Nathan D Lawson

List of Publications by Year
in descending order

93 papers	15,940 citations	26567 56 h-index	42291 92 g-index
104 all docs	104 docs citations	104 times ranked	18441 citing authors

#	Article	IF	Citations
1	In Vivo Imaging of Embryonic Vascular Development Using Transgenic Zebrafish. Developmental Biology, 2002, 248, 307-318.	0.9	1,917
2	ChIPpeakAnno: a Bioconductor package to annotate ChIP-seq and ChIP-chip data. BMC Bioinformatics, 2010, 11, 237.	1.2	963
3	Notch signaling is required for arterial-venous differentiation during embryonic vascular development. Development (Cambridge), 2001, 128, 3675-3683.	1.2	768
4	sonic hedgehog and vascular endothelial growth factor Act Upstream of the Notch Pathway during Arterial Endothelial Differentiation. Developmental Cell, 2002, 3, 127-136.	3.1	744
5	Targeted gene inactivation in zebrafish using engineered zinc-finger nucleases. Nature Biotechnology, 2008, 26, 695-701.	9.4	720
6	A Novel miRNA Processing Pathway Independent of Dicer Requires Argonaute2 Catalytic Activity. Science, 2010, 328, 1694-1698.	6.0	718
7	Reverse Genetic Screening Reveals Poor Correlation between Morpholino-Induced and Mutant Phenotypes in Zebrafish. Developmental Cell, 2015, 32, 97-108.	3.1	666
8	Notch signalling limits angiogenic cell behaviour in developing zebrafish arteries. Nature, 2007, 445, 781-784.	13.7	625
9	Recombinant vesicular stomatitis viruses from DNA.. Proceedings of the National Academy of Sciences of the United States of America, 1995, 92, 4477-4481.	3.3	598
10	Angiogenic network formation in the developing vertebrate trunk. Development (Cambridge), 2003, 130, 5281-5290.	1.2	462
11	MicroRNA-mediated integration of haemodynamics and Vegf signalling during angiogenesis. Nature, 2010, 464, 1196-1200.	13.7	412
12	Disruption of<i>acvrl1</i>increases endothelial cell number in zebrafish cranial vessels. Development (Cambridge), 2002, 129, 3009-3019.	1.2	325
13	Gateway compatible vectors for analysis of gene function in the zebrafish. Developmental Dynamics, 2007, 236, 3077-3087.	0.8	317
14	Notch-responsive cells initiate the secondary transition in larval zebrafish pancreas. Mechanisms of Development, 2009, 126, 898-912.	1.7	311
15	Guidelines for morpholino use in zebrafish. PLoS Genetics, 2017, 13, e1007000.	1.5	255
16	Distinct genetic interactions between multiple Vegf receptors are required for development of different blood vessel types in zebrafish. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 6554-6559.	3.3	249
17	Arteries and veins: making a difference with zebrafish. Nature Reviews Genetics, 2002, 3, 674-682.	7.7	248
18	Notch Activity Levels Control the Balance between Quiescence and Recruitment of Adult Neural Stem Cells. Journal of Neuroscience, 2010, 30, 7961-7974.	1.7	247

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19	phospholipase C gamma-1 is required downstream of vascular endothelial growth factor during arterial development. Genes and Development, 2003, 17, 1346-1351.	2.7	212
20	Combinatorial function of ETS transcription factors in the developing vasculature. Developmental Biology, 2007, 303, 772-783.	0.9	202
21	Lymphatic vessels arise from specialized angioblasts within a venous niche. Nature, 2015, 522, 56-61.	13.7	197
22	A somitic Wnt16/Notch pathway specifies haematopoietic stem cells. Nature, 2011, 474, 220-224.	13.7	192
23	An essential role for Fgfs in endodermal pouch formation influences later craniofacial skeletal patterning. Development (Cambridge), 2004, 131, 5703-5716.	1.2	185
24	miR-221 Is Required for Endothelial Tip Cell Behaviors during Vascular Development. Developmental Cell, 2012, 22, 418-429.	3.1	156
25	Forward and Reverse Genetic Approaches for the Analysis of Vertebrate Development in the Zebrafish. Developmental Cell, 2011, 21, 48-64.	3.1	155
26	ATACseqQC: a Bioconductor package for post-alignment quality assessment of ATAC-seq data. BMC Genomics, 2018, 19, 169.	1.2	153
27	Disruption of acvrl1 increases endothelial cell number in zebrafish cranial vessels. Development (Cambridge), 2002, 129, 3009-19.	1.2	152
28	A nonsense mutation in zebrafish gata1 causes the bloodless phenotype in vlad tepes. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 5454-5459.	3.3	148
29	The cilia protein IFT88 is required for spindle orientation in mitosis. Nature Cell Biology, 2011, 13, 461-468.	4.6	148
30	Modulation of VEGF signalling output by the Notch pathway. BioEssays, 2008, 30, 303-313.	1.2	141
31	Role of Delta-like-4/Notch in the Formation and Wiring of the Lymphatic Network in Zebrafish. Arteriosclerosis, Thrombosis, and Vascular Biology, 2010, 30, 1695-1702.	1.1	118
32	Gata2b is a restricted early regulator of hemogenic endothelium in the zebrafish embryo. Development (Cambridge), 2015, 142, 1050-1061.	1.2	117
33	Chemokine signaling guides regional patterning of the first embryonic artery. Genes and Development, 2009, 23, 2272-2277.	2.7	116
34	A genetic screen for vascular mutants in zebrafish reveals dynamic roles for Vegf/Plcg1 signaling during artery development. Developmental Biology, 2009, 329, 212-226.	0.9	116
35	Global analysis of hematopoietic and vascular endothelial gene expression by tissue specific microarray profiling in zebrafish. Developmental Biology, 2006, 299, 551-562.	0.9	114
36	Endothelial Notch signalling limits angiogenesis via control of artery formation. Nature Cell Biology, 2017, 19, 928-940.	4.6	111

