Claudia KÃ¶hler

List of Publications by Year
in descending order

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114 papers	9,420 citations	31902 53 h-index	45213 90 g-index
138 all docs	138 docs citations	138 times ranked	6654 citing authors

#	Article	IF	Citations
1	Bypassing reproductive barriers in hybrid seeds using chemically induced epimutagenesis. Plant Cell, 2022, 34, 989-1001.	3.1	16
2	The miRNome function transitions from regulating developmental genes to transposable elements during pollen maturation. Plant Cell, 2022, 34, 784-801.	3.1	17
3	Endosperm Evolution by Duplicated and Neofunctionalized Type I MADS-Box Transcription Factors. Molecular Biology and Evolution, 2022, 39, .	3.5	12
4	Role of H1 and DNA methylation in selective regulation of transposable elements during heat stress. New Phytologist, 2021, 229, 2238-2250.	3.5	40
5	Hybrid seed incompatibility in Capsella is connected to chromatin condensation defects in the endosperm. PLoS Genetics, 2021, 17, e1009370.	1.5	17
6	Polycomb Repressive Complex 2 and KRYPTONITE regulate pathogen-induced programmed cell death in Arabidopsis. Plant Physiology, 2021, 185, 2003-2021.	2.3	15
7	INT-Hi-C reveals distinct chromatin architecture in endosperm and leaf tissues ofArabidopsis. Nucleic Acids Research, 2021, 49, 4371-4385.	6.5	22
8	On the origin of the widespread self-compatible allotetraploid Capsella bursa-pastoris (Brassicaceae). Heredity, 2021, 127, 124-134.	1.2	12
9	Postzygotic reproductive isolation established in the endosperm: mechanisms, drivers and relevance. Philosophical Transactions of the Royal Society B: Biological Sciences, 2021, 376, 20200118.	1.8	28
10	Transgenerational effect of mutants in the RNA-directed DNA methylation pathway on the triploid block in Arabidopsis. Genome Biology, 2021, 22, 141.	3.8	13
11	Combinations of maternal-specific repressive epigenetic marks in the endosperm control seed dormancy. ELife, 2021, 10, .	2.8	10
12	H2A ubiquitination is essential for Polycomb Repressive Complex 1-mediated gene regulation in Marchantia polymorpha. Genome Biology, 2021, 22, 253.	3.8	8
13	Genomic imprinting in plantsâ€"revisiting existing models. Genes and Development, 2020, 34, 24-36.	2.7	114
14	Dark-Induced Senescence Causes Localized Changes in DNA Methylation. Plant Physiology, 2020, 182, 949-961.	2.3	11
15	Polycomb Repressive Complex 2-mediated histone modification H3K27me3 is associated with embryogenic potential in Norway spruce. Journal of Experimental Botany, 2020, 71, 6366-6378.	2.4	12
16	Removal of H2Aub1 by ubiquitin-specific proteases 12 and 13 is required for stable Polycomb-mediated gene repression in Arabidopsis. Genome Biology, 2020, 21, 144.	3.8	34
17	Polymerase IV Plays a Crucial Role in Pollen Development in Capsella. Plant Cell, 2020, 32, 950-966.	3.1	46
18	Mobility connects: transposable elements wire new transcriptional networks by transferring transcription factor binding motifs. Biochemical Society Transactions, 2020, 48, 1005-1017.	1.6	33

