Brian D Harfe

List of Publications by Year
in descending order

86 papers	14,190 citations	31976 53 h-index	53230 85 g-index
91 all docs	91 docs citations	91 times ranked	16072 citing authors

#	Article	IF	Citations
1	Intervertebral disc repair and regeneration: Insights from the notochord. Seminars in Cell and Developmental Biology, 2022, 127, 3-9.	5.0	12
2	Loss of BMP2 and BMP4 Signaling in the Dental Epithelium Causes Defective Enamel Maturation and Aberrant Development of Ameloblasts. International Journal of Molecular Sciences, 2022, 23, 6095.	4.1	0
3	Sonic Hedgehog Signaling Is Required for Cyp26 Expression during Embryonic Development. International Journal of Molecular Sciences, 2019, 20, 2275.	4.1	10
4	TMEM16A calcium-activated chloride currents in supporting cells of the mouse olfactory epithelium. Journal of General Physiology, 2019, 151, 954-966.	1.9	16
5	SHH Protein Variance in the Limb Bud Is Constrained by Feedback Regulation and Correlates with Altered Digit Patterning. G3: Genes, Genomes, Genetics, 2017, 7, 851-858.	1.8	7
6	Whole Transcriptome Analysis of Notochord-Derived Cells during Embryonic Formation of the Nucleus Pulposus. Scientific Reports, 2017, 7, 10504.	3.3	52
7	Developmental mechanisms of intervertebral disc and vertebral column formation. Wiley Interdisciplinary Reviews: Developmental Biology, 2017, 6, e283.	5.9	41
8	Cell fate specification in the lingual epithelium is controlled by antagonistic activities of Sonic hedgehog and retinoic acid. PLoS Genetics, 2017, 13, e1006914.	3.5	16
9	BMPs are direct triggers of interdigital programmed cell death. Developmental Biology, 2016, 411, 266-276.	2.0	30
10	Development of the Olfactory Epithelium and Nasal Glands in TMEM16A-/- and TMEM16A+/+ Mice. PLoS ONE, 2015, 10, e0129171.	2.5	10
11	Musculoskeletal integration at the wrist underlies modular development of limb tendons. Development (Cambridge), 2015, 142, 2431-41.	2.5	79
12	Notochord to Nucleus Pulposus Transition. Current Osteoporosis Reports, 2015, 13, 336-341.	3.6	55
13	Ano1, a Ca²⁺â€activated Cl^{âˆ’} channel, coordinates contractility in mouse intestine by Ca²⁺ transient coordination between interstitial cells of Cajal. Journal of Physiology, 2014, 592, 4051-4068.	2.9	84
14	Dynamics of BMP signaling in limb bud mesenchyme and polydactyly. Developmental Biology, 2014, 393, 270-281.	2.0	28
15	The Transmembrane Protein 16A Ca²⁺-activated Cl^{âˆ’} Channel in Airway Smooth Muscle Contributes to Airway Hyperresponsiveness. American Journal of Respiratory and Critical Care Medicine, 2013, 187, 374-381.	5.6	72
16	An Lmx1b-miR135a2 Regulatory Circuit Modulates Wnt1/Wnt Signaling and Determines the Size of the Midbrain Dopaminergic Progenitor Pool. PLoS Genetics, 2013, 9, e1003973.	3.5	63
17	Needle puncture injury causes acute and long-term mechanical deficiency in a mouse model of intervertebral disc degeneration. Journal of Orthopaedic Research, 2013, 31, 1276-1282.	2.3	101
18	Foxa1 and Foxa2 Are Required for Formation of the Intervertebral Discs. PLoS ONE, 2013, 8, e55528.	2.5	56

