genetic analysis of the homeodomain transcription factor Chx10 in the retina using a novel multifunctional BAC transgenic mouse reporter. Developmental Biology, 2004, 271, 388-402.	2.0	283
20	The Expression and Function of<i>Notch</i>Pathway Genes in the Developing Rat Eye. Journal of Neuroscience, 1997, 17, 1425-1434.	3.6	282
21	The chicken<i>RaxL</i>gene plays a role in the initiation of photoreceptor differentiation. Development (Cambridge), 2002, 129, 5363-5375.	2.5	276
22	SABER amplifies FISH: enhanced multiplexed imaging of RNA and DNA in cells and tissues. Nature Methods, 2019, 16, 533-544.	19.0	271
23	Clonal dispersion in proliferative layers of developing cerebral cortex. Nature, 1993, 362, 632-635.	27.8	264
24	Mutations in a new photoreceptor-pineal gene on 17p cause Leber congenital amaurosis. Nature Genetics, 2000, 24, 79-83.	21.4	257
25	Regulation of Chamber-Specific Gene Expression in the Developing Heart by Irx4. Science, 1999, 283, 1161-1164.	12.6	232
26	SARS-CoV-2 detection using isothermal amplification and a rapid, inexpensive protocol for sample inactivation and purification. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 24450-24458.	7.1	223
27	Regulating proliferation during retinal development. Nature Reviews Neuroscience, 2001, 2, 333-342.	10.2	220
28	NRF2 promotes neuronal survival in neurodegeneration and acute nerve damage. Journal of Clinical Investigation, 2015, 125, 1433-1445.	8.2	217
29	Notch 1 inhibits photoreceptor production in the developing mammalian retina. Development (Cambridge), 2006, 133, 913-923.	2.5	207
30	Development and neurogenic potential of MÃ¼ller glial cells in the vertebrate retina. Progress in Retinal and Eye Research, 2009, 28, 249-262.	15.5	199
31	Quantitative analysis of proliferation and cell cycle length during development of the rat retina. Developmental Dynamics, 1996, 205, 293-307.	1.8	187
32	Generation and migration of cells in the developing striatum. Neuron, 1992, 9, 15-26.	8.1	180
33	HDAC4 Regulates Neuronal Survival in Normal and Diseased Retinas. Science, 2009, 323, 256-259.	12.6	180
34	Anterograde or retrograde transsynaptic labeling of CNS neurons with vesicular stomatitis virus vectors. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 15414-15419.	7.1	172
35	Local Retinal Circuits of Melanopsin-Containing Ganglion Cells Identified by Transsynaptic Viral Tracing. Current Biology, 2007, 17, 981-988.	3.9	165
36	Individual Retinal Progenitor Cells Display Extensive Heterogeneity of Gene Expression. PLoS ONE, 2008, 3, e1588.	2.5	163

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37	A Gene Regulatory Network Controls the Binary Fate Decision of Rod and Bipolar Cells in the Vertebrate Retina. Developmental Cell, 2014, 30, 513-527.	7.0	162
38	Loss of Daylight Vision in Retinal Degeneration: Are Oxidative Stress and Metabolic Dysregulation to Blame?. Journal of Biological Chemistry, 2012, 287, 1642-1648.	3.4	161
39	AAV <i>cis</i> -regulatory sequences are correlated with ocular toxicity. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 5785-5794.	7.1	158
40	Notch activity permits retinal cells to progress through multiple progenitor states and acquire a stem cell property. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 18998-19003.	7.1	155
41	Two Phases of Rod Photoreceptor Differentiation during Rat Retinal Development. Journal of Neuroscience, 1998, 18, 3738-3748.	3.6	151
42	Misexpression of the Emx-Related Homeobox Genes cVax and mVax2 Ventralizes the Retina and Perturbs the Retinotectal Map. Neuron, 1999, 24, 541-553.	8.1	148
