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 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
2	A genetic screen for temperature-sensitive morphogenesis-defective Caenorhabditis elegans mutants. G3: Genes, Genomes, Genetics, 2021, 11, .	1.8	0
3	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
4	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
5	Excess crossovers impede faithful meiotic chromosome segregation in C. elegans. PLoS Genetics, 2020, 16, e1009001.	3.5	22
6	Microtubule assembly and pole coalescence: early steps in C. elegans oocyte meiosis I spindle assembly. Biology Open, 2020, 9, .	1.2	12
7	Title is missing!. , 2020, 16, e1008751.		0
8	Title is missing!. , 2020, 16, e1008751.		0
9	Title is missing!. , 2020, 16, e1008751.		0
10	Title is missing!. , 2020, 16, e1008751.		0
11	Breaking Symmetry: Worm Cue Finally Found. Developmental Cell, 2019, 48, 593-594.	7.0	0
12	Mitotic Cell Division in Caenorhabditis elegans. Genetics, 2019, 211, 35-73.	2.9	63
13	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
14	Combinatorial Contact Cues Specify Cell Division Orientation by Directing Cortical Myosin Flows. Developmental Cell, 2018, 46, 257-270.e5.	7.0	71
15	MIP-MAP: High-Throughput Mapping of Caenorhabditis elegans Temperature-Sensitive Mutants via Molecular Inversion Probes. Genetics, 2017, 207, 447-463.	2.9	23
16	Centriolar SAS-7 acts upstream of SPD-2 to regulate centriole assembly and pericentriolar material formation. ELife, 2017, 6, .	6.0	50
17	Oocyte Meiotic Spindle Assembly and Function. Current Topics in Developmental Biology, 2016, 116, 65-98.	2.2	75
18	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

#	Article	IF	Citations
19	E3 ubiquitin ligases promote progression of differentiation during C. elegans embryogenesis. Developmental Biology, 2015, 398, 267-279.	2.0	25
20	Cell Biology: Scaling and the Emergence of Evolutionary Cell Biology. Current Biology, 2015, 25, R223-R225.	3.9	4
21	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
22	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
23	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
24	An Evolutionarily Conserved Innate Immunity Protein Interaction Network. Journal of Biological Chemistry, 2013, 288, 1967-1978.	3.4	31
25	Animal Development: An Ancient Î²-Catenin Switch?. Current Biology, 2013, 23, R313-R315.	3.9	6
26	CRL2LRR-1 E3-Ligase Regulates Proliferation and Progression through Meiosis in the Caenorhabditis elegans Germline. PLoS Genetics, 2013, 9, e1003375.	3.5	35
27	Pushing Your Back into Place. Science, 2012, 336, 984-985.	12.6	0
28	Axon Regeneration Pathways Identified by Systematic Genetic Screening in C.Âelegans. Neuron, 2011, 71, 1043-1057.	8.1	182
29	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
30	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
31	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
32	Cell Polarity: Keeping Worms LeGaL. Current Biology, 2010, 20, R646-R648.	3.9	5
33	Caenorhabditis elegans EFA-6 limits microtubule growth at the cell cortex. Nature Cell Biology, 2010, 12, 1235-1241.	10.3	61
34	Symmetry Breaking in Biology. Cold Spring Harbor Perspectives in Biology, 2010, 2, a003475-a003475.	5.5	118
35	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
36	Cellular Symmetry Breaking during Caenorhabditis elegans Development. Cold Spring Harbor Perspectives in Biology, 2009, 1, a003400-a003400.	5.5	89

#	Article	IF	Citations
37	Inhibition of Rac by the GAP Activity of Centralspindlin Is Essential for Cytokinesis. Science, 2008, 322, 1543-1546.	12.6	172
38	Wnt Moves Beyond the Canon. Science, 2008, 320, 327-328.	12.6	13
39	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
40	Dynein Modifiers in C. elegans: Light Chains Suppress Conditional Heavy Chain Mutants. PLoS Genetics, 2007, 3, e128.	3.5	80
41	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
42	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
43	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
44	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
45	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
46	Caenorhabditis elegans SAND-1 is essential for RAB-7 function in endosomal traffic. EMBO Journal, 2007, 26, 301-312.	7.8	99
47	Ectodermâ€•and endomesodermâ€specific GATA transcription factors in the marine annelid Platynereis dumerilli. Evolution & Development, 2007, 9, 39-50.	2.0	43
48	C. elegans Aging: Proteolysis Cuts Both Ways. Current Biology, 2007, 17, R514-R516.	3.9	7
49	Leftâ€“Right Asymmetry: Making the Right Decision Early. Current Biology, 2006, 16, R1039-R1042.	3.9	0
50	Degrade to create: developmental requirements for ubiquitin-mediated proteolysis during early C. elegans embryogenesis. Development (Cambridge), 2006, 133, 773-784.	2.5	64
51	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
52	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
53	Frontiers of gene function. Nature, 2005, 434, 444-445.	27.8	2
54	CELL BIOLOGY: Oxidative Stress and Cancer: A Â-Catenin Convergence. Science, 2005, 308, 1119-1120.	12.6	43

