David H Rowitch

List of Publications by Citations

214 papers	34,047 citations	95 h-index	184 g-index
227 ext. papers	40,345 ext. citations	12.8 avg, IF	7 L-index

#	Paper	IF	Citations
214	Neurotoxic reactive astrocytes are induced by activated microglia. *Nature*, **2017**, 541, 481-487	50.4	2875
213	Conserved role of intragenic DNA methylation in regulating alternative promoters. *Nature*, **2010**, 466, 253-7	50.4	1298
212	Modification of gene activity in mouse embryos in utero by a tamoxifen-inducible form of Cre recombinase. *Current Biology*, **1998**, 8, 1323-6	6.3	1065
211	Malignant glioma: genetics and biology of a grave matter. *Genes and Development*, **2001**, 15, 1311-33	12.6	934
210	Common developmental requirement for Olig function indicates a motor neuron/oligodendrocyte connection. *Cell*, **2002**, 109, 75-86	56.2	844
209	Single-cell reconstruction of the early maternal-fetal interface in humans. *Nature*, **2018**, 563, 347-353	50.4	792
208	Origin of oligodendrocytes in the subventricular zone of the adult brain. *Journal of Neuroscience*, **2006**, 26, 7907-18	6.6	743
207	Sonic hedgehog--regulated oligodendrocyte lineage genes encoding bHLH proteins in the mammalian central nervous system. *Neuron*, **2000**, 25, 317-29	13.9	704
206	Corridors of migrating neurons in the human brain and their decline during infancy. *Nature*, **2011**, 478, 382-6	50.4	608
205	Inactivation of the beta-catenin gene by Wnt1-Cre-mediated deletion results in dramatic brain malformation and failure of craniofacial development. *Development (Cambridge)*, **2001**, 128, 1253-64	6.6	566
204	Epidermal growth factor receptor and Ink4a/Arf: convergent mechanisms governing terminal differentiation and transformation along the neural stem cell to astrocyte axis. *Cancer Cell*, **2002**, 1, 269-77	24.3	559
203	Fate of the mammalian cranial neural crest during tooth and mandibular morphogenesis. *Development (Cambridge)*, **2000**, 127, 1671-9	6.6	551
202	Medulloblastoma can be initiated by deletion of Patched in lineage-restricted progenitors or stem cells. *Cancer Cell*, **2008**, 14, 135-45	24.3	509
201	Acquisition of granule neuron precursor identity is a critical determinant of progenitor cell competence to form Shh-induced medulloblastoma. *Cancer Cell*, **2008**, 14, 123-34	24.3	482
200	Fate of the mammalian cardiac neural crest. *Development (Cambridge)*, **2000**, 127, 1607-16	6.6	468
199	Dysregulation of the Wnt pathway inhibits timely myelination and remyelination in the mammalian CNS. *Genes and Development*, **2009**, 23, 1571-85	12.6	459
198	Astrocytes and disease: a neurodevelopmental perspective. *Genes and Development*, **2012**, 26, 891-907	12.6	447

197	Developmental genetics of vertebrate glial-cell specification. *Nature*, **2010**, 468, 214-22	50.4	444
196	CNS-resident glial progenitor/stem cells produce Schwann cells as well as oligodendrocytes during repair of CNS demyelination. *Cell Stem Cell*, **2010**, 6, 578-90	18	438
195	Sonic hedgehog promotes G(1) cyclin expression and sustained cell cycle progression in mammalian neuronal precursors. *Molecular and Cellular Biology*, **2000**, 20, 9055-67	4.8	437
194	Nmyc upregulation by sonic hedgehog signaling promotes proliferation in developing cerebellar granule neuron precursors. *Development (Cambridge)*, **2003**, 130, 15-28	6.6	372
193	Olig2-regulated lineage-restricted pathway controls replication competence in neural stem cells and malignant glioma. *Neuron*, **2007**, 53, 503-17	13.9	369
