Michael Sendtner

List of Publications by Citations

232 papers	27,591 citations	84 h-index	164 g-index
279 ext. papers	30,827 ext. citations	11 avg, IF	6.4 L-index

#	Paper	IF	Citations
232	A hexanucleotide repeat expansion in C9ORF72 is the cause of chromosome 9p21-linked ALS-FTD. *Neuron*, **2011**, 72, 257-68	13.9	3018
231	Frequency of the C9orf72 hexanucleotide repeat expansion in patients with amyotrophic lateral sclerosis and frontotemporal dementia: a cross-sectional study. *Lancet Neurology, The*, **2012**, 11, 323-30	24.1	830
230	Ciliary neurotrophic factor prevents the degeneration of motor neurons after axotomy. *Nature*, **1990**, 345, 440-1	50.4	797
229	Association of transcription factor APRF and protein kinase Jak1 with the interleukin-6 signal transducer gp130. *Science*, **1994**, 263, 89-92	33.3	726
228	Brain-derived neurotrophic factor prevents the death of motoneurons in newborn rats after nerve section. *Nature*, **1992**, 360, 757-9	50.4	660
227	Molecular cloning, expression and regional distribution of rat ciliary neurotrophic factor. *Nature*, **1989**, 342, 920-3	50.4	570
226	The human centromeric survival motor neuron gene (SMN2) rescues embryonic lethality in Smn(-/-) mice and results in a mouse with spinal muscular atrophy. *Human Molecular Genetics*, **2000**, 9, 333-9	5.6	553
225	Disruption of the CNTF gene results in motor neuron degeneration. *Nature*, **1993**, 365, 27-32	50.4	551
224	Survival effect of ciliary neurotrophic factor (CNTF) on chick embryonic motoneurons in culture: comparison with other neurotrophic factors and cytokines. *Journal of Neuroscience*, **1990**, 10, 3507-15	6.6	551
223	Inactivation of the survival motor neuron gene, a candidate gene for human spinal muscular atrophy, leads to massive cell death in early mouse embryos. *Proceedings of the National Academy of Sciences of the United States of America*, **1997**, 94, 9920-5	11.5	540
222	Ciliary neurotrophic factor prevents degeneration of motor neurons in mouse mutant progressive motor neuronopathy. *Nature*, **1992**, 358, 502-4	50.4	519
221	Smn, the spinal muscular atrophy-determining gene product, modulates axon growth and localization of beta-actin mRNA in growth cones of motoneurons. *Journal of Cell Biology*, **2003**, 163, 801-12	7.3	508
220	The Notch target genes Hey1 and Hey2 are required for embryonic vascular development. *Genes and Development*, **2004**, 18, 901-11	12.6	507
219	Na(+)-D-glucose cotransporter SGLT1 is pivotal for intestinal glucose absorption and glucose-dependent incretin secretion. *Diabetes*, **2012**, 61, 187-96	0.9	456
218	Guidelines for the use and interpretation of assays for monitoring autophagy (4th edition). *Autophagy*, **2021**, 17, 1-382	10.2	440
217	Molecular pathways of motor neuron injury in amyotrophic lateral sclerosis. *Nature Reviews Neurology*, **2011**, 7, 616-30	15	428
216	CNTF is a major protective factor in demyelinating CNS disease: a neurotrophic cytokine as modulator in neuroinflammation. *Nature Medicine*, **2002**, 8, 620-4	50.5	344

215	Synthesis and localization of ciliary neurotrophic factor in the sciatic nerve of the adult rat after lesion and during regeneration. *Journal of Cell Biology*, **1992**, 118, 139-48	7.3	342
214	Gene disruption discloses role of selenoprotein P in selenium delivery to target tissues. *Biochemical Journal*, **2003**, 370, 397-402	3.8	334
213	Ciliary neurotrophic factor induces cholinergic differentiation of rat sympathetic neurons in culture. *Journal of Cell Biology*, **1989**, 108, 1807-16	7.3	331
