Bruce Bowerman

List of Publications by Year
in descending order

96 papers	9,310 citations	53794 45 h-index	51608 86 g-index
146 all docs	146 docs citations	146 times ranked	7524 citing authors

#	Article	IF	Citations
1	The Promise and Perils of Wnt Signaling Through beta -Catenin. Science, 2002, 296, 1644-1646.	12.6	937
2	The TAK1â€“NLKâ€“MAPK-related pathway antagonizes signalling between Î²-catenin and transcription factor TCF. Nature, 1999, 399, 798-802.	27.8	569
3	Correct integration of retroviral DNA in vitro. Cell, 1987, 49, 347-356.	28.9	537
4	Wnt Signaling Polarizes an Early C. elegans Blastomere to Distinguish Endoderm from Mesoderm. Cell, 1997, 90, 695-705.	28.9	470
5	The BTB protein MEL-26 is a substrate-specific adaptor of the CUL-3 ubiquitin-ligase. Nature, 2003, 425, 311-316.	27.8	378
6	skn-1, a maternally expressed gene required to specify the fate of ventral blastomeres in the early C. elegans embryo. Cell, 1992, 68, 1061-1075.	28.9	356
7	Centrosome Maturation and Mitotic Spindle Assembly in C. elegans Require SPD-5, a Protein with Multiple Coiled-Coil Domains. Developmental Cell, 2002, 3, 673-684.	7.0	269
8	MAP kinase and Wnt pathways converge to downregulate an HMG-domain repressor in Caenorhabditis elegans. Nature, 1999, 399, 793-797.	27.8	263
9	MEX-3 Is a KH Domain Protein That Regulates Blastomere Identity in Early C. elegans Embryos. Cell, 1996, 87, 205-216.	28.9	253
10	The maternal gene skn-1 encodes a protein that is distributed unequally in early C. elegans embryos. Cell, 1993, 74, 443-452.	28.9	235
11	The Aurora-related kinase AIR-2 recruits ZEN-4/CeMKLP1 to the mitotic spindle at metaphase and is required for cytokinesis. Current Biology, 2000, 10, 1162-1171.	3.9	226
12	The Nonmuscle Myosin Regulatory Light Chain Gene mlc-4 Is Required for Cytokinesis, Anterior-Posterior Polarity, and Body Morphology during Caenorhabditis elegans Embryogenesis. Journal of Cell Biology, 1999, 146, 439-451.	5.2	191
13	A Formin Homology Protein and a Profilin Are Required for Cytokinesis and Arp2/3-Independent Assembly of Cortical Microfilaments in C. elegans. Current Biology, 2002, 12, 2066-2075.	3.9	187
14	Axon Regeneration Pathways Identified by Systematic Genetic Screening in C.Âelegans. Neuron, 2011, 71, 1043-1057.	8.1	182
15	Cytoskeletal Regulation by the Nedd8 Ubiquitin-Like Protein Modification Pathway. Science, 2002, 295, 1294-1298.	12.6	180
16	Restriction of Mesendoderm to a Single Blastomere by the Combined Action of SKN-1 and a GSK-3Î² Homolog Is Mediated by MED-1 and -2 in C. elegans. Molecular Cell, 2001, 7, 475-485.	9.7	174
17	Inhibition of Rac by the GAP Activity of Centralspindlin Is Essential for Cytokinesis. Science, 2008, 322, 1543-1546.	12.6	172
18	The conserved protein DCN-1/Dcn1p is required for cullin neddylation in C. elegans and S. cerevisiae. Nature, 2005, 435, 1257-1261.	27.8	161

