John B Wallingford

List of Publications by Year
in descending order

108 papers	11,672 citations	50276 46 h-index	31849 101 g-index
187 all docs	187 docs citations	187 times ranked	11172 citing authors

#	Article	IF	Citations
1	Genome evolution in the allotetraploid frog Xenopus laevis. Nature, 2016, 538, 336-343.	27.8	849
2	Dishevelled controls cell polarity during Xenopus gastrulation. Nature, 2000, 405, 81-85.	27.8	705
3	Convergent Extension. Developmental Cell, 2002, 2, 695-706.	7.0	550
4	Panorama of ancient metazoan macromolecular complexes. Nature, 2015, 525, 339-344.	27.8	478
5	Planar cell polarity in development and disease. Nature Reviews Molecular Cell Biology, 2017, 18, 375-388.	37.0	423
6	Dishevelled controls apical docking and planar polarization of basal bodies in ciliated epithelial cells. Nature Genetics, 2008, 40, 871-879.	21.4	419
7	The developmental biology of Dishevelled: an enigmatic protein governing cell fate and cell polarity. Development (Cambridge), 2005, 132, 4421-4436.	2.5	398
8	The Continuing Challenge of Understanding, Preventing, and Treating Neural Tube Defects. Science, 2013, 339, 1222002.	12.6	375
9	Ciliogenesis defects in embryos lacking inturned or fuzzy function are associated with failure of planar cell polarity and Hedgehog signaling. Nature Genetics, 2006, 38, 303-311.	21.4	356
10	Wnt9b signaling regulates planar cell polarity and kidney tubule morphogenesis. Nature Genetics, 2009, 41, 793-799.	21.4	313
11	Shroom Induces Apical Constriction and Is Required for Hingepoint Formation during Neural Tube Closure. Current Biology, 2003, 13, 2125-2137.	3.9	312
12	Dishevelled genes mediate a conserved mammalian PCP pathway to regulate convergent extension during neurulation. Development (Cambridge), 2006, 133, 1767-1778.	2.5	309
13	Planar Cell Polarity Acts Through Septins to Control Collective Cell Movement and Ciliogenesis. Science, 2010, 329, 1337-1340.	12.6	309
14	Neural tube closure requires Dishevelled-dependent convergent extension of the midline. Development (Cambridge), 2002, 129, 5815-5825.	2.5	307
15	Strange as it may seem: the many links between Wnt signaling, planar cell polarity, and cilia: Figure 1.. Genes and Development, 2011, 25, 201-213.	5.9	280
16	Multiciliated Cells. Current Biology, 2014, 24, R973-R982.	3.9	263
17	Mutations inVANGL1Associated with Neural-Tube Defects. New England Journal of Medicine, 2007, 356, 1432-1437.	27.0	261
18	Planar Cell Polarity and the Developmental Control of Cell Behavior in Vertebrate Embryos. Annual Review of Cell and Developmental Biology, 2012, 28, 627-653.	9.4	217