43	Transdifferentiation of the retina into pigmented cells in ocular retardation mice defines a new function of the homeodomain gene Chx10. Development (Cambridge), 2004, 131, 5139-5152.	2.5	148
44	Molecular heterogeneity of developing retinal ganglion and amacrine cells revealed through single cell gene expression profiling. Journal of Comparative Neurology, 2007, 502, 1047-1065.	1.6	147
45	A Hybrid Photoreceptor Expressing Both Rod and Cone Genes in a Mouse Model of Enhanced S-Cone Syndrome. PLoS Genetics, 2005, 1, e11.	3.5	145
46	Wnt2b/Î²-catenin-mediated canonical Wnt signaling determines the peripheral fates of the chick eye. Development (Cambridge), 2006, 133, 3167-3177.	2.5	136
47	Neuroanatomy goes viral!. Frontiers in Neuroanatomy, 2015, 9, 80.	1.7	135
48	The Cis-regulatory Logic of the Mammalian Photoreceptor Transcriptional Network. PLoS ONE, 2007, 2, e643.	2.5	133
49	Glycolytic reliance promotes anabolism in photoreceptors. ELife, 2017, 6, .	6.0	129
50	Transcription factor <i>Olig2</i> defines subpopulations of retinal progenitor cells biased toward specific cell fates. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 7882-7887.	7.1	128
51	Otx2 and Onecut1 Promote the Fates of Cone Photoreceptors and Horizontal Cells and Repress Rod Photoreceptors. Developmental Cell, 2013, 26, 59-72.	7.0	119
52	Dentate granule cell recruitment of feedforward inhibition governs engram maintenance and remote memory generalization. Nature Medicine, 2018, 24, 438-449.	30.7	115
53	Clonal Analysis in the Chicken Retina Reveals Tangential Dispersion of Clonally Related Cells. Developmental Biology, 1994, 166, 666-682.	2.0	111
54	Development and diversification of retinal amacrine interneurons at single cell resolution. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 9495-9500.	7.1	110

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55	Identification of molecular markers of bipolar cells in the murine retina. Journal of Comparative Neurology, 2008, 507, 1795-1810.	1.6	109
56	Optimizing Nervous System-Specific Gene Targeting with Cre Driver Lines: Prevalence of Germline Recombination and Influencing Factors. Neuron, 2020, 106, 37-65.e5.	8.1	109
57	Ectopic expression of Olig1 promotes oligodendrocyte formation and reduces neuronal survival in developing mouse cortex. Nature Neuroscience, 2001, 4, 973-974.	14.8	108
58	Late Retinal Progenitor Cells Show Intrinsic Limitations in the Production of Cell Types and the Kinetics of Opsin Synthesis. Journal of Neuroscience, 2000, 20, 2247-2254.	3.6	107
59	A Core Paired-Type and POU Homeodomain-Containing Transcription Factor Program Drives Retinal Bipolar Cell Gene Expression. Journal of Neuroscience, 2008, 28, 7748-7764.	3.6	105
60	A Nanobody-Based System Using Fluorescent Proteins as Scaffolds for Cell-Specific Gene Manipulation. Cell, 2013, 154, 928-939.	28.9	104
61	Clonally Related Forebrain Interneurons Disperse Broadly across Both Functional Areas and Structural Boundaries. Neuron, 2015, 87, 989-998.	8.1	99
62	Engineering adeno-associated viral vectors to evade innate immune and inflammatory responses. Science Translational Medicine, 2021, 13, .	12.4	99
63	A Class of Human Proteins that Deliver Functional Proteins into Mammalian Cells InÂVitro and InÂVivo. Chemistry and Biology, 2011, 18, 833-838.	6.0	98
64	A typology of photoreceptor gene expression patterns in the mouse. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 12069-12074.	7.1	96
65	Expression of Chx10 and Chx10-1 in the developing chicken retina. Mechanisms of Development, 2000, 90, 293-297.	1.7	95
66	NeuroD Factors Regulate Cell Fate and Neurite Stratification in the Developing Retina. Journal of Neuroscience, 2011, 31, 7365-7379.	3.6	94