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19	Let-7b/c Enhance the Stability of a Tissue-Specific mRNA during Mammalian Organogenesis as Part of a Feedback Loop Involving KSRP. PLoS Genetics, 2012, 8, e1002823.	3.5	22
20	TMEM16A Induces MAPK and Contributes Directly to Tumorigenesis and Cancer Progression. Cancer Research, 2012, 72, 3270-3281.	0.9	252
21	Autonomous and nonautonomous roles of Hedgehog signaling in regulating limb muscle formation. Genes and Development, 2012, 26, 2088-2102.	5.9	57
22	Calcium-Activated Chloride Channels (CaCCs) Regulate Action Potential and Synaptic Response in Hippocampal Neurons. Neuron, 2012, 74, 179-192.	8.1	146
23	Sonic hedgehog in the notochord is sufficient for patterning of the intervertebral discs. Mechanisms of Development, 2012, 129, 255-262.	1.7	72
24	Avian intervertebral disc arises from rostral sclerotome and lacks a nucleus pulposus: Implications for evolution of the vertebrate disc. Developmental Dynamics, 2012, 241, 675-683.	1.8	47
25	The calcium-activated chloride channel anoctamin 1 acts as a heat sensor in nociceptive neurons. Nature Neuroscience, 2012, 15, 1015-1021.	14.8	316
26	Bmp2, Bmp4 and Bmp7 Are Co-Required in the Mouse AER for Normal Digit Patterning but Not Limb Outgrowth. PLoS ONE, 2012, 7, e37826.	2.5	24
27	Degeneration and regeneration of the intervertebral disc: lessons from development. DMM Disease Models and Mechanisms, 2011, 4, 31-41.	2.4	295
28	Nuclei Pulposi Formation From the Embryonic Notochord Occurs Normally in GDF-5-Deficient Mice. Spine, 2011, 36, E1555-E1561.	2.0	15
29	The microRNA-processing enzyme Dicer is dispensable for somite segmentation but essential for limb bud positioning. Developmental Biology, 2011, 351, 254-265.	2.0	27
30	Keeping up with the zone of polarizing activity: New roles for an old signaling center. Developmental Dynamics, 2011, 240, 915-919.	1.8	15
31	Hedgehog signaling is required for formation of the notochord sheath and patterning of nuclei pulposi within the intervertebral discs. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 9484-9489.	7.1	125
32	Ano1 as a regulator of proliferation. FASEB Journal, 2011, 25, lb115.	0.5	0
33	The sonic hedgehog pathway in chordoid tumours. Histopathology, 2010, 56, 978-979.	2.9	10
34	The MicroRNA-Processing Enzyme Dicer Maintains Juxtaglomerular Cells. Journal of the American Society of Nephrology: JASN, 2010, 21, 460-467.	6.1	143
35	Shh pathway activation is present and required within the vertebrate limb bud apical ectodermal ridge for normal autopod patterning. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 5489-5494.	7.1	39
36	Tmem16A Encodes the Ca2+-activated Clâˆ’ Channel in Mouse Submandibular Salivary Gland Acinar Cells. Journal of Biological Chemistry, 2010, 285, 12990-13001.	3.4	174