212	Genome-wide association analyses identify new risk variants and the genetic architecture of amyotrophic lateral sclerosis. *Nature Genetics*, **2016**, 48, 1043-8	36.3	328
211	Mutations in the Matrin 3 gene cause familial amyotrophic lateral sclerosis. *Nature Neuroscience*, **2014**, 17, 664-666	25.5	319
210	Ciliary neurotrophic factor induces type-2 astrocyte differentiation in culture. *Nature*, **1988**, 335, 70-3	50.4	315
209	Regional distribution, developmental changes, and cellular localization of CNTF-mRNA and protein in the rat brain. *Journal of Cell Biology*, **1991**, 115, 447-59	7.3	305
208	Essential function of LIF receptor in motor neurons. *Nature*, **1995**, 378, 724-7	50.4	290
207	Developmental requirement of gp130 signaling in neuronal survival and astrocyte differentiation. *Journal of Neuroscience*, **1999**, 19, 5429-34	6.6	283
206	Proliferation and differentiation of embryonic chick sympathetic neurons: effects of ciliary neurotrophic factor. *Neuron*, **1989**, 2, 1275-84	13.9	281
205	Evidence that embryonic neurons regulate the onset of cortical gliogenesis via cardiotrophin-1. *Neuron*, **2005**, 48, 253-65	13.9	275
204	Mutations in the gene encoding immunoglobulin mu-binding protein 2 cause spinal muscular atrophy with respiratory distress type 1. *Nature Genetics*, **2001**, 29, 75-7	36.3	272
203	Neurotrophins: from enthusiastic expectations through sobering experiences to rational therapeutic approaches. *Nature Neuroscience*, **2002**, 5 Suppl, 1046-50	25.5	262
202	Ciliary neurotrophic factor. *Journal of Neurobiology*, **1994**, 25, 1436-53		262
201	Members of several gene families influence survival of rat motoneurons in vitro and in vivo. *Journal of Neuroscience Research*, **1993**, 36, 663-71	4.4	262
200	Inactivation of bcl-2 results in progressive degeneration of motoneurons, sympathetic and sensory neurons during early postnatal development. *Neuron*, **1996**, 17, 75-89	13.9	250
199	Type-2 astrocyte development in rat brain cultures is initiated by a CNTF-like protein produced by type-1 astrocytes. *Neuron*, **1988**, 1, 485-94	13.9	237
198	Does oligodendrocyte survival depend on axons?. *Current Biology*, **1993**, 3, 489-97	6.3	232

197	Global deprivation of brain-derived neurotrophic factor in the CNS reveals an area-specific requirement for dendritic growth. *Journal of Neuroscience*, **2010**, 30, 1739-49	6.6	220
196	Specific interaction of Smn, the spinal muscular atrophy determining gene product, with hnRNP-R and gry-rbp/hnRNP-Q: a role for Smn in RNA processing in motor axons?. *Human Molecular Genetics*, **2002**, 11, 93-105	5.6	218
195	A phase I/II trial of recombinant methionyl human brain derived neurotrophic factor administered by intrathecal infusion to patients with amyotrophic lateral sclerosis. *Amyotrophic Lateral Sclerosis and Other Motor Neuron Disorders: Official Publication of the World Federation of Neurology, Research Group on Motor Neuron Diseases*, **2000**, 1, 201-6		216
194	Intraocular gene transfer of ciliary neurotrophic factor prevents death and increases responsiveness of rod photoreceptors in the retinal degeneration slow mouse. *Journal of Neuroscience*, **1998**, 18, 9282-93	6.6	195
193	ras p21 protein promotes survival and fiber outgrowth of cultured embryonic neurons. *Neuron*, **1989**, 2, 1087-96	13.9	185
192	Expression of neurotrophins in skeletal muscle: quantitative comparison and significance for motoneuron survival and maintenance of function. *Journal of Neuroscience Research*, **1995**, 42, 21-33	4.4	173
