Seth Blackshaw

List of Publications by Year
in descending order

115 papers	7,784 citations	71102 41 h-index	64796 79 g-index
153 all docs	153 docs citations	153 times ranked	9886 citing authors

#	Article	IF	Citations
1	Genomic Analysis of Mouse Retinal Development. PLoS Biology, 2004, 2, e247.	5.6	550
2	Tanycytes of the hypothalamic median eminence form a diet-responsive neurogenic niche. Nature Neuroscience, 2012, 15, 700-702.	14.8	413
3	A genomic atlas of mouse hypothalamic development. Nature Neuroscience, 2010, 13, 767-775.	14.8	354
4	Profiling the Human Protein-DNA Interactome Reveals ERK2 as a Transcriptional RepressorÂof Interferon Signaling. Cell, 2009, 139, 610-622.	28.9	352
5	Single-Cell RNA-Seq Analysis of Retinal Development Identifies NFI Factors as Regulating Mitotic Exit and Late-Born Cell Specification. Neuron, 2019, 102, 1111-1126.e5.	8.1	343
6	Comprehensive Analysis of Photoreceptor Gene Expression and the Identification of Candidate Retinal Disease Genes. Cell, 2001, 107, 579-589.	28.9	286
7	A nuclease that mediates cell death induced by DNA damage and poly(ADP-ribose) polymerase-1. Science, 2016, 354, .	12.6	266
8	Mutations in a new photoreceptor-pineal gene on 17p cause Leber congenital amaurosis. Nature Genetics, 2000, 24, 79-83.	21.4	257
9	Gene regulatory networks controlling vertebrate retinal regeneration. Science, 2020, 370, .	12.6	248
10	Single-Cell Analysis of Human Retina Identifies Evolutionarily Conserved and Species-Specific Mechanisms Controlling Development. Developmental Cell, 2020, 53, 473-491.e9.	7.0	170
11	Lhx6-positive GABA-releasing neurons of the zona incerta promote sleep. Nature, 2017, 548, 582-587.	27.8	164
12	Construction of human activityâ€based phosphorylation networks. Molecular Systems Biology, 2013, 9, 655.	7.2	153
13	Rapid Identification of Monospecific Monoclonal Antibodies Using a Human Proteome Microarray. Molecular and Cellular Proteomics, 2012, 11, O111.016253.	3.8	136
14	A Conserved Regulatory Logic Controls Temporal Identity in Mouse Neural Progenitors. Neuron, 2015, 85, 497-504.	8.1	135
15	The long noncoding RNA Six3OS acts in trans to regulate retinal development by modulating Six3 activity. Neural Development, 2011, 6, 32.	2.4	128
16	WIDE AWAKE Mediates the Circadian Timing of Sleep Onset. Neuron, 2014, 82, 151-166.	8.1	128
17	The nutrient sensor OGT in PVN neurons regulates feeding. Science, 2016, 351, 1293-1296.	12.6	124
18	ATAC-Seq analysis reveals a widespread decrease of chromatin accessibility in age-related macular degeneration. Nature Communications, 2018, 9, 1364.	12.8	124