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37	Multiphasic and tissue-specific roles of sonic hedgehog in cloacal septation and external genitalia development. Development (Cambridge), 2009, 136, 3949-3957.	2.5	87
38	LPS induces KHâ€•type splicing regulatory proteinâ€•dependent processing of microRNAâ€•155 precursors in macrophages. FASEB Journal, 2009, 23, 2898-2908.	0.5	188
39	Studies on expression and function of the TMEM16A calcium-activated chloride channel. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 21413-21418.	7.1	278
40	Transmembrane Protein 16A (TMEM16A) Is a Ca2+-regulated Clâ€" Secretory Channel in Mouse Airways. Journal of Biological Chemistry, 2009, 284, 14875-14880.	3.4	220
41	TMEM16 Proteins Produce Volume-regulated Chloride Currents That Are Reduced in Mice Lacking TMEM16A. Journal of Biological Chemistry, 2009, 284, 28571-28578.	3.4	159
42	Loss of TMEM16A Causes a Defect in Epithelial Ca2+-dependent Chloride Transport. Journal of Biological Chemistry, 2009, 284, 28698-28703.	3.4	213
43	Expression patterns of the Tmem16 gene family during cephalic development in the mouse. Gene Expression Patterns, 2009, 9, 178-191.	0.8	34
44	Genetic analyses reveal a requirement for Dicer1 in the mouse urogenital tract. Mammalian Genome, 2009, 20, 140-151.	2.2	82
45	Expression of anoctamin 1/TMEM16A by interstitial cells of Cajal is fundamental for slow wave activity in gastrointestinal muscles. Journal of Physiology, 2009, 587, 4887-4904.	2.9	348
46	Sertoli cell Dicer is essential for spermatogenesis in mice. Developmental Biology, 2009, 326, 250-259.	2.0	171
47	In the limb AER Bmp2 and Bmp4 are required for dorsalâ€"ventral patterning and interdigital cell death but not limb outgrowth. Developmental Biology, 2009, 327, 516-523.	2.0	47
48	Residual microRNA expression dictates the extent of inner ear development in conditional Dicer knockout mice. Developmental Biology, 2009, 328, 328-341.	2.0	131
49	Aberrant FGF signaling, independent of ectopic hedgehog signaling, initiates preaxial polydactyly in Dorking chickens. Developmental Biology, 2009, 334, 133-141.	2.0	21
50	Identification of nucleus pulposus precursor cells and notochordal remnants in the mouse: Implications for disk degeneration and chordoma formation. Developmental Dynamics, 2008, 237, 3953-3958.	1.8	280
51	<i>Dicer</i>Inactivation Leads to Progressive Functional and Structural Degeneration of the Mouse Retina. Journal of Neuroscience, 2008, 28, 4878-4887.	3.6	204
52	Members of the miRNA-200 Family Regulate Olfactory Neurogenesis. Neuron, 2008, 57, 41-55.	8.1	245
53	Cell lineage analysis demonstrates an endodermal origin of the distal urethra and perineum. Developmental Biology, 2008, 318, 143-152.	2.0	143
54	The transmembrane protein TMEM16A is required for normal development of the murine trachea. Developmental Biology, 2008, 321, 141-149.	2.0	202

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55	Dicer loss in striatal neurons produces behavioral and neuroanatomical phenotypes in the absence of neurodegeneration. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 5614-5619.	7.1	205
56	Podocyte-Specific Deletion of Dicer Alters Cytoskeletal Dynamics and Causes Glomerular Disease. Journal of the American Society of Nephrology: JASN, 2008, 19, 2150-2158.	6.1	300
57	Conditional Loss of Dicer Disrupts Cellular and Tissue Morphogenesis in the Cortex and Hippocampus. Journal of Neuroscience, 2008, 28, 4322-4330.	3.6	411
58	Dicer1 Is Required for Differentiation of the Mouse Male Germline1. Biology of Reproduction, 2008, 79, 696-703.	2.7	203
59	MicroRNA Expression Is Required for Pancreatic Islet Cell Genesis in the Mouse. Diabetes, 2007, 56, 2938-2945.	0.6	344
60	Characterization of a novel ectodermal signaling center regulating Tbx2 and Shh in the vertebrate limb. Developmental Biology, 2007, 304, 9-21.	2.0	50
61	Essential role for Dicer during skeletal muscle development. Developmental Biology, 2007, 311, 359-368.	2.0	298
62	Abnormal Hair Development and Apparent Follicular Transformation to Mammary Gland in the Absence of Hedgehog Signaling. Developmental Cell, 2007, 12, 99-112.	7.0	92
63	Epidermal stem cells arise from the hair follicle after wounding. FASEB Journal, 2007, 21, 1358-1366.	0.5	350
64	Identification of genes expressed in the mouse limb using a novel ZPA microarray approach. Gene Expression Patterns, 2007, 8, 19-26.	0.8	21
65	MicroRNAs in Development. Scientific World Journal, The, 2006, 6, 1828-1840.	2.1	20
66	BMP2 activity, although dispensable for bone formation, is required for the initiation of fracture healing. Nature Genetics, 2006, 38, 1424-1429.	21.4	708
67	MicroRNAs in mammalian development and tumorigenesis. Birth Defects Research Part C: Embryo Today Reviews, 2006, 78, 172-179.	3.6	42
68	Genetic Analysis of the Roles of BMP2, BMP4, and BMP7 in Limb Patterning and Skeletogenesis. PLoS Genetics, 2006, 2, e216.	3.5	532
69	Dicerfunction is essential for lung epithelium morphogenesis. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 2208-2213.	7.1	382
70	The microRNA miR-196 acts upstream of Hoxb8 and Shh in limb development. Nature, 2005, 438, 671-674.	27.8	365
71	The RNaseIII enzyme <i>Dicer</i> is required for morphogenesis but not patterning of the vertebrate limb. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 10898-10903.	7.1	619
72	MicroRNAs in vertebrate development. Current Opinion in Genetics and Development, 2005, 15, 410-415.	3.3	337

