Reprogramming of DNA Methylation in Pollen Guides E

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Citation Report

#	Article	IF	CITATIONS
1	Reprogramming the Epigenome in Arabidopsis Pollen. Cold Spring Harbor Symposia on Quantitative Biology, 2012, 77, 1-5.	2.0	20
2	Plant & Cell Physiology Research Highlights. Plant and Cell Physiology, 2012, 53, 1985-1988.	1.5	1
3	What Triggers Differential DNA Methylation of Genes and TEs: Contribution of Body Methylation?. Cold Spring Harbor Symposia on Quantitative Biology, 2012, 77, 155-160.	2.0	27
4	Hypothesis: Selection of Imprinted Genes Is Driven by Silencing Deleterious Gene Activity in Somatic Tissues. Cold Spring Harbor Symposia on Quantitative Biology, 2012, 77, 23-29.	2.0	19
5	Imprinting: DNA Methyltransferases Illuminate Reprogramming. Current Biology, 2012, 22, R929-R931.	1.8	4
7	Long-Distance Systemic Signaling and Communication in Plants. Signaling and Communication in Plants, 2013, , .	0.5	16
8	De Novo Methyltransferase, OsDRM2, Interacts with the ATP-Dependent RNA Helicase, OselF4A, in Rice. Journal of Molecular Biology, 2013, 425, 2853-2866.	2.0	22
9	Early steps of active DNA demethylation initiated by ROS1 glycosylase require three putative helix-invading residues. Nucleic Acids Research, 2013, 41, 8654-8664.	6.5	15
10	Kin Conflict in Seed Development: An Interdependent but Fractious Collective. Annual Review of Cell and Developmental Biology, 2013, 29, 189-211.	4.0	86
11	Small RNAs, big impact: small RNA pathways in transposon control and their effect on the host stress response. Chromosome Research, 2013, 21, 587-600.	1.0	45
12	Comparative methylomics between domesticated and wild silkworms implies possible epigenetic influences on silkworm domestication. BMC Genomics, 2013, 14, 646.	1.2	47
13	Roles, and establishment, maintenance and erasing of the epigenetic cytosine methylation marks in plants. Journal of Genetics, 2013, 92, 629-666.	0.4	24
14	Hidden genetic nature of epigenetic natural variation in plants. Trends in Plant Science, 2013, 18, 625-632.	4.3	39
15	Genomic Imprinting: Insights From Plants. Annual Review of Genetics, 2013, 47, 187-208.	3.2	150
16	Cell and Molecular Biology of DNA Methyltransferase 1. International Review of Cell and Molecular Biology, 2013, 306, 1-42.	1.6	27
17	RNA interference in the nucleus: roles for small RNAs in transcription, epigenetics and beyond. Nature Reviews Genetics, 2013, 14, 100-112.	7.7	871
18	Classification and Comparison of Small RNAs from Plants. Annual Review of Plant Biology, 2013, 64, 137-159.	8.6	832
19	The impact of climate change on plant epigenomes. Trends in Genetics, 2013, 29, 503-505.	2.9	20

# 20	ARTICLE Patterns of population epigenomic diversity. Nature, 2013, 495, 193-198.	IF 13.7	Citations
21	Microgenomics: Genome-Scale, Cell-Specific Monitoring of Multiple Gene Regulation Tiers. Annual Review of Plant Biology, 2013, 64, 293-325.	8.6	46
22	Establishing epigenetic variation during genome reprogramming. RNA Biology, 2013, 10, 490-494.	1.5	23
23	Epigenetics and Development in Plants. Current Topics in Developmental Biology, 2013, 104, 189-222.	1.0	24
24	Epigenetic trigger for tomato ripening. Nature Biotechnology, 2013, 31, 119-120.	9.4	21
25	Widespread, abundant, and diverse TE-associated siRNAs in developing wheat grain. Gene, 2013, 522, 1-7.	1.0	23
26	Small RNAs, RNAi and the Inheritance of Gene Silencing in Caenorhabditis elegans. Journal of Genetics and Genomics, 2013, 40, 153-160.	1.7	36
27	RNA-directed DNA methylation regulates parental genomic imprinting at several loci in <i>Arabidopsis</i> . Development (Cambridge), 2013, 140, 2953-2960.	1.2	80
28	Conceptual links between DNA methylation reprogramming in the early embryo and primordial germ cells. Current Opinion in Cell Biology, 2013, 25, 281-288.	2.6	103
29	Arguments for standardizing transposable element annotation in plant genomes. Trends in Plant Science, 2013, 18, 367-376.	4.3	26
30	A Conversation across Generations: Soma-Germ Cell Crosstalk in Plants. Developmental Cell, 2013, 24, 215-225.	3.1	65
31	Sperm, but Not Oocyte, DNA Methylome Is Inherited by Zebrafish Early Embryos. Cell, 2013, 153, 773-784.	13.5	428
32	An Integrated Workflow for DNA Methylation Analysis. Journal of Genetics and Genomics, 2013, 40, 249-260.	1.7	22
33	Imprinting in Plants and Its Underlying Mechanisms. Journal of Genetics and Genomics, 2013, 40, 239-247.	1.7	12
34	The Initiation of Epigenetic Silencing of Active Transposable Elements Is Triggered by RDR6 and 21-22 Nucleotide Small Interfering RNAs Â. Plant Physiology, 2013, 162, 116-131.	2.3	267
35	Perspectives on deciphering mechanisms underlying plant heat stress response and thermotolerance. Frontiers in Plant Science, 2013, 4, 315.	1.7	323
36	Silicon Era of Carbon-Based Life: Application of Genomics and Bioinformatics in Crop Stress Research. International Journal of Molecular Sciences, 2013, 14, 11444-11483.	1.8	8
37	Pollen-Specific, but Not Sperm-Specific, Genes Show Stronger Purifying Selection and Higher Rates of Positive Selection Than Sporophytic Genes in Capsella grandiflora. Molecular Biology and Evolution, 2013, 30, 2475-2486.	3.5	90