191	Adenoviral gene transfer of ciliary neurotrophic factor and brain-derived neurotrophic factor leads to long-term survival of axotomized motor neurons. *Nature Medicine*, **1997**, 3, 765-70	50.5	169
190	Can physical exercise in old age improve memory and hippocampal function?. *Brain*, **2016**, 139, 662-73	11.2	168
189	Conditional gene ablation of Stat3 reveals differential signaling requirements for survival of motoneurons during development and after nerve injury in the adult. *Journal of Cell Biology*, **2002**, 156, 287-97	7.3	160
188	Ciliary neurotrophic factor: pharmacokinetics and acute-phase response in rat. *Annals of Neurology*, **1994**, 35, 151-63	9.4	156
187	Loss of striatal type 1 cannabinoid receptors is a key pathogenic factor in Huntington's disease. *Brain*, **2011**, 134, 119-36	11.2	154
186	Cryptic physiological trophic support of motoneurons by LIF revealed by double gene targeting of CNTF and LIF. *Current Biology*, **1996**, 6, 686-94	6.3	154
185	Relationships of peripheral IGF-1, VEGF and BDNF levels to exercise-related changes in memory, hippocampal perfusion and volumes in older adults. *NeuroImage*, **2016**, 131, 142-54	7.9	153
184	Clinical characteristics of patients with familial amyotrophic lateral sclerosis carrying the pathogenic GGGGCC hexanucleotide repeat expansion of C9ORF72. *Brain*, **2012**, 135, 784-93	11.2	153
183	Functional role of brain-derived neurotrophic factor in neuroprotective autoimmunity: therapeutic implications in a model of multiple sclerosis. *Brain*, **2010**, 133, 2248-63	11.2	153
182	NEK1 variants confer susceptibility to amyotrophic lateral sclerosis. *Nature Genetics*, **2016**, 48, 1037-42	36.3	149
181	Muscle-derived factors that support survival and promote fiber outgrowth from embryonic chick spinal motor neurons in culture. *Developmental Biology*, **1986**, 118, 209-21	3.1	147
180	Extracellular matrix-associated molecules collaborate with ciliary neurotrophic factor to induce type-2 astrocyte development. *Journal of Cell Biology*, **1990**, 111, 635-44	7.3	140

179	Defective Ca2+ channel clustering in axon terminals disturbs excitability in motoneurons in spinal muscular atrophy. *Journal of Cell Biology*, **2007**, 179, 139-49	7.3	135
178	Ciliary neurotrophic factor enhances the rate of oligodendrocyte generation. *Molecular and Cellular Neurosciences*, **1996**, 8, 146-56	4.8	135
177	Reg-2 is a motoneuron neurotrophic factor and a signalling intermediate in the CNTF survival pathway. *Nature Cell Biology*, **2000**, 2, 906-14	23.4	133
176	Reduced survival motor neuron (Smn) gene dose in mice leads to motor neuron degeneration: an animal model for spinal muscular atrophy type III. *Human Molecular Genetics*, **2000**, 9, 341-6	5.6	130
175	A transgene carrying an A2G missense mutation in the SMN gene modulates phenotypic severity in mice with severe (type I) spinal muscular atrophy. *Journal of Cell Biology*, **2003**, 160, 41-52	7.3	128
174	Evidence that fibroblast growth factor 5 is a major muscle-derived survival factor for cultured spinal motoneurons. *Neuron*, **1993**, 10, 369-77	13.9	128
173	Cardiotrophin-1, a muscle-derived cytokine, is required for the survival of subpopulations of developing motoneurons. *Journal of Neuroscience*, **2001**, 21, 1283-91	6.6	121
172	Ribosomal deficiencies in Diamond-Blackfan anemia impair translation of transcripts essential for differentiation of murine and human erythroblasts. *Blood*, **2012**, 119, 262-72	2.2	120
171	Developmental motoneuron cell death and neurotrophic factors. *Cell and Tissue Research*, **2000**, 301, 71-84	4.2	119
170	The CB1 cannabinoid receptor mediates excitotoxicity-induced neural progenitor proliferation and neurogenesis. *Journal of Biological Chemistry*, **2007**, 282, 23892-8	5.4	115