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19	Decomposing Cell Identity for Transfer Learning across Cellular Measurements, Platforms, Tissues, and Species. Cell Systems, 2019, 8, 395-411.e8.	6.2	121
20	Regulation and function of neurogenesis in the adult mammalian hypothalamus. Progress in Neurobiology, 2018, 170, 53-66.	5.7	110
21	Reactive microglia and IL1Î²/IL-1R1-signaling mediate neuroprotection in excitotoxin-damaged mouse retina. Journal of Neuroinflammation, 2019, 16, 118.	7.2	103
22	The cellular and molecular landscape of hypothalamic patterning and differentiation from embryonic to late postnatal development. Nature Communications, 2020, 11, 4360.	12.8	96
23	The long non-coding RNA NEAT1 is responsive to neuronal activity and is associated with hyperexcitability states. Scientific Reports, 2017, 7, 40127.	3.3	92
24	Lhx1 Controls Terminal Differentiation and Circadian Function of the Suprachiasmatic Nucleus. Cell Reports, 2014, 7, 609-622.	6.4	88
25	LHX2 Is Necessary for the Maintenance of Optic Identity and for the Progression of Optic Morphogenesis. Journal of Neuroscience, 2013, 33, 6877-6884.	3.6	87
26	Injury-independent induction of reactive gliosis in retina by loss of function of the LIM homeodomain transcription factor Lhx2. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 4657-4662.	7.1	86
27	Patterning, specification, and differentiation in the developing hypothalamus. Wiley Interdisciplinary Reviews: Developmental Biology, 2015, 4, 445-468.	5.9	85
28	Identification of New Autoantigens for Primary Biliary Cirrhosis Using Human Proteome Microarrays. Molecular and Cellular Proteomics, 2012, 11, 669-680.	3.8	80
29	Type 3 inositol 1,4,5â€trisphosphate receptor modulates cell death. FASEB Journal, 2000, 14, 1375-1379.	0.5	79
30	Lhx2 Is an Essential Factor for Retinal Gliogenesis and Notch Signaling. Journal of Neuroscience, 2016, 36, 2391-2405.	3.6	79
31	<i>Rax</i> regulates hypothalamic tanycyte differentiation and barrier function in mice. Journal of Comparative Neurology, 2014, 522, 876-899.	1.6	74
32	Differential expression of putative transbilayer amphipath transporters. Physiological Genomics, 1999, 1, 139-150.	2.3	73
33	Molecular Pathways Controlling Development of Thalamus and Hypothalamus: From Neural Specification to Circuit Formation. Journal of Neuroscience, 2010, 30, 14925-14930.	3.6	71
34	Vertebrate retina and hypothalamus development. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2009, 1, 380-389.	6.6	70
35	Dietary and sex-specific factors regulate hypothalamic neurogenesis in young adult mice. Frontiers in Neuroscience, 2014, 8, 157.	2.8	70
36	The orphan nuclear hormone receptor <i>ERR</i> Î² controls rod photoreceptor survival. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 11579-11584.	7.1	69

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37	Rax-CreERT2 Knock-In Mice: A Tool for Selective and Conditional Gene Deletion in Progenitor Cells and Radial Glia of the Retina and Hypothalamus. PLoS ONE, 2014, 9, e90381.	2.5	65
38	Notch3 Interactome Analysis Identified WWP2 as a Negative Regulator of Notch3 Signaling in Ovarian Cancer. PLoS Genetics, 2014, 10, e1004751.	3.5	64
39	The LIM Homeodomain Factor Lhx2 Is Required for Hypothalamic Tanycyte Specification and Differentiation. Journal of Neuroscience, 2014, 34, 16809-16820.	3.6	63
40	A toolbox of immunoprecipitation-grade monoclonal antibodies to human transcription factors. Nature Methods, 2018, 15, 330-338.	19.0	58
41	Pax6 is essential for the generation of late-born retinal neurons and for inhibition of photoreceptor-fate during late stages of retinogenesis. Developmental Biology, 2017, 432, 140-150.	2.0	55
42	Gene regulatory networks controlling temporal patterning, neurogenesis, and cell-fate specification in mammalian retina. Cell Reports, 2021, 37, 109994.	6.4	52
43	Tanycyte ablation in the arcuate nucleus and median eminence increases obesity susceptibility by increasing body fat content in male mice. Glia, 2020, 68, 1987-2000.	4.9	51
44	ASCOT identifies key regulators of neuronal subtype-specific splicing. Nature Communications, 2020, 11, 137.	12.8	50
45	Tanycyte-Independent Control of Hypothalamic Leptin Signaling. Frontiers in Neuroscience, 2019, 13, 240.	2.8	46
46	Understanding the Role of lncRNAs in Nervous System Development. Advances in Experimental Medicine and Biology, 2017, 1008, 253-282.	1.6	42
47	NF-Î°B signaling regulates the formation of proliferating MÃ¼ller glia-derived progenitor cells in the avian retina. Development (Cambridge), 2020, 147, .	2.5	42
48	In vivo base editing rescues cone photoreceptors in a mouse model of early-onset inherited retinal degeneration. Nature Communications, 2022, 13, 1830.	12.8	42
49	Atoh7-independent specification of retinal ganglion cell identity. Science Advances, 2021, 7, .	10.3	41
50	Dual midbrain and forebrain origins of thalamic inhibitory interneurons. ELife, 2021, 10, .	6.0	40
51	Genetic loss of function of Ptbp1 does not induce glia-to-neuron conversion in retina. Cell Reports, 2022, 39, 110849.	6.4	39
52	Turning lead into gold: reprogramming retinal cells to cure blindness. Journal of Clinical Investigation, 2021, 131, .	8.2	38
53	Cell-specific cis-regulatory elements and mechanisms of non-coding genetic disease in human retina and retinal organoids. Developmental Cell, 2022, 57, 820-836.e6.	7.0	37
54	An LHX1-Regulated Transcriptional Network Controls Sleep/Wake Coupling and Thermal Resistance of the Central Circadian Clockworks. Current Biology, 2017, 27, 128-136.	3.9	36

