R Kelly Dawe

List of Publications by Year
in descending order

78 papers	11,283 citations	61984 43 h-index	66911 78 g-index
86 all docs	86 docs citations	86 times ranked	10545 citing authors

#	Article	IF	Citations
1	The B73 Maize Genome: Complexity, Diversity, and Dynamics. Science, 2009, 326, 1112-1115.	12.6	3,612
2	Improved maize reference genome with single-molecule technologies. Nature, 2017, 546, 524-527.	27.8	1,113
3	A standardized kinesin nomenclature. Journal of Cell Biology, 2004, 167, 19-22.	5.2	662
4	Centromeric Retroelements and Satellites Interact with Maize Kinetochore Protein CENH3. Plant Cell, 2002, 14, 2825-2836.	6.6	354
5	CHH islands: de novo DNA methylation in near-gene chromatin regulation in maize. Genome Research, 2013, 23, 628-637.	5.5	310
6	A molecular view of plant centromeres. Trends in Plant Science, 2003, 8, 570-575.	8.8	300
7	De novo assembly, annotation, and comparative analysis of 26 diverse maize genomes. Science, 2021, 373, 655-662.	12.6	282
8	Chromatin Immunoprecipitation Reveals That the 180-bp Satellite Repeat Is the Key Functional DNA Element of <i>Arabidopsis thaliana</i> Centromeres. Genetics, 2003, 163, 1221-1225.	2.9	254
9	Maize Centromeres: Organization and Functional Adaptation in the Genetic Background of Oat. Plant Cell, 2004, 16, 571-581.	6.6	241
10	The maize W22 genome provides a foundation for functional genomics and transposon biology. Nature Genetics, 2018, 50, 1282-1288.	21.4	183
11	RNA-directed DNA methylation enforces boundaries between heterochromatin and euchromatin in the maize genome. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 14728-14733.	7.1	179
12	Meiotic Drive of Chromosomal Knobs Reshaped the Maize Genome. Genetics, 1999, 153, 415-426.	2.9	173
13	Maize Centromere Structure and Evolution: Sequence Analysis of Centromeres 2 and 5 Reveals Dynamic Loci Shaped Primarily by Retrotransposons. PLoS Genetics, 2009, 5, e1000743.	3.5	168
14	Neocentromere-mediated Chromosome Movement in Maize. Journal of Cell Biology, 1997, 139, 831-840.	5.2	132
15	MEIOTIC CHROMOSOME ORGANIZATION AND SEGREGATION IN PLANTS. Annual Review of Plant Biology, 1998, 49, 371-395.	14.3	127
16	The Maize Homologue of the Cell Cycle Checkpoint Protein MAD2 Reveals Kinetochore Substructure and Contrasting Mitotic and Meiotic Localization Patterns. Journal of Cell Biology, 1999, 145, 425-435.	5.2	125
17	A Maize Homolog of Mammalian CENPC Is a Constitutive Component of the Inner Kinetochore. Plant Cell, 1999, 11, 1227-1238.	6.6	122
18	DNA Binding of Centromere Protein C (CENPC) Is Stabilized by Single-Stranded RNA. PLoS Genetics, 2010, 6, e1000835.	3.5	122

