Michael M Wegner

List of Publications by Year
in descending order

140 papers	15,560 citations	14655 66 h-index	17592 121 g-index
143 all docs	143 docs citations	143 times ranked	14972 citing authors

#	Article	IF	Citations
1	Competing waves of oligodendrocytes in the forebrain and postnatal elimination of an embryonic lineage. Nature Neuroscience, 2006, 9, 173-179.	14.8	978
2	From head to toes: the multiple facets of Sox proteins. Nucleic Acids Research, 1999, 27, 1409-1420.	14.5	769
3	SOX10 mutations in patients with Waardenburg-Hirschsprung disease. Nature Genetics, 1998, 18, 171-173.	21.4	733
4	Sox10, a Novel Transcriptional Modulator in Glial Cells. Journal of Neuroscience, 1998, 18, 237-250.	3.6	718
5	Terminal differentiation of myelin-forming oligodendrocytes depends on the transcription factor Sox10. Genes and Development, 2002, 16, 165-170.	5.9	561
6	The Sox9 transcription factor determines glial fate choice in the developing spinal cord. Genes and Development, 2003, 17, 1677-1689.	5.9	541
7	Functional analysis of<i>Sox8</i>and<i>Sox9</i>during sex determination in the mouse. Development (Cambridge), 2004, 131, 1891-1901.	2.5	490
8	Molecular mechanism for distinct neurological phenotypes conveyed by allelic truncating mutations. Nature Genetics, 2004, 36, 361-369.	21.4	383
9	From stem cells to neurons and glia: a Soxist's view of neural development. Trends in Neurosciences, 2005, 28, 583-588.	8.6	379
10	Survival and glial fate acquisition of neural crest cells are regulated by an interplay between the transcription factor Sox10 and extrinsic combinatorial signaling. Development (Cambridge), 2001, 128, 3949-3961.	2.5	285
11	Bone Morphogenetic Proteins Are Required In Vivo for the Generation of Sympathetic Neurons. Neuron, 1999, 24, 861-870.	8.1	270
12	Gene Targeting Reveals a Widespread Role for the High-Mobility-Group Transcription Factor Sox11 in Tissue Remodeling. Molecular and Cellular Biology, 2004, 24, 6635-6644.	2.3	245
13	Sox10 promotes the formation and maintenance of giant congenital naevi and melanoma. Nature Cell Biology, 2012, 14, 882-890.	10.3	232
14	SoxD Proteins Influence Multiple Stages of Oligodendrocyte Development and Modulate SoxE Protein Function. Developmental Cell, 2006, 11, 697-709.	7.0	229
15	Protein Zero Gene Expression Is Regulated by the Glial Transcription Factor Sox10. Molecular and Cellular Biology, 2000, 20, 3198-3209.	2.3	210
16	Cooperative Function of POU Proteins and SOX Proteins in Glial Cells. Journal of Biological Chemistry, 1998, 273, 16050-16057.	3.4	202
17	<i>Sox10</i> is required for Schwann cell identity and progression beyond the immature Schwann cell stage. Journal of Cell Biology, 2010, 189, 701-712.	5.2	198
18	MYRF Is a Membrane-Associated Transcription Factor That Autoproteolytically Cleaves to Directly Activate Myelin Genes. PLoS Biology, 2013, 11, e1001625.	5.6	198

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19	The Cell-Intrinsic Requirement of Sox6 for Cortical Interneuron Development. Neuron, 2009, 63, 466-481.	8.1	194
20	All purpose Sox: The many roles of Sox proteins in gene expression. International Journal of Biochemistry and Cell Biology, 2010, 42, 381-390.	2.8	191
21	Sox9 and Sox10 influence survival and migration of oligodendrocyte precursors in the spinal cord by regulating PDGF receptor Î±expression. Development (Cambridge), 2008, 135, 637-646.	2.5	190
22	Transcription factors Sox8 and Sox10 perform non-equivalent roles during oligodendrocyte development despite functional redundancy. Development (Cambridge), 2004, 131, 2349-2358.	2.5	188
23	Organogenesis relies on SoxC transcription factors for the survival of neural and mesenchymal progenitors. Nature Communications, 2010, 1, 9.	12.8	183
