Gary H Karpen

List of Publications by Year
in descending order

89 papers	22,980 citations	31902 53 h-index	53109 85 g-index
107 all docs	107 docs citations	107 times ranked	21182 citing authors

#	Article	IF	Citations
1	Complete genomic and epigenetic maps of human centromeres. Science, 2022, 376, eabl4178.	6.0	204
2	Pericentromeric heterochromatin is hierarchically organized and spatially contacts H3K9me2 islands in euchromatin. PLoS Genetics, 2020, 16, e1008673.	1.5	32
3	Innovation of heterochromatin functions drives rapid evolution of essential ZAD-ZNF genes in Drosophila. ELife, 2020, 9, .	2.8	28
4	Title is missing!. , 2020, 16, e1008673.		0
5	Title is missing!. , 2020, 16, e1008673.		0
6	Title is missing!. , 2020, 16, e1008673.		0
7	Title is missing!. , 2020, 16, e1008673.		0
8	Timely double-strand break repair and pathway choice in pericentromeric heterochromatin depend on the histone demethylase dKDM4A. Genes and Development, 2019, 33, 103-115.	2.7	45
9	Haplotypes spanning centromeric regions reveal persistence of large blocks of archaic DNA. ELife, 2019, 8, .	2.8	54
10	RNA from a simple-tandem repeat is required for sperm maturation and male fertility in Drosophila melanogaster. ELife, 2019, 8, .	2.8	37
11	Heterochromatin: Guardian of the Genome. Annual Review of Cell and Developmental Biology, 2018, 34, 265-288.	4.0	335
12	Phase separation drives heterochromatin domain formation. Nature, 2017, 547, 241-245.	13.7	1,456
13	Exploring the role of CENP-A Ser18 phosphorylation in CIN and Tumorigenesis. Cell Cycle, 2017, 16, 2323-2325.	1.3	6
14	Drosophila Histone Demethylase KDM4A Has Enzymatic and Non-enzymatic Roles in Controlling Heterochromatin Integrity. Developmental Cell, 2017, 42, 156-169.e5.	3.1	38
15	FBW7 Loss Promotes Chromosomal Instability and Tumorigenesis via Cyclin E1/CDK2â€“Mediated Phosphorylation of CENP-A. Cancer Research, 2017, 77, 4881-4893.	0.4	68
16	Influence of early life exposure, host genetics and diet on the mouse gut microbiome and metabolome. Nature Microbiology, 2017, 2, 16221.	5.9	138
17	Pervasive epigenetic effects of Drosophila euchromatic transposable elements impact their evolution. ELife, 2017, 6, .	2.8	102
18	The composition and organization of Drosophila heterochromatin are heterogeneous and dynamic. ELife, 2016, 5, .	2.8	53

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19	A single double-strand break system reveals repair dynamics and mechanisms in heterochromatin and euchromatin. Genes and Development, 2016, 30, 1645-1657.	2.7	95
20	Centromere and kinetochore gene misexpression predicts cancer patient survival and response to radiotherapy and chemotherapy. Nature Communications, 2016, 7, 12619.	5.8	152
21	Identification of genetic loci that control mammary tumor susceptibility through the host microenvironment. Scientific Reports, 2015, 5, 8919.	1.6	16
22	Identification of genetic factors that modify motor performance and body weight using Collaborative Cross mice. Scientific Reports, 2015, 5, 16247.	1.6	47
23	The Release 6 reference sequence of the <i>Drosophila melanogaster</i> genome. Genome Research, 2015, 25, 445-458.	2.4	359
24	Heterochromatic breaks move to the nuclear periphery to continue recombinational repair. Nature Cell Biology, 2015, 17, 1401-1411.	4.6	209
25	Nucleosomes Shape DNA Polymorphism and Divergence. PLoS Genetics, 2014, 10, e1004457.	1.5	38
26	Impact of sequencing depth in ChIP-seq experiments. Nucleic Acids Research, 2014, 42, e74-e74.	6.5	69
27	Comparative analysis of metazoan chromatin organization. Nature, 2014, 512, 449-452.	13.7	363
28	Editorial overview: Cell nucleus: The nucleus: a dynamic organelle. Current Opinion in Cell Biology, 2014, 28, iv-vii.	2.6	2
29	An interferon signature identified by RNA-sequencing of mammary tissues varies across the estrous cycle and is predictive of metastasis-free survival. Oncotarget, 2014, 5, 4011-4025.	0.8	19
30	Solo or doppio: how many CENP-As make a centromeric nucleosome?. Nature Structural and Molecular Biology, 2013, 20, 648-650.	3.6	17
31	The Cell Cycle Timing of Centromeric Chromatin Assembly in Drosophila Meiosis Is Distinct from Mitosis Yet Requires CAL1 and CENP-C. PLoS Biology, 2012, 10, e1001460.	2.6	72
32	Sequence-Specific Targeting of Dosage Compensation in Drosophila Favors an Active Chromatin Context. PLoS Genetics, 2012, 8, e1002646.	1.5	48
33	Assembly of Drosophila Centromeric Nucleosomes Requires CID Dimerization. Molecular Cell, 2012, 45, 263-269.	4.5	50
34	Nature and function of insulator protein binding sites in the <i>Drosophila</i> genome. Genome Research, 2012, 22, 2188-2198.	2.4	168
35	Double-Strand Breaks in Heterochromatin Move Outside of a Dynamic HP1a Domain to Complete Recombinational Repair. Cell, 2011, 144, 732-744.	13.5	470
36	An assessment of histone-modification antibody quality. Nature Structural and Molecular Biology, 2011, 18, 91-93.	3.6	369