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37	Zinc finger protein-dependent and -independent contributions to the in vivo off-target activity of zinc finger nucleases. Nucleic Acids Research, 2011, 39, 381-392.	6.5	104
38	Vegfa signals through ERK to promote angiogenesis, but not artery differentiation. Development (Cambridge), 2016, 143, 3796-3805.	1.2	101
39	Reiterative use of the notch signal during zebrafish intrahepatic biliary development. Developmental Dynamics, 2010, 239, 855-864.	0.8	100
40	Arteries define the position of the thyroid gland during its developmental relocalisation. Development (Cambridge), 2006, 133, 3797-3804.	1.2	98
41	A truncation allele in <i>vascular endothelial growth factor c</i> reveals distinct modes of signaling during lymphatic and vascular development. Development (Cambridge), 2013, 140, 1497-1506.	1.2	98
42	Distinct Notch signaling outputs pattern the developing arterial system. Development (Cambridge), 2014, 141, 1544-1552.	1.2	97
43	Targeted chromosomal deletions and inversions in zebrafish. Genome Research, 2013, 23, 1008-1017.	2.4	96
44	<i>pak2a</i> mutations cause cerebral hemorrhage in <i>redhead</i> zebrafish. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 13996-14001.	3.3	89
45	reg6 is required for branching morphogenesis during blood vessel regeneration in zebrafish caudal fins. Developmental Biology, 2003, 264, 263-274.	0.9	87
46	Enhanced Cas12a editing in mammalian cells and zebrafish. Nucleic Acids Research, 2019, 47, 4169-4180.	6.5	85
47	Evaluation and application of modularly assembled zinc-finger nucleases in zebrafish. Development (Cambridge), 2011, 138, 4555-4564.	1.2	78
48	Identification of cis regulatory features in the embryonic zebrafish genome through large-scale profiling of H3K4me1 and H3K4me3 binding sites. Developmental Biology, 2011, 357, 450-462.	0.9	76
49	The zebrafish kohtalo/trap230 gene is required for the development of the brain, neural crest, and pronephric kidney. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 18473-18478.	3.3	72
50	Initiation of zebrafish haematopoiesis by the TATA-box-binding protein-related factor Trf3. Nature, 2007, 450, 1082-1085.	13.7	72
51	Zebrafish neurofibromatosis type 1 genes have redundant functions in tumorigenesis and embryonic development. DMM Disease Models and Mechanisms, 2012, 5, 881-94.	1.2	72
52	Venous-derived angioblasts generate organ-specific vessels during embryonic development. Development (Cambridge), 2015, 142, 4266-78.	1.2	72
53	An improved zebrafish transcriptome annotation for sensitive and comprehensive detection of cell type-specific genes. ELife, 2020, 9, .	2.8	72
54	Notch Signalling and the Regulation of Angiogenesis. Cell Adhesion and Migration, 2007, 1, 104-105.	1.1	68