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19	Vertebrate kidney tubules elongate using a planar cell polarityâ€“dependent, rosette-based mechanism of convergent extension. Nature Genetics, 2012, 44, 1382-1387.	21.4	197
20	PCP and Septins Compartmentalize Cortical Actomyosin to Direct Collective Cell Movement. Science, 2014, 343, 649-652.	12.6	197
21	The planar cell polarity effector Fuz is essential for targeted membrane trafficking, ciliogenesis and mouse embryonic development. Nature Cell Biology, 2009, 11, 1225-1232.	10.3	196
22	Integration of over 9,000 mass spectrometry experiments builds a global map of human proteinÂcomplexes. Molecular Systems Biology, 2017, 13, 932.	7.2	177
23	XenopusDishevelled signaling regulates both neural and mesodermal convergent extension: parallel forces elongating the body axis. Development (Cambridge), 2001, 128, 2581-2592.	2.5	174
24	Planar cell polarity signaling, cilia and polarized ciliary beating. Current Opinion in Cell Biology, 2010, 22, 597-604.	5.4	170
25	Morpholinos: Antisense and Sensibility. Developmental Cell, 2015, 35, 145-149.	7.0	155
26	Shroom family proteins regulate Î³-tubulin distribution and microtubule architecture during epithelial cell shape change. Development (Cambridge), 2007, 134, 1431-1441.	2.5	136
27	Coordinated genomic control of ciliogenesis and cell movement by RFX2. ELife, 2014, 3, e01439.	6.0	121
28	The ciliopathy-associated CPLANE proteins direct basal body recruitment of intraflagellar transport machinery. Nature Genetics, 2016, 48, 648-656.	21.4	119
29	Planar cell polarity, ciliogenesis and neural tube defects. Human Molecular Genetics, 2006, 15, R227-R234.	2.9	112
30	Identification of novel ciliogenesis factors using a new in vivo model for mucociliary epithelial development. Developmental Biology, 2007, 312, 115-130.	2.0	109
31	Pax6-dependent Shroom3 expression regulates apical constriction during lens placode invagination. Development (Cambridge), 2010, 137, 405-415.	2.5	109
32	Neural tube closure and neural tube defects: Studies in animal models reveal known knowns and known unknowns. American Journal of Medical Genetics, Part C: Seminars in Medical Genetics, 2005, 135C, 59-68.	1.6	99
33	RFX2 is broadly required for ciliogenesis during vertebrate development. Developmental Biology, 2012, 363, 155-165.	2.0	98
34	Coming to Consensus: A Unifying Model Emerges for Convergent Extension. Developmental Cell, 2018, 46, 389-396.	7.0	94
35	Evolutionary Proteomics Uncovers Ancient Associations of Cilia with Signaling Pathways. Developmental Cell, 2017, 43, 744-762.e11.	7.0	92
36	TTC25 Deficiency Results in Defects of the Outer Dynein Arm Docking Machinery and Primary Ciliary Dyskinesia with Left-Right Body Asymmetry Randomization. American Journal of Human Genetics, 2016, 99, 460-469.	6.2	88

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37	Emergence of an Apical Epithelial Cell Surface InÂVivo. Developmental Cell, 2016, 36, 24-35.	7.0	86
38	Fifteen years of research on oralâ€“facialâ€“digital syndromes: from 1 to 16 causal genes. Journal of Medical Genetics, 2017, 54, 371-380.	3.2	85
39	hu.MAP 2.0: integration of over 15,000 proteomic experiments builds a global compendium of human multiprotein assemblies. Molecular Systems Biology, 2021, 17, e10016.	7.2	82
40	Directed evolution of the surface chemistry of the reporter enzyme Î²-glucuronidase. Nature Biotechnology, 1999, 17, 696-701.	17.5	76
41	Dynamic patterns of gene expression in the developing pronephros ofXenopus laevis. , 1999, 24, 199-207.		74
42	Regional requirements for Dishevelled signaling during Xenopusgastrulation: separable effects on blastopore closure, mesendoderm internalization and archenteron formation. Development (Cambridge), 2004, 131, 6195-6209.	2.5	73
43	Fuz Mutant Mice Reveal Shared Mechanisms between Ciliopathies and FGF-Related Syndromes. Developmental Cell, 2013, 25, 623-635.	7.0	65
44	Cilia-mediated Hedgehog signaling controls form and function in the mammalian larynx. ELife, 2017, 6, .	6.0	63
45	Spatial and temporal analysis of PCP protein dynamics during neural tube closure. ELife, 2018, 7, .	6.0	62
46	Control of vertebrate intraflagellar transport by the planar cell polarity effector Fuz. Journal of Cell Biology, 2012, 198, 37-45.	5.2	56
47	A liquid-like organelle at the root of motile ciliopathy. ELife, 2018, 7, .	6.0	55
48	Systematic Discovery of Endogenous Human Ribonucleoprotein Complexes. Cell Reports, 2019, 29, 1351-1368.e5.	6.4	53
49	Whole-Mount Fluorescence Immunocytochemistry on Xenopus Embryos. Cold Spring Harbor Protocols, 2008, 2008, pdb.prot4957.	0.3	51
50	Zeta-Tubulin Is a Member of a Conserved Tubulin Module and Is a Component of the Centriolar Basal Foot in Multiciliated Cells. Current Biology, 2015, 25, 2177-2183.	3.9	49
51	The shroom family proteins play broad roles in the morphogenesis of thickened epithelial sheets. Developmental Dynamics, 2009, 238, 1480-1491.	1.8	48
52	From Planar Cell Polarity to Ciliogenesis and Back: The Curious Tale of the PPE and CPLANE proteins. Trends in Cell Biology, 2017, 27, 379-390.	7.9	46
53	RhoA regulates actin network dynamics during apical surface emergence in multiciliated epithelial cells. Journal of Cell Science, 2017, 130, 420-428.	2.0	45
54	Mutations in Kinesin family member 6 reveal specific role in ependymal cell ciliogenesis and human neurological development. PLoS Genetics, 2018, 14, e1007817.	3.5	45