169	Endogenous ciliary neurotrophic factor is a lesion factor for axotomized motoneurons in adult mice. *Journal of Neuroscience*, **1997**, 17, 6999-7006	6.6	111
168	Bag1 is essential for differentiation and survival of hematopoietic and neuronal cells. *Nature Neuroscience*, **2005**, 8, 1169-78	25.5	108
167	Hot-spot KIF5A mutations cause familial ALS. *Brain*, **2018**, 141, 688-697	11.2	105
166	Novel role for vascular endothelial growth factor (VEGF) receptor-1 and its ligand VEGF-B in motor neuron degeneration. *Journal of Neuroscience*, **2008**, 28, 10451-9	6.6	104
165	Effect of ciliary neurotrophic factor (CNTF) on motoneuron survival. *Journal of Cell Science*, **1991**, 15, 103-9	5.3	103
164	Toxoplasma gondii in primary rat CNS cells: differential contribution of neurons, astrocytes, and microglial cells for the intracerebral development and stage differentiation. *Experimental Parasitology*, **1999**, 93, 23-32	2.1	101
163	Synaptic PRG-1 modulates excitatory transmission via lipid phosphate-mediated signaling. *Cell*, **2009**, 138, 1222-35	56.2	100
162	Adenosine receptor A2A-R contributes to motoneuron survival by transactivating the tyrosine kinase receptor TrkB. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 17210-5	11.5	99

161	Missense mutation in the tubulin-specific chaperone E (Tbce) gene in the mouse mutant progressive motor neuronopathy, a model of human motoneuron disease. *Journal of Cell Biology*, **2002**, 159, 563-9	7.3	98
160	PTEN depletion rescues axonal growth defect and improves survival in SMN-deficient motor neurons. *Human Molecular Genetics*, **2010**, 19, 3159-68	5.6	97
159	A genome-wide association meta-analysis identifies a novel locus at 17q11.2 associated with sporadic amyotrophic lateral sclerosis. *Human Molecular Genetics*, **2014**, 23, 2220-31	5.6	95
158	Early onset of severe familial amyotrophic lateral sclerosis with a SOD-1 mutation: potential impact of CNTF as a candidate modifier gene. *American Journal of Human Genetics*, **2002**, 70, 1277-86	11	95
157	Specific function of B-Raf in mediating survival of embryonic motoneurons and sensory neurons. *Nature Neuroscience*, **2001**, 4, 137-42	25.5	92
156	Actions of CNTF and neurotrophins on degenerating motoneurons: preclinical studies and clinical implications. *Journal of the Neurological Sciences*, **1994**, 124 Suppl, 77-83	3.2	92
155	A two-stage genome-wide association study of sporadic amyotrophic lateral sclerosis. *Human Molecular Genetics*, **2009**, 18, 1524-32	5.6	91
154	Effect of glutamate on dendritic growth in embryonic rat motoneurons. *Journal of Neuroscience*, **1998**, 18, 1735-42	6.6	91
153	The role of p75NTR in modulating neurotrophin survival effects in developing motoneurons. *European Journal of Neuroscience*, **1999**, 11, 1668-76	3.5	90
152	The CB□cannabinoid receptor signals striatal neuroprotection via a PI3K/Akt/mTORC1/BDNF pathway. *Cell Death and Differentiation*, **2015**, 22, 1618-29	12.7	87
151	C9ORF72 interaction with cofilin modulates actin dynamics in motor neurons. *Nature Neuroscience*, **2016**, 19, 1610-1618	25.5	87
150	Isolation and enrichment of embryonic mouse motoneurons from the lumbar spinal cord of individual mouse embryos. *Nature Protocols*, **2010**, 5, 31-8	18.8	86
149	Genetic correlation between amyotrophic lateral sclerosis and schizophrenia. *Nature Communications*, **2017**, 8, 14774	17.4	85
148	Association of a null mutation in the CNTF gene with early onset of multiple sclerosis. *Archives of Neurology*, **2002**, 59, 407-9		81