24	The Transcription Factors Sox10 and Myrf Define an Essential Regulatory Network Module in Differentiating Oligodendrocytes. PLoS Genetics, 2013, 9, e1003907.	3.5	169
25	Induction of oligodendrocyte differentiation by Olig2 and Sox10: Evidence for reciprocal interactions and dosage-dependent mechanisms. Developmental Biology, 2007, 302, 683-693.	2.0	159
26	Identification of Sox8 as a modifier gene in a mouse model of Hirschsprung disease reveals underlying molecular defect. Developmental Biology, 2005, 277, 155-169.	2.0	158
27	The glial transcription factor Sox10 binds to DNA both as monomer and dimer with different functional consequences. Nucleic Acids Research, 2000, 28, 3047-3055.	14.5	154
28	Idiopathic Weight Reduction in Mice Deficient in the High-Mobility-Group Transcription Factor Sox8. Molecular and Cellular Biology, 2001, 21, 6951-6959.	2.3	148
29	SoxC Transcription Factors Are Required for Neuronal Differentiation in Adult Hippocampal Neurogenesis. Journal of Neuroscience, 2012, 32, 3067-3080.	3.6	140
30	The high-mobility-group domain of Sox proteins interacts with DNA-binding domains of many transcription factors. Nucleic Acids Research, 2006, 34, 1735-1744.	14.5	131
31	Functional Analysis of Sox10 Mutations Found in Human Waardenburg-Hirschsprung Patients. Journal of Biological Chemistry, 1998, 273, 23033-23038.	3.4	126
32	Mutual antagonism between Sox10 and NFIA regulates diversification of glial lineages and glioma subtypes. Nature Neuroscience, 2014, 17, 1322-1329.	14.8	124
33	Zeb2 is essential for Schwann cell differentiation, myelination and nerve repair. Nature Neuroscience, 2016, 19, 1050-1059.	14.8	123
34	Loss of DNA-dependent dimerization of the transcription factor SOX9 as a cause for campomelic dysplasia. Human Molecular Genetics, 2003, 12, 1439-1447.	2.9	122
35	Melanocyte-specific expression of dopachrome tautomerase is dependent on synergistic gene activation by the Sox10 and Mitf transcription factors. FEBS Letters, 2004, 556, 236-244.	2.8	122
36	Sox12 Deletion in the Mouse Reveals Nonreciprocal Redundancy with the Related Sox4 and Sox11 Transcription Factors. Molecular and Cellular Biology, 2008, 28, 4675-4687.	2.3	119

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37	Gain of Olig2 function in oligodendrocyte progenitors promotes remyelination. Brain, 2015, 138, 120-135.	7.6	119
38	Injury-activated glial cells promote wound healing of the adult skin in mice. Nature Communications, 2018, 9, 236.	12.8	119
39	SOX9 controls epithelial branching by activating RET effector genes during kidney development. Human Molecular Genetics, 2011, 20, 1143-1153.	2.9	118
40	SoxE function in vertebrate nervous system development. International Journal of Biochemistry and Cell Biology, 2010, 42, 437-440.	2.8	117
41	Multiple conserved regulatory elements with overlapping functions determine Sox10 expression in mouse embryogenesis. Nucleic Acids Research, 2007, 35, 6526-6538.	14.5	113
42	<i>Sox10</i> is required for Schwannâ€cell homeostasis and myelin maintenance in the adult peripheral nerve. Glia, 2011, 59, 1022-1032.	4.9	113
43	A Matter of Identity: Transcriptional Control in Oligodendrocytes. Journal of Molecular Neuroscience, 2008, 35, 3-12.	2.3	108
44	Transcription factor Sox10 orchestrates activity of a neural crest-specific enhancer in the vicinity of its gene. Nucleic Acids Research, 2012, 40, 88-101.	14.5	108
45	Olig2 regulates Sox10 expression in oligodendrocyte precursors through an evolutionary conserved distal enhancer. Nucleic Acids Research, 2011, 39, 1280-1293.	14.5	107
46	Chromatin-Remodeling Factor Brg1 Is Required for Schwann Cell Differentiation and Myelination. Developmental Cell, 2012, 23, 193-201.	7.0	107