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37	Comprehensive analysis of the chromatin landscape in Drosophila melanogaster. Nature, 2011, 471, 480-485.	13.7	781
38	Plasticity in patterns of histone modifications and chromosomal proteins in <i>Drosophila</i> heterochromatin. Genome Research, 2011, 21, 147-163.	2.4	230
39	Assembly of Drosophila Centromeric Chromatin Proteins during Mitosis. PLoS Genetics, 2011, 7, e1002068.	1.5	135
40	Identification of Functional Elements and Regulatory Circuits by <i>Drosophila</i> modENCODE. Science, 2010, 330, 1787-1797.	6.0	1,124
41	Identification of a physiological E2 module for the human anaphase-promoting complex. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 18213-18218.	3.3	259
42	Heterochromatic Genome Stability Requires Regulators of Histone H3 K9 Methylation. PLoS Genetics, 2009, 5, e1000435.	1.5	168
43	Unlocking the secrets of the genome. Nature, 2009, 459, 927-930.	13.7	744
44	Frodos Found: Behold the CENP-A â€œRingâ€• Bearers. Cell, 2009, 137, 409-412.	13.5	14
45	Epigenetic regulation of centromeric chromatin: old dogs, new tricks?. Nature Reviews Genetics, 2008, 9, 923-937.	7.7	521
46	Epigenetic regulation of heterochromatic DNA stability. Current Opinion in Genetics and Development, 2008, 18, 204-211.	1.5	183
47	Genome-wide analysis reveals a cell cycleâ€"dependent mechanism controlling centromere propagation. Journal of Cell Biology, 2008, 183, 805-818.	2.3	172
48	The Release 5.1 Annotation of Drosophila melanogaster Heterochromatin. Science, 2007, 316, 1586-1591.	6.0	181
49	A Specialized Nucleosome Has a â€œPointâ€• to Make. Cell, 2007, 129, 1047-1049.	13.5	15
50	Improved repeat identification and masking in Dipterans. Gene, 2007, 389, 1-9.	1.0	87
51	Sequence Finishing and Mapping of Drosophila melanogaster Heterochromatin. Science, 2007, 316, 1625-1628.	6.0	264
52	H3K9 methylation and RNA interference regulate nucleolar organization and repeated DNA stability. Nature Cell Biology, 2007, 9, 25-35.	4.6	353
53	Evolution of genes and genomes on the Drosophila phylogeny. Nature, 2007, 450, 203-218.	13.7	1,886
54	Mislocalization of the Drosophila Centromere-Specific Histone CID Promotes Formation of Functional Ectopic Kinetochores. Developmental Cell, 2006, 10, 303-315.	3.1	319