192	bHLH transcription factor Olig1 is required to repair demyelinated lesions in the CNS. *Science*, **2004**, 306, 2111-5	33.3	345
191	Myelin gene regulatory factor is a critical transcriptional regulator required for CNS myelination. *Cell*, **2009**, 138, 172-85	56.2	342
190	Regional astrocyte allocation regulates CNS synaptogenesis and repair. *Science*, **2012**, 337, 358-62	33.3	341
189	Mouse brain organization revealed through direct genome-scale TF expression analysis. *Science*, **2004**, 306, 2255-7	33.3	339
188	Glial specification in the vertebrate neural tube. *Nature Reviews Neuroscience*, **2004**, 5, 409-19	13.5	336
187	Sox9 is required for determination of the chondrogenic cell lineage in the cranial neural crest. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 9360-5	11.5	332
186	The oligodendroglial lineage marker OLIG2 is universally expressed in diffuse gliomas. *Journal of Neuropathology and Experimental Neurology*, **2004**, 63, 499-509	3.1	322
185	Sonic hedgehog regulates proliferation and inhibits differentiation of CNS precursor cells. *Journal of Neuroscience*, **1999**, 19, 8954-65	6.6	316
184	Smaller inner ear sensory epithelia in Neurog 1 null mice are related to earlier hair cell cycle exit. *Developmental Dynamics*, **2005**, 234, 633-50	2.9	313
183	Expression pattern of the transcription factor Olig2 in response to brain injuries: implications for neuronal repair. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 18183-8	11.5	300
182	Reactive astrocyte nomenclature, definitions, and future directions. *Nature Neuroscience*, **2021**, 24, 312-325	25	298
181	Functional diversity of astrocytes in neural circuit regulation. *Nature Reviews Neuroscience*, **2017**, 18, 31-41	13.5	291
180	Challenges to curing primary brain tumours. *Nature Reviews Clinical Oncology*, **2019**, 16, 509-520	19.4	284

179	Dlx1 and Dlx2 control neuronal versus oligodendroglial cell fate acquisition in the developing forebrain. *Neuron*, **2007**, 55, 417-33	13.9	271
178	Axin2 as regulatory and therapeutic target in newborn brain injury and remyelination. *Nature Neuroscience*, **2011**, 14, 1009-16	25.5	265
177	Glioma stem cells: a midterm exam. *Neuron*, **2008**, 58, 832-46	13.9	257
176	A dramatic increase of C1q protein in the CNS during normal aging. *Journal of Neuroscience*, **2013**, 33, 13460-74	6.6	256
175	Myelin regeneration: a recapitulation of development?. *Annual Review of Neuroscience*, **2011**, 34, 21-43	17	242
174	Small-molecule inhibitors reveal multiple strategies for Hedgehog pathway blockade. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 14132-7	11.5	242
173	Single-cell genomics identifies cell type-specific molecular changes in autism. *Science*, **2019**, 364, 685-689	33.3	239
172	Oligodendrocyte-encoded HIF function couples postnatal myelination and white matter angiogenesis. *Cell*, **2014**, 158, 383-396	56.2	230
171	Hedgehog-dependent oligodendrocyte lineage specification in the telencephalon. *Development (Cambridge)*, **2001**, 128, 2545-2554	6.6	228
170	A novel somatic mouse model to survey tumorigenic potential applied to the Hedgehog pathway. *Cancer Research*, **2006**, 66, 10171-8	10.1	223
169	Development of mice expressing a single D-type cyclin. *Genes and Development*, **2002**, 16, 3277-89	12.6	209
168	Extensive migration of young neurons into the infant human frontal lobe. *Science*, **2016**, 354,	33.3	209
167	Neural stem cell engraftment and myelination in the human brain. *Science Translational Medicine*, **2012**, 4, 155ra137	17.5	208