67	Wide Dispersion and Diversity of Clonally Related Inhibitory Interneurons. Neuron, 2015, 87, 999-1007.	8.1	84
68	Fgf8 Expression and Degradation of Retinoic Acid Are Required for Patterning a High-Acuity Area in the Retina. Developmental Cell, 2017, 42, 68-81.e6.	7.0	77
69	Detection and manipulation of live antigen-expressing cells using conditionally stable nanobodies. ELife, 2016, 5, .	6.0	77
70	The Mouse<i>Crx</i>5â€²-Upstream Transgene Sequence Directs Cell-Specific and Developmentally Regulated Expression in Retinal Photoreceptor Cells. Journal of Neuroscience, 2002, 22, 1640-1647.	3.6	76
71	Cell typeâ€"specific manipulation with GFP-dependent Cre recombinase. Nature Neuroscience, 2015, 18, 1334-1341.	14.8	74
72	Gene expression changes within MÃ¼ller glial cells in retinitis pigmentosa. Molecular Vision, 2012, 18, 1197-214.	1.1	74

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73	Developmental sources of conservation and variation in the evolution of the primate eye. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 8963-8968.	7.1	72
74	[56] Lineage analysis using retrovirus vectors. Methods in Enzymology, 1993, 225, 933-960.	1.0	69
75	Synaptogenesis and outer segment formation are perturbed in the neural retina of Crx mutant mice. BMC Neuroscience, 2005, 6, 5.	1.9	69
76	Temporal order of bipolar cell genesis in the neural retina. Neural Development, 2008, 3, 2.	2.4	65
77	Thyroid hormone components are expressed in three sequential waves during development of the chick retina. BMC Developmental Biology, 2008, 8, 101.	2.1	64
78	Identification of a retina-specific Otx2 enhancer element active in immature developing photoreceptors. Developmental Biology, 2011, 360, 241-255.	2.0	63
79	Notch1 is required in newly postmitotic cells to inhibit the rod photoreceptor fate. Development (Cambridge), 2013, 140, 3188-3197.	2.5	63
80	Vesicular stomatitis virus enables gene transfer and transsynaptic tracing in a wide range of organisms. Journal of Comparative Neurology, 2015, 523, 1639-1663.	1.6	59
81	RCAS-RNAi: A loss-of-function method for the developing chick retina. BMC Developmental Biology, 2006, 6, 2.	2.1	56
82	Conditional expression of the TVA receptor allows clonal analysis of descendents from Cre-expressing progenitor cells. Developmental Biology, 2011, 353, 309-320.	2.0	55
83	Production and Design of More Effective Avian Replication-Incompetent Retroviral Vectors. Developmental Biology, 1999, 214, 370-384.	2.0	54
84	Transsynaptic Tracing with Vesicular Stomatitis Virus Reveals Novel Retinal Circuitry. Journal of Neuroscience, 2013, 33, 35-51.	3.6	54
85	Vesicular stomatitis virus with the rabies virus glycoprotein directs retrograde transsynaptic transport among neurons in vivo. Frontiers in Neural Circuits, 2013, 7, 11.	2.8	52
86	Lineage Analysis Using Retroviral Vectors. Methods, 1998, 14, 393-406.	3.8	51
87	The Dorsalâ€"Ventral Axis of the Neural Retina Is Divided into Multiple Domains of Restricted Gene Expression Which Exhibit Features of Lineage Compartments. Developmental Biology, 2002, 251, 59-73.	2.0	49
88	The brain parenchyma has a type I interferon response that can limit virus spread. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E95-E104.	7.1	49
89	Pseudotyped retroviruses for infecting axolotl <i>in vivo</i> and <i>in vitro</i>. Development (Cambridge), 2013, 140, 1137-1146.	2.5	48
90	The Determination of Rod and Cone Photoreceptor Fate. Annual Review of Vision Science, 2015, 1, 211-234.	4.4	47

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91	Microglia modulation by TGF-Î²1 protects cones in mouse models of retinal degeneration. Journal of Clinical Investigation, 2020, 130, 4360-4369.	8.2	45