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55	The ABCs of centromeres. Nature Cell Biology, 2006, 8, 427-429.	4.6	22
56	Drosophila CENP-A Mutations Cause a BubR1- Dependent Early Mitotic Delay without Normal Localization of Kinetochore Components. PLoS Genetics, 2006, 2, e110.	1.5	39
57	Acf1 confers unique activities to ACF/CHRAC and promotes the formation rather than disruption of chromatin in vivo. Genes and Development, 2004, 18, 170-183.	2.7	159
58	Centromeric chromatin exhibits a histone modification pattern that is distinct from both euchromatin and heterochromatin. Nature Structural and Molecular Biology, 2004, 11, 1076-1083.	3.6	518
59	A high proportion of genes involved in position effect variegation also affect chromosome inheritance. Chromosoma, 2004, 112, 269-276.	1.0	13
60	Sequence Analysis of a Functional Drosophila Centromere. Genome Research, 2003, 13, 182-194.	2.4	155
61	Genetics of <i>P</i>-Element Transposition Into <i>Drosophila melanogaster</i> Centric Heterochromatin. Genetics, 2003, 165, 2039-2053.	1.2	26
62	A Chromosome RNAissance. Cell, 2002, 111, 159-162.	13.5	48
63	Conserved Organization of Centromeric Chromatin in Flies and Humans. Developmental Cell, 2002, 2, 319-330.	3.1	493
64	Modifiers of Terminal Deficiency-Associated Position Effect Variegation in Drosophila. Genetics, 2002, 160, 995-1009.	1.2	25
65	Efficient Recovery of Centric Heterochromatin <i>P</i>-Element Insertions in <i>Drosophila melanogaster</i>. Genetics, 2002, 161, 217-229.	1.2	35
66	Determining centromere identity: cyclical stories and forking paths. Nature Reviews Genetics, 2001, 2, 584-596.	7.7	260
67	The role of Drosophila CID in kinetochore formation, cell-cycle progression and heterochromatin interactions. Nature Cell Biology, 2001, 3, 730-739.	4.6	327
68	The Drosophila Su(var)2-10 locus regulates chromosome structure and function and encodes a member of the PIAS protein family. Genes and Development, 2001, 15, 1334-1348.	2.7	175
69	Centromere identity in Drosophila is not determined in vivo by replication timing. Journal of Cell Biology, 2001, 154, 683-690.	2.3	76
70	Identification of Chromosome Inheritance Modifiers in <i>Drosophila melanogaster</i>. Genetics, 2001, 157, 1623-1637.	1.2	61
71	The Activation of a Neocentromere in Drosophila Requires Proximity to an Endogenous Centromere. Genetics, 2001, 158, 1615-1628.	1.2	121
72	Sister-chromatid cohesion via MEI-S332 and kinetochore assembly are separable functions of the Drosophila centromere. Current Biology, 2000, 10, 997-1000.	1.8	40

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73	The Genome Sequence of Drosophila melanogaster. Science, 2000, 287, 2185-2195.	6.0	5,566
74	Acquisition and Metastability of Centromere Identity and Function: Sequence Analysis of a Human Neocentromere. Genome Research, 2000, 10, 725-728.	2.4	23
75	Centromere proteins and chromosome inheritance: a complex affair. Current Opinion in Genetics and Development, 1999, 9, 206-217.	1.5	87
76	Neocentromere activity of structurally acentric mini-chromosomes in Drosophila. Nature Genetics, 1998, 18, 30-38.	9.4	195
77	Centromeres Take Flight: Alpha Satellite and the Quest for the Human Centromere. Cell, 1998, 93, 317-320.	13.5	134
78	Molecular Structure of a Functional Drosophila Centromere. Cell, 1997, 91, 1007-1019.	13.5	260
79	The case for epigenetic effects on centromere identity and function. Trends in Genetics, 1997, 13, 489-496.	2.9	454
80	Trans-Suppression of Terminal Deficiency-Associated Position Effect Variegation in a Drosophila Minichromosome. Genetics, 1997, 145, 325-337.	1.2	28
81	Identification of <i>Trans</i>-Acting Genes Necessary for Centromere Function in <i>Drosophila melanogaster</i> Using Centromere-Defective Minichromosomes. Genetics, 1997, 145, 737-747.	1.2	17
82	Localization of centromere function in a drosophila minichromosome. Cell, 1995, 82, 599-609.	13.5	199
83	Interactions between the nod+ kinesin-like gene and extracentromeric sequences are required for transmission of a drosophila minichromosome. Cell, 1995, 81, 139-148.	13.5	68
84	Position-effect variegation and the new biology of heterochromatin. Current Opinion in Genetics and Development, 1994, 4, 281-291.	1.5	252
85	Replication forks are not found in a Drosophila minichromosome demonstrating a gradient of polytenization. Chromosoma, 1992, 102, 15-19.	1.0	36
86	Drosophila ribosomal RNA genes function as an X-Y pairing site during male meiosis. Cell, 1990, 61, 61-72.	13.5	187
87	Fragile sites in human chromosomes as regions of late-replicating DNA. Trends in Genetics, 1987, 3, 274-281.	2.9	161
88	Compartmental restrictions and blastema formation during pattern regulation in Drosophila imaginal leg discs. Developmental Biology, 1981, 87, 64-75.	0.9	67
89	Extensive regulatory capabilities of a Drosophila imaginal disk blastema. Nature, 1981, 294, 744-747.	13.7	37