#	Article	IF	Citations
19	Kingdom Come. PLoS Genetics, 2020, 16, e1009178.	1.5	0
20	Genetic basis and timing of a major mating system shift in Capsella. New Phytologist, 2019, 224, 505-517.	3.5	23
21	Auxin regulates endosperm cellularization in Arabidopsis. Genes and Development, 2019, 33, 466-476.	2.7	68
22	Epigenetic signatures associated with imprinted paternally expressed genes in the Arabidopsis endosperm. Genome Biology, 2019, 20, 41.	3.8	40
23	Tissue-specific transposon-associated small RNAs in the gymnosperm tree, Norway spruce. BMC Genomics, 2019, 20, 997.	1.2	12
24	Endosperm-specific transcriptome analysis by applying the INTACT system. Plant Reproduction, 2019, 32, 55-61.	1.3	22
25	The MADS-box transcription factor PHERES1 controls imprinting in the endosperm by binding to domesticated transposons. ELife, 2019, 8, .	2.8	73
26	Auxin: a molecular trigger of seed development. Genes and Development, 2018, 32, 479-490.	2.7	124
27	Transgenerational phenotype aggravation in <scp>CAF</scp>â€1 mutants reveals parentâ€ofâ€origin specific epigenetic inheritance. New Phytologist, 2018, 220, 908-921.	3.5	15
28	Transposon-derived small RNAs triggered by miR845 mediate genome dosage response in Arabidopsis. Nature Genetics, 2018, 50, 186-192.	9.4	126
29	Paternal easiRNAs regulate parental genome dosage in Arabidopsis. Nature Genetics, 2018, 50, 193-198.	9.4	125
30	Arabidopsis SWC4 Binds DNA and Recruits the SWR1 Complex to Modulate Histone H2A.Z Deposition at Key Regulatory Genes. Molecular Plant, 2018, 11, 815-832.	3.9	60
31	Paternally expressed imprinted genes associate with hybridization barriers in Capsella. Nature Plants, 2018, 4, 352-357.	4.7	81
32	Sequestration of a Transposon-Derived siRNA by a Target Mimic Imprinted Gene Induces Postzygotic Reproductive Isolation in Arabidopsis. Developmental Cell, 2018, 46, 696-705.e4.	3.1	40
33	Endosperm-based hybridization barriers explain the pattern of gene flow between Arabidopsis lyrata and Arabidopsis arenosa in Central Europe. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E1027-E1035.	3.3	103
34	Epigenetic processes in flowering plant reproduction. Journal of Experimental Botany, 2017, 68, erw486.	2.4	57
35	Role of small RNAs in epigenetic reprogramming during plant sexual reproduction. Current Opinion in Plant Biology, 2017, 36, 22-28.	3.5	51
36	H3K23me1 is an evolutionarily conserved histone modification associated with <scp>CG DNA</scp> methylation in Arabidopsis. Plant Journal, 2017, 90, 293-303.	2.8	19

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37	Applying the INTACT method to purify endosperm nuclei and to generate parental-specific epigenome profiles. Nature Protocols, 2017, 12, 238-254.	5.5	56
38	Ectopic application of the repressive histone modification H3K9me2 establishes post-zygotic reproductive isolation inArabidopsis thaliana. Genes and Development, 2017, 31, 1272-1287.	2.7	61
39	Plant epigenomicsâ€"deciphering the mechanisms of epigenetic inheritance and plasticity in plants. Genome Biology, 2017, 18, 132.	3.8	18
40	The meiotic regulator JASON utilizes alternative translation initiation sites to produce differentially localized forms. Journal of Experimental Botany, 2017, 68, 4205-4217.	2.4	6
41	Auxin production in the endosperm drives seed coat development in Arabidopsis. ELife, 2016, 5, .	2.8	158
42	BRR2a Affects Flowering Time via FLC Splicing. PLoS Genetics, 2016, 12, e1005924.	1.5	51
43	Endospermâ€based postzygotic hybridization barriers: developmental mechanisms and evolutionary drivers. Molecular Ecology, 2016, 25, 2620-2629.	2.0	114
44	H3K36ac Is an Evolutionary Conserved Plant Histone Modification That Marks Active Genes. Plant Physiology, 2016, 170, 1566-1577.	2.3	77
45	DNA-sequence-specific erasers of epigenetic memory. Nature Genetics, 2016, 48, 591-592.	9.4	8
46	Parental epigenetic asymmetry of <scp>PRC</scp> 2â€mediated histone modifications in the Arabidopsis endosperm. EMBO Journal, 2016, 35, 1298-1311.	3.5	124
47	Rapid Evolution of Genomic Imprinting in Two Species of the Brassicaceae. Plant Cell, 2016, 28, 1815-1827.	3.1	84
48	Silencing in sperm cells is directed by RNA movement from the surrounding nurse cell. Nature Plants, 2016, 2, 16030.	4.7	191
49	H2A deubiquitinases UBP12/13 are part of the Arabidopsis polycomb group protein system. Nature Plants, 2016, 2, 16126.	4.7	66
50	Bridging the generation gap: communication between maternal sporophyte, female gametophyte and fertilization products. Current Opinion in Plant Biology, 2016, 29, 16-20.	3.5	28
51	Auxin production couples endosperm development to fertilization. Nature Plants, 2015, 1, 15184.	4.7	143
52	SYBR Green-activated sorting of Arabidopsis pollen nuclei based on different DNA/RNA content. Plant Reproduction, 2015, 28, 61-72.	1.3	18
53	Organelles maintain spindle position in plant meiosis. Nature Communications, 2015, 6, 6492.	5.8	37
54	Evolution and function of epigenetic processes in the endosperm. Frontiers in Plant Science, 2015, 6, 130.	1.7	16