166	Astrocyte development and heterogeneity. *Cold Spring Harbor Perspectives in Biology*, **2014**, 7, a020362	10.2	203
165	Astrocyte-encoded positional cues maintain sensorimotor circuit integrity. *Nature*, **2014**, 509, 189-94	50.4	202
164	Oncogenic BRAF mutation with CDKN2A inactivation is characteristic of a subset of pediatric malignant astrocytomas. *Cancer Research*, **2010**, 70, 512-9	10.1	201
163	Essential role of Sox9 in the pathway that controls formation of cardiac valves and septa. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 6502-7	11.5	201
162	Hedgehog-responsive candidate cell of origin for diffuse intrinsic pontine glioma. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 4453-8	11.5	194

161	Myelin abnormalities without oligodendrocyte loss in periventricular leukomalacia. *Brain Pathology*, **2008**, 18, 153-63	6	194
160	Molecular diversity of astrocytes with implications for neurological disorders. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 8384-9	11.5	185
159	Olig gene function in CNS development and disease. *Glia*, **2006**, 54, 1-10	9	181
158	Hedgehog and PI-3 kinase signaling converge on Nmyc1 to promote cell cycle progression in cerebellar neuronal precursors. *Development (Cambridge)*, **2004**, 131, 217-28	6.6	176
157	Neuronal vulnerability and multilineage diversity in multiple sclerosis. *Nature*, **2019**, 573, 75-82	50.4	173
156	Development of NG2 neural progenitor cells requires Olig gene function. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 7853-8	11.5	171
155	Inhibition of phosphatidylinositol 3-kinase destabilizes Mycn protein and blocks malignant progression in neuroblastoma. *Cancer Research*, **2006**, 66, 8139-46	10.1	164
154	The proneural gene Mash1 specifies an early population of telencephalic oligodendrocytes. *Journal of Neuroscience*, **2007**, 27, 4233-42	6.6	161
153	Neurite outgrowth inhibitor Nogo-A establishes spatial segregation and extent of oligodendrocyte myelination. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 1299-304	11.5	160
152	Notch1 signaling plays a role in regulating precursor differentiation during CNS remyelination. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 19162-7	11.5	156
151	GDNF induces branching and increased cell proliferation in the ureter of the mouse. *Developmental Biology*, **1997**, 192, 193-8	3.1	154
150	A centrosomal Cdc20-APC pathway controls dendrite morphogenesis in postmitotic neurons. *Cell*, **2009**, 136, 322-36	56.2	153
149	NIH Consensus Development Conference statement: inhaled nitric-oxide therapy for premature infants. *Pediatrics*, **2011**, 127, 363-9	7.4	152
148	Pro-neural miR-128 is a glioma tumor suppressor that targets mitogenic kinases. *Oncogene*, **2012**, 31, 1884-95	9.2	150
147	Niche stiffness underlies the ageing of central nervous system progenitor cells. *Nature*, **2019**, 573, 130-134	50.4	144
146	The metabolic defect of methionine dependence occurs frequently in human tumor cell lines. *Biochemical and Biophysical Research Communications*, **1983**, 117, 429-34	3.4	144
145	Astrocyte layers in the mammalian cerebral cortex revealed by a single-cell in situ transcriptomic map. *Nature Neuroscience*, **2020**, 23, 500-509	25.5	142
144	Oligodendrocyte lineage genes (OLIG) as molecular markers for human glial brain tumors. *Proceedings of the National Academy of Sciences of the United States of America*, **2001**, 98, 10851-6	11.5	142

