Susan Biggins

List of Publications by Year
in descending order

76 papers	6,981 citations	87888 38 h-index	91884 69 g-index
86 all docs	86 docs citations	86 times ranked	4829 citing authors

#	Article	IF	Citations
1	Tension directly stabilizes reconstituted kinetochore-microtubule attachments. Nature, 2010, 468, 576-579.	27.8	408
2	The conserved protein kinase Ipl1 regulates microtubule binding to kinetochores in budding yeast. Genes and Development, 1999, 13, 532-544.	5.9	371
3	The budding yeast protein kinase Ipl1/Aurora allows the absence of tension to activate the spindle checkpoint. Genes and Development, 2001, 15, 3118-3129.	5.9	363
4	Phosphoregulation of Spc105 by Mps1 and PP1 Regulates Bub1 Localization to Kinetochores. Current Biology, 2012, 22, 900-906.	3.9	328
5	Computed structures of core eukaryotic protein complexes. Science, 2021, 374, eabm4805.	12.6	316
6	Histone variants: deviants?. Genes and Development, 2005, 19, 295-316.	5.9	296
7	Signalling dynamics in the spindle checkpoint response. Nature Reviews Molecular Cell Biology, 2014, 15, 736-748.	37.0	278
8	The Ipl1-Aurora protein kinase activates the spindle checkpoint by creating unattached kinetochores. Nature Cell Biology, 2006, 8, 78-83.	10.3	272
9	The NoCut Pathway Links Completion of Cytokinesis to Spindle Midzone Function to Prevent Chromosome Breakage. Cell, 2006, 125, 85-98.	28.9	267
10	The spindle checkpoint: tension versus attachment. Trends in Cell Biology, 2005, 15, 486-493.	7.9	257
11	Centromere identity is specified by a single centromeric nucleosome in budding yeast. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 14706-14711.	7.1	240
12	Proteolysis Contributes to the Exclusive Centromere Localization of the Yeast Cse4/CENP-A Histone H3 Variant. Current Biology, 2004, 14, 1968-1972.	3.9	191
13	An E3 Ubiquitin Ligase Prevents Ectopic Localization of the Centromeric Histone H3 Variant via the Centromere Targeting Domain. Molecular Cell, 2010, 40, 455-464.	9.7	176
14	Mad1 kinetochore recruitment by Mps1-mediated phosphorylation of Bub1 signals the spindle checkpoint. Genes and Development, 2014, 28, 140-152.	5.9	175
15	The Composition, Functions, and Regulation of the Budding Yeast Kinetochore. Genetics, 2013, 194, 817-846.	2.9	170
16	Mutation ofYCS4, a Budding Yeast Condensin Subunit, Affects Mitotic and Nonmitotic Chromosome Behavior. Molecular Biology of the Cell, 2002, 13, 632-645.	2.1	167
17	Yeast ubiquitin-like genes are involved in duplication of the microtubule organizing center.. Journal of Cell Biology, 1996, 133, 1331-1346.	5.2	164
18	A TOG Protein Confers Tension Sensitivity to Kinetochore-Microtubule Attachments. Cell, 2016, 165, 1428-1439.	28.9	158