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19	Metaphase to Anaphase (mat) Transitionâ€“Defective Mutants inCaenorhabditis elegans. Journal of Cell Biology, 2000, 151, 1469-1482.	5.2	159
20	Neddylation and Deneddylation of CUL-3 Is Required to Target MEI-1/Katanin for Degradation at the Meiosis-to-Mitosis Transition in C. elegans. Current Biology, 2003, 13, 911-921.	3.9	157
21	Multiple Wnt Signaling Pathways Converge to Orient the Mitotic Spindle in Early C. elegans Embryos. Developmental Cell, 2004, 7, 831-841.	7.0	156
22	A new mechanism controlling kinetochoreâ€“microtubule interactions revealed by comparison of two dynein-targeting components: SPDL-1 and the Rod/Zwilch/Zw10 complex. Genes and Development, 2008, 22, 2385-2399.	5.9	156
23	Asymmetric cell division: fly neuroblast meets worm zygote. Current Opinion in Cell Biology, 2001, 13, 68-75.	5.4	150
24	DNA Replication Defects Delay Cell Division and Disrupt Cell Polarity in Early Caenorhabditis elegans Embryos. Developmental Biology, 2000, 228, 225-238.	2.0	122
25	Symmetry Breaking in Biology. Cold Spring Harbor Perspectives in Biology, 2010, 2, a003475-a003475.	5.5	118
26	Heterotrimeric G protein signaling functions with dynein to promote spindle positioning in C. elegans . Journal of Cell Biology, 2007, 179, 15-22.	5.2	114
27	Cell Polarity and the Cytoskeleton in the Caenorhabditis Elegans Zygote. Annual Review of Genetics, 2003, 37, 221-249.	7.6	113
28	Î²-Catenin Asymmetries after All Animal/Vegetal- Oriented Cell Divisions in Platynereis dumerilii Embryos Mediate Binary Cell-Fate Specification. Developmental Cell, 2007, 13, 73-86.	7.0	109
29	Mutations in Caenorhabditis elegans Cytoplasmic Dynein Components Reveal Specificity of Neuronal Retrograde Cargo. Journal of Neuroscience, 2004, 24, 3907-3916.	3.6	101
30	Caenorhabditis elegans SAND-1 is essential for RAB-7 function in endosomal traffic. EMBO Journal, 2007, 26, 301-312.	7.8	99
31	The Anaphase-Promoting Complex and Separin Are Required for Embryonic Anterior-Posterior Axis Formation. Developmental Cell, 2002, 2, 195-206.	7.0	97
32	Wnt signalling in Caenorhabditis elegans : regulating repressors and polarizing the cytoskeleton. Trends in Cell Biology, 2000, 10, 10-17.	7.9	96
33	3 Maternal Control of Pattern Formation in Early Caenorhabditis elegans Embryos. Current Topics in Developmental Biology, 1998, 39, 73-117.	2.2	95
34	Myosin and the PAR proteins polarize microfilament-dependent forces that shape and position mitotic spindles in Caenorhabditis elegans. Journal of Cell Biology, 2003, 161, 21-26.	5.2	91
35	Cellular Symmetry Breaking during Caenorhabditis elegans Development. Cold Spring Harbor Perspectives in Biology, 2009, 1, a003400-a003400.	5.5	89
36	A Spindle Checkpoint Functions during Mitosis in the Early Caenorhabditis elegans Embryo. Molecular Biology of the Cell, 2005, 16, 1056-1070.	2.1	80