147	Progressive postnatal motoneuron loss in mice lacking GDF-15. *Journal of Neuroscience*, **2009**, 29, 13640-8	6.6	76
146	The heterogeneous nuclear ribonucleoprotein-R is necessary for axonal beta-actin mRNA translocation in spinal motor neurons. *Human Molecular Genetics*, **2010**, 19, 1951-66	5.6	75
145	Hypomorphic Sox10 alleles reveal novel protein functions and unravel developmental differences in glial lineages. *Development (Cambridge)*, **2007**, 134, 3271-81	6.6	75
144	Axonal defects in mouse models of motoneuron disease. *Journal of Neurobiology*, **2004**, 58, 272-86		75

143	Co-regulation of survival of motor neuron (SMN) protein and its interactor SIP1 during development and in spinal muscular atrophy. *Human Molecular Genetics*, **2001**, 10, 497-505	5.6	74
142	Shared polygenic risk and causal inferences in amyotrophic lateral sclerosis. *Annals of Neurology*, **2019**, 85, 470-481	9.4	72
141	Leukaemia inhibitory factor gene mutations in infertile women. *Molecular Human Reproduction*, **1999**, 5, 581-6	4.4	72
140	The response of motoneurons to neurotrophins. *Neurochemical Research*, **1996**, 21, 831-41	4.6	72
139	Whole transcriptome profiling reveals the RNA content of motor axons. *Nucleic Acids Research*, **2016**, 44, e33	20.1	71
138	Distinct and overlapping alterations in motor and sensory neurons in a mouse model of spinal muscular atrophy. *Human Molecular Genetics*, **2006**, 15, 511-8	5.6	70
137	Characterization of Ighmbp2 in motor neurons and implications for the pathomechanism in a mouse model of human spinal muscular atrophy with respiratory distress type 1 (SMARD1). *Human Molecular Genetics*, **2004**, 13, 2031-42	5.6	70
136	Neurotrophin receptor-interacting mage homologue is an inducible inhibitor of apoptosis protein-interacting protein that augments cell death. *Journal of Biological Chemistry*, **2001**, 276, 39985-9	5.4	69
135	Subcellular transcriptome alterations in a cell culture model of spinal muscular atrophy point to widespread defects in axonal growth and presynaptic differentiation. *Rna*, **2014**, 20, 1789-802	5.8	67
134	Trophic support of motoneurons: physiological, pathophysiological, and therapeutic implications. *Experimental Neurology*, **1993**, 124, 47-55	5.7	66
133	Triple knock-out of CNTF, LIF, and CT-1 defines cooperative and distinct roles of these neurotrophic factors for motoneuron maintenance and function. *Journal of Neuroscience*, **2005**, 25, 1778-87	6.6	64
132	Gene targeting of Gemin2 in mice reveals a correlation between defects in the biogenesis of U snRNPs and motoneuron cell death. *Proceedings of the National Academy of Sciences of the United States of America*, **2002**, 99, 10126-31	11.5	64
131	Truncated TrkB receptor-induced outgrowth of dendritic filopodia involves the p75 neurotrophin receptor. *Journal of Cell Science*, **2004**, 117, 5803-14	5.3	62
130	Pharmacokinetics of intrathecally applied BDNF and effects on spinal motoneurons. *Experimental Neurology*, **1996**, 141, 225-39	5.7	62
129	The anti-apoptotic protein ITA is essential for NGF-mediated survival of embryonic chick neurons. *Nature Neuroscience*, **1999**, 2, 978-83	25.5	61
128	Local axonal function of STAT3 rescues axon degeneration in the pmn model of motoneuron disease. *Journal of Cell Biology*, **2012**, 199, 437-51	7.3	60
127	SMN deficiency alters Nrxn2 expression and splicing in zebrafish and mouse models of spinal muscular atrophy. *Human Molecular Genetics*, **2014**, 23, 1754-70	5.6	59
126	EGF transactivation of Trk receptors regulates the migration of newborn cortical neurons. *Nature Neuroscience*, **2013**, 16, 407-15	25.5	59