143	An ѠligarchyUrules neural development. *Trends in Neurosciences*, **2002**, 25, 417-22	13.3	141
142	Pax-2 expression in the murine neural plate precedes and encompasses the expression domains of Wnt-1 and En-1. *Mechanisms of Development*, **1995**, 52, 3-8	1.7	140
141	Insulin-like growth factor type 1 receptor signaling in the cells of oligodendrocyte lineage is required for normal in vivo oligodendrocyte development and myelination. *Glia*, **2007**, 55, 400-11	9	134
140	N-myc is an essential downstream effector of Shh signaling during both normal and neoplastic cerebellar growth. *Cancer Research*, **2006**, 66, 8655-61	10.1	134
139	Overcoming remyelination failure in multiple sclerosis and other myelin disorders. *Experimental Neurology*, **2010**, 225, 18-23	5.7	132
138	Oligodendrocyte PTEN is required for myelin and axonal integrity, not remyelination. *Annals of Neurology*, **2010**, 68, 703-16	9.4	132
137	Specification of astrocytes by bHLH protein SCL in a restricted region of the neural tube. *Nature*, **2005**, 438, 360-3	50.4	132
136	Conserved mechanisms across development and tumorigenesis revealed by a mouse development perspective of human cancers. *Genes and Development*, **2004**, 18, 629-40	12.6	129
135	Targeted therapy for BRAFV600E malignant astrocytoma. *Clinical Cancer Research*, **2011**, 17, 7595-604	12.9	128
134	Origin and dynamics of oligodendrocytes in the developing brain: Implications for perinatal white matter injury. *Glia*, **2018**, 66, 221-238	9	122
133	The central nervous system-restricted transcription factor Olig2 opposes p53 responses to genotoxic damage in neural progenitors and malignant glioma. *Cancer Cell*, **2011**, 19, 359-71	24.3	119
132	Olig bHLH proteins interact with homeodomain proteins to regulate cell fate acquisition in progenitors of the ventral neural tube. *Current Biology*, **2001**, 11, 1413-20	6.3	116
131	Hedgehog-dependent oligodendrocyte lineage specification in the telencephalon. *Development (Cambridge)*, **2001**, 128, 2545-54	6.6	115
130	Evolving concepts of gliogenesis: a look way back and ahead to the next 25 years. *Neuron*, **2013**, 80, 613-23	2.9	114
129	A Glial Signature and Wnt7 Signaling Regulate Glioma-Vascular Interactions and Tumor Microenvironment. *Cancer Cell*, **2018**, 33, 874-889.e7	24.3	111
128	Hypomyelinating leukodystrophies: translational research progress and prospects. *Annals of Neurology*, **2014**, 76, 5-19	9.4	111
127	Separated at birth? The functional and molecular divergence of OLIG1 and OLIG2. *Nature Reviews Neuroscience*, **2012**, 13, 819-31	13.5	111
126	The Cdk1 complex plays a prime role in regulating N-myc phosphorylation and turnover in neural precursors. *Developmental Cell*, **2005**, 9, 327-38	10.2	107

125	Ectopic expression of Olig1 promotes oligodendrocyte formation and reduces neuronal survival in developing mouse cortex. *Nature Neuroscience*, **2001**, 4, 973-4	25.5	102
124	Transcription factor co-expression patterns indicate heterogeneity of oligodendroglial subpopulations in adult spinal cord. *Glia*, **2006**, 54, 35-46	9	101
123	Oligodendrocyte development in the spinal cord and telencephalon: common themes and new perspectives. *International Journal of Developmental Neuroscience*, **2001**, 19, 379-85	2.7	101
122	Species-dependent posttranscriptional regulation of NOS1 by FMRP in the developing cerebral cortex. *Cell*, **2012**, 149, 899-911	56.2	100
121	A regulatory network involving Foxn4, Mash1 and delta-like 4/Notch1 generates V2a and V2b spinal interneurons from a common progenitor pool. *Development (Cambridge)*, **2007**, 134, 3427-36	6.6	99