92	The p57Kip2 cyclin kinase inhibitor is expressed by a restricted set of amacrine cells in the rodent retina. Journal of Comparative Neurology, 2001, 429, 601-614.	1.6	44
93	Identification of genes expressed preferentially in the developing peripheral margin of the optic cup. Developmental Dynamics, 2009, 238, 2327-2329.	1.8	44
94	Retinoic acid regulates the expression of dorsoventral topographic guidance molecules in the chick retina. Development (Cambridge), 2005, 132, 5147-5159.	2.5	39
95	A POU factor binding site upstream of the Chx10 homeobox gene is required for Chx10 expression in subsets of retinal progenitor cells and bipolar cells. Developmental Biology, 2005, 281, 240-255.	2.0	37
96	Clinical Assessment and Validation of a Rapid and Sensitive SARS-CoV-2 Test Using Reverse Transcription Loop-Mediated Isothermal Amplification Without the Need for RNA Extraction. Open Forum Infectious Diseases, 2021, 8, ofaa631.	0.9	36
97	Soluble CX3CL1 gene therapy improves cone survival and function in mouse models of retinitis pigmentosa. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 10140-10149.	7.1	35
98	Nrf2 overexpression rescues the RPE in mouse models of retinitis pigmentosa. JCI Insight, 2021, 6, .	5.0	33
99	Analysis of Thyroid Response Element Activity during Retinal Development. PLoS ONE, 2010, 5, e13739.	2.5	33
100	Emerging Gene Therapies for Retinal Degenerations. Journal of Neuroscience, 2012, 32, 6415-6420.	3.6	32
101	AAV-Txnip prolongs cone survival and vision in mouse models of retinitis pigmentosa. ELife, 2021, 10, .	6.0	30
102	Ultrasoundâ€guided in utero injections allow studies of the development and function of the eye. Developmental Dynamics, 2008, 237, 1034-1042.	1.8	29
103	Anterograde or Retrograde Transsynaptic Circuit Tracing in Vertebrates with Vesicular Stomatitis Virus Vectors. Current Protocols in Neuroscience, 2016, 74, 1.26.1-1.26.27.	2.6	26
104	Probe-Seq enables transcriptional profiling of specific cell types from heterogeneous tissue by RNA-based isolation. ELife, 2019, 8, .	6.0	26
105	Targeting Microglia to Treat Degenerative Eye Diseases. Frontiers in Immunology, 2022, 13, 843558.	4.8	24
106	Cell type- and stage-specific expression of Otx2 is regulated by multiple transcription factors and<i>cis</i>-regulatory modules in the retina. Development (Cambridge), 2020, 147, .	2.5	23
107	The Stability of Endogenous Tyrosine Hydroxylase Protein in PCâ€12 Cells Differs from That Expressed in Mouse Fibroblasts by Gene Transfer. Journal of Neurochemistry, 1994, 62, 863-872.	3.9	21
108	Lineage Analysis of the Late Otocyst Stage Mouse Inner Ear by Transuterine Microinjection of A Retroviral Vector Encoding Alkaline Phosphatase and an Oligonucleotide Library. PLoS ONE, 2013, 8, e69314.	2.5	20

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109	The Rod Photoreceptor Pattern Is Set at the Optic Vesicle Stage and Requires Spatially Restricted cVax Expression. Journal of Neuroscience, 2005, 25, 2823-2831.	3.6	19
110	Analysis of gene expression in wildâ€type and Notch1 mutant retinal cells by single cell profiling. Developmental Dynamics, 2013, 242, 1147-1159.	1.8	19
111	The Lgr5 transgene is expressed specifically in glycinergic amacrine cells in the mouse retina. Experimental Eye Research, 2014, 119, 106-110.	2.6	19
112	Robust marking of photoreceptor cells and pinealocytes with several reporters under control of the <i>Crx</i> gene. Developmental Dynamics, 2009, 238, 3218-3225.	1.8	18
113	Photoreceptor Fate Determination in the Vertebrate Retina. , 2016, 57, ORSFe1.		18