125	Neuromuscular defects and breathing disorders in a new mouse model of spinal muscular atrophy. *Neurobiology of Disease*, **2010**, 38, 125-35	7.5	59
124	The p75NTR-interacting protein SC1 inhibits cell cycle progression by transcriptional repression of cyclin E. *Journal of Cell Biology*, **2004**, 164, 985-96	7.3	57
123	Ciliary neurotrophic factor-induced sprouting preserves motor function in a mouse model of mild spinal muscular atrophy. *Human Molecular Genetics*, **2010**, 19, 973-86	5.6	54
122	The role of neurotrophins in muscle under physiological and pathological conditions. *Muscle and Nerve*, **2006**, 33, 462-76	3.4	54
121	Glycinergic and GABAergic synaptic activity differentially regulate motoneuron survival and skeletal muscle innervation. *Journal of Neuroscience*, **2005**, 25, 1249-59	6.6	49
120	The role of SMN in spinal muscular atrophy. *Journal of Neurology*, **2000**, 247 Suppl 1, I37-42	5.5	48
119	The neuronal apoptosis inhibitory protein suppresses neuronal differentiation and apoptosis in PC12 cells. *Human Molecular Genetics*, **2000**, 9, 2479-89	5.6	48
118	Vascular signal transducer and activator of transcription-3 promotes angiogenesis and neuroplasticity long-term after stroke. *Circulation*, **2015**, 131, 1772-82	16.7	46
117	Dynamic changes in C-Raf phosphorylation and 14-3-3 protein binding in response to growth factor stimulation: differential roles of 14-3-3 protein binding sites. *Journal of Biological Chemistry*, **2004**, 279, 14074-86	5.4	46
116	Presynaptic localization of Smn and hnRNP R in axon terminals of embryonic and postnatal mouse motoneurons. *PLoS ONE*, **2014**, 9, e110846	3.7	45
115	Microencapsulated ciliary neurotrophic factor: physical properties and biological activities. *Experimental Neurology*, **1996**, 138, 177-88	5.7	45
114	Haploinsufficiency of c-Met in cd44-/- mice identifies a collaboration of CD44 and c-Met in vivo. *Molecular and Cellular Biology*, **2007**, 27, 8797-806	4.8	44
113	Comprehensive analysis of the mutation spectrum in 301 German ALS families. *Journal of Neurology, Neurosurgery and Psychiatry*, **2018**, 89, 817-827	5.5	43
112	Neurotrophin receptors TrkB.T1 and p75NTR cooperate in modulating both functional and structural plasticity in mature hippocampal neurons. *European Journal of Neuroscience*, **2010**, 32, 1854-65	3.5	43
111	C-terminal FUS/TLS mutations in familial and sporadic ALS in Germany. *Neurobiology of Aging*, **2011**, 32, 548.e1-4	5.6	42
110	Deep proteomic evaluation of primary and cell line motoneuron disease models delineates major differences in neuronal characteristics. *Molecular and Cellular Proteomics*, **2014**, 13, 3410-20	7.6	40
109	Plekhg5-regulated autophagy of synaptic vesicles reveals a pathogenic mechanism in motoneuron disease. *Nature Communications*, **2017**, 8, 678	17.4	39
108	Heterozygous loss has opposing effects in early and late stages of ALS in mice. *Journal of Experimental Medicine*, **2019**, 216, 267-278	16.6	39

107	Rat ciliary neurotrophic factor (CNTF): gene structure and regulation of mRNA levels in glial cell cultures. *Glia*, **1993**, 9, 176-87	9	39
106	Up-regulation of ciliary neurotrophic factor in astrocytes by aspirin: implications for remyelination in multiple sclerosis. *Journal of Biological Chemistry*, **2013**, 288, 18533-45	5.4	38
105	Leukemia inhibitory factor deficiency modulates the immune response and limits autoimmune demyelination: a new role for neurotrophic cytokines in neuroinflammation. *Journal of Immunology*, **2008**, 180, 2204-13	5.3	37