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55	Keeping the gate closed: functions of the polycomb repressive complex <scp>PRC</scp>2 in development. Plant Journal, 2015, 83, 121-132.	2.8	133
56	Intercellular communication in Arabidopsis thaliana pollen discovered via AHG3 transcript movement from the vegetative cell to sperm. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 13378-13383.	3.3	21
57	Epigenetic mechanisms of postzygotic reproductive isolation in plants. Current Opinion in Plant Biology, 2015, 23, 39-44.	3.5	49
58	Non-reciprocal Interspecies Hybridization Barriers in the Capsella Genus Are Established in the Endosperm. PLoS Genetics, 2015, 11, e1005295.	1.5	88
59	Paternally expressed imprinted genes establish postzygotic hybridization barriers in Arabidopsis thaliana. ELife, 2015, 4, .	2.8	101
60	Hypomethylated Pollen Bypasses the Interploidy Hybridization Barrier inArabidopsisÂ Â. Plant Cell, 2014, 26, 3556-3568.	3.1	49
61	Signalling events regulating seed coat development. Biochemical Society Transactions, 2014, 42, 358-363.	1.6	57
62	Embryo and endosperm, partners in seed development. Current Opinion in Plant Biology, 2014, 17, 64-69.	3.5	143
63	Endosperm-Specific Chromatin Profiling by Fluorescence-Activated Nuclei Sorting and Chip-on-Chip. Methods in Molecular Biology, 2014, 1112, 105-115.	0.4	9
64	An Imprinted Gene Underlies Postzygotic Reproductive Isolation in Arabidopsis thaliana. Developmental Cell, 2013, 26, 525-535.	3.1	127
65	Increased Maternal Genome Dosage Bypasses the Requirement of the FIS Polycomb Repressive Complex 2 in Arabidopsis Seed Development. PLoS Genetics, 2013, 9, e1003163.	1.5	56
66	Endosperm cellularization defines an important developmental transition for embryo development. Development (Cambridge), 2012, 139, 2031-2039.	1.2	191
67	Tearing down barriers: understanding the molecular mechanisms of interploidy hybridizations. Journal of Experimental Botany, 2012, 63, 6059-6067.	2.4	44
68	Evolution, function, and regulation of genomic imprinting in plant seed development. Journal of Experimental Botany, 2012, 63, 4713-4722.	2.4	66
69	Epigenetic Mechanisms Underlying Genomic Imprinting in Plants. Annual Review of Plant Biology, 2012, 63, 331-352.	8.6	196
70	Epigenetic mechanisms in the endosperm and their consequences for the evolution of flowering plants. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2011, 1809, 438-443.	0.9	20
71	Unreduced gamete formation in plants: mechanisms and prospects. Journal of Experimental Botany, 2011, 62, 1659-1668.	2.4	159
72	Identification of imprinted genes subject to parent-of-origin specific expression in Arabidopsis thaliana seeds. BMC Plant Biology, 2011, 11, 113.	1.6	46

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73	Polycomb group proteins are required to couple seed coat initiation to fertilization. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 20826-20831.	3.3	101
74	High-Resolution Analysis of Parent-of-Origin Allelic Expression in the Arabidopsis Endosperm. PLoS Genetics, 2011, 7, e1002126.	1.5	237
75	The CHD3 Chromatin Remodeler PICKLE and Polycomb Group Proteins Antagonistically Regulate Meristem Activity in the Arabidopsis Root Â. Plant Cell, 2011, 23, 1047-1060.	3.1	150
76	The impact of the triploid block on the origin and evolution of polyploid plants. Trends in Genetics, 2010, 26, 142-148.	2.9	225
77	Mechanisms and evolution of genomic imprinting in plants. Heredity, 2010, 105, 57-63.	1.2	73
78	H3K27me3 Profiling of the Endosperm Implies Exclusion of Polycomb Group Protein Targeting by DNA Methylation. PLoS Genetics, 2010, 6, e1001152.	1.5	174
79	Antagonizing Polycomb group-mediated gene repression by chromatin remodelers. Epigenetics, 2010, 5, 20-23.	1.3	6
80	Bisulphite Sequencing of Plant Genomic DNA. Methods in Molecular Biology, 2010, 655, 433-443.	0.4	8
81	Regulation of cell identity by plant Polycomb and trithorax group proteins. Current Opinion in Genetics and Development, 2010, 20, 541-547.	1.5	83
82	Plant Chromatin Immunoprecipitation. Methods in Molecular Biology, 2010, 655, 401-411.	0.4	37
83	Imprinting of the Polycomb Group Gene MEDEA Serves as a Ploidy Sensor in Arabidopsis. PLoS Genetics, 2009, 5, e1000663.	1.5	141
84	CHD3 Proteins and Polycomb Group Proteins Antagonistically Determine Cell Identity in Arabidopsis. PLoS Genetics, 2009, 5, e1000605.	1.5	141
85	Control of PHERES1 Imprinting in Arabidopsis by Direct Tandem Repeats. Molecular Plant, 2009, 2, 654-660.	3.9	61
86	The Chromodomain of LIKE HETEROCHROMATIN PROTEIN 1 Is Essential for H3K27me3 Binding and Function during Arabidopsis Development. PLoS ONE, 2009, 4, e5335.	1.1	120
87	Programming of gene expression by Polycomb group proteins. Trends in Cell Biology, 2008, 18, 236-243.	3.6	156
88	Mechanism of PHERES1 imprinting in Arabidopsis. Journal of Cell Science, 2008, 121, 906-912.	1.2	138
89	Polycomb group proteins function in the female gametophyte to determine seed development in plants. Development (Cambridge), 2007, 134, 3639-3648.	1.2	43
90	Epigenetic Regulation of Seed Development. , 2007, , 309-311.		0