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19	Protein Phosphatase 1 Regulates Exit from the Spindle Checkpoint in Budding Yeast. Current Biology, 2009, 19, 1182-1187.	3.9	138
20	The budding yeast Ipl1/Aurora protein kinase regulates mitotic spindle disassembly. Journal of Cell Biology, 2003, 160, 329-339.	5.2	133
21	Genes Involved in Sister Chromatid Separation and Segregation in the Budding Yeast <i>Saccharomyces cerevisiae</i>. Genetics, 2001, 159, 453-470.	2.9	133
22	Glc7/Protein Phosphatase 1 Regulatory Subunits Can Oppose the Ipl1/Aurora Protein Kinase by Redistributing Glc7. Molecular and Cellular Biology, 2006, 26, 2648-2660.	2.3	102
23	Captivating Capture: How Microtubules Attach to Kinetochores. Current Biology, 2003, 13, R449-R460.	3.9	99
24	Quantitative proteomic analysis of purified yeast kinetochores identifies a PP1 regulatory subunit. Genes and Development, 2009, 23, 2887-2899.	5.9	99
25	Direct interaction between yeast spindle pole body components: Kar1p is required for Cdc31p localization to the spindle pole body.. Journal of Cell Biology, 1994, 125, 843-852.	5.2	94
26	An Mtw1 Complex Promotes Kinetochore Biorientation that Is Monitored by the Ipl1/Aurora Protein Kinase. Developmental Cell, 2003, 5, 735-745.	7.0	94
27	Pericentromeric Sister Chromatid Cohesion Promotes Kinetochore Biorientation. Molecular Biology of the Cell, 2009, 20, 3818-3827.	2.1	83
28	The structure of purified kinetochores reveals multiple microtubule-attachment sites. Nature Structural and Molecular Biology, 2012, 19, 925-929.	8.2	77
29	The Yeast Centrin, Cdc31p, and the Interacting Protein Kinase, Kic1p, Are Required for Cell Integrity. Journal of Cell Biology, 1998, 143, 751-765.	5.2	76
30	Phosphoregulation promotes release of kinetochores from dynamic microtubules via multiple mechanisms. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 7282-7287.	7.1	76
31	Sister kinetochores are mechanically fused during meiosis I in yeast. Science, 2014, 346, 248-251.	12.6	68
32	De Novo Kinetochore Assembly Requires the Centromeric Histone H3 Variant. Molecular Biology of the Cell, 2005, 16, 5649-5660.	2.1	67
33	The FACT complex interacts with the E3 ubiquitin ligase Psh1 to prevent ectopic localization of CENP-A. Genes and Development, 2014, 28, 1815-1826.	5.9	66
34	Analysis of Ipl1-Mediated Phosphorylation of the Ndc80 Kinetochore Protein in <i>Saccharomyces cerevisiae</i>. Genetics, 2009, 183, 1591-1595.	2.9	64
35	A Pathway Containing the Ipl1/Aurora Protein Kinase and the Spindle Midzone Protein Ase1 Regulates Yeast Spindle Assembly. Developmental Cell, 2007, 13, 433-445.	7.0	60
36	The Aurora B Kinase Promotes Inner and Outer Kinetochore Interactions in Budding Yeast. Genetics, 2013, 194, 785-789.	2.9	57

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37	Unravelling the tangled web at the microtubule-organizing center. Current Opinion in Cell Biology, 1993, 5, 105-115.	5.4	52
38	Kinetochores require oligomerization of Dam1 complex to maintain microtubule attachments against tension and promote biorientation. Nature Communications, 2014, 5, 4951.	12.8	51
39	Sister chromatid cohesion in mitosis. Current Opinion in Genetics and Development, 1999, 9, 230-236.	3.3	50
40	An assay for de novo kinetochore assembly reveals a key role for the CENP-T pathway in budding yeast. ELife, 2018, 7, .	6.0	46
41	Design principles of a microtubule polymerase. ELife, 2018, 7, .	6.0	45
42	H3K4 methylation at active genes mitigates transcription-replication conflicts during replication stress. Nature Communications, 2020, 11, 809.	12.8	41
43	Regulation of Budding Yeast CENP-A levels Prevents Misincorporation at Promoter Nucleosomes and Transcriptional Defects. PLoS Genetics, 2016, 12, e1005930.	3.5	39
44	Sister chromatid cohesion in mitosis. Current Opinion in Cell Biology, 1998, 10, 769-775.	5.4	33
45	Microtubule Capture: A Concerted Effort. Cell, 2006, 127, 1105-1108.	28.9	33
46	A Kinesin-5, Cin8, Recruits Protein Phosphatase 1 to Kinetochores and Regulates Chromosome Segregation. Current Biology, 2018, 28, 2697-2704.e3.	3.9	30
47	The Overexpression of a Saccharomyces cerevisiae Centromeric Histone H3 Variant Mutant Protein Leads to a Defect in Kinetochore Biorientation. Genetics, 2007, 175, 513-525.	2.9	29
48	The Mub1/Ubr2 Ubiquitin Ligase Complex Regulates the Conserved Dsn1 Kinetochore Protein. PLoS Genetics, 2013, 9, e1003216.	3.5	29
49	chTOG is a conserved mitotic error correction factor. ELife, 2020, 9, .	6.0	27
50	Kinetochore-bound Mps1 regulates kinetochoreâ€“microtubule attachments via Ndc80 phosphorylation. Journal of Cell Biology, 2021, 220, .	5.2	27
51	Kinetochore-associated Stu2 promotes chromosome biorientation in vivo. PLoS Genetics, 2019, 15, e1008423.	3.5	26
52	Kinetochore Function and Chromosome Segregation Rely on Critical Residues in Histones H3 and H4 in Budding Yeast. Genetics, 2013, 195, 795-807.	2.9	23
53	An Efficient Purification System for Native Minichromosome from Saccharomyces cerevisiae. Methods in Molecular Biology, 2012, 833, 115-123.	0.9	22
54	Cdc14-Dependent Dephosphorylation of a Kinetochore Protein Prior to Anaphase in <i>Saccharomyces cerevisiae</i>. Genetics, 2010, 186, 1487-1491.	2.9	20

