Abby F Dernburg

List of Publications by Year
in descending order

62	8,866	71061	118793
papers	citations	41 h-index	62 g-index

80	80	80	6490
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Integrative Analysis of the Caenorhabditis elegans Genome by the modENCODE Project. Science, 2010, 330, 1775-1787.	6.0	912
2	Meiotic Recombination in C. elegans Initiates by a Conserved Mechanism and Is Dispensable for Homologous Chromosome Synapsis. Cell, 1998, 94, 387-398.	13.5	747
3	The auxin-inducible degradation (AID) system enables versatile conditional protein depletion in C. elegans. Development (Cambridge), 2015, 142, 4374-84.	1.2	453
4	Perturbation of Nuclear Architecture by Long-Distance Chromosome Interactions. Cell, 1996, 85, 745-759.	13.5	444
5	Direct Evidence of a Role for Heterochromatin in Meiotic Chromosome Segregation. Cell, 1996, 86, 135-146.	13.5	372
6	Comparative analysis of metazoan chromatin organization. Nature, 2014, 512, 449-452.	13.7	363
7	Chromosome Sites Play Dual Roles to Establish Homologous Synapsis during Meiosis in C. elegans. Cell, 2005, 123, 1037-1050.	13.5	290
8	X-chromosome silencing in the germline ofC. elegans. Development (Cambridge), 2002, 129, 479-492.	1.2	280
9	HIM-8 Binds to the X Chromosome Pairing Center and Mediates Chromosome-Specific Meiotic Synapsis. Cell, 2005, 123, 1051-1063.	13.5	270
10	Broad chromosomal domains of histone modification patterns in C. elegans. Genome Research, 2011, 21, 227-236.	2.4	256
11	Cytoskeletal Forces Span the Nuclear Envelope to Coordinate Meiotic Chromosome Pairing and Synapsis. Cell, 2009, 139, 907-919.	13.5	254
12	The SUN Rises on Meiotic Chromosome Dynamics. Developmental Cell, 2009, 17, 598-605.	3.1	238
13	Caenorhabditis elegans msh-5 Is Required for Both Normal and Radiation-Induced Meiotic Crossing Over but Not for Completion of Meiosis. Genetics, 2000, 156, 617-630.	1.2	228
14	A Family of Zinc-Finger Proteins Is Required for Chromosome-Specific Pairing and Synapsis during Meiosis in C. elegans. Developmental Cell, 2006, 11, 817-829.	3.1	216
15	A Conserved Checkpoint Monitors Meiotic Chromosome Synapsis in Caenorhabditis elegans. Science, 2005, 310, 1683-1686.	6.0	215
16	Complete genomic and epigenetic maps of human centromeres. Science, 2022, 376, eabl4178.	6.0	204
17	Homologous Chromosome Pairing in Drosophila melanogaster Proceeds through Multiple Independent Initiations. Journal of Cell Biology, 1998, 141, 5-20.	2.3	195
18	Protein phosphatase 2A regulates MPF activity and sister chromatid cohesion in budding yeast. Current Biology, 1996, 6, 1609-1620.	1.8	183

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19	X-chromosome silencing in the germline of C. elegans. Development (Cambridge), 2002, 129, 479-92.	1.2	181
20	The synaptonemal complex has liquid crystalline properties and spatially regulates meiotic recombination factors. ELife, 2017, 6, .	2.8	180
21	Crossovers trigger a remodeling of meiotic chromosome axis composition that is linked to two-step loss of sister chromatid cohesion. Genes and Development, 2008, 22, 2886-2901.	2.7	141
22	The C. elegans DSB-2 Protein Reveals a Regulatory Network that Controls Competence for Meiotic DSB Formation and Promotes Crossover Assurance. PLoS Genetics, 2013, 9, e1003674.	1.5	134
23	ZHP-3 Acts at Crossovers to Couple Meiotic Recombination with Synaptonemal Complex Disassembly and Bivalent Formation in C. elegans. PLoS Genetics, 2008, 4, e1000235.	1.5	129
24	Pairing Centers Recruit a Polo-like Kinase to Orchestrate Meiotic Chromosome Dynamics in C. elegans. Developmental Cell, 2011, 21, 934-947.	3.1	127
25	Here, There, and Everywhere. Journal of Cell Biology, 2001, 153, F33-F38.	2.3	123
26	Identification of chromosome sequence motifs that mediate meiotic pairing and synapsis in C. elegans. Nature Cell Biology, 2009, 11, 934-942.	4.6	123
27	Transgene-mediated cosuppression in the C. elegans germ line. Genes and Development, 2000, 14, 1578-1583.	2.7	122
28	Prelude to a Division. Annual Review of Cell and Developmental Biology, 2008, 24, 397-424.	4.0	118
29	Identification of DSB-1, a Protein Required for Initiation of Meiotic Recombination in Caenorhabditis elegans, Illuminates a Crossover Assurance Checkpoint. PLoS Genetics, 2013, 9, e1003679.	1.5	113
30	Dynein-dependent processive chromosome motions promote homologous pairing in C. elegans meiosis. Journal of Cell Biology, 2012, 196, 47-64.	2.3	111
31	The Chromosome Axis Controls Meiotic Events through a Hierarchical Assembly of HORMA Domain Proteins. Developmental Cell, 2014, 31, 487-502.	3.1	108
32	Chromosome pairing and synapsis during Caenorhabditis elegans meiosis. Current Opinion in Cell Biology, 2013, 25, 349-356.	2.6	87
33	Direct Visualization Reveals Kinetics of Meiotic Chromosome Synapsis. Cell Reports, 2015, 10, 1639-1645.	2.9	80
34	Cytological Analysis of Meiosis in Caenorhabditis elegans. Methods in Molecular Biology, 2009, 558, 171-195.	0.4	80
35	A compartmentalized signaling network mediates crossover control in meiosis. ELife, 2018, 7, .	2.8	77
36	A Link between Meiotic Prophase Progression and Crossover Control. PLoS Genetics, 2006, 2, e12.	1.5	72