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91	Case studies for transcriptional profiling. , 2007, 97, 87-97.		0
92	Different Polycomb group complexes regulate common target genes in Arabidopsis. EMBO Reports, 2006, 7, 947-952.	2.0	242
93	Epigenetic mechanisms governing seed development in plants. EMBO Reports, 2006, 7, 1223-1227.	2.0	103
94	Polycomb-group proteins repressthe floral activator AGL19 in the FLC-independent vernalization pathway. Genes and Development, 2006, 20, 1667-1678.	2.7	222
95	The Arabidopsis thaliana MEDEA Polycomb group protein controls expression of PHERES1 by parental imprinting. Nature Genetics, 2005, 37, 28-30.	9.4	251
96	Seed Development and Genomic Imprinting in Plants. , 2005, 38, 237-262.		22
97	Transcriptional Programs of Early Reproductive Stages in Arabidopsis. Plant Physiology, 2004, 135, 1765-1775.	2.3	119
98	Intrachromosomal excision of a hybrid Ds element induces large genomic deletions in Arabidopsis. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 2969-2974.	3.3	35
99	Genetic Interaction of an Origin Recognition Complex Subunit and the Polycomb Group Gene MEDEA during Seed Development[W]. Plant Cell, 2004, 16, 1035-1046.	3.1	58
100	Arabidopsis MSI1 is a component of the MEA/FIE Polycomb group complex and required for seed development. EMBO Journal, 2003, 22, 4804-4814.	3.5	379
101	The Polycomb-group protein MEDEA regulates seed development by controlling expression of the MADS-box gene PHERES1. Genes and Development, 2003, 17, 1540-1553.	2.7	390
102	HLM1, an Essential Signaling Component in the Hypersensitive Response, Is a Member of the Cyclic Nucleotideâ€“Gated Channel Ion Channel Family[W]. Plant Cell, 2003, 15, 365-379.	3.1	329
103	Epigenetics: The Flowers That Come In From The Cold. Current Biology, 2002, 12, R129-R131.	1.8	17
104	Epigenetic inheritance of expression states in plant development: the role of Polycomb group proteins. Current Opinion in Cell Biology, 2002, 14, 773-779.	2.6	61
105	Genomic imprinting and seed development: endosperm formation with and without sex. Current Opinion in Plant Biology, 2001, 4, 21-27.	3.5	127
106	Interaction of the Arabidopsis Polycomb group proteins FIE and MEA mediates their common phenotypes. Current Biology, 2000, 10, 1535-1538.	1.8	142
107	Characterisation of calmodulin binding to cyclic nucleotide-gated ion channels fromArabidopsis thaliana. FEBS Letters, 2000, 471, 133-136.	1.3	127
108	Characterisation of a novel gene family of putative cyclic nucleotide- and calmodulin-regulated ion channels in Arabidopsis thaliana. Plant Journal, 1999, 18, 97-104.	2.8	176

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109	Nuclear export of proteins in plants: AtXPO1 is the export receptor for leucine-rich nuclear export signals in Arabidopsis thaliana. Plant Journal, 1999, 20, 695-705.	2.8	165
110	age Mutants of Arabidopsis Exhibit Altered Auxin-Regulated Gene Expression. Plant Cell, 1998, 10, 1649-1662.	3.1	113
111	age Mutants of Arabidopsis Exhibit Altered Auxin-Regulated Gene Expression. Plant Cell, 1998, 10, 1649.	3.1	11
112	Characterization of two members (ACS1 and ACS3) of the 1-aminocyclopropane-1-carboxylate synthase gene family of Arabidopsis thaliana. Gene, 1995, 167, 17-24.	1.0	59
113	Function of Polycomb group proteins in the transition to flowering in plants. , 0, 2008, .		0
114	Role of the Mi-2 homolog PICKLE in repression of Polycomb group target genes in Arabidopsis. , 0, 2008, .		0