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55	Epigenomic profiling of retinal progenitors reveals LHX2 is required for developmental regulation of open chromatin. Communications Biology, 2019, 2, 142.	4.4	36
56	Control of neurogenic competence in mammalian hypothalamic tanycytes. Science Advances, 2021, 7, .	10.3	36
57	Photic generation of 11-cis-retinal in bovine retinal pigment epithelium. Journal of Biological Chemistry, 2019, 294, 19137-19154.	3.4	33
58	Disruption of stromal hedgehog signaling initiates RNF5-mediated proteasomal degradation of PTEN and accelerates pancreatic tumor growth. Life Science Alliance, 2018, 1, e201800190.	2.8	33
59	Multiple intrinsic factors act in concert with Lhx2 to direct retinal gliogenesis. Scientific Reports, 2016, 6, 32757.	3.3	32
60	Penetrance of Congenital Heart Disease in a Mouse Model of Down Syndrome Depends on a Trisomic Potentiator of a Disomic Modifier. Genetics, 2016, 203, 763-770.	2.9	31
61	The stage-dependent roles of Ldb1 and functional redundancy with Ldb2 in mammalian retinogenesis. Development (Cambridge), 2016, 143, 4182-4192.	2.5	29
62	Canonical Wnt signaling regulates patterning, differentiation and nucleogenesis in mouse hypothalamus and prethalamus. Developmental Biology, 2018, 442, 236-248.	2.0	29
63	In vivo Electroporation of Developing Mouse Retina. Journal of Visualized Experiments, 2011, , .	0.3	28
64	Foxd1 is required for terminal differentiation of anterior hypothalamic neuronal subtypes. Developmental Biology, 2018, 439, 102-111.	2.0	28
65	Global Analysis of Intercellular Homeodomain Protein Transfer. Cell Reports, 2019, 28, 712-722.e3.	6.4	28
66	<scp>NFkB</scp>â€signaling promotes glial reactivity and suppresses MÃ¼ller gliaâ€mediated neuron regeneration in the mammalian retina. Glia, 2022, 70, 1380-1401.	4.9	28
67	In Vivo Electroporation of Developing Mouse Retina. Methods in Molecular Biology, 2018, 1715, 101-111.	0.9	27
68	Characterization of the SUMO-Binding Activity of the Myeloproliferative and Mental Retardation (MYM)-Type Zinc Fingers in ZNF261 and ZNF198. PLoS ONE, 2014, 9, e105271.	2.5	27
69	Ablation of lncRNA <i>Miat</i> attenuates pathological hypertrophy and heart failure. Theranostics, 2021, 11, 7995-8007.	10.0	26
70	Gene regulatory networks controlling differentiation, survival, and diversification of hypothalamic Lhx6-expressing GABAergic neurons. Communications Biology, 2021, 4, 95.	4.4	26
71	EphA4 is Involved in Sleep Regulation but Not in the Electrophysiological Response to Sleep Deprivation. Sleep, 2016, 39, 613-624.	1.1	25
72	Ldb1 and Rnf12-dependent regulation of Lhx2 controls the relative balance between neurogenesis and gliogenesis in retina. Development (Cambridge), 2018, 145, .	2.5	25