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37	Superresolution microscopy reveals the three-dimensional organization of meiotic chromosome axes in intact Caenorhabditis elegans tissue. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E4734-E4743.	3.3	72
38	H4K20me1 Contributes to Downregulation of X-Linked Genes for C. elegans Dosage Compensation. PLoS Genetics, 2012, 8, e1002933.	1.5	70
39	The Chromosome Axis Mediates Feedback Control of CHK-2 to Ensure Crossover Formation in C.Âelegans. Developmental Cell, 2015, 35, 247-261.	3.1	69
40	Chapter 10 Mapping Three-Dimensional Chromosome Architecture in Situ. Methods in Cell Biology, 1997, 53, 187-233.	0.5	55
41	A Chromosome RNAissance. Cell, 2002, 111, 159-162.	13.5	48
42	Meiotic recombination and the crossover assurance checkpoint in Caenorhabditis elegans. Seminars in Cell and Developmental Biology, 2016, 54, 106-116.	2.3	47
43	Selective Loss of Sperm Bearing a Compound Chromosome in the Drosophila Female. Genetics, 1996, 143, 1629-1642.	1.2	30
44	In Situ Hybridization to Somatic Chromosomes in Drosophila. Cold Spring Harbor Protocols, 2011, 2011, pdb.top065540-pdb.top065540.	0.2	27
45	Analysis of meiosis in Pristionchus pacificus reveals plasticity in homolog pairing and synapsis in the nematode lineage. ELife, 2021, 10, .	2.8	21
46	A degron-based strategy reveals new insights into Aurora B function in C. elegans. PLoS Genetics, 2021, 17, e1009567.	1.5	17
47	How and Why Chromosomes Interact with the Cytoskeleton during Meiosis. Genes, 2022, 13, 901.	1.0	17
48	Phosphoregulation of DSB-1 mediates control of meiotic double-strand break activity. ELife, 0, 11, .	2.8	16
49	Phase separation in biology and diseaseâ€"a symposium report. Annals of the New York Academy of Sciences, 2019, 1452, 3-11.	1.8	14
50	Pushing the (nuclear) envelope into meiosis. Genome Biology, 2013, 14, 110.	3.8	13
51	Diffusion through a liquid crystalline compartment regulates meiotic recombination. , 2019, , .		12
52	Hybridization to Tissues in Suspension for Whole-Mount FISH in Drosophila. Cold Spring Harbor Protocols, 2011, 2011, pdb.prot066902.	0.2	11
53	Fragmentation and Labeling of Probe DNA for Whole-Mount FISH in Drosophila. Cold Spring Harbor Protocols, 2011, 2011, pdb.prot066886.	0.2	7
54	Robust, versatile DNA FISH probes for chromosome-specific repeats in Caenorhabditis elegans and Pristionchus pacificus. G3: Genes, Genomes, Genetics, 2022, 12, .	0.8	5

#	Article	IF	Citations
55	Meiosis Researchers Exchange Information in the Alps. Developmental Cell, 2003, 5, 691-693.	3.1	4
56	Manual Dissection and Fixation of Drosophila Egg Chambers for Whole-Mount FISH. Cold Spring Harbor Protocols, 2011, 2011, pdb.prot066894.	0.2	4
57	RNA Plays Meiotic Matchmaker. Science, 2012, 336, 681-682.	6.0	3
58	Formaldehyde Fixation of Drosophila Tissues onto Slides for Whole-Mount FISH. Cold Spring Harbor Protocols, 2012, 2012, pdb.prot067314.	0.2	3
59	Hybridization to Tissues on Slides or Coverslips for Whole-Mount FISH in Drosophila: Figure 1.. Cold Spring Harbor Protocols, 2012, 2012, pdb.prot067322.	0.2	2
60	Microdissection of Drosophila Polytene Chromosomes for DOP-PCR. Cold Spring Harbor Protocols, 2012, 2012, pdb.prot067298-pdb.prot067298.	0.2	2
61	DOP-PCR Amplification of Probe DNA for Whole-Mount FISH in Drosophila. Cold Spring Harbor Protocols, 2012, 2012, pdb.prot067306-pdb.prot067306.	0.2	2
62	A Link Between Meiotic Prophase Progression and Crossover Control. PLoS Genetics, 2005, preprint, e12.	1.5	1