120	A genome-wide screen for spatially restricted expression patterns identifies transcription factors that regulate glial development. *Journal of Neuroscience*, **2009**, 29, 11399-408	6.6	98
119	Phosphorylation state of Olig2 regulates proliferation of neural progenitors. *Neuron*, **2011**, 69, 906-17	13.9	90
118	Regulated temporal-spatial astrocyte precursor cell proliferation involves BRAF signalling in mammalian spinal cord. *Development (Cambridge)*, **2012**, 139, 2477-87	6.6	90
117	Hedgehog signaling has a protective effect in glucocorticoid-induced mouse neonatal brain injury through an 11betaHSD2-dependent mechanism. *Journal of Clinical Investigation*, **2009**, 119, 267-77	15.9	90
116	Fibrinogen Activates BMP Signaling in Oligodendrocyte Progenitor Cells and Inhibits Remyelination after Vascular Damage. *Neuron*, **2017**, 96, 1003-1012.e7	13.9	86
115	Whole genome sequencing reveals that genetic conditions are frequent in intensively ill children. *Intensive Care Medicine*, **2019**, 45, 627-636	14.5	84
114	Towards improved animal models of neonatal white matter injury associated with cerebral palsy. *DMM Disease Models and Mechanisms*, **2010**, 3, 678-88	4.1	82
113	Six3 promotes the formation of ectopic optic vesicle-like structures in mouse embryos. *Developmental Dynamics*, **2001**, 221, 342-9	2.9	81
112	Forkhead transcription factor FoxM1 regulates mitotic entry and prevents spindle defects in cerebellar granule neuron precursors. *Molecular and Cellular Biology*, **2007**, 27, 8259-70	4.8	79
111	Identifying the Zika Virus Target Cell in Malignant Glioma. *Neuro-Oncology*, **2019**, 21, iv2-iv2	1	78
110	Medulloblastoma tumorigenesis diverges from cerebellar granule cell differentiation in patched heterozygous mice. *Developmental Biology*, **2003**, 263, 50-66	3.1	77
109	Parallel states of pathological Wnt signaling in neonatal brain injury and colon cancer. *Nature Neuroscience*, **2014**, 17, 506-12	25.5	76
108	Interactions between DNA and coat protein in the structure and assembly of filamentous bacteriophage fd. *Nature*, **1987**, 327, 252-4	50.4	76

107	Sonic hedgehog is required during an early phase of oligodendrocyte development in mammalian brain. *Molecular and Cellular Neurosciences*, **2001**, 18, 434-41	4.8	73
106	Astrocyte Unfolded Protein Response Induces a Specific Reactivity State that Causes Non-Cell-Autonomous Neuronal Degeneration. *Neuron*, **2020**, 105, 855-866.e5	13.9	73
105	A FOXO-Pak1 transcriptional pathway controls neuronal polarity. *Genes and Development*, **2010**, 24, 799-813	11.3	72
104	Histology-based expression profiling yields novel prognostic markers in human glioblastoma. *Journal of Neuropathology and Experimental Neurology*, **2005**, 64, 948-55	3.1	72
103	Heparan sulfate sulfatase SULF2 regulates PDGFRβ signaling and growth in human and mouse malignant glioma. *Journal of Clinical Investigation*, **2012**, 122, 911-22	15.9	71
102	Oligodendrocyte regeneration after neonatal hypoxia requires FoxO1-mediated p27Kip1 expression. *Journal of Neuroscience*, **2012**, 32, 14775-93	6.6	70
101	Identification of the Kappa-Opioid Receptor as a Therapeutic Target for Oligodendrocyte Remyelination. *Journal of Neuroscience*, **2016**, 36, 7925-35	6.6	66
100	Cooperative interactions of BRAFV600E kinase and CDKN2A locus deficiency in pediatric malignant astrocytoma as a basis for rational therapy. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 8710-5	11.5	64