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73	Global Identification of Small Ubiquitin-related Modifier (SUMO) Substrates Reveals Crosstalk between SUMOylation and Phosphorylation Promotes Cell Migration. Molecular and Cellular Proteomics, 2018, 17, 871-888.	3.8	24
74	Matrix-metalloproteinase expression and gelatinase activity in the avian retina and their influence on MÃ¼ller glia proliferation. Experimental Neurology, 2019, 320, 112984.	4.1	24
75	A single cell transcriptional atlas of early synovial joint development. Development (Cambridge), 2020, 147, .	2.5	23
76	Midkine is neuroprotective and influences glial reactivity and the formation of MÃ¼ller gliaâ€derived progenitor cells in chick and mouse retinas. Glia, 2021, 69, 1515-1539.	4.9	23
77	Assessing the model transferability for prediction of transcription factor binding sites based on chromatin accessibility. BMC Bioinformatics, 2017, 18, 355.	2.6	22
78	Conditional deletion of<i>Des1</i>in the mouse retina does not impair the visual cycle in cones. FASEB Journal, 2019, 33, 5782-5792.	0.5	22
79	Cannabinoid signaling promotes the deâ€differentiation and proliferation of MÃ¼ller gliaâ€derived progenitor cells. Glia, 2021, 69, 2503-2521.	4.9	20
80	Asymmetric vasopressin signaling spatially organizes the master circadian clock. Journal of Comparative Neurology, 2018, 526, 2048-2067.	1.6	19
81	Single-cell analysis of early chick hypothalamic development reveals that hypothalamic cells are induced from prethalamic-like progenitors. Cell Reports, 2022, 38, 110251.	6.4	19
82	Control of lens development by Lhx2-regulated neuroretinal FGFs. Development (Cambridge), 2016, 143, 3994-4002.	2.5	16
83	PanoView: An iterative clustering method for single-cell RNA sequencing data. PLoS Computational Biology, 2019, 15, e1007040.	3.2	16
84	Clarinâ€1 expression in adult mouse and human retina highlights a role of MÃ¼ller glia in Usher syndrome. Journal of Pathology, 2020, 250, 195-204.	4.5	15
85	Applying genomics technologies to neural development. Current Opinion in Neurobiology, 2002, 12, 110-114.	4.2	13
86	Direct DNA Sequencing of PCR Products. , 2001, Chapter 15, Unit 15.2.		12
87	Transcriptomic Profiling of Control and Thyroid-Associated Orbitopathy (TAO) Orbital Fat and TAO Orbital Fibroblasts Undergoing Adipogenesis. , 2021, 62, 24.		12
88	Why Has the Ability to Regenerate Following CNS Injury Been Repeatedly Lost Over the Course of Evolution?. Frontiers in Neuroscience, 2022, 16, 831062.	2.8	12
89	Identification of SUMO E3 Ligase-Specific Substrates Using the HuProt Human Proteome Microarray. Methods in Molecular Biology, 2015, 1295, 455-463.	0.9	11
90	The selective estrogen receptor modulator raloxifene mitigates the effect of all-trans-retinal toxicity in photoreceptor degeneration. Journal of Biological Chemistry, 2019, 294, 9461-9475.	3.4	11