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55	Cloning and expression of Xenopus Prickle, an orthologue of a Drosophila planar cell polarity gene. Mechanisms of Development, 2002, 116, 183-186.	1.7	43
56	High-Magnification In Vivo Imaging of Xenopus Embryos for Cell and Developmental Biology. Cold Spring Harbor Protocols, 2010, 2010, pdb.prot5427.	0.3	42
57	Control of Intercalation Is Cell-Autonomous in the Notochord of Ciona intestinalis. Developmental Biology, 2002, 246, 329-340.	2.0	41
58	Control of vertebrate core PCP protein localization and dynamics by Prickle2. Development (Cambridge), 2015, 142, 3429-39.	2.5	40
59	PCP-dependent transcellular regulation of actomyosin oscillation facilitates convergent extension of vertebrate tissue. Developmental Biology, 2019, 446, 159-167.	2.0	40
60	Functional partitioning of a liquid-like organelle during assembly of axonemal dyneins. ELife, 2020, 9, .	6.0	37
61	Embryogenesis and laboratory maintenance of the foamâ€nesting tÃºngara frogs, genus Engystomops (= Physalaemus). Developmental Dynamics, 2009, 238, 1444-1454.	1.8	35
62	Folateâ€dependent methylation of septins governs ciliogenesis during neural tube closure. FASEB Journal, 2017, 31, 3622-3635.	0.5	35
63	Mechanical heterogeneity along single cell-cell junctions is driven by lateral clustering of cadherins during vertebrate axis elongation. ELife, 2021, 10, .	6.0	34
64	The developmental biology of kinesins. Developmental Biology, 2021, 469, 26-36.	2.0	33
65	A role for central spindle proteins in cilia structure and function. Cytoskeleton, 2011, 68, 112-124.	2.0	32
66	Cluap1 is Essential for Ciliogenesis and Photoreceptor Maintenance in the Vertebrate Eye. , 2014, 55, 4585.		32
67	A novel ciliopathic skull defect arising from excess neural crest. Developmental Biology, 2016, 417, 4-10.	2.0	31
68	Protein localization screening in vivo reveals novel regulators of multiciliated cell development and function. Journal of Cell Science, 2018, 131, .	2.0	29
69	Hedgehog activity controls opening of the primary mouth. Developmental Biology, 2014, 396, 1-7.	2.0	27
70	A revised model of Xenopus dorsal midline development: Differential and separable requirements for Notch and Shh signaling. Developmental Biology, 2011, 352, 254-266.	2.0	24
71	Neural tube closure requires the endocytic receptor Lrp2 and its functional interaction with intracellular scaffolds. Development (Cambridge), 2021, 148, .	2.5	24
72	Preparation of Fixed Xenopus Embryos for Confocal Imaging. Cold Spring Harbor Protocols, 2010, 2010, pdb.prot5426.	0.3	23