99	Neurocritical care for neonates. *Neurocritical Care*, **2010**, 12, 421-9	3.3	64
98	STAT3-mediated astrogliosis protects myelin development in neonatal brain injury. *Annals of Neurology*, **2012**, 72, 750-65	9.4	63
97	Identification of genes expressed with temporal-spatial restriction to developing cerebellar neuron precursors by a functional genomic approach. *Proceedings of the National Academy of Sciences of the United States of America*, **2002**, 99, 5704-9	11.5	63
96	Sonic hedgehog-associated medulloblastoma arising from the cochlear nuclei of the brainstem. *Acta Neuropathologica*, **2012**, 123, 601-14	14.3	61
95	Cross-repressive interaction of the Olig2 and Nkx2.2 transcription factors in developing neural tube associated with formation of a specific physical complex. *Journal of Neuroscience*, **2003**, 23, 9547-56	6.6	61
94	A small-molecule smoothened agonist prevents glucocorticoid-induced neonatal cerebellar injury. *Science Translational Medicine*, **2011**, 3, 105ra104	17.5	60
93	Reactive astrocyte COX2-PGE2 production inhibits oligodendrocyte maturation in neonatal white matter injury. *Glia*, **2017**, 65, 2024-2037	9	57
92	Expression of oligodendroglial and astrocytic lineage markers in diffuse gliomas: use of YKL-40, ApoE, ASCL1, and NKX2-2. *Journal of Neuropathology and Experimental Neurology*, **2006**, 65, 1149-56	3.1	57
91	Kir4.1-Dependent Astrocyte-Fast Motor Neuron Interactions Are Required for Peak Strength. *Neuron*, **2018**, 98, 306-319.e7	13.9	55
90	Voltage-gated potassium channel EAG2 controls mitotic entry and tumor growth in medulloblastoma via regulating cell volume dynamics. *Genes and Development*, **2012**, 26, 1780-96	12.6	54

89	Dach1, a vertebrate homologue of Drosophila dachshund, is expressed in the developing eye and ear of both chick and mouse and is regulated independently of Pax and Eya genes. *Mechanisms of Development*, **2002**, 111, 75-87	1.7	54
88	Dysregulation of astrocyte extracellular signaling in Costello syndrome. *Science Translational Medicine*, **2015**, 7, 286ra66	17.5	53
87	Olig2 expression, GFAP, p53 and 1p loss analysis contribute to glioma subclassification. *Neuropathology and Applied Neurobiology*, **2005**, 31, 62-9	5.2	53
86	Olig1 function is required to repress dlx1/2 and interneuron production in Mammalian brain. *Neuron*, **2014**, 81, 574-87	13.9	51
85	Medulloblastoma: a problem of developmental biology. *Cancer Cell*, **2002**, 2, 7-8	24.3	51
84	Characterization of Pax-2 regulatory sequences that direct transgene expression in the Wolffian duct and its derivatives. *Developmental Biology*, **2001**, 229, 128-40	3.1	51
83	Decreased microglial Wnt/β-catenin signalling drives microglial pro-inflammatory activation in the developing brain. *Brain*, **2019**, 142, 3806-3833	11.2	48
82	OLIG2 is differentially expressed in pediatric astrocytic and in ependymal neoplasms. *Journal of Neuro-Oncology*, **2011**, 104, 423-38	4.8	48
81	Protein kinase C-associated kinase (PKK), a novel membrane-associated, ankyrin repeat-containing protein kinase. *Journal of Biological Chemistry*, **2001**, 276, 21737-44	5.4	48
80	Identification of molecular compartments and genetic circuitry in the developing mammalian kidney. *Development (Cambridge)*, **2012**, 139, 1863-73	6.6	47
79	Loss of Emx2 function leads to ectopic expression of Wnt1 in the developing telencephalon and cortical dysplasia. *Development (Cambridge)*, **2003**, 130, 2275-87	6.6	47