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19	Molecular and Functional Dissection of the Maize B Chromosome Centromere. Plant Cell, 2005, 17, 1412-1423.	6.6	110
20	Widespread Gene Conversion in Centromere Cores. PLoS Biology, 2010, 8, e1000327.	5.6	109
21	Accessible DNA and Relative Depletion of H3K9me2 at Maize Loci Undergoing RNA-Directed DNA Methylation Â. Plant Cell, 2015, 26, 4903-4917.	6.6	106
22	A Kinesin-14 Motor Activates Neocentromeres to Promote Meiotic Drive in Maize. Cell, 2018, 173, 839-850.e18.	28.9	104
23	Gapless assembly of maize chromosomes using long-read technologies. Genome Biology, 2020, 21, 121.	8.8	101
24	Dyneins Have Run Their Course in Plant Lineage. Traffic, 2001, 2, 362-363.	2.7	100
25	Genome-Scale Sequence Disruption Following Biolistic Transformation in Rice and Maize. Plant Cell, 2019, 31, 368-383.	6.6	96
26	Megabase-Scale Inversion Polymorphism in the Wild Ancestor of Maize. Genetics, 2012, 191, 883-894.	2.9	94
27	Centromeres put epigenetics in the driver's seat. Trends in Biochemical Sciences, 2006, 31, 662-669.	7.5	91
28	Partitioning of the Maize Epigenome by the Number of Methyl Groups on Histone H3 Lysines 9 and 27. Genetics, 2006, 173, 1571-1583.	2.9	89
29	Fused sister kinetochores initiate the reductional division in meiosis I. Nature Cell Biology, 2009, 11, 1103-1108.	10.3	85
30	Phosphoserines on Maize CENTROMERIC HISTONE H3 and Histone H3 Demarcate the Centromere and Pericentromere during Chromosome Segregation. Plant Cell, 2005, 17, 572-583.	6.6	77
31	Maize centromeres expand and adopt a uniform size in the genetic background of oat. Genome Research, 2014, 24, 107-116.	5.5	77
32	Independently Regulated Neocentromere Activity of Two Classes of Tandem Repeat Arrays. Plant Cell, 2002, 14, 407-420.	6.6	71
33	Haploid induction by a maize <i>cenh3</i> null mutant. Science Advances, 2021, 7, .	10.3	70
34	Functional Redundancy in the Maize Meiotic Kinetochore. Journal of Cell Biology, 2000, 151, 131-142.	5.2	69
35	Plant neocentromeres: fast, focused, and driven. Chromosome Research, 2004, 12, 655-669.	2.2	65
36	Maximum Likelihood Methods Reveal Conservation of Function Among Closely Related Kinesin Families. Journal of Molecular Evolution, 2002, 54, 42-53.	1.8	64

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37	RNA Interference, Transposons, and the Centromere. Plant Cell, 2003, 15, 297-301.	6.6	64
38	Mechanisms of plant spindle formation. Chromosome Research, 2011, 19, 335-344.	2.2	64
39	Genetic and Genomic Toolbox of <i>Zea mays</i>. Genetics, 2015, 199, 655-669.	2.9	55
40	Total centromere size and genome size are strongly correlated in ten grass species. Chromosome Research, 2012, 20, 403-412.	2.2	53
41	Transformation of rice with long DNA-segments consisting of random genomic DNA or centromere-specific DNA. Transgenic Research, 2007, 16, 341-351.	2.4	52
42	RNA as a Structural and Regulatory Component of the Centromere. Annual Review of Genetics, 2012, 46, 443-453.	7.6	52
43	Centromere Size and Its Relationship to Haploid Formation in Plants. Molecular Plant, 2018, 11, 398-406.	8.3	49
44	Stable centromere positioning in diverse sequence contexts of complex and satellite centromeres of maize and wild relatives. Genome Biology, 2017, 18, 121.	8.8	46
45	Strong epigenetic similarity between maize centromeric and pericentromeric regions at the level of small RNAs, DNA methylation and H3 chromatin modifications. Nucleic Acids Research, 2012, 40, 1550-1560.	14.5	45
46	Loss of RNA-Directed DNA Methylation in Maize Chromomethylase and DDM1-Type Nucleosome Remodeler Mutants. Plant Cell, 2018, 30, 1617-1627.	6.6	41
47	Is It Ordered Correctly? Validating Genome Assemblies by Optical Mapping. Plant Cell, 2018, 30, 7-14.	6.6	40
48	Maize NDC80 is a constitutive feature of the central kinetochore. Chromosome Research, 2007, 15, 767-775.	2.2	39
49	Effect of sequence depth and length in long-read assembly of the maize inbred NC358. Nature Communications, 2020, 11, 2288.	12.8	39
50	Precise Centromere Mapping Using a Combination of Repeat Junction Markers and Chromatin Immunoprecipitationâ€“Polymerase Chain Reaction. Genetics, 2006, 174, 1057-1061.	2.9	35
51	The Maize Ab10 Meiotic Drive System Maps to Supernumerary Sequences in a Large Complex Haplotype. Genetics, 2006, 174, 145-154.	2.9	34
52	Maize chromosomal knobs are located in gene-dense areas and suppress local recombination. Chromosoma, 2013, 122, 67-75.	2.2	33
53	Four Loci on Abnormal Chromosome 10 Contribute to Meiotic Drive in Maize. Genetics, 2003, 164, 699-709.	2.9	32
54	Intragenomic Conflict Between the Two Major Knob Repeats of Maize. Genetics, 2013, 194, 81-89.	2.9	31