#	Article	IF	Citations
55	A Spindle Checkpoint Functions during Mitosis in the Early Caenorhabditis elegans Embryo. Molecular Biology of the Cell, 2005, 16, 1056-1070.	2.1	80
56	Advocating Asymmetry and the POP-1 Paradox: Noncanonical Wnt Signaling in C. elegans. Cell, 2005, 121, 662-664.	28.9	2
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	Maternally expressed and partially redundant Î²-tubulins in Caenorhabditis elegans are autoregulated. Journal of Cell Science, 2004, 117, 457-464.	2.0	32
59	Mutations in Caenorhabditis elegans Cytoplasmic Dynein Components Reveal Specificity of Neuronal Retrograde Cargo. Journal of Neuroscience, 2004, 24, 3907-3916.	3.6	101
60	Uncoiling centriole duplication. Nature Cell Biology, 2004, 6, 573-575.	10.3	3
61	Timing the machine. Nature, 2004, 430, 840-841.	27.8	8
62	Multiple Wnt Signaling Pathways Converge to Orient the Mitotic Spindle in Early C. elegans Embryos. Developmental Cell, 2004, 7, 831-841.	7.0	156
63	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
64	The BTB protein MEL-26 is a substrate-specific adaptor of the CUL-3 ubiquitin-ligase. Nature, 2003, 425, 311-316.	27.8	378
65	Cell Polarity and the Cytoskeleton in the Caenorhabditis Elegans Zygote. Annual Review of Genetics, 2003, 37, 221-249.	7.6	113
66	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
67	Cytoskeletal Regulation by the Nedd8 Ubiquitin-Like Protein Modification Pathway. Science, 2002, 295, 1294-1298.	12.6	180
68	The Promise and Perils of Wnt Signaling Through beta -Catenin. Science, 2002, 296, 1644-1646.	12.6	937
69	Cytokinesis. Developmental Cell, 2002, 2, 4-6.	7.0	8
70	The Anaphase-Promoting Complex and Separin Are Required for Embryonic Anterior-Posterior Axis Formation. Developmental Cell, 2002, 2, 195-206.	7.0	97
71	Heads or Tails. Developmental Cell, 2002, 3, 157-166.	7.0	73
72	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

#	Article	IF	Citations
73	Caenorhabditis elegans par genes. Current Biology, 2002, 12, R444.	3.9	14
74	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
75	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
76	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
77	Asymmetric cell division: fly neuroblast meets worm zygote. Current Opinion in Cell Biology, 2001, 13, 68-75.	5.4	150
78	Embryonic polarity: Protein stability in asymmetric cell division. Current Biology, 2000, 10, R637-R641.	3.9	12
79	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
80	Wnt signalling in Caenorhabditis elegans : regulating repressors and polarizing the cytoskeleton. Trends in Cell Biology, 2000, 10, 10-17.	7.9	96
81	Metaphase to Anaphase (mat) Transitionâ€“Defective Mutants inCaenorhabditis elegans. Journal of Cell Biology, 2000, 151, 1469-1482.	5.2	159
82	DNA Replication Defects Delay Cell Division and Disrupt Cell Polarity in Early Caenorhabditis elegans Embryos. Developmental Biology, 2000, 228, 225-238.	2.0	122
83	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
84	MAP kinase and Wnt pathways converge to downregulate an HMG-domain repressor in Caenorhabditis elegans. Nature, 1999, 399, 793-797.	27.8	263
85	The TAK1â€“NLKâ€“MAPK-related pathway antagonizes signalling between Î²-catenin and transcription factor TCF. Nature, 1999, 399, 798-802.	27.8	569
86	Cell division: Plant-like properties of animal cell cytokinesis. Current Biology, 1999, 9, R658-R660.	3.9	19
87	Cell polarity in the early Caenorhabditis elegans embryo. Current Opinion in Genetics and Development, 1999, 9, 390-395.	3.3	50
88	A new DNA-binding motif in the Skn-1 binding domainâ€“DNA complex. Nature Structural Biology, 1998, 5, 484-491.	9.7	53
89	3 Maternal Control of Pattern Formation in Early Caenorhabditis elegans Embryos. Current Topics in Developmental Biology, 1998, 39, 73-117.	2.2	95
90	Wnt Signaling Polarizes an Early C. elegans Blastomere to Distinguish Endoderm from Mesoderm. Cell, 1997, 90, 695-705.	28.9	470

#	Article	IF	Citations
91	The worm keeps turning. Nature, 1997, 390, 228-229.	27.8	0
92	MEX-3 Is a KH Domain Protein That Regulates Blastomere Identity in Early C. elegans Embryos. Cell, 1996, 87, 205-216.	28.9	253
93	Determinants of blastomere identity in the earlyC. elegans embryo. BioEssays, 1995, 17, 405-414.	2.5	29
94	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
95	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
96	Correct integration of retroviral DNA in vitro. Cell, 1987, 49, 347-356.	28.9	537