78	Astrocytes: The Final Frontier *Neuron*, **2016**, 89, 1-2	13.9	46
77	A single homeodomain binding site restricts spatial expression of Wnt-1 in the developing brain. *Mechanisms of Development*, **1995**, 53, 87-96	1.7	46
76	Sirt1 regulates glial progenitor proliferation and regeneration in white matter after neonatal brain injury. *Nature Communications*, **2016**, 7, 13866	17.4	45
75	Systematic Three-Dimensional Coculture Rapidly Recapitulates Interactions between Human Neurons and Astrocytes. *Stem Cell Reports*, **2017**, 9, 1745-1753	8	44
74	Oligodendrocyte-encoded Kir4.1 function is required for axonal integrity. *ELife*, **2018**, 7,	8.9	43
73	Dlx1 and Dlx2 Promote Interneuron GABA Synthesis, Synaptogenesis, and Dendritogenesis. *Cerebral Cortex*, **2018**, 28, 3797-3815	5.1	42
72	Beta-catenin function is required for cerebellar morphogenesis. *Brain Research*, **2007**, 1140, 161-9	3.7	42

71	Expression profiling of Aldh1l1-precursors in the developing spinal cord reveals glial lineage-specific genes and direct Sox9-Nfe2l1 interactions. *Glia*, **2013**, 61, 1518-32	9	41
70	Behaviorally consequential astrocytic regulation of neural circuits. *Neuron*, **2021**, 109, 576-596	13.9	39
69	Oligodendrocyte Death in Pelizaeus-Merzbacher Disease Is Rescued by Iron Chelation. *Cell Stem Cell*, **2019**, 25, 531-541.e6	18	36
68	Missense mutation in mouse GALC mimics human gene defect and offers new insights into Krabbe disease. *Human Molecular Genetics*, **2013**, 22, 3397-414	5.6	36
67	Myelin regeneration in multiple sclerosis: targeting endogenous stem cells. *Neurotherapeutics*, **2011**, 8, 650-8	6.4	36
66	Origins and Proliferative States of Human Oligodendrocyte Precursor Cells. *Cell*, **2020**, 182, 594-608.e11	56.2	36
65	NIH consensus development conference: Inhaled nitric oxide therapy for premature infants. *NIH Consensus and State-of-the-science Statements*, **2010**, 27, 1-34		36
64	Disease specific therapies in leukodystrophies and leukoencephalopathies. *Molecular Genetics and Metabolism*, **2015**, 114, 527-36	3.7	35
63	Dysregulation of locus coeruleus development in congenital central hypoventilation syndrome. *Acta Neuropathologica*, **2015**, 130, 171-83	14.3	34
62	Variable electrostatic interaction between DNA and coat protein in filamentous bacteriophage assembly. *Journal of Molecular Biology*, **1988**, 204, 663-74	6.5	34
61	Cerebellar transcriptome reveals cell-type and stage-specific expression during postnatal development and tumorigenesis. *Molecular and Cellular Neurosciences*, **2006**, 33, 247-59	4.8	33
60	Ablation of NG2 proteoglycan leads to deficits in brown fat function and to adult onset obesity. *PLoS ONE*, **2012**, 7, e30637	3.7	32
59	Expression of the homeobox-containing genes EN1 and EN2 in human fetal midgestational medulla and cerebellum. *Journal of Neuropathology and Experimental Neurology*, **1997**, 56, 236-42	3.1	32
58	Postnatal growth of the human pons: a morphometric and immunohistochemical analysis. *Journal of Comparative Neurology*, **2015**, 523, 449-62	3.4	31
57	The role of Tal2 and Tal1 in the differentiation of midbrain GABAergic neuron precursors. *Biology Open*, **2013**, 2, 990-7	2.2	29
56	An update on human astrocytes and their role in development and disease. *Glia*, **2020**, 68, 685-704	9	26
55	Long-Term Safety, Immunologic Response, and Imaging Outcomes following Neural Stem Cell Transplantation for Pelizaeus-Merzbacher Disease. *Stem Cell Reports*, **2019**, 13, 254-261	8	25