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91	High-Throughput RNA In Situ Hybridization in Mouse Retina. Methods in Molecular Biology, 2012, 935, 215-226.	0.9	11
92	Fatty acid-binding proteins and fatty acid synthase influence glial reactivity and promote the formation of MÃ¼ller glia-derived progenitor cells in the chick retina. Development (Cambridge), 2022, 149, .	2.5	11
93	Epigenetic hallmarks of age-related macular degeneration are recapitulated in a photosensitive mouse model. Human Molecular Genetics, 2020, 29, 2611-2624.	2.9	10
94	An inducible Cre mouse for studying roles of the RPE in retinal physiology and disease. JCI Insight, 2021, 6, .	5.0	10
95	Quantitative transportomics identifies Kif5a as a major regulator of neurodegeneration. ELife, 2022, 11, .	6.0	10
96	The NIH Protein Capture Reagents Program (PCRP): a standardized protein affinity reagent toolbox. Nature Methods, 2016, 13, 805-806.	19.0	9
97	Tissue- and Species-Specific Patterns of RNA metabolism in Post-Mortem Mammalian Retina and Retinal Pigment Epithelium. Scientific Reports, 2019, 9, 14821.	3.3	9
98	Notch Inhibition Promotes Regeneration and Immunosuppression Supports Cone Survival in a Zebrafish Model of Inherited Retinal Dystrophy. Journal of Neuroscience, 2022, 42, 5144-5158.	3.6	9
99	LRLoop: a method to predict feedback loops in cellâ€“cell communication. Bioinformatics, 2022, 38, 4117-4126.	4.1	9
100	A potential role for somatostatin signaling in regulating retinal neurogenesis. Scientific Reports, 2021, 11, 10962.	3.3	7
101	Zeb2 regulates the balance between retinal interneurons and MÃ¼ller glia by inhibition of BMPâ€“Smad signaling. Developmental Biology, 2020, 468, 80-92.	2.0	5
102	Characterization of <scp><i>mWake</i></scp> expression in the murine brain. Journal of Comparative Neurology, 2021, 529, 1954-1987.	1.6	5
103	Loss of Function of the Neural Cell Adhesion Molecule NrCAM Regulates Differentiation, Proliferation and Neurogenesis in Early Postnatal Hypothalamic Tanycytes. Frontiers in Neuroscience, 2022, 16, 832961.	2.8	5
104	Oneâ€Step Enzymatic Purification of PCR Products for Direct Sequencing. Current Protocols in Human Genetics, 2001, 30, Unit 11.6.	3.5	4
105	Antibody Specificity Profiling Using Protein Microarrays. Methods in Molecular Biology, 2018, 1785, 223-229.	0.9	4
106	A diffusion MRI-based spatiotemporal continuum of the embryonic mouse brain for probing geneâ€“neuroanatomy connections. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	4
107	Serial Analysis of Gene Expression (SAGE): Experimental Method and Data Analysis. Current Protocols in Human Genetics, 2007, 53, Unit 11.7.	3.5	2
108	Serial Analysis of Gene Expression (SAGE): Experimental Method and Data Analysis. Current Protocols in Molecular Biology, 2007, 80, Unit 25B.6.	2.9	2

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109	Multiplexed Analysis of Retinal Gene Expression and Chromatin Accessibility Using scRNA-Seq and scATAC-Seq. Journal of Visualized Experiments, 2021, , .	0.3	2
110	Temperature and species-dependent regulation of browning in retrobulbar fat. Scientific Reports, 2021, 11, 3094.	3.3	1
111	Serial Analysis of Gene Expression (SAGE). Current Protocols in Human Genetics, 2003, 36, 11.7.1.	3.5	0
112	Serial Analysis of Gene Expression (SAGE). Current Protocols in Molecular Biology, 2003, 61, 25B.6.1.	2.9	0
113	SAGE. , 2005, , .		0
114	We Contain Multitudes: The Protean Face of Retinoblastoma. Cancer Cell, 2011, 20, 137-138.	16.8	0
115	Cover Image, Volume 70, Issue 7. Glia, 2022, 70, .	4.9	0