Nathan D Lawson

List of Publications by Year
in descending order

93 papers	15,940 citations	30551 56 h-index	48101 92 g-index
104 all docs	104 docs citations	104 times ranked	20284 citing authors

#	Article	IF	Citations
1	Heterogeneous <i>pdgfrb+</i> cells regulate coronary vessel development and revascularization during heart regeneration. Development (Cambridge), 2022, 149, .	1.2	6
2	Proper migration of lymphatic endothelial cells requires survival and guidance cues from arterial mural cells. ELife, 2022, 11, .	2.8	6
3	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
4	Decoding the zebrafish genome. Nature Genetics, 2022, 54, 917-919.	9.4	2
5	Adaptive cell invasion maintains lateral line organ homeostasis in response to environmental changes. Developmental Cell, 2021, 56, 1296-1312.e7.	3.1	17
6	VEGFC/FLT4-induced cell-cycle arrest mediates sprouting and differentiation of venous and lymphatic endothelial cells. Cell Reports, 2021, 35, 109255.	2.9	28
7	Conserved and context-dependent roles for pdgfrb signaling during zebrafish vascular mural cell development. Developmental Biology, 2021, 479, 11-22.	0.9	19
8	5â€²-Modifications improve potency and efficacy of DNA donors for precision genome editing. ELife, 2021, 10, .	2.8	30
9	Back and forth: History of and new insights on the vertebrate lymphatic valve. Development Growth and Differentiation, 2021, , .	0.6	3
10	Integrated molecular analysis identifies a conserved pericyte gene signature in zebrafish. Development (Cambridge), 2021, 148, .	1.2	20
11	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
12	An improved zebrafish transcriptome annotation for sensitive and comprehensive detection of cell type-specific genes. ELife, 2020, 9, .	2.8	72
13	Valves Are a Conserved Feature of the Zebrafish Lymphatic System. Developmental Cell, 2019, 51, 374-386.e5.	3.1	36
14	On the Right Track: Meningeal Lymphatics Guide Angiogenesis during Tissue Repair in the Brain. Developmental Cell, 2019, 49, 655-656.	3.1	2
15	foxc1 is required for embryonic head vascular smooth muscle differentiation in zebrafish. Developmental Biology, 2019, 453, 34-47.	0.9	41
16	Enhanced Cas12a editing in mammalian cells and zebrafish. Nucleic Acids Research, 2019, 47, 4169-4180.	6.5	85
17	ATACseqQC: a Bioconductor package for post-alignment quality assessment of ATAC-seq data. BMC Genomics, 2018, 19, 169.	1.2	153
18	A New Conserved Player in Lymphatic Morphogenesis. Circulation Research, 2017, 120, 1216-1218.	2.0	0

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19	CRISPR/Cas9 editing reveals novel mechanisms of clustered microRNA regulation and function. Scientific Reports, 2017, 7, 8585.	1.6	32
20	Endothelial Notch signalling limits angiogenesis via control of artery formation. Nature Cell Biology, 2017, 19, 928-940.	4.6	111
21	Robust Identification of Developmentally Active Endothelial Enhancers in Zebrafish Using FANS-Assisted ATAC-Seq. Cell Reports, 2017, 20, 709-720.	2.9	62
22	195â€...Crispr/cas9 gene editing reveals novel tertiary constraints in clustered mirna processing. Heart, 2017, 103, A133.1-A133.	1.2	0
23	Hdac3 regulates lymphovenous and lymphatic valve formation. Journal of Clinical Investigation, 2017, 127, 4193-4206.	3.9	43
24	Guidelines for morpholino use in zebrafish. PLoS Genetics, 2017, 13, e1007000.	1.5	255
25	Vegfa signals through ERK to promote angiogenesis, but not artery differentiation. Development (Cambridge), 2016, 143, 3796-3805.	1.2	101
26	Vegfc acts through ERK to induce sprouting and differentiation of trunk lymphatic progenitors. Development (Cambridge), 2016, 143, 3785-3795.	1.2	67
27	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
28	Reverse Genetics in Zebrafish: Mutants, Morphants, and Moving Forward. Trends in Cell Biology, 2016, 26, 77-79.	3.6	38
29	Radial glia regulate vascular patterning around the developing spinal cord. ELife, 2016, 5, .	2.8	62
30	Venous-derived angioblasts generate organ-specific vessels during embryonic development. Development (Cambridge), 2015, 142, 4266-78.	1.2	72
31	Lymphatic vessels arise from specialized angioblasts within a venous niche. Nature, 2015, 522, 56-61.	13.7	197
32	A Platform for Reverse Genetics in Endothelial Cells. Circulation Research, 2015, 117, 107-108.	2.0	5
33	Homozygous knockout of the piezo1 gene in the zebrafish is not associated with anemia. Haematologica, 2015, 100, e483-e485.	1.7	23
34	Gata2b is a restricted early regulator of hemogenic endothelium in the zebrafish embryo. Development (Cambridge), 2015, 142, 1050-1061.	1.2	117
35	Reverse Genetic Screening Reveals Poor Correlation between Morpholino-Induced and Mutant Phenotypes in Zebrafish. Developmental Cell, 2015, 32, 97-108.	3.1	666
36	Construction and Application of Site-Specific Artificial Nucleases for Targeted Gene Editing. Methods in Molecular Biology, 2014, 1101, 267-303.	0.4	9