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55	The Bub1-TPR Domain Interacts Directly with Mad3 to Generate Robust Spindle Checkpoint Arrest. Current Biology, 2019, 29, 2407-2414.e7.	3.9	19
56	Purification of kinetochores from the budding yeast Saccharomyces cerevisiae. Methods in Cell Biology, 2018, 144, 349-370.	1.1	18
57	Cdk1 Phosphorylation of the Dam1 Complex Strengthens Kinetochore-Microtubule Attachments. Current Biology, 2020, 30, 4491-4499.e5.	3.9	17
58	Tension can directly suppress Aurora B kinase-triggered release of kinetochore-microtubule attachments. Nature Communications, 2022, 13, 2152.	12.8	17
59	Reconstituting the kinetochoreâ€"microtubule interface: what, why, and how. Chromosoma, 2012, 121, 235-250.	2.2	16
60	Stochastic Modeling Yields a Mechanistic Framework for Spindle Attachment Error Correction in Budding Yeast Mitosis. Cell Systems, 2017, 4, 645-650.e5.	6.2	15
61	Autophosphorylation is sufficient to release Mps1 kinase from native kinetochores. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 17355-17360.	7.1	15
62	Histone H4 Facilitates the Proteolysis of the Budding Yeast CENP-ACse4 Centromeric Histone Variant. Genetics, 2017, 205, 113-124.	2.9	13
63	A transcriptional roadblock protects yeast centromeres. Nucleic Acids Research, 2022, 50, 7801-7815.	14.5	11
64	Top-SUMO Wrestles Centromeric Cohesion. Developmental Cell, 2002, 3, 4-6.	7.0	10
65	Measuring Kinetochoreâ€"Microtubule Interaction In Vitro. Methods in Enzymology, 2014, 540, 321-337.	1.0	4
66	Correcting SYNful attachments. Nature Cell Biology, 2004, 6, 181-183.	10.3	3
67	Under Tension: Kinetochores and Basic Research. Genetics, 2015, 200, 681-682.	2.9	3
68	Functional dissection of human mitotic genes using CRISPRâ€"Cas9 tiling screens. Genes and Development, 2022, 36, 495-510.	5.9	2
69	Fifty years of cycling. Molecular Biology of the Cell, 2020, 31, 2868-2870.	2.1	1
70	Post-Translational Modifications that Regulate Kinetochore Activity. , 2009, , 1-51.		1
71	How to Successfully Start a Lab. Cell, 2003, 114, 16-17.	28.9	0
72	Sue Biggins: How kinetochores keep control of mitosis. Journal of Cell Biology, 2012, 196, 668-669.	5.2	0

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73	Biophysical Study of Native Yeast Kinetochores Indicates Distinct Roles for Phospho-Regulation of Core Microtubule-Binding Subcomplexes. Biophysical Journal, 2012, 102, 700a-701a.	0.5	0
74	Editorial overview: Cell architecture: Cellular organization and function. Current Opinion in Cell Biology, 2014, 26, v-vii.	5.4	0
75	What Silences the Spindle Checkpoint? A Single Particle Study. Biophysical Journal, 2017, 112, 431a.	0.5	0
76	Sue Biggins. Current Biology, 2019, 29, R227-R229.	3.9	0