54	Evidence that nuclear factor IA inhibits repair after white matter injury. *Annals of Neurology*, **2012**, 72, 224-33	9.4	25

53	Lineage-Restricted OLIG2-RTK Signaling Governs the Molecular Subtype of Glioma Stem-like Cells. *Cell Reports*, **2016**, 16, 2838-2845	10.6	25
52	Pax-2 regulatory sequences that direct transgene expression in the developing neural plate and external granule cell layer of the cerebellum. *Developmental Brain Research*, **1999**, 117, 99-108		24
51	Cerebellar abnormalities following hypoxia alone compared to hypoxic-ischemic forebrain injury in the developing rat brain. *Neurobiology of Disease*, **2011**, 41, 138-46	7.5	23
50	Concise Review: Stem Cell-Based Treatment of Pelizaeus-Merzbacher Disease. *Stem Cells*, **2017**, 35, 311-315	5.8	22
49	Identification of proliferative progenitors associated with prominent postnatal growth of the pons. *Nature Communications*, **2016**, 7, 11628	17.4	21
48	A Sequentially Priming Phosphorylation Cascade Activates the Gliomagenic Transcription Factor Olig2. *Cell Reports*, **2017**, 18, 3167-3177	10.6	20
47	Nuclear localization of the mitochondrial factor HIGD1A during metabolic stress. *PLoS ONE*, **2013**, 8, e62758	3.7	20
46	Olig1 function is required for remyelination potential of transplanted neural progenitor cells in a model of viral-induced demyelination. *Experimental Neurology*, **2012**, 235, 380-7	5.7	19
45	Dexamethasone destabilizes Nmyc to inhibit the growth of hedgehog-associated medulloblastoma. *Cancer Research*, **2010**, 70, 5220-5	10.1	19
44	Neonatal herpes simplex virus infection presenting as fulminant liver failure. *Pediatric Infectious Disease Journal*, **1995**, 14, 242-4	3.4	19
43	Identification of an evolutionarily conserved 110 base-pair cis-acting regulatory sequence that governs Wnt-1 expression in the murine neural plate. *Development (Cambridge)*, **1998**, 125, 2735-46	6.6	19
42	Oxygen Tension and the VHL-Hif1 Pathway Determine Onset of Neuronal Polarization and Cerebellar Germinal Zone Exit. *Neuron*, **2020**, 106, 607-623.e5	13.9	16
41	Cerebellar cortical lamination and foliation require cyclin A2. *Developmental Biology*, **2014**, 385, 328-39	3.1	16
40	Evidence for motoneuron lineage-specific regulation of Olig2 in the vertebrate neural tube. *Developmental Biology*, **2006**, 292, 152-64	3.1	16
39	Wnt-Dependent Oligodendroglial-Endothelial Interactions Regulate White Matter Vascularization and Attenuate Injury. *Neuron*, **2020**, 108, 1130-1145.e5	13.9	15
38	Myelin restoration: progress and prospects for human cell replacement therapies. *Archivum Immunologiae Et Therapiae Experimentalis*, **2011**, 59, 179-93	4	14
37	Synchronization of goat fibroblast cells at quiescent stage and determination of their transition from G0 to G1 by detection of cyclin D1 mRNA. *Cloning and Stem Cells*, **2004**, 6, 58-66		14
36	Cystic malformation of the posterior cerebellar vermis in transgenic mice that ectopically express Engrailed-1, a homeodomain transcription factor. *Teratology*, **1999**, 60, 22-8		14

35	Diversity and Function of Glial Cell Types in Multiple Sclerosis. *Trends in Immunology*, **2021**, 42, 228-247	14.4	14
34	Sonic Hedgehog Agonist Protects Against Complex Neonatal Cerebellar Injury. *Cerebellum*, **2018**, 17, 213-227	4.3	14
33	An amino terminal phosphorylation motif regulates intranuclear compartmentalization of Olig2 in neural progenitor cells. *Journal of Neuroscience*, **2014**, 34, 8507-18	6.6	13
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