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73	In vivo investigation of cilia structure and function using Xenopus. Methods in Cell Biology, 2015, 127, 131-159.	1.1	22
74	A systematic, label-free method for identifying RNA-associated proteins in vivo provides insights into vertebrate ciliary beating machinery. Developmental Biology, 2020, 467, 108-117.	2.0	22
75	Xenopus. Current Biology, 2010, 20, R263-R264.	3.9	20
76	The Small GTPase Rsg1 is important for the cytoplasmic localization and axonemal dynamics of intraflagellar transport proteins. Cilia, 2013, 2, 13.	1.8	19
77	Identification of new regulators of embryonic patterning and morphogenesis in Xenopus gastrulae by RNA sequencing. Developmental Biology, 2017, 426, 429-441.	2.0	19
78	Septin-dependent remodeling of cortical microtubule drives cell reshaping during epithelial wound healing. Journal of Cell Science, 2018, 131, .	2.0	18
79	Vertebrate Gastrulation: Polarity Genes Control the Matrix. Current Biology, 2005, 15, R414-R416.	3.9	17
80	White paper on the study of birth defects. Birth Defects Research, 2017, 109, 180-185.	1.5	17
81	Protein turnover dynamics suggest a diffusion-to-capture mechanism for peri-basal body recruitment and retention of intraflagellar transport proteins. Molecular Biology of the Cell, 2021, 32, 1171-1180.	2.1	17
82	Convergent extension requires adhesion-dependent biomechanical integration of cell crawling and junction contraction. Cell Reports, 2022, 39, 110666.	6.4	17
83	We Are All Developmental Biologists. Developmental Cell, 2019, 50, 132-137.	7.0	16
84	The planar cell polarity effector protein Wdpcp (Fritz) controls epithelial cell cortex dynamics via septins and actomyosin. Biochemical and Biophysical Research Communications, 2015, 456, 562-566.	2.1	14
85	The 200-year effort to see the embryo. Science, 2019, 365, 758-759.	12.6	14
86	Identifying direct targets of transcription factor Rfx2 that coordinate ciliogenesis and cell movement. Genomics Data, 2014, 2, 192-194.	1.3	12
87	Global analysis of cell behavior and protein dynamics reveals region-specific roles for Shroom3 and N-cadherin during neural tube closure. ELife, 2022, 11, .	6.0	12
88	Low-Magnification Live Imaging of Xenopus Embryos for Cell and Developmental Biology. Cold Spring Harbor Protocols, 2010, 2010, pdb.prot5425-pdb.prot5425.	0.3	11
89	A comparative study of the turnover of multiciliated cells in the mouse trachea, oviduct, and brain. Developmental Dynamics, 2020, 249, 898-905.	1.8	11
90	An opportunity to address the genetic causes of birth defects. Pediatric Research, 2017, 81, 282-285.	2.3	9

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91	Aristotle, Buddhist scripture and embryology in ancient Mexico: building inclusion by re-thinking what counts as the history of developmental biology. Development (Cambridge), 2021, 148, .	2.5	8
92	ARVCF catenin controls force production during vertebrate convergent extension. Developmental Cell, 2022, 57, 1119-1131.e5.	7.0	8
93	Challenges and opportunities at the interface of birth defects, human genetics and developmental biology. Development (Cambridge), 2020, 147, .	2.5	6
94	Twinfilin1 controls lamellipodial protrusive activity and actin turnover during vertebrate gastrulation. Journal of Cell Science, 2021, 134, .	2.0	6
95	Spatiotemporal transcriptional dynamics of the cycling mouse oviduct. Developmental Biology, 2021, 476, 240-248.	2.0	6
96	Kif9 is an active kinesin motor required for ciliary beating and proximodistal patterning of motile axonemes. Journal of Cell Science, 2023, 136, .	2.0	6
97	Proteome-wide dataset supporting the study of ancient metazoan macromolecular complexes. Data in Brief, 2016, 6, 715-721.	1.0	5
98	A temporally resolved transcriptome for developing â€œKellerâ€•explants of the Xenopus laevis dorsal marginal zone. Developmental Dynamics, 2021, 250, 717-731.	1.8	5
99	Vertebrate Gastrulation: The BMP Sticker Shock. Current Biology, 2007, 17, R206-R209.	3.9	3
100	May the force be with you. ELife, 2018, 7, .	6.0	2
101	Assays for Apical Using the Xenopus Model. Methods in Molecular Biology, 2022, 2438, 415-437.	0.9	2
102	Commentary and tribute to Antone Jacobson: The pioneer of morphodynamics. Developmental Biology, 2019, 451, 97-133.	2.0	1
103	Diseases of development: leveraging developmental biology to understand human disease. Development (Cambridge), 2020, 147, .	2.5	1
104	Dynamic patterns of gene expression in the developing pronephros of Xenopus laevis. Genesis, 1999, 24, 199-207.	2.1	1
105	New tools for visualization and analysis of morphogenesis in spherical embryos. Developmental Dynamics, 2006, 235, spc1-spc1.	1.8	0
106	Planar Pol(o)arity. Developmental Cell, 2015, 33, 494-495.	7.0	0
107	Cell Adhesions Link Subcellular Actomyosin Dynamics to Tissue Scale Force Production During Vertebrate Convergent Extension. SSRN Electronic Journal, 0, , .	0.4	0
108	RhoA regulates actin network dynamics during apical surface emergence in multiciliated epithelial cells. Development (Cambridge), 2017, 144, e1.2-e1.2.	2.5	0