Jeff Sekelsky

List of Publications by Year
in descending order

Version: 2024-02-01

60 papers	2,813 citations	186265 28 h-index	189892 50 g-index
89 all docs	89 docs citations	89 times ranked	2679 citing authors

#	Article	IF	Citations
1	The mei-41 gene of D. melanogaster is a structural and functional homolog of the human ataxia telangiectasia gene. Cell, 1995, 82, 815-821.	28.9	294
2	Drosophila MUS312 and the Vertebrate Ortholog BTBD12 Interact with DNA Structure-Specific Endonucleases in DNA Repair and Recombination. Molecular Cell, 2009, 35, 128-135.	9.7	159
3	Drawing a stripe in Drosophila imaginal disks: negative regulation of decapentaplegic and patched expression by engrailed.. Genetics, 1995, 139, 745-756.	2.9	125
4	From sequence to phenotype: reverse genetics in drosophila melanogaster. Nature Reviews Genetics, 2002, 3, 189-198.	16.3	121
5	DNA Repair in Drosophila. Journal of Cell Biology, 2000, 150, F31-F36.	5.2	118
6	Meiotic versus mitotic recombination: Two different routes for doubleâ€strand break repair. BioEssays, 2010, 32, 1058-1066.	2.5	116
7	Drosophila MUS312 Interacts with the Nucleotide Excision Repair Endonuclease MEI-9 to Generate Meiotic Crossovers. Molecular Cell, 2002, 10, 1503-1509.	9.7	102
8	DNA Repair inDrosophila: Mutagens, Models, and Missing Genes. Genetics, 2017, 205, 471-490.	2.9	99
9	Evidence for Multiple Cycles of Strand Invasion During Repair of Double-Strand Gaps in Drosophila. Genetics, 2004, 167, 699-705.	2.9	97
10	REC, Drosophila MCM8, Drives Formation of Meiotic Crossovers. PLoS Genetics, 2005, 1, e40.	3.5	97
11	Mechanistic basis for microhomology identification and genome scarring by polymerase theta. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 8476-8485.	7.1	96
12	Interstrand crosslink repair: can XPF-ERCC1 be let off the hook?. Trends in Genetics, 2008, 24, 70-76.	6.7	95
13	Multiple Functions of Drosophila BLM Helicase in Maintenance of Genome Stability. Genetics, 2007, 176, 1979-1992.	2.9	84
14	Formation of deletions during double-strand break repair in Drosophila DmBlm mutants occurs after strand invasion. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 15694-15699.	7.1	83
15	Meiotic and Mitotic Recombination in Meiosis. Genetics, 2013, 194, 327-334.	2.9	83
16	Local Inversion Heterozygosity Alters Recombination throughout the Genome. Current Biology, 2018, 28, 2984-2990.e3.	3.9	74
17	Phenotypic Analysis of Separation-of-Function Alleles of MEI-41, Drosophila ATM/ATR. Genetics, 2003, 164, 589-601.	2.9	71
18	Mitotic Recombination: Why? When? How? Where?. PLoS Genetics, 2009, 5, e1000411.	3.5	68

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19	The Development of a Monoclonal Antibody Recognizing the Drosophila melanogaster Phosphorylated Histone H2A Variant (Î³-H2AV). G3: Genes, Genomes, Genetics, 2013, 3, 1539-1543.	1.8	67
20	Evolution of an MCM Complex in Flies That Promotes Meiotic Crossovers by Blocking BLM Helicase. Science, 2012, 338, 1363-1365.	12.6	61
21	Drosophila ATR in Double-Strand Break Repair. Genetics, 2007, 175, 1023-1033.	2.9	57
22	Synthetic Lethality of Drosophila in the Absence of the MUS81 Endonuclease and the DmBlm Helicase Is Associated With Elevated Apoptosis. Genetics, 2007, 176, 1993-2001.	2.9	49
23	Nucleotide excision repair endonuclease genes in Drosophila melanogaster. Mutation Research DNA Repair, 2000, 459, 219-228.	3.7	48
24	Bloom Syndrome Helicase Promotes Meiotic Crossover Patterning and Homolog Disjunction. Current Biology, 2017, 27, 96-102.	3.9	46
25	Three Structure-Selective Endonucleases Are Essential in the Absence of BLM Helicase in Drosophila. PLoS Genetics, 2011, 7, e1002315.	3.5	43
26	Drosophila ERCC1 Is Required for a Subset of MEI-9-Dependent Meiotic Crossovers. Genetics, 2005, 170, 1737-1745.	2.9	42
27	Meiotic Crossover Patterning. Frontiers in Cell and Developmental Biology, 2021, 9, 681123.	3.7	35
28	Heteroduplex DNA in Meiotic Recombination in Drosophila mei-9 Mutants. Genetics, 2007, 176, 63-72.	2.9	30
29	Meiotic Recombination in Drosophila Msh6 Mutants Yields Discontinuous Gene Conversion Tracts. Genetics, 2007, 176, 53-62.	2.9	29
30	Eliminating Both Canonical and Short-Patch Mismatch Repair in Drosophila melanogaster Suggests a New Meiotic Recombination Model. PLoS Genetics, 2014, 10, e1004583.	3.5	28
31	Bloom syndrome helicase in meiosis: Proâ€crossover functions of an antiâ€crossover protein. BioEssays, 2017, 39, 1700073.	2.5	23
32	Drosophila FANCM Helicase Prevents Spontaneous Mitotic Crossovers Generated by the MUS81 and SLX1 Nucleases. Genetics, 2014, 198, 935-945.	2.9	22
33	Substrate preference of Gen endonucleases highlights the importance of branched structures as DNA damage repair intermediates. Nucleic Acids Research, 2017, 45, 5333-5348.	14.5	21
34	Centromere-Proximal Meiotic Crossovers inDrosophila melanogasterAre Suppressed by Both Highly Repetitive Heterochromatin and Proximity to the Centromere. Genetics, 2019, 213, 113-125.	2.9	21
35	Loss of Drosophila Mei-41/ATR Alters Meiotic Crossover Patterning. Genetics, 2018, 208, 579-588.	2.9	19
36	DNA polymerase theta suppresses mitotic crossing over. PLoS Genetics, 2021, 17, e1009267.	3.5	19