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55	Distinct influences of tandem repeats and retrotransposons on CENH3 nucleosome positioning. Epigenetics and Chromatin, 2011, 4, 3.	3.9	30
56	Gene Expression and Chromatin Modifications Associated with Maize Centromeres. G3: Genes, Genomes, Genetics, 2016, 6, 183-192.	1.8	30
57	High Quality Maize Centromere 10 Sequence Reveals Evidence of Frequent Recombination Events. Frontiers in Plant Science, 2016, 7, 308.	3.6	28
58	Distinct kinesin motors drive two types of maize neocentromeres. Genes and Development, 2020, 34, 1239-1251.	5.9	27
59	The Maize Divergent spindle-1 (dv1) Gene Encodes a Kinesin-14A Motor Protein Required for Meiotic Spindle Pole Organization. Frontiers in Plant Science, 2016, 7, 1277.	3.6	26
60	Sequence of the supernumerary B chromosome of maize provides insight into its drive mechanism and evolution. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	25
61	Fitness Costs and Variation in Transmission Distortion Associated with the Abnormal Chromosome 10 Meiotic Drive System in Maize. Genetics, 2018, 208, 297-305.	2.9	23
62	Centromere renewal and replacement in the plant kingdom. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 11573-11574.	7.1	21
63	Diversity and evolution of centromere repeats in the maize genome. Chromosoma, 2015, 124, 57-65.	2.2	21
64	Stable Patterns of CENH3 Occupancy Through Maize Lineages Containing Genetically Similar Centromeres. Genetics, 2015, 200, 1105-1116.	2.9	20
65	Functional diversification of the kinesinâ€14 family in land plants. FEBS Letters, 2018, 592, 1918-1928.	2.8	20
66	The meiotic drive system on maize abnormal chromosome 10 contains few essential genes. Genetica, 2003, 117, 67-76.	1.1	19
67	Modeling the Evolution of Female Meiotic Drive in Maize. G3: Genes, Genomes, Genetics, 2018, 8, 123-130.	1.8	18
68	Stable integration of an engineered megabase repeat array into the maize genome. Plant Journal, 2012, 70, 357-365.	5.7	17
69	The maize gene<i>maternal derepression of r1</i>encodes a DNA glycosylase that demethylates DNA and reduces siRNA expression in the endosperm. Plant Cell, 2022, 34, 3685-3701.	6.6	16
70	Anaphase asymmetry and dynamic repositioning of the division plane during maize meiosis. Journal of Cell Science, 2016, 129, 4014-4024.	2.0	13
71	Charting the path to fully synthetic plant chromosomes. Experimental Cell Research, 2020, 390, 111951.	2.6	12
72	Maize centromeric chromatin scales with changes in genome size. Genetics, 2021, 217, .	2.9	11

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73	The maize abnormal chromosome 10 meiotic drive haplotype: a review. Chromosome Research, 2022, 30, 205-216.	2.2	11
74	QTL Map of Early- and Late-Stage Perennial Regrowth in Zea diploperennis. Frontiers in Plant Science, 2021, 12, 707839.	3.6	5
75	Liveâ€Cell Imaging of Meiotic Spindle and Chromosome Dynamics in Maize (<i>Zea mays</i>). Current Protocols in Plant Biology, 2016, 1, 546-565.	2.8	3
76	Generation of a Maize B Centromere Minimal Map Containing the Central Core Domain. G3: Genes, Genomes, Genetics, 2015, 5, 2857-2864.	1.8	2
77	Genomics of Maize Centromeres. Compendium of Plant Genomes, 2018, , 59-80.	0.5	2
78	Frequent Spindle Assembly Errors Require Structural Rearrangement to Complete Meiosis in Zea mays. International Journal of Molecular Sciences, 2022, 23, 4293.	4.1	1