#	Article	IF	CITATIONS
38	Discovery of antibiotic adjuvants. Nature Biotechnology, 2013, 31, 120-122.	9.4	46
39	Warm temperatures induce transgenerational epigenetic release of RNA silencing by inhibiting siRNA biogenesis in <i>Arabidopsis</i> . Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 9171-9176.	3.3	104
40	Non-coding RNAs in homeostasis, disease and stress responses: an evolutionary perspective. Briefings in Functional Genomics, 2013, 12, 254-278.	1.3	111
41	Epigenomic programming contributes to the genomic drift evolution of the F-Box protein superfamily in Arabidopsis. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 16927-16932.	3.3	25
42	Epigenome-wide inheritance of cytosine methylation variants in a recombinant inbred population. Genome Research, 2013, 23, 1663-1674.	2.4	227
43	Small RNAs and regulation of transposons in plants. Genes and Genetic Systems, 2013, 88, 3-7.	0.2	34
44	Parentâ€ofâ€origin control of transgenerational retrotransposon proliferation in Arabidopsis. EMBO Reports, 2013, 14, 823-828.	2.0	22
45	The study of a barley epigenetic regulator, HvDME, in seed development and under drought. BMC Plant Biology, 2013, 13, 172.	1.6	44
46	Epigenetic Repression of Male Gametophyte-Specific Genes in the Arabidopsis Sporophyte. Molecular Plant, 2013, 6, 1176-1186.	3.9	13
47	Impact of New Natural Biostimulants on Increasing Synthesis in Plant Cells of Small Regulatory si/miRNA With High Anti-Nematodic Activity. International Journal of Biology, 2013, 6, .	0.1	4
48	Mutation of a major CG methylase in rice causes genome-wide hypomethylation, dysregulated genome expression, and seedling lethality. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 10642-10647.	3.3	149
49	Methylation of the S f locus in almond is associated with S-RNase loss of function. Plant Molecular Biology, 2014, 86, 681-689.	2.0	37
50	Transcriptomes and Proteomes Define Gene Expression Progression in Pre-meiotic Maize Anthers. G3: Genes, Genomes, Genetics, 2014, 4, 993-1010.	0.8	45
51	Changes in DNA Methylation Levels and Nuclear Distribution Patterns after Microspore Reprogramming to Embryogenesis in Barley. Cytogenetic and Genome Research, 2014, 143, 200-208.	0.6	48
52	Evolution of DNA Methylation Patterns in the Brassicaceae is Driven by Differences in Genome Organization. PLoS Genetics, 2014, 10, e1004785.	1.5	184
53	Chromatin dynamics during plant sexual reproduction. Frontiers in Plant Science, 2014, 5, 354.	1.7	33
54	Decoding the Epigenomes of Herbaceous Plants. Advances in Botanical Research, 2014, 69, 247-277.	0.5	5
55	Three Groups of Transposable Elements with Contrasting Copy Number Dynamics and Host Responses	1.5	52