104	Laminin induced local axonal translation of β-actin mRNA is impaired in SMN-deficient motoneurons. *Histochemistry and Cell Biology*, **2012**, 138, 737-48	2.4	36
103	Molecular mechanisms in spinal muscular atrophy: models and perspectives. *Current Opinion in Neurology*, **2001**, 14, 629-34	7.1	34
102	Downregulation of genes with a function in axon outgrowth and synapse formation in motor neurones of the VEGFdelta/delta mouse model of amyotrophic lateral sclerosis. *BMC Genomics*, **2010**, 11, 203	4.5	32
101	Differential roles of □ □ and β-actin in axon growth and collateral branch formation in motoneurons. *Journal of Cell Biology*, **2017**, 216, 793-814	7.3	31
100	Mechanisms of axonal degeneration in EAE--lessons from CNTF and MHC I knockout mice. *Journal of the Neurological Sciences*, **2005**, 233, 167-72	3.2	31
99	Potential role of LIF as a modifier gene in the pathogenesis of amyotrophic lateral sclerosis. *Neurology*, **2000**, 54, 1003-5	6.5	30
98	Hey bHLH factors in cardiovascular development. *Cold Spring Harbor Symposia on Quantitative Biology*, **2002**, 67, 63-70	3.9	30
97	Therapy development in spinal muscular atrophy. *Nature Neuroscience*, **2010**, 13, 795-9	25.5	29
96	Role of Na(v)1.9 in activity-dependent axon growth in motoneurons. *Human Molecular Genetics*, **2012**, 21, 3655-67	5.6	29
95	Large-scale pathways-based association study in amyotrophic lateral sclerosis. *Brain*, **2007**, 130, 2292-301	11.2	29
94	In vivo adenoviral transduction of the neonatal rat cochlea and middle ear. *Hearing Research*, **2001**, 151, 30-40	3.9	29
93	Single-dose application of CNTF and BDNF improves remyelination of regenerating nerve fibers after C7 ventral root avulsion and replantation. *Journal of Neurotrauma*, **2008**, 25, 384-400	5.4	28
92	Loss of Tdp-43 disrupts the axonal transcriptome of motoneurons accompanied by impaired axonal translation and mitochondria function. *Acta Neuropathologica Communications*, **2020**, 8, 116	7.3	27
91	Insulin-like growth factor 1 in diabetic neuropathy and amyotrophic lateral sclerosis. *Neurobiology of Disease*, **2017**, 97, 103-113	7.5	26
90	Sox10 regulates ciliary neurotrophic factor gene expression in Schwann cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 7871-6	11.5	26

89	Opposing Effects of CREBBP Mutations Govern the Phenotype of Rubinstein-Taybi Syndrome and Adult SHH Medulloblastoma. *Developmental Cell*, **2018**, 44, 709-724.e6	10.2	25
88	Fgfr2 and Fgfr3 are not required for patterning and maintenance of the midbrain and anterior hindbrain. *Developmental Biology*, **2007**, 303, 231-43	3.1	25
87	Contribution of Ca(2+)-permeable AMPA/KA receptors to glutamate-induced Ca(2+) rise in embryonic lumbar motoneurons in situ. *Journal of Neurophysiology*, **2000**, 83, 50-9	3.2	25
86	Early onset of degenerative changes at nodes of Ranvier in alpha-motor axons of Cntf null (-/-) mutant mice. *Glia*, **2003**, 42, 340-9	9	24
85	Neurodegenerative disease. Oxidative stress and motorneuron disease. *Current Biology*, **1994**, 4, 1036-9	6.3	24
84	Is activation of the Na+K+ pump necessary for NGF-mediated neuronal survival?. *Journal of Neuroscience*, **1988**, 8, 458-62	6.6	24
83	Potential implications of a ciliary neurotrophic factor gene mutation in a German population of patients with motor neuron disease. *Muscle and Nerve*, **1998**, 21, 236-8	3.4	23
82	Leukemia inhibitory factor protects axons in experimental autoimmune encephalomyelitis via an oligodendrocyte-independent mechanism. *PLoS ONE*, **2012**, 7, e47379	3.7	22