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37	Distinct Notch signaling outputs pattern the developing arterial system. Development (Cambridge), 2014, 141, 1544-1552.	1.2	97
38	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
39	MicroRNA Control of Vascular Endothelial Growth Factor Signaling Output During Vascular Development. Arteriosclerosis, Thrombosis, and Vascular Biology, 2013, 33, 193-200.	1.1	63
40	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
41	Post-transcriptional mechanisms contribute to Etv2 repression during vascular development. Developmental Biology, 2013, 384, 128-140.	0.9	31
42	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
43	Targeted chromosomal deletions and inversions in zebrafish. Genome Research, 2013, 23, 1008-1017.	2.4	96
44	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
45	miR-221 Is Required for Endothelial Tip Cell Behaviors during Vascular Development. Developmental Cell, 2012, 22, 418-429.	3.1	156
46	Regulation of intrahepatic biliary duct morphogenesis by Claudin 15-like b. Developmental Biology, 2012, 361, 68-78.	0.9	43
47	A somitic Wnt16/Notch pathway specifies haematopoietic stem cells. Nature, 2011, 474, 220-224.	13.7	192
48	Forward and Reverse Genetic Approaches for the Analysis of Vertebrate Development in the Zebrafish. Developmental Cell, 2011, 21, 48-64.	3.1	155
49	The cilia protein IFT88 is required for spindle orientation in mitosis. Nature Cell Biology, 2011, 13, 461-468.	4.6	148
50	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
51	Centrin depletion causes cyst formation and other ciliopathy-related phenotypes in zebrafish. Cell Cycle, 2011, 10, 3964-3972.	1.3	34
52	Evaluation and application of modularly assembled zinc-finger nucleases in zebrafish. Development (Cambridge), 2011, 138, 4555-4564.	1.2	78
53	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
54	BMP signaling orchestrates photoreceptor specification in the zebrafish pineal gland in collaboration with Notch. Development (Cambridge), 2011, 138, 2293-2302.	1.2	24

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55	ChIPpeakAnno: a Bioconductor package to annotate ChIP-seq and ChIP-chip data. BMC Bioinformatics, 2010, 11, 237.	1.2	963
56	Reiterative use of the notch signal during zebrafish intrahepatic biliary development. Developmental Dynamics, 2010, 239, 855-864.	0.8	100
57	MicroRNA-mediated integration of haemodynamics and Vegf signalling during angiogenesis. Nature, 2010, 464, 1196-1200.	13.7	412
58	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
59	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
60	A Novel miRNA Processing Pathway Independent of Dicer Requires Argonaute2 Catalytic Activity. Science, 2010, 328, 1694-1698.	6.0	718
61	Chemokine signaling guides regional patterning of the first embryonic artery. Genes and Development, 2009, 23, 2272-2277.	2.7	116
62	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
63	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
64	Notch-responsive cells initiate the secondary transition in larval zebrafish pancreas. Mechanisms of Development, 2009, 126, 898-912.	1.7	311
65	Modulation of VEGF signalling output by the Notch pathway. BioEssays, 2008, 30, 303-313.	1.2	141
66	Targeted gene inactivation in zebrafish using engineered zinc-finger nucleases. Nature Biotechnology, 2008, 26, 695-701.	9.4	720
67	Zebrafish VEGF Receptors: A Guideline to Nomenclature. PLoS Genetics, 2008, 4, e1000064.	1.5	66
68	<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
69	Notch Signalling and the Regulation of Angiogenesis. Cell Adhesion and Migration, 2007, 1, 104-105.	1.1	68
70	Combinatorial function of ETS transcription factors in the developing vasculature. Developmental Biology, 2007, 303, 772-783.	0.9	202
71	Gateway compatible vectors for analysis of gene function in the zebrafish. Developmental Dynamics, 2007, 236, 3077-3087.	0.8	317
72	Notch signalling limits angiogenic cell behaviour in developing zebrafish arteries. Nature, 2007, 445, 781-784.	13.7	625

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73	Initiation of zebrafish haematopoiesis by the TATA-box-binding protein-related factor Trf3. Nature, 2007, 450, 1082-1085.	13.7	72
74	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
75	Arteries define the position of the thyroid gland during its developmental relocalisation. Development (Cambridge), 2006, 133, 3797-3804.	1.2	98
76	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
77	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
78	An essential role for Fgfs in endodermal pouch formation influences later craniofacial skeletal patterning. Development (Cambridge), 2004, 131, 5703-5716.	1.2	185
79	reg6 is required for branching morphogenesis during blood vessel regeneration in zebrafish caudal fins. Developmental Biology, 2003, 264, 263-274.	0.9	87
80	Angiogenic network formation in the developing vertebrate trunk. Development (Cambridge), 2003, 130, 5281-5290.	1.2	462
81	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
82	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
83	Arteries, Veins, Notch, and VEGF. Cold Spring Harbor Symposia on Quantitative Biology, 2002, 67, 155-162.	2.0	61
84	In Vivo Imaging of Embryonic Vascular Development Using Transgenic Zebrafish. Developmental Biology, 2002, 248, 307-318.	0.9	1,917
85	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
86	Arteries and veins: making a difference with zebrafish. Nature Reviews Genetics, 2002, 3, 674-682.	7.7	248
87	Disruption of<i>acvrl1</i>increases endothelial cell number in zebrafish cranial vessels. Development (Cambridge), 2002, 129, 3009-3019.	1.2	325
88	Disruption of acvrl1 increases endothelial cell number in zebrafish cranial vessels. Development (Cambridge), 2002, 129, 3009-19.	1.2	152
89	Notch signaling is required for arterial-venous differentiation during embryonic vascular development. Development (Cambridge), 2001, 128, 3675-3683.	1.2	768
90	Neutrophil maturation and the role of retinoic acid. Experimental Hematology, 1999, 27, 1355-1367.	0.2	55

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91	Modulation of a calcium/calmodulin-dependent protein kinase cascade by retinoic acid during neutrophil maturation. Experimental Hematology, 1999, 27, 1682-1690.	0.2	15
92	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
93	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