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37	Annealing of Complementary DNA Sequences During Double-Strand Break Repair inDrosophilaIs Mediated by the Ortholog of SMARCAL1. Genetics, 2017, 206, 467-480.	2.9	17
38	Sources and Structures of Mitotic Crossovers That Arise When BLM Helicase Is Absent inDrosophila. Genetics, 2014, 196, 107-118.	2.9	16
39	The absence of crossovers on chromosome 4 in Drosophila melanogaster: Imperfection or interesting exception?. Fly, 2017, 11, 253-259.	1.7	15
40	Transcription Initiation From Within P Elements Generates Hypomorphic Mutations in Drosophila melanogaster. Genetics, 2011, 188, 749-752.	2.9	13
41	A pathway for error-free non-homologous end joining of resected meiotic double-strand breaks. Nucleic Acids Research, 2021, 49, 879-890.	14.5	13
42	An elegans Solution for Crossover Formation. PLoS Genetics, 2013, 9, e1003658.	3.5	11
43	Centromeric SMC1 promotes centromere clustering and stabilizes meiotic homolog pairing. PLoS Genetics, 2019, 15, e1008412.	3.5	11
44	Variation in Meiotic Recombination Frequencies Between Allelic Transgenes Inserted at Different Sites in theDrosophila melanogasterGenome. G3: Genes, Genomes, Genetics, 2013, 3, 1419-1427.	1.8	9
45	Meiotic MCM Proteins Promote and Inhibit Crossovers During Meiotic Recombination. Genetics, 2019, 212, 461-468.	2.9	9
46	Unique invasions and resolutions: DNA repair proteins in meiotic recombination in Drosophila melanogaster. Cytogenetic and Genome Research, 2004, 107, 172-179.	1.1	8
47	Biochemical Activities and Genetic Functions of the Drosophila melanogaster Fancm Helicase in DNA Repair. Genetics, 2016, 204, 531-541.	2.9	8
48	Human Cell Assays for Synthesis-Dependent Strand Annealing and Crossing over During Double-Strand Break Repair. G3: Genes, Genomes, Genetics, 2017, 7, 1191-1199.	1.8	8
49	Reducing DNA Polymerase Î± in the Absence of Drosophila ATR Leads to P53-Dependent Apoptosis and Developmental Defects. Genetics, 2007, 176, 1441-1451.	2.9	7
50	DNA damage responses in Drosophila nbs mutants with reduced or altered NBS function. DNA Repair, 2009, 8, 803-812.	2.8	6
51	Blm helicase facilitates rapid replication of repetitive DNA sequences in early Drosophila development. Genetics, 2022, 220, .	2.9	5
52	CSB-independent, XPC-dependent transcription-coupled repair in Drosophila. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	5
53	Targeted Gene Replacement in Drosophila Goes the Distance. Genetics, 2013, 193, 377-381.	2.9	2
54	TheDrosophila melanogasterOrtholog of RFWD3 Functions Independently of RAD51 During DNA Repair. G3: Genes, Genomes, Genetics, 2020, 10, 999-1004.	1.8	2

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55	The 2008 Genetics Society of America Award for Excellence in Education. Genetics, 2008, 178, 1131-1133.	2.9	1
56	Meiotic and Mitotic Recombination. , 2016, , 139-154.		1
57	Meiotic and mitotic recombination: First in flies. , 2021, , 151-168.		1
58	REC, Drosophila MCM8, Drives Formation of Meiotic Crossovers. PLoS Genetics, 2005, preprint, e40.	3.5	0
59	Centromeric SMC1 promotes centromere clustering and stabilizes meiotic homolog pairing. , 2019, 15, e1008412.		0
60	Centromeric SMC1 promotes centromere clustering and stabilizes meiotic homolog pairing. , 2019, 15, e1008412.		0