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55	Vegfc acts through ERK to induce sprouting and differentiation of trunk lymphatic progenitors. Development (Cambridge), 2016, 143, 3785-3795.	1.2	67
56	Zebrafish VEGF Receptors: A Guideline to Nomenclature. PLoS Genetics, 2008, 4, e1000064.	1.5	66
57	MicroRNA Control of Vascular Endothelial Growth Factor Signaling Output During Vascular Development. Arteriosclerosis, Thrombosis, and Vascular Biology, 2013, 33, 193-200.	1.1	63
58	Robust Identification of Developmentally Active Endothelial Enhancers in Zebrafish Using FANS-Assisted ATAC-Seq. Cell Reports, 2017, 20, 709-720.	2.9	62
59	Radial glia regulate vascular patterning around the developing spinal cord. ELife, 2016, 5, .	2.8	62
60	Arteries, Veins, Notch, and VEGF. Cold Spring Harbor Symposia on Quantitative Biology, 2002, 67, 155-162.	2.0	61
61	Neutrophil maturation and the role of retinoic acid. Experimental Hematology, 1999, 27, 1355-1367.	0.2	55
62	Regulation of intrahepatic biliary duct morphogenesis by Claudin 15-like b. Developmental Biology, 2012, 361, 68-78.	0.9	43
63	Hdac3 regulates lymphovenous and lymphatic valve formation. Journal of Clinical Investigation, 2017, 127, 4193-4206.	3.9	43
64	foxc1 is required for embryonic head vascular smooth muscle differentiation in zebrafish. Developmental Biology, 2019, 453, 34-47.	0.9	41
65	Reverse Genetics in Zebrafish: Mutants, Morphants, and Moving Forward. Trends in Cell Biology, 2016, 26, 77-79.	3.6	38
66	Estrogen Defines the Dorsal-Ventral Limit of VEGF Regulation to Specify the Location of the Hemogenic Endothelial Niche. Developmental Cell, 2014, 29, 437-453.	3.1	36
67	Valves Are a Conserved Feature of the Zebrafish Lymphatic System. Developmental Cell, 2019, 51, 374-386.e5.	3.1	36
68	Centrin depletion causes cyst formation and other ciliopathy-related phenotypes in zebrafish. Cell Cycle, 2011, 10, 3964-3972.	1.3	34
69	CRISPR/Cas9 editing reveals novel mechanisms of clustered microRNA regulation and function. Scientific Reports, 2017, 7, 8585.	1.6	32
70	Genomic Characterization of Endothelial Enhancers Reveals a Multifunctional Role for NR2F2 in Regulation of Arteriovenous Gene Expression. Circulation Research, 2020, 126, 875-888.	2.0	32
71	Post-transcriptional mechanisms contribute to Etv2 repression during vascular development. Developmental Biology, 2013, 384, 128-140.	0.9	31
72	5â€²-Modifications improve potency and efficacy of DNA donors for precision genome editing. ELife, 2021, 10, .	2.8	30

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73	Cardiac and vascular functions of the zebrafish orthologues of the type I neurofibromatosis gene <i>NFI</i>. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 22305-22310.	3.3	28
74	Accurate identification of polyadenylation sites from 3â€² end deep sequencing using a naÃ¯ve Bayes classifier. Bioinformatics, 2013, 29, 2564-2571.	1.8	28
75	VEGFC/FLT4-induced cell-cycle arrest mediates sprouting and differentiation of venous and lymphatic endothelial cells. Cell Reports, 2021, 35, 109255.	2.9	28
76	BMP signaling orchestrates photoreceptor specification in the zebrafish pineal gland in collaboration with Notch. Development (Cambridge), 2011, 138, 2293-2302.	1.2	24
77	Homozygous knockout of the piezo1 gene in the zebrafish is not associated with anemia. Haematologica, 2015, 100, e483-e485.	1.7	23
78	Integrated molecular analysis identifies a conserved pericyte gene signature in zebrafish. Development (Cambridge), 2021, 148, .	1.2	20
79	Conserved and context-dependent roles for pdgfrb signaling during zebrafish vascular mural cell development. Developmental Biology, 2021, 479, 11-22.	0.9	19
80	Representational difference analysis of a committed myeloid progenitor cell line reveals evidence for bilineage potential. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 10129-10133.	3.3	17
81	Adaptive cell invasion maintains lateral line organ homeostasis in response to environmental changes. Developmental Cell, 2021, 56, 1296-1312.e7.	3.1	17
82	Modulation of a calcium/calmodulin-dependent protein kinase cascade by retinoic acid during neutrophil maturation. Experimental Hematology, 1999, 27, 1682-1690.	0.2	15
83	Regenerating vascular mural cells in zebrafish fin blood vessels are not derived from pre-existing mural cells and differentially require Pdgfrb signalling for their development. Development (Cambridge), 2022, 149, .	1.2	10
84	Construction and Application of Site-Specific Artificial Nucleases for Targeted Gene Editing. Methods in Molecular Biology, 2014, 1101, 267-303.	0.4	9
85	Authors response to "Comment on: 'Homozygous knockout of the piezo1 gene in the zebrafish is not associated with anemia". Haematologica, 2016, 101, e39-e39.	1.7	8
86	Heterogeneous <i>pdgfrb+</i> cells regulate coronary vessel development and revascularization during heart regeneration. Development (Cambridge), 2022, 149, .	1.2	6
87	Proper migration of lymphatic endothelial cells requires survival and guidance cues from arterial mural cells. ELife, 2022, 11, .	2.8	6
88	A Platform for Reverse Genetics in Endothelial Cells. Circulation Research, 2015, 117, 107-108.	2.0	5
89	Back and forth: History of and new insights on the vertebrate lymphatic valve. Development Growth and Differentiation, 2021, , .	0.6	3
90	On the Right Track: Meningeal Lymphatics Guide Angiogenesis during Tissue Repair in the Brain. Developmental Cell, 2019, 49, 655-656.	3.1	2

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91	Decoding the zebrafish genome. Nature Genetics, 2022, 54, 917-919.	9.4	2
92	A New Conserved Player in Lymphatic Morphogenesis. Circulation Research, 2017, 120, 1216-1218.	2.0	0
93	195â€…Crispr/cas9 gene editing reveals novel tertiary constraints in clustered mirna processing. Heart, 2017, 103, A133.1-A133.	1.2	0