Carmen Birchmeier

List of Publications by Year
in descending order

109 papers	20,681 citations	17405 63 h-index	27345 106 g-index
118 all docs	118 docs citations	118 times ranked	23469 citing authors

#	Article	IF	Citations
1	Oscillations of Delta-like1 regulate the balance between differentiation and maintenance of muscle stem cells. Nature Communications, 2021, 12, 1318.	5.8	34
2	Met and Cxcr4 cooperate to protect skeletal muscle stem cells against inflammation-induced damage during regeneration. ELife, 2021, 10, .	2.8	7
3	A medullary centre for lapping in mice. Nature Communications, 2021, 12, 6307.	5.8	19
4	An oscillatory network controlling self-renewal of skeletal muscle stem cells. Experimental Cell Research, 2021, 409, 112933.	1.2	6
5	Technologies for profiling the impact of genomic variants on transcription factor binding. Medizinische Genetik, 2021, 33, 147-155.	0.1	1
6	Single-nucleus transcriptomics reveals functional compartmentalization in syncytial skeletal muscle cells. Nature Communications, 2020, 11, 6375.	5.8	122
7	SIX1 and SIX4 homeoproteins regulate PAX7+ progenitor cell properties during fetal epaxial myogenesis. Development (Cambridge), 2020, 147, .	1.2	6
8	Self-Organizing 3D Human Trunk Neuromuscular Organoids. Cell Stem Cell, 2020, 26, 172-186.e6.	5.2	177
9	EHD2-mediated restriction of caveolar dynamics regulates cellular fatty acid uptake. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 7471-7481.	3.3	41
10	Context-specific regulation of cell survival by a miRNA-controlled BIM rheostat. Genes and Development, 2019, 33, 1673-1687.	2.7	13
11	Î²-Secretase BACE1 Is Required for Normal Cochlear Function. Journal of Neuroscience, 2019, 39, 9013-9027.	1.7	13
12	Oscillations of MyoD and Hes1 proteins regulate the maintenance of activated muscle stem cells. Genes and Development, 2019, 33, 524-535.	2.7	60
13	Teashirt1 (Tshz1) is essential for the development, survival and function of hypoglossal and phrenic motor neurons. Development (Cambridge), 2019, 146, .	1.2	8
14	Human muscle-derived CLEC14A-positive cells regenerate muscle independent of PAX7. Nature Communications, 2019, 10, 5776.	5.8	30
15	Sustained MAPK/ERK Activation in Adult Schwann Cells Impairs Nerve Repair. Journal of Neuroscience, 2018, 38, 679-690.	1.7	60
16	Mutation in <i>LBX1/Lbx1</i> precludes transcription factor cooperativity and causes congenital hypoventilation in humans and mice. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 13021-13026.	3.3	27
17	Haploinsufficiency of Insm1 Impairs Postnatal Baseline Î²-Cell Mass. Diabetes, 2018, 67, 2615-2625.	0.3	6
18	Mutations in Disordered Regions Can Cause Disease by Creating Dileucine Motifs. Cell, 2018, 175, 239-253.e17.	13.5	97

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19	Neuregulin 3 promotes excitatory synapse formation on hippocampal interneurons. EMBO Journal, 2018, 37, .	3.5	45
20	Maf links Neuregulin1 signaling to cholesterol synthesis in myelinating Schwann cells. Genes and Development, 2018, 32, 645-657.	2.7	22
21	Neuregulin-1 mutant mice indicate motor and sensory deficits, indeed few references for schizophrenia endophenotype model. Behavioural Brain Research, 2017, 322, 177-185.	1.2	5
22	Touch Receptor-Derived Sensory Information Alleviates Acute Pain Signaling and Fine-Tunes Nociceptive Reflex Coordination. Neuron, 2017, 93, 179-193.	3.8	172
23	Dual origin of enteric neurons in vagal Schwann cell precursors and the sympathetic neural crest. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 11980-11985.	3.3	108
24	RNA localization is a key determinant of neurite-enriched proteome. Nature Communications, 2017, 8, 583.	5.8	176
25	Mutations in<i>MYO1H</i>cause a recessive form of central hypoventilation with autonomic dysfunction. Journal of Medical Genetics, 2017, 54, 754-761.	1.5	21
26	Loss of a mammalian circular RNA locus causes miRNA deregulation and affects brain function. Science, 2017, 357, .	6.0	978
27	Genetic identification of a hindbrain nucleus essential for innate vocalization. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 8095-8100.	3.3	74
28	BMP signaling regulates satellite cell dependent postnatal muscle growth. Development (Cambridge), 2017, 144, 2737-2747.	1.2	34
29	Cell fixation and preservation for droplet-based single-cell transcriptomics. BMC Biology, 2017, 15, 44.	1.7	186
30	The dorsal spinal cord and hindbrain: From developmental mechanisms to functional circuits. Developmental Biology, 2017, 432, 34-42.	0.9	74
31	Loss of Ptpn11 (Shp2) drives satellite cells into quiescence. ELife, 2017, 6, .	2.8	18
32	Homozygous ARHGEF2 mutation causes intellectual disability and midbrain-hindbrain malformation. PLoS Genetics, 2017, 13, e1006746.	1.5	27
33	Neuregulin/ErbB Signaling in Developmental Myelin Formation and Nerve Repair. Current Topics in Developmental Biology, 2016, 116, 45-64.	1.0	49
34	Neuregulin-1 controls an endogenous repair mechanism after spinal cord injury. Brain, 2016, 139, 1394-1416.	3.7	69
35	Muscle contraction is required to maintain the pool of muscle progenitors via YAP and NOTCH during fetal myogenesis. ELife, 2016, 5, .	2.8	65
36	Insm1 controls the differentiation of pulmonary neuroendocrine cells by repressing Hes1. Developmental Biology, 2015, 408, 90-98.	0.9	49