81	Stiff person syndrome associated anti-amphiphysin antibodies reduce GABA associated [Ca(2+)]i rise in embryonic motoneurons. *Neurobiology of Disease*, **2009**, 36, 191-9	7.5	21
80	Functional improvement in mouse models of familial amyotrophic lateral sclerosis by PEGylated insulin-like growth factor I treatment depends on disease severity. *Amyotrophic Lateral Sclerosis and Other Motor Neuron Disorders*, **2012**, 13, 418-29		21
79	hnRNP R and its main interactor, the noncoding RNA 7SK, coregulate the axonal transcriptome of motoneurons. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E2859-E2868	11.5	20
78	Neurotrophic factors: effects in modulating properties of the neuromuscular endplate. *Cytokine and Growth Factor Reviews*, **1998**, 9, 1-7	17.9	20
77	Pathogenic Huntingtin Repeat Expansions in Patients with Frontotemporal Dementia and Amyotrophic Lateral Sclerosis. *Neuron*, **2021**, 109, 448-460.e4	13.9	20
76	The FTLD Risk Factor TMEM106B Regulates the Transport of Lysosomes at the Axon Initial Segment of Motoneurons. *Cell Reports*, **2020**, 30, 3506-3519.e6	10.6	19
75	Therapeutic effects of PEGylated insulin-like growth factor I in the pmn mouse model of motoneuron disease. *Experimental Neurology*, **2011**, 232, 261-9	5.7	19
74	Valproic acid blocks excitability in SMA type I mouse motor neurons. *Neurobiology of Disease*, **2009**, 36, 477-87	7.5	19
73	Common and rare variant association analyses in amyotrophic lateral sclerosis identify 15 risk loci with distinct genetic architectures and neuron-specific biology. *Nature Genetics*, **2021**, 53, 1636-1648	36.3	19
72	Dysregulated IGFBP5 expression causes axon degeneration and motoneuron loss in diabetic neuropathy. *Acta Neuropathologica*, **2015**, 130, 373-87	14.3	18

71	Cooperation of tyrosine kinase receptor TrkB and epidermal growth factor receptor signaling enhances migration and dispersal of lung tumor cells. *PLoS ONE*, **2014**, 9, e100944	3.7	18
70	Developmental regulation of SMN expression: pathophysiological implications and perspectives for therapy development in spinal muscular atrophy. *Gene Therapy*, **2017**, 24, 506-513	4	17
69	Loss of leukemia inhibitory factor receptor beta or cardiotrophin-1 causes similar deficits in preganglionic sympathetic neurons and adrenal medulla. *Journal of Neuroscience*, **2006**, 26, 1823-32	6.6	17
68	Effects of root replantation and neurotrophic factor treatment on long-term motoneuron survival and axonal regeneration after C7 spinal root avulsion. *Experimental Neurology*, **2005**, 194, 341-54	5.7	17
67	Endogenous ciliary neurotrophic factor protects GABAergic, but not cholinergic, septohippocampal neurons following fimbria-fornix transection. *Brain Pathology*, **2003**, 13, 309-21	6	17
66	Autophagy in the presynaptic compartment. *Current Opinion in Neurobiology*, **2018**, 51, 80-85	7.6	16
65	Ciliary neurotrophic factor (CNTF) protects retinal cone and rod photoreceptors by suppressing excessive formation of the visual pigments. *Journal of Biological Chemistry*, **2018**, 293, 15256-15268	5.4	16
64	Developing standard procedures for pre-clinical efficacy studies in mouse models of spinal muscular atrophy: report of the expert workshop "Pre-clinical testing for SMA", Zürich, March 29-30th 2010. *Neuromuscular Disorders*, **2011**, 21, 74-7	2.9	16
63	Ciliary neurotrophic factor in the olfactory bulb of rats and mice. *Neuroscience*, **2003**, 120, 99-112	3.9	16
62	Pathogenic inflammation in the CNS of mice carrying human PLP1 mutations. *Human Molecular Genetics*, **2016**, 25, 4686-4702	5.6	16
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