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37	Dynein Modifiers in C. elegans: Light Chains Suppress Conditional Heavy Chain Mutants. PLoS Genetics, 2007, 3, e128.	3.5	80
38	Oocyte Meiotic Spindle Assembly and Function. Current Topics in Developmental Biology, 2016, 116, 65-98.	2.2	75
39	Heads or Tails. Developmental Cell, 2002, 3, 157-166.	7.0	73
40	Combinatorial Contact Cues Specify Cell Division Orientation by Directing Cortical Myosin Flows. Developmental Cell, 2018, 46, 257-270.e5.	7.0	71
41	Degrade to create: developmental requirements for ubiquitin-mediated proteolysis during early C. elegans embryogenesis. Development (Cambridge), 2006, 133, 773-784.	2.5	64
42	Mitotic Cell Division in Caenorhabditis elegans. Genetics, 2019, 211, 35-73.	2.9	63
43	A Survey of New Temperature-Sensitive, Embryonic-Lethal Mutations in C. elegans: 24 Alleles of Thirteen Genes. PLoS ONE, 2011, 6, e16644.	2.5	62
44	Caenorhabditis elegans EFA-6 limits microtubule growth at the cell cortex. Nature Cell Biology, 2010, 12, 1235-1241.	10.3	61
45	A new DNA-binding motif in the Skn-1 binding domainâ€“DNA complex. Nature Structural Biology, 1998, 5, 484-491.	9.7	53
46	Cell polarity in the early Caenorhabditis elegans embryo. Current Opinion in Genetics and Development, 1999, 9, 390-395.	3.3	50
47	Centriolar SAS-7 acts upstream of SPD-2 to regulate centriole assembly and pericentriolar material formation. ELife, 2017, 6, .	6.0	50
48	Caenorhabditis elegansoocyte meiotic spindle pole assembly requires microtubule severing and the calponin homology domain protein ASPM-1. Molecular Biology of the Cell, 2014, 25, 1298-1311.	2.1	49
49	KLP-7 acts through the Ndc80 complex to limit pole number in C. elegans oocyte meiotic spindle assembly. Journal of Cell Biology, 2015, 210, 917-932.	5.2	46
50	CELL BIOLOGY: Oxidative Stress and Cancer: A Â-Catenin Convergence. Science, 2005, 308, 1119-1120.	12.6	43
51	Ectodermâ€•and endomesodermâ€•specific GATA transcription factors in the marine annelid Platynereis dumerilli. Evolution & Development, 2007, 9, 39-50.	2.0	43
52	Control of nuclear centration in the C. elegans zygote by receptor-independent GÎ± signaling and myosin II. Journal of Cell Biology, 2007, 178, 1177-1191.	5.2	39
53	ZYG-9, TAC-1 and ZYG-8 together ensure correct microtubule function throughout the cell cycle of C. elegans embryos. Journal of Cell Science, 2007, 120, 2963-2973.	2.0	35
54	CRL2LRR-1 E3-Ligase Regulates Proliferation and Progression through Meiosis in the Caenorhabditis elegans Germline. PLoS Genetics, 2013, 9, e1003375.	3.5	35

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55	Maternally expressed and partially redundant Î²-tubulins in Caenorhabditis elegans are autoregulated. Journal of Cell Science, 2004, 117, 457-464.	2.0	32
56	An Evolutionarily Conserved Innate Immunity Protein Interaction Network. Journal of Biological Chemistry, 2013, 288, 1967-1978.	3.4	31
57	MOM-5 Frizzled regulates the distribution of DSH-2 to control C. elegans asymmetric neuroblast divisions. Developmental Biology, 2005, 284, 246-259.	2.0	30
58	Determinants of blastomere identity in the earlyC. elegans embryo. BioEssays, 1995, 17, 405-414.	2.5	29
59	The puromycin-sensitive aminopeptidase PAM-1 is required for meiotic exit and anteroposterior polarity in the one-cell Caenorhabditis elegansembryo. Development (Cambridge), 2006, 133, 4281-4292.	2.5	29
60	E3 ubiquitin ligases promote progression of differentiation during C. elegans embryogenesis. Developmental Biology, 2015, 398, 267-279.	2.0	25
61	High-Throughput Cloning of Temperature-Sensitive Caenorhabditis elegans Mutants with Adult Syncytial Germline Membrane Architecture Defects. G3: Genes, Genomes, Genetics, 2015, 5, 2241-2255.	1.8	24
62	Tumor suppressor APC is an attenuator of spindle-pulling forces during C. elegans asymmetric cell division. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E954-E963.	7.1	24
63	MIP-MAP: High-Throughput Mapping of Caenorhabditis elegans Temperature-Sensitive Mutants via Molecular Inversion Probes. Genetics, 2017, 207, 447-463.	2.9	23
64	Excess crossovers impede faithful meiotic chromosome segregation in C. elegans. PLoS Genetics, 2020, 16, e1009001.	3.5	22
65	Epigenetic Regulation of Histone H3 Serine 10 Phosphorylation Status by HCF-1 Proteins in C. elegans and Mammalian Cells. PLoS ONE, 2007, 2, e1213.	2.5	21
66	Using RNA Interference to Identify Specific Modifiers of a Temperature-Sensitive, Embryonic-Lethal Mutation in the Caenorhabditis elegans Ubiquitin-Like Nedd8 Protein Modification Pathway E1-Activating Gene rfl-1. Genetics, 2009, 182, 1035-1049.	2.9	21
67	Cell division: Plant-like properties of animal cell cytokinesis. Current Biology, 1999, 9, R658-R660.	3.9	19
68	Rapid Mapping and Identification of Mutations inCaenorhabditis elegansby Restriction Site-Associated DNA Mapping and Genomic Interval Pull-Down Sequencing. Genetics, 2011, 189, 767-778.	2.9	16
69	Caenorhabditis elegans par genes. Current Biology, 2002, 12, R444.	3.9	14
70	C. elegans CLASP/CLS-2 negatively regulates membrane ingression throughout the oocyte cortex and is required for polar body extrusion. PLoS Genetics, 2020, 16, e1008751.	3.5	14
71	Wnt Moves Beyond the Canon. Science, 2008, 320, 327-328.	12.6	13
72	Embryonic polarity: Protein stability in asymmetric cell division. Current Biology, 2000, 10, R637-R641.	3.9	12