#	ARTICLE	IF	CITATIONS
56	"Out of Pollen―Hypothesis for Origin of New Genes in Flowering Plants: Study from Arabidopsis thaliana. Genome Biology and Evolution, 2014, 6, 2822-2829.	1.1	28
57	Regulation of meiotic gene expression in plants. Frontiers in Plant Science, 2014, 5, 413.	1.7	35
58	Maize germinal cell initials accommodate hypoxia and precociously express meiotic genes. Plant Journal, 2014, 77, 639-652.	2.8	47
59	Pollen grain development is highly sensitive to temperature stress in <i>Vitis vinifera</i> . Australian Journal of Grape and Wine Research, 2014, 20, 474-484.	1.0	22
60	Seed evolution: parental conflicts in a multi-generational household. Biomolecular Concepts, 2014, 5, 71-86.	1.0	15
61	Hybridization Alters Spontaneous Mutation Rates in a Parent-of-Origin-Dependent Fashion in Arabidopsis Â. Plant Physiology, 2014, 165, 424-437.	2.3	23
62	Plant grafting: new mechanisms, evolutionary implications. Frontiers in Plant Science, 2014, 5, 727.	1.7	278
63	Epigenetics and Heterosis in Crop Plants. , 2014, , 13-31.		6
64	Methylated DNA is over-represented in whole-genome bisulfite sequencing data. Frontiers in Genetics, 2014, 5, 341.	1.1	64
65	The convergence of autophagy, small RNA and the stress response – implications for transgenerational epigenetic inheritance in plants. Biomolecular Concepts, 2014, 5, 1-8.	1.0	5
66	Hypomethylated Pollen Bypasses the Interploidy Hybridization Barrier in <i>Arabidopsis</i> Â Â. Plant Cell, 2014, 26, 3556-3568.	3.1	49
67	DNA methylation as a system of plant genomic immunity. Trends in Plant Science, 2014, 19, 320-326.	4.3	197
68	miRNAs trigger widespread epigenetically activated siRNAs from transposons in Arabidopsis. Nature, 2014, 508, 411-415.	13.7	331
69	Accessing epigenetic variation in the plant methylome. Briefings in Functional Genomics, 2014, 13, 318-327.	1.3	24
70	Transgenerational Epigenetic Inheritance: Myths and Mechanisms. Cell, 2014, 157, 95-109.	13.5	1,393
71	RNA-directed DNA methylation: an epigenetic pathway of increasing complexity. Nature Reviews Genetics, 2014, 15, 394-408.	7.7	1,309
72	Possible mechanisms responsible for absence of a retrotransposon family on a plant Y chromosome. New Phytologist, 2014, 202, 662-678.	3.5	37
73	Epigenetics: Beyond Chromatin Modifications and Complex Genetic Regulation. Plant Physiology, 2014, 165, 933-947.	2.3	126