114	Enhancer transcription identifies <i>cis</i>-regulatory elements for photoreceptor cell types. Development (Cambridge), 2020, 147, .	2.5	18
115	In Situ Detection of Adeno-associated Viral Vector Genomes with SABER-FISH. Molecular Therapy - Methods and Clinical Development, 2020, 19, 376-386.	4.1	18
116	Overview of the Retrovirus Transduction System. Current Protocols in Molecular Biology, 1996, 36, Unit9.9.	2.9	16
117	Temporal requirement of the alternative-splicing factor <i>Sfrs1</i>for the survival of retinal neurons. Development (Cambridge), 2008, 135, 3923-3933.	2.5	15
118	Development and diversification of bipolar interneurons in the mammalian retina. Developmental Biology, 2022, 481, 30-42.	2.0	15
119	Seeing the Light of Day. Science, 2010, 329, 403-404.	12.6	14
120	Spatiotemporal patterns of neuronal subtype genesis suggest hierarchical development of retinal diversity. Cell Reports, 2022, 38, 110191.	6.4	14
121	FIN-Seq: transcriptional profiling of specific cell types from frozen archived tissue of the human central nervous system. Nucleic Acids Research, 2020, 48, e4.	14.5	13
122	Retinoic acid signaling mediates peripheral cone photoreceptor survival in a mouse model of retina degeneration. ELife, 2022, 11, .	6.0	13
123	Retrovirus Infection of Cells In Vitro and In Vivo. Current Protocols in Molecular Biology, 1996, 36, Unit9.14.	2.9	10
124	Large-Scale Preparation and Concentration of Retrovirus Stocks. , 2001, Chapter 9, Unit9.12.		10
125	<i>Cis</i>-regulatory dissection of cone development reveals a broad role for Otx2 and Oc transcription factors. Development (Cambridge), 2021, 148, .	2.5	9
126	Alternative splicing produces high levels of noncoding isoforms of bHLH transcription factors during development. Genes and Development, 2010, 24, 229-234.	5.9	8

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127	Preferential Budding of Vesicular Stomatitis Virus from the Basolateral Surface of Polarized Epithelial Cells Is Not Solely Directed by Matrix Protein or Glycoprotein. Journal of Virology, 2015, 89, 11718-11722.	3.4	7
128	Viral Delivery of GFP-Dependent Recombinases to the Mouse Brain. Methods in Molecular Biology, 2017, 1642, 109-126.	0.9	7
129	Augmentation of CD47/SIRPÎ± signaling protects cones in genetic models of retinal degeneration. JCI Insight, 2021, 6, .	5.0	7
130	Distinct Expression Patterns of AAV8 Vectors with Broadly Active Promoters from Subretinal Injections of Neonatal Mouse Eyes at Two Different Ages. Advances in Experimental Medicine and Biology, 2016, 854, 501-507.	1.6	6
131	<i>Response</i> : The Dispersion of Neuronal Clones Across the Cerebral Cortex. Science, 1992, 258, 317-320.	12.6	5
132	Viral Tracing of Genetically Defined Neural Circuitry. Journal of Visualized Experiments, 2012, , .	0.3	3
133	Quantitative analysis of proliferation and cell cycle length during development of the rat retina. , 0, .		3
134	In Vivo Functional Imaging of Retinal Neurons Using Red and Green Fluorescent Calcium Indicators. Advances in Experimental Medicine and Biology, 2018, 1074, 135-144.	1.6	2
135	Detection of Helper Virus in Retrovirus Stocks. Current Protocols in Molecular Biology, 1996, 36, Unit9.13.	2.9	1
136	Tackling the brain's genetic complexity. Nature Neuroscience, 2001, 4, 1159-1160.	14.8	1
137	Cell Fate Determination of Photoreceptor Cells. , 2014, , 217-244.		1
138	Response : The Dispersion of Neuronal Clones Across the Cerebral Cortex. Science, 1992, 258, 317-320.	12.6	0
139	Probe-Seq: Method for RNA Sequencing of Specific Cell Types from Animal Tissue. Bio-protocol, 2020, 10, e3749.	0.4	0
140	Mouse Lines with Cre-mediated Recombination in Retinal Amacrine Cells. ENeuro, 2022, , ENEURO.0255-21.2021.	1.9	0