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73	Distinct Stem Cell Populations Regenerate the Follicle and Interfollicular Epidermis. Developmental Cell, 2005, 9, 855-861.	7.0	381
74	Fate-mapping of the epithelial seam during palatal fusion rules out epithelialâ€"mesenchymal transformation. Developmental Biology, 2005, 285, 490-495.	2.0	88
75	The Limb Bud Shh-Fgf Feedback Loop Is Terminated by Expansion of Former ZPA Cells. Science, 2004, 305, 396-399.	12.6	143
76	Functional genomic analysis of the ADPâ€ribosylation factor family of GTPases: phylogeny among diverse eukaryotes and function in<i>C. elegans</i>. FASEB Journal, 2004, 18, 1834-1850.	0.5	214
77	MicroRNA-responsive 'sensor' transgenes uncover Hox-like and other developmentally regulated patterns of vertebrate microRNA expression. Nature Genetics, 2004, 36, 1079-1083.	21.4	411
78	Evidence for an Expansion-Based Temporal Shh Gradient in Specifying Vertebrate Digit Identities. Cell, 2004, 118, 517-528.	28.9	893
79	A Tcf4-Positive Mesodermal Population Provides a Prepattern for Vertebrate Limb Muscle Patterning. Developmental Cell, 2003, 5, 937-944.	7.0	188
80	Base Composition of Mononucleotide Runs Affects DNA Polymerase Slippage and Removal of Frameshift Intermediates by Mismatch Repair in Saccharomyces cerevisiae. Molecular and Cellular Biology, 2002, 22, 8756-8762.	2.3	82
81	Discrete in vivo roles for the MutL homologs Mlh2p and Mlh3p in the removal of frameshift intermediates in budding yeast. Current Biology, 2000, 10, 145-148.	3.9	118
82	DNA Polymerase Î¶ Introduces Multiple Mutations when Bypassing Spontaneous DNA Damage in Saccharomyces cerevisiae. Molecular Cell, 2000, 6, 1491-1499.	9.7	114
83	DNA MISMATCH REPAIR AND GENETIC INSTABILITY. Annual Review of Genetics, 2000, 34, 359-399.	7.6	561
84	dpy-18 Encodes an Î±-Subunit of Prolyl-4-Hydroxylase in Caenorhabditis elegans. Genetics, 2000, 155, 1139-1148.	2.9	43
85	Sequence Composition and Context Effects on the Generation and Repair of Frameshift Intermediates in Mononucleotide Runs in Saccharomyces cerevisiae. Genetics, 2000, 156, 571-578.	2.9	53
86	Removal of Frameshift Intermediates by Mismatch Repair Proteins in <i>Saccharomyces cerevisiae</i>. Molecular and Cellular Biology, 1999, 19, 4766-4773.	2.3	56