#	Article	IF	CITATIONS
74	Transposable elements, a treasure trove to decipher epigenetic variation: insights from Arabidopsis and crop epigenomes. Journal of Experimental Botany, 2014, 65, 2801-2812.	2.4	79
75	Covering Your Bases: Inheritance of DNA Methylation in Plant Genomes. Molecular Plant, 2014, 7, 472-480.	3.9	80
76	Small RNAs and heritable epigenetic variation in plants. Trends in Cell Biology, 2014, 24, 100-107.	3.6	98
77	Sustainable harvest: managing plasticity for resilient crops. Plant Biotechnology Journal, 2014, 12, 517-533.	4.1	34
78	Effect of epigenetic polymorphism of corn seeds on their germination rate and resistance of seedlings under UV-C exposure. Cytology and Genetics, 2014, 48, 227-232.	0.2	3
79	Small RNAs in Plants. , 2014, , 95-127.		5
80	Epigenetic Memory for Stress Response and Adaptation in Plants. Plant and Cell Physiology, 2014, 55, 1859-1863.	1.5	321
81	Small RNAs break out: the molecular cell biology of mobile small RNAs. Nature Reviews Molecular Cell Biology, 2014, 15, 525-535.	16.1	122
82	Epigenetic reprogramming in plant sexual reproduction. Nature Reviews Genetics, 2014, 15, 613-624.	7.7	234
84	Plant Models of Transgenerational Epigenetic Inheritance. , 2014, , 147-161.		5
84 85	Plant Models of Transgenerational Epigenetic Inheritance. , 2014, , 147-161. Bis-class: a new classification tool of methylation status using bayes classifier and local methylation information. BMC Genomics, 2014, 15, 608.	1.2	5
84 85 86	Plant Models of Transgenerational Epigenetic Inheritance. , 2014, , 147-161. Bis-class: a new classification tool of methylation status using bayes classifier and local methylation information. BMC Genomics, 2014, 15, 608. Dynamic parent-of-origin effects on small interfering RNA expression in the developing maize endosperm. BMC Plant Biology, 2014, 14, 192.	1.2	5 12 21
84 85 86 87	Plant Models of Transgenerational Epigenetic Inheritance., 2014, , 147-161. Bis-class: a new classification tool of methylation status using bayes classifier and local methylation information. BMC Genomics, 2014, 15, 608. Dynamic parent-of-origin effects on small interfering RNA expression in the developing maize endosperm. BMC Plant Biology, 2014, 14, 192. Functional redundancy and/or ongoing pseudogenization among F-box protein genes expressed in Arabidopsis male gametophyte. Plant Reproduction, 2014, 27, 95-107.	1.2 1.6 1.3	5 12 21 8
84 85 86 87 88	Plant Models of Transgenerational Epigenetic Inheritance. , 2014, , 147-161. Bis-class: a new classification tool of methylation status using bayes classifier and local methylation information. BMC Genomics, 2014, 15, 608. Dynamic parent-of-origin effects on small interfering RNA expression in the developing maize endosperm. BMC Plant Biology, 2014, 14, 192. Functional redundancy and/or ongoing pseudogenization among F-box protein genes expressed in Arabidopsis male gametophyte. Plant Reproduction, 2014, 27, 95-107. Control of transposable elements in Arabidopsis thaliana. Chromosome Research, 2014, 22, 217-223.	1.2 1.6 1.3 1.0	5 12 21 8 52
 84 85 86 87 88 89 	Plant Models of Transgenerational Epigenetic Inheritance. , 2014, , 147-161. Bis-class: a new classification tool of methylation status using bayes classifier and local methylation information. BMC Genomics, 2014, 15, 608. Dynamic parent-of-origin effects on small interfering RNA expression in the developing maize endosperm. BMC Plant Biology, 2014, 14, 192. Functional redundancy and/or ongoing pseudogenization among F-box protein genes expressed in Arabidopsis male gametophyte. Plant Reproduction, 2014, 27, 95-107. Control of transposable elements in Arabidopsis thaliana. Chromosome Research, 2014, 22, 217-223. Two waves of de novo methylation during mouse germ cell development. Genes and Development, 2014, 28, 1544-1549.	1.2 1.6 1.3 1.0 2.7	5 12 21 8 52 123
84 85 86 87 88 88 89 90	Plant Models of Transgenerational Epigenetic Inheritance. , 2014, , 147-161. Bis-class: a new classification tool of methylation status using bayes classifier and local methylation information. BMC Genomics, 2014, 15, 608. Dynamic parent-of-origin effects on small interfering RNA expression in the developing maize endosperm. BMC Plant Biology, 2014, 14, 192. Functional redundancy and/or ongoing pseudogenization among F-box protein genes expressed in Arabidopsis male gametophyte. Plant Reproduction, 2014, 27, 95-107. Control of transposable elements in Arabidopsis thaliana. Chromosome Research, 2014, 22, 217-223. Two waves of de novo methylation during mouse germ cell development. Genes and Development, 2014, 28, 1544-1549. S-Methylcytosine Recognition by <i>Arabidopsis thaliana S-Methylcytosine Recognition by <i>Arabidopsis thaliana</i></i>	1.2 1.6 1.3 1.0 2.7 1.2	5 12 21 8 52 123 18
 84 85 86 87 88 89 90 91 	Plant Models of Transgenerational Epigenetic Inheritance., 2014, , 147-161. Bis-class: a new classification tool of methylation status using bayes classifier and local methylation information. BMC Genomics, 2014, 15, 608. Dynamic parent-of-origin effects on small interfering RNA expression in the developing maize endosperm. BMC Plant Biology, 2014, 14, 192. Functional redundancy and/or ongoing pseudogenization among F-box protein genes expressed in Arabidopsis male gametophyte. Plant Reproduction, 2014, 27, 95-107. Control of transposable elements in Arabidopsis thaliana. Chromosome Research, 2014, 22, 217-223. Two waves of de novo methylation during mouse germ cell development. Genes and Development, 2014, 28, 1544-1549. S-Methylcytosine Recognition by <i>Arabidopsis thaliana Biochemistry, 2014, 53, 2525-2532. ãCMovers and shakers〙 in the regulation of fruit ripening: a cross-dissection of climacteric versus non-climacteric fruit. Journal of Experimental Botany, 2014, 65, 4705-4722.</i>	1.2 1.6 1.3 1.0 2.7 1.2 2.4	5 12 21 8 52 123 18 223

		Report	
#	Article	IF	CITATIONS
93	Embryo and endosperm, partners in seed development. Current Opinion in Plant Biology, 2014, 17, 64-69.	3.5	143
94	Overproduction of stomatal lineage cells in Arabidopsis mutants defective