47	Genetic evidence that <i>Nkx2.2</i> and <i>Pdgfra</i> are major determinants of the timing of oligodendrocyte differentiation in the developing CNS. Development (Cambridge), 2014, 141, 548-555.	2.5	104
48	Sox10 Is an Active Nucleocytoplasmic Shuttle Protein, and Shuttling Is Crucial for Sox10-Mediated Transactivation. Molecular and Cellular Biology, 2002, 22, 5826-5834.	2.3	99
49	Substantial DNA methylation differences between two major neuronal subtypes in human brain. Nucleic Acids Research, 2016, 44, 2593-2612.	14.5	97
50	Secrets to a healthy Sox life: lessons for melanocytes. Pigment Cell & Melanoma Research, 2005, 18, 74-85.	3.6	94
51	Development and degeneration of dorsal root ganglia in the absence of the HMG-domain transcription factor Sox10. Mechanisms of Development, 2001, 109, 253-265.	1.7	93
52	Stem cell factor Sox2 and its close relative Sox3 have differentiation functions in oligodendrocytes. Development (Cambridge), 2014, 141, 39-50.	2.5	92
53	A unique role for DNA (hydroxy)methylation in epigenetic regulation of human inhibitory neurons. Science Advances, 2018, 4, eaau6190.	10.3	92
54	SoxE factors: Transcriptional regulators of neural differentiation and nervous system development. Seminars in Cell and Developmental Biology, 2017, 63, 35-42.	5.0	91

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55	Impact of transcription factor Sox8 on oligodendrocyte specification in the mouse embryonic spinal cord. Developmental Biology, 2005, 281, 309-317.	2.0	89
56	Copy number variation of two separate regulatory regions upstream of<i>SOX9</i>causes isolated 46,XY or 46,XX disorder of sex development. Journal of Medical Genetics, 2015, 52, 240-247.	3.2	88
57	Sox8 Is a Specific Marker for Muscle Satellite Cells and Inhibits Myogenesis. Journal of Biological Chemistry, 2003, 278, 29769-29775.	3.4	87
58	Myelin regulatory factor drives remyelination in multiple sclerosis. Acta Neuropathologica, 2017, 134, 403-422.	7.7	87
59	Hypomorphic Sox10 alleles reveal novel protein functions and unravel developmental differences in glial lineages. Development (Cambridge), 2007, 134, 3271-3281.	2.5	85
60	A Dual Role for SOX10 in the Maintenance of the Postnatal Melanocyte Lineage and the Differentiation of Melanocyte Stem Cell Progenitors. PLoS Genetics, 2013, 9, e1003644.	3.5	85
61	Antagonistic Cross-Regulation between Sox9 and Sox10 Controls an Anti-tumorigenic Program in Melanoma. PLoS Genetics, 2015, 11, e1004877.	3.5	85
62	A Tissue-restricted cAMP Transcriptional Response. Journal of Biological Chemistry, 2003, 278, 45224-45230.	3.4	83
63	The transcription factor Sox5 modulates Sox10 function during melanocyte development. Nucleic Acids Research, 2008, 36, 5427-5440.	14.5	82
64	Replacement of the Sox10 transcription factor by Sox8 reveals incomplete functional equivalence. Development (Cambridge), 2006, 133, 2875-2886.	2.5	80
65	Activation of <i>Krox20</i> gene expression by Sox10 in myelinating Schwann cells. Journal of Neurochemistry, 2010, 112, 744-754.	3.9	77
66	SOX after SOX: SOXession regulates neurogenesis: Figure 1.. Genes and Development, 2011, 25, 2423-2428.	5.9	74
67	Identification of the Nuclear Localization Signal of the POU Domain Protein Tst-1/Oct6. Journal of Biological Chemistry, 1996, 271, 17512-17518.	3.4	70
68	Transcriptional control of myelination and remyelination. Glia, 2019, 67, 2153-2165.	4.9	69
69	Olfactory ensheathing glia are required for embryonic olfactory axon targeting and the migration of gonadotropin-releasing hormone neurons. Biology Open, 2013, 2, 750-759.	1.2	66