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73	Microtubule assembly and pole coalescence: early steps in C. elegans oocyte meiosis I spindle assembly. Biology Open, 2020, 9, .	1.2	12
74	Cytokinesis. Developmental Cell, 2002, 2, 4-6.	7.0	8
75	Timing the machine. Nature, 2004, 430, 840-841.	27.8	8
76	C. elegans Aging: Proteolysis Cuts Both Ways. Current Biology, 2007, 17, R514-R516.	3.9	7
77	Advances in Cytokinesis Research. Cytokinesis in the C. elegans Embryo: Regulating Contractile Forces and a Late Role for the Central Spindle.. Cell Structure and Function, 2001, 26, 603-607.	1.1	6
78	Animal Development: An Ancient Î²-Catenin Switch?. Current Biology, 2013, 23, R313-R315.	3.9	6
79	Cell Polarity: Keeping Worms LeGaL. Current Biology, 2010, 20, R646-R648.	3.9	5
80	The near demise and subsequent revival of classical genetics for investigatingCaenorhabditis elegansembryogenesis: RNAi meets next-generation DNA sequencing. Molecular Biology of the Cell, 2011, 22, 3556-3558.	2.1	4
81	Cell Biology: Scaling and the Emergence of Evolutionary Cell Biology. Current Biology, 2015, 25, R223-R225.	3.9	4
82	Uncoiling centriole duplication. Nature Cell Biology, 2004, 6, 573-575.	10.3	3
83	Interactions between the WEE-1.3 kinase and the PAM-1 aminopeptidase in oocyte maturation and the earlyC. elegansembryo. G3: Genes, Genomes, Genetics, 2021, 11, .	1.8	3
84	A Semi-Dominant Mutation in the General Splicing Factor SF3a66 Causes Anterior-Posterior Axis Reversal in One-Cell Stage C. elegans Embryos. PLoS ONE, 2014, 9, e106484.	2.5	3
85	Frontiers of gene function. Nature, 2005, 434, 444-445.	27.8	2
86	Advocating Asymmetry and the POP-1 Paradox: Noncanonical Wnt Signaling in C. elegans. Cell, 2005, 121, 662-664.	28.9	2
87	The worm keeps turning. Nature, 1997, 390, 228-229.	27.8	0
88	Leftâ€“Right Asymmetry: Making the Right Decision Early. Current Biology, 2006, 16, R1039-R1042.	3.9	0
89	Pushing Your Back into Place. Science, 2012, 336, 984-985.	12.6	0
90	Breaking Symmetry: Worm Cue Finally Found. Developmental Cell, 2019, 48, 593-594.	7.0	0

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91	A genetic screen for temperature-sensitive morphogenesis-defective Caenorhabditis elegans mutants. G3: Genes, Genomes, Genetics, 2021, 11, .	1.8	0
92	The chromatin remodeling protein CHD-1 and the EFL-1/DPL-1 transcription factor cooperatively down regulate CDK-2 to control SAS-6 levels and centriole number. PLoS Genetics, 2022, 18, e1009799.	3.5	0
93	Title is missing!. , 2020, 16, e1008751.		0
94	Title is missing!. , 2020, 16, e1008751.		0
95	Title is missing!. , 2020, 16, e1008751.		0
96	Title is missing!. , 2020, 16, e1008751.		0