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37	Quantitative Proteomics Reveals Dynamic Interaction of c-Jun N-terminal Kinase (JNK) with RNA Transport Granule Proteins Splicing Factor Proline- and Glutamine-rich (Sfpq) and Non-POU Domain-containing Octamer-binding Protein (Nono) during Neuronal Differentiation. Molecular and Cellular Proteomics, 2015, 14, 50-65.	2.5	17
38	Insm1 cooperates with <scp>N</scp> eurod1 and <scp>F</scp> oxa2 to maintain mature pancreatic Î²â€cell function. EMBO Journal, 2015, 34, 1417-1433.	3.5	77
39	CO2 in the spotlight. ELife, 2015, 4, .	2.8	5
40	Activation of MAPK overrides the termination of myelin growth and replaces Nrg1/ErbB3 signals during Schwann cell development and myelination. Genes and Development, 2014, 28, 290-303.	2.7	76
41	Neuregulin-3 in the Mouse Medial Prefrontal Cortex Regulates Impulsive Action. Biological Psychiatry, 2014, 76, 648-655.	0.7	55
42	Antagonistic regulation of p57kip2 by Hes/Hey downstream of Notch signaling and muscle regulatory factors regulates skeletal muscle growth arrest. Development (Cambridge), 2014, 141, 2780-2790.	1.2	45
43	Parasympathetic neurons originate from nerve-associated peripheral glial progenitors. Science, 2014, 345, 82-87.	6.0	181
44	Divergent and conserved roles of Dll1 signaling in development of craniofacial and trunk muscle. Developmental Biology, 2014, 395, 307-316.	0.9	23
45	Axonal neuregulin 1 is a rate limiting but not essential factor for nerve remyelination. Brain, 2013, 136, 2279-2297.	3.7	73
46	Bace1 and Neuregulin-1 cooperate to control formation and maintenance of muscle spindles. EMBO Journal, 2013, 32, 2015-2028.	3.5	122
47	Insm1 controls development of pituitary endocrine cells and requires a SNAG domain for function and for recruitment of histone-modifying factors. Development (Cambridge), 2013, 140, 4947-4958.	1.2	46
48	Genome-Wide Expression Analysis of<i>Ptf1a</i>- and<i>Ascl1</i>-Deficient Mice Reveals New Markers for Distinct Dorsal Horn Interneuron Populations Contributing to Nociceptive Reflex Plasticity. Journal of Neuroscience, 2013, 33, 7299-7307.	1.7	45
49	Ontogeny of Excitatory Spinal Neurons Processing Distinct Somatic Sensory Modalities. Journal of Neuroscience, 2013, 33, 14738-14748.	1.7	57
50	Wnt/Rspondin/Î²-catenin signals control axonal sorting and lineage progression in Schwann cell development. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 18174-18179.	3.3	74
51	The transcription factor c-Maf in sensory neuron development. Transcription, 2012, 3, 285-289.	1.7	9
52	The Transcription Factor c-Maf Controls Touch Receptor Development and Function. Science, 2012, 335, 1373-1376.	6.0	147
53	The HGF Receptor/Met Tyrosine Kinase Is a Key Regulator of Dendritic Cell Migration in Skin Immunity. Journal of Immunology, 2012, 189, 1699-1707.	0.4	67
54	A Validated Regulatory Network for Th17 Cell Specification. Cell, 2012, 151, 289-303.	13.5	1,010

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55	Colonization of the Satellite Cell Niche by Skeletal Muscle Progenitor Cells Depends on Notch Signals. Developmental Cell, 2012, 23, 469-481.	3.1	157
56	Axonally Derived Neuregulin-1 Is Required for Remyelination and Regeneration after Nerve Injury in Adulthood. Journal of Neuroscience, 2011, 31, 3225-3233.	1.7	129
57	Homeoprotein Phox2b commands a somatic-to-visceral switch in cranial sensory pathways. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 20018-20023.	3.3	101
58	Nrg1/ErbB signaling networks in Schwann cell development and myelination. Seminars in Cell and Developmental Biology, 2010, 21, 922-928.	2.3	207
59	Development and more. Seminars in Cell and Developmental Biology, 2010, 21, 812-813.	2.3	0
60	The Tyrosine Phosphatase Shp2 in Development and Cancer. Advances in Cancer Research, 2010, 106, 53-89.	1.9	239
61	Defective Respiratory Rhythmogenesis and Loss of Central Chemosensitivity in Phox2b Mutants Targeting Retrotrapezoid Nucleus Neurons. Journal of Neuroscience, 2009, 29, 14836-14846.	1.7	115
62	The bHLH transcription factor Olig3 marks the dorsal neuroepithelium of the hindbrain and is essential for the development of brainstem nuclei. Development (Cambridge), 2009, 136, 295-305.	1.2	94
63	The tyrosine phosphatase Shp2 (PTPN11) directs Neuregulin-1/ErbB signaling throughout Schwann cell development. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 16704-16709.	3.3	100
64	Sensory Axon-Derived Neuregulin-1 Is Required for Axoglial Signaling and Normal Sensory Function But Not for Long-Term Axon Maintenance. Journal of Neuroscience, 2009, 29, 7667-7678.	1.7	46
65	Insm1 (IA-1) is an essential component of the regulatory network that specifies monoaminergic neuronal phenotypes in the vertebrate hindbrain. Development (Cambridge), 2009, 136, 2477-2485.	1.2	50
66	ErbB receptors and the development of the nervous system. Experimental Cell Research, 2009, 315, 611-618.	1.2	117
67	Schwann Cell Precursors from Nerve Innervation Are a Cellular Origin of Melanocytes in Skin. Cell, 2009, 139, 366-379.	13.5	477
68	Neuregulinâ€1, a key axonal signal that drives Schwann cell growth and differentiation. Glia, 2008, 56, 1491-1497.	2.5	210
69	Neuregulin-1/ErbB Signaling Serves Distinct Functions in Myelination of the Peripheral and Central Nervous System. Neuron, 2008, 59, 581-595.	3.8	321
70	A transcriptional network coordinately determines transmitter and peptidergic fate in the dorsal spinal cord. Developmental Biology, 2008, 322, 381-393.	0.9	77
71	A nonclassical bHLHâ€"Rbpj transcription factor complex is required for specification of GABAergic neurons independent of Notch signaling. Genes and Development, 2008, 22, 166-178.	2.7	116
72	Insm1 (IA-1) is a crucial component of the transcriptional network that controls differentiation of the sympatho-adrenal lineage. Development (Cambridge), 2008, 135, 473-481.	1.2	103

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73	c-Met is essential for wound healing in the skin. Journal of Cell Biology, 2007, 177, 151-162.	2.3	275
74	Lbx1 Acts as a Selector Gene in the Fate Determination of Somatosensory and Viscerosensory Relay Neurons in the Hindbrain. Journal of Neuroscience, 2007, 27, 4902-4909.	1.7	113
75	RBP-J (Rbpsuh) is essential to maintain muscle progenitor cells and to generate satellite cells. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 4443-4448.	3.3	202
76	Bmp and Wnt/Î²-catenin signals control expression of the transcription factor Olig3 and the specification of spinal cord neurons. Developmental Biology, 2007, 303, 181-190.	0.9	77
77	Control of Peripheral Nerve Myelination by the Â-Secretase BACE1. Science, 2006, 314, 664-666.	6.0	652
78	The development of migrating muscle precursor cells. Anatomy and Embryology, 2006, 211, 37-41.	1.5	50
79	dILA neurons in the dorsal spinal cord are the product of terminal and non-terminal asymmetric progenitor cell divisions, and require Mash1 for their development. Development (Cambridge), 2006, 133, 2105-2113.	1.2	77
80	ErbB2 Signaling in Schwann Cells Is Mostly Dispensable for Maintenance of Myelinated Peripheral Nerves and Proliferation of Adult Schwann Cells after Injury. Journal of Neuroscience, 2006, 26, 2124-2131.	1.7	109
81	The Zinc-finger factor Insm1 (IA-1) is essential for the development of pancreatic beta cells and intestinal endocrine cells. Genes and Development, 2006, 20, 2465-2478.	2.7	185
82	The bHLH factor Olig3 coordinates the specification of dorsal neurons in the spinal cord. Genes and Development, 2005, 19, 733-743.	2.7	128
83	CXCR4 and Gab1 cooperate to control the development of migrating muscle progenitor cells. Genes and Development, 2005, 19, 2187-2198.	2.7	164
84	Met provides essential signals for liver regeneration. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 10608-10613.	3.3	449
85	Axonal Neuregulin-1 Regulates Myelin Sheath Thickness. Science, 2004, 304, 700-703.	6.0	821
86	Short- and Long-Range Attraction of Cortical GABAergic Interneurons by Neuregulin-1. Neuron, 2004, 44, 251-261.	3.8	383
87	ErbB2 Pathways in Heart and Neural Diseases. Trends in Cardiovascular Medicine, 2003, 13, 80-86.	2.3	90
88	Met, metastasis, motility and more. Nature Reviews Molecular Cell Biology, 2003, 4, 915-925.	16.1	2,399
89	Î²-Catenin signals regulate cell growth and the balance between progenitor cell expansion and differentiation in the nervous system. Developmental Biology, 2003, 258, 406-418.	0.9	442
90	Tiermodelle in der biomedizinischen Forschung. , 2003, , 299-339.		0

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91	Conditional mutation of the ErbB2 (HER2) receptor in cardiomyocytes leads to dilated cardiomyopathy. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 8880-8885.	3.3	418
92	The Homeodomain Factor Lbx1 Distinguishes Two Major Programs of Neuronal Differentiation in the Dorsal Spinal Cord. Neuron, 2002, 34, 551-562.	3.8	343
93	A Role for Neuregulin1 Signaling in Muscle Spindle Differentiation. Neuron, 2002, 36, 1035-1049.	3.8	141
94	The breast proto-oncogene, HRGÎ± regulates epithelial proliferation and lobuloalveolar development in the mouse mammary gland. Oncogene, 2002, 21, 4900-4907.	2.6	81
95	Patterning of Muscle Acetylcholine Receptor Gene Expression in the Absence of Motor Innervation. Neuron, 2001, 30, 399-410.	3.8	428
96	Neuregulin, a factor with many functions in the life of a Schwann cell. BioEssays, 2000, 22, 987-996.	1.2	251
97	Editorial overview. Current Opinion in Cell Biology, 2000, 12, 717-718.	2.6	0
98	Genes that control the development of migrating muscle precursor cells. Current Opinion in Cell Biology, 2000, 12, 725-730.	2.6	146
99	A Dual Role of erbB2 in Myelination and in Expansion of the Schwann Cell Precursor Pool. Journal of Cell Biology, 2000, 148, 1035-1046.	2.3	245
100	Essential Role of Gab1 for Signaling by the C-Met Receptor in Vivo. Journal of Cell Biology, 2000, 150, 1375-1384.	2.3	256
101	Neuregulin, a factor with many functions in the life of a Schwann cell. , 2000, 22, 987.		1
102	Neuregulin, a factor with many functions in the life of a Schwann cell. BioEssays, 2000, 22, 987-996.	1.2	5
103	Engineered mutants of HGF/SF with reduced binding to heparan sulphate proteoglycans, decreased clearance and enhanced activity in vivo. Current Biology, 1998, 8, 125-135.	1.8	91
104	Developmental roles of HGF/SF and its receptor, the c-Met tyrosine kinase. Trends in Cell Biology, 1998, 8, 404-410.	3.6	558
105	Severe neuropathies in mice with targeted mutations in the ErbB3 receptor. Nature, 1997, 389, 725-730.	13.7	659
106	Hepatocyte Growth Factor/Scatter Factor Is an Axonal Chemoattractant and a Neurotrophic Factor for Spinal Motor Neurons. Neuron, 1996, 17, 1157-1172.	3.8	387
107	Essential role for the c-met receptor in the migration of myogenic precursor cells into the limb bud. Nature, 1995, 376, 768-771.	13.7	1,202
108	Multiple essential functions of neuregulin in development. Nature, 1995, 378, 386-390.	13.7	1,154

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109	Genes That Control Cell Migration during Mouse Development. , 0, , 317-330.		1