70	Prolonged Sox4 Expression in Oligodendrocytes Interferes with Normal Myelination in the Central Nervous System. Molecular and Cellular Biology, 2007, 27, 5316-5326.	2.3	65
71	Î±-Synuclein impairs oligodendrocyte progenitor maturation in multiple system atrophy. Neurobiology of Aging, 2014, 35, 2357-2368.	3.1	62
72	From CNS stem cells to neurons and glia: Sox for everyone. Cell and Tissue Research, 2015, 359, 111-124.	2.9	62

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73	Nfat/calcineurin signaling promotes oligodendrocyte differentiation and myelination by transcription factor network tuning. Nature Communications, 2018, 9, 899.	12.8	60
74	Transforming Growth Factor Î²-Mediated Sox10 Suppression Controls Mesenchymal Progenitor Generation in Neural Crest Stem Cells. Stem Cells, 2011, 29, 689-699.	3.2	59
75	Schwann cells and their transcriptional network: Evolution of key regulators of peripheral myelination. Brain Research, 2016, 1641, 101-110.	2.2	59
76	Î±-Synuclein-induced myelination deficit defines a novel interventional target for multiple system atrophy. Acta Neuropathologica, 2016, 132, 59-75.	7.7	58
77	Cooperative binding of Sox10 to DNA: requirements and consequences. Nucleic Acids Research, 2002, 30, 5509-5516.	14.5	56
78	Expression of Connexin47 in Oligodendrocytes is Regulated by the Sox10 Transcription Factor. Journal of Molecular Biology, 2006, 361, 11-21.	4.2	55
79	The closely related transcription factors Sox4 and Sox11 function as survival factors during spinal cord development. Journal of Neurochemistry, 2010, 115, 131-141.	3.9	55
80	Brg1-Dependent Chromatin Remodelling Is Not Essentially Required during Oligodendroglial Differentiation. Journal of Neuroscience, 2015, 35, 21-35.	3.6	55
81	Redundancy of Class III POU Proteins in the Oligodendrocyte Lineage. Journal of Biological Chemistry, 1997, 272, 32286-32293.	3.4	54
82	Common schizophrenia risk variants are enriched in open chromatin regions of human glutamatergic neurons. Nature Communications, 2020, 11, 5581.	12.8	53
83	Sox10 Cooperates with the Mediator Subunit 12 during Terminal Differentiation of Myelinating Glia. Journal of Neuroscience, 2013, 33, 6679-6690.	3.6	52
84	BRG1 interacts with SOX10 to establish the melanocyte lineage and to promote differentiation. Nucleic Acids Research, 2017, 45, 6442-6458.	14.5	51
85	Transcription factors Sox5 and Sox6 exert direct and indirect influences on oligodendroglial migration in spinal cord and forebrain. Glia, 2016, 64, 122-138.	4.9	50
86	Oligodendroglial Î±â€synucleinopathyâ€driven neuroinflammation in multiple system atrophy. Brain Pathology, 2019, 29, 380-396.	4.1	50
87	SoxE Proteins Are Differentially Required in Mouse Adrenal Gland Development. Molecular Biology of the Cell, 2008, 19, 1575-1586.	2.1	48
88	Sox8 and Sox10 jointly maintain myelin gene expression in oligodendrocytes. Glia, 2018, 66, 279-294.	4.9	48
89	Deciphering the regulatory landscape of fetal and adult Î³Î´ Tâ€cell development at singleâ€cell resolution. EMBO Journal, 2020, 39, e104159.	7.8	48
90	SomethiNG 2 talk aboutâ€"Transcriptional regulation in embryonic and adult oligodendrocyte precursors. Brain Research, 2016, 1638, 167-182.	2.2	47

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91	The Class III POU Domain Protein Brn-1 Can Fully Replace the Related Oct-6 during Schwann Cell Development and Myelination. Molecular and Cellular Biology, 2005, 25, 1821-1829.	2.3	45
92	Sox10-rtTA mouse line for tetracycline-inducible expression of transgenes in neural crest cells and oligodendrocytes. Genesis, 2004, 40, 171-175.	1.6	43
93	Neural stem/progenitor cell properties of glial cells in the adult mouse auditory nerve. Scientific Reports, 2015, 5, 13383.	3.3	43
94	Elevated In Vivo Levels of a Single Transcription Factor Directly Convert Satellite Glia into Oligodendrocyte-like Cells. PLoS Genetics, 2015, 11, e1005008.	3.5	41
95	Transcription factor Sox10 regulates oligodendroglial Sox9 levels via microRNAs. Glia, 2017, 65, 1089-1102.	4.9	41
96	Intracellular alpha-synuclein affects early maturation of primary oligodendrocyte progenitor cells. Molecular and Cellular Neurosciences, 2014, 62, 68-78.	2.2	40
97	Transcription factor profiling identifies Sox9 as regulator of proliferation and differentiation in corneal epithelial stem/progenitor cells. Scientific Reports, 2018, 8, 10268.	3.3	39
98	Translation of SOX10 3' untranslated region causes a complex severe neurocristopathy by generation of a deleterious functional domain. Human Molecular Genetics, 2007, 16, 3037-3046.	2.9	36
99	Establishment of myelinating schwann cells and barrier integrity between central and peripheral nervous systems depend on <i>Sox10</i>. Glia, 2012, 60, 806-819.	4.9	36
100	A gene regulatory architecture that controls regionâ€independent dynamics of oligodendrocyte differentiation. Glia, 2019, 67, 825-843.	4.9	36
101	Expression of Krox Proteins During Differentiation of the Oâ€2A Progenitor Cell Line CGâ€4. Journal of Neurochemistry, 1997, 68, 1911-1919.	3.9	35
102	Using the lineage determinants Olig2 and Sox10 to explore transcriptional regulation of oligodendrocyte development. Developmental Neurobiology, 2021, 81, 892-901.	3.0	33
103	Sox appeal â€" Sox10 attracts epigenetic and transcriptional regulators in myelinating glia. Biological Chemistry, 2013, 394, 1583-1593.	2.5	32
104	Myrf guides target gene selection of transcription factor Sox10 during oligodendroglial development. Nucleic Acids Research, 2020, 48, 1254-1270.	14.5	31
105	Transcription factor Tcf4 is the preferred heterodimerization partner for Olig2 in oligodendrocytes and required for differentiation. Nucleic Acids Research, 2020, 48, 4839-4857.	14.5	31
106	SOX10 structure-function analysis in the chicken neural tube reveals important insights into its role in human neurocristopathies. Human Molecular Genetics, 2010, 19, 2409-2420.	2.9	27
107	CTCF-mediated chromatin looping in EGR2 regulation and SUZ12 recruitment critical for peripheral myelination and repair. Nature Communications, 2020, 11, 4133.	12.8	27
108	Chromatin remodeler Ep400 ensures oligodendrocyte survival and is required for myelination in the vertebrate central nervous system. Nucleic Acids Research, 2019, 47, 6208-6224.	14.5	26

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109	Transcription factors Sox10 and Sox2 functionally interact with positive transcription elongation factor b in Schwann cells. Journal of Neurochemistry, 2015, 132, 384-393.	3.9	21
110	The transcription factor Sox10 is an essential determinant of branching morphogenesis and involution in the mouse mammary gland. Scientific Reports, 2020, 10, 17807.	3.3	21
111	Desert Hedgehog Links Transcription Factor Sox10 to Perineurial Development. Journal of Neuroscience, 2012, 32, 5472-5480.	3.6	20
112	Sox13 functionally complements the related Sox5 and Sox6 as important developmental modulators in mouse spinal cord oligodendrocytes. Journal of Neurochemistry, 2016, 136, 316-328.	3.9	20
113	Ep400 deficiency in Schwann cells causes persistent expression of early developmental regulators and peripheral neuropathy. Nature Communications, 2019, 10, 2361.	12.8	20
114	Replacement of mouse Sox10 by the Drosophila ortholog Sox100B provides evidence for co-option of SoxE proteins into vertebrate-specific gene-regulatory networks through altered expression. Developmental Biology, 2010, 341, 267-281.	2.0	19
115	The Dual-specificity phosphatase Dusp15 is regulated by Sox10 and Myrf in Myelinating Oligodendrocytes. Glia, 2016, 64, 2120-2132.	4.9	19
116	Sox11 gene disruption causes congenital anomalies of the kidney and urinary tract (CAKUT). Kidney International, 2018, 93, 1142-1153.	5.2	19
117	Evolution of regulatory signatures in primate cortical neurons at cell-type resolution. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 28422-28432.	7.1	18
118	MicroRNA miRâ€204 regulates proliferation and differentiation of oligodendroglia in culture. Glia, 2020, 68, 2015-2027.	4.9	16
119	Egr2-guided histone H2B monoubiquitination is required for peripheral nervous system myelination. Nucleic Acids Research, 2020, 48, 8959-8976.	14.5	14
120	Evolutionary conserved sequence elements with embryonic enhancer activity in the vicinity of the mammalian Sox8 gene. International Journal of Biochemistry and Cell Biology, 2010, 42, 465-471.	2.8	10
121	The role of chromatin remodeling complexes in Schwann cell development. Glia, 2020, 68, 1596-1603.	4.9	10
122	A Human Periodontal Ligament Fibroblast Cell Line as a New Model to Study Periodontal Stress. International Journal of Molecular Sciences, 2020, 21, 7961.	4.1	10
123	Formation of the node of Ranvier by Schwann cells is under control of transcription factor Sox10. Glia, 2021, 69, 1464-1477.	4.9	10
124	Characterization of Glomerular Sox9+ Cells in Anti-Glomerular Basement Membrane Nephritis in the Rat. American Journal of Pathology, 2018, 188, 2529-2541.	3.8	9
125	scRNA sequencing uncovers a TCF4-dependent transcription factor network regulating commissure development in mouse. Development (Cambridge), 2021, 148, .	2.5	8
126	Sox9 overexpression exerts multiple stageâ€dependent effects on mouse spinal cord development. Glia, 2020, 68, 932-946.	4.9	7

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127	Sox9 in the developing central nervous system: a jack of all trades?. Neural Regeneration Research, 2021, 16, 676.	3.0	7
128	Analysis of the human SOX10 mutation Q377X in mice and its implications for genotype-phenotype correlation in SOX10-related human disease. Human Molecular Genetics, 2018, 27, 1078-1092.	2.9	5
129	SoxD transcription factor deficiency in Schwann cells delays myelination in the developing peripheral nervous system. Scientific Reports, 2021, 11, 14044.	3.3	5
130	Transcription factor Zfp276 drives oligodendroglial differentiation and myelination by switching off the progenitor cell program. Nucleic Acids Research, 2022, , .	14.5	5
131	Role of the Pbrm1 subunit and the PBAF complex in Schwann cell development. Scientific Reports, 2022, 12, 2651.	3.3	3
132	Oligodendroglial heterogeneity in time and space (NG2 glia in the CNS). E-Neuroforum, 2015, 6, 69-72.	0.1	2
133	Sp2 is the only glutamineâ€rich specificity protein with minor impact on development and differentiation in myelinating glia. Journal of Neurochemistry, 2017, 140, 245-256.	3.9	2
134	Specification of oligodendrocytes. , 2020, , 847-866.		2
135	Coordination of Schwann cell myelination and node formation at the transcriptional level. Neural Regeneration Research, 2022, 17, 1269.	3.0	1
136	Sox Transcription Factors in Neural Development. , 2006, , 181-203.		0
137	Translation of SOX10 3' untranslated region causes a complex severe neurocristopathy by generation of a deleterious functional domain. Human Molecular Genetics, 2008, 17, 1705-1705.	2.9	0
138	Oligodendroglial heterogeneity in time and space (NG2 glia in the CNS). E-Neuroforum, 2015, 21, .	0.1	0
139	Radial glia phagocytose axonal debris from degenerating overextending axons in the developing olfactory bulb. Journal of Comparative Neurology, 2015, 523, Spc1-Spc1.	1.6	0
140	Melanocytes and the Transcription Factor Sox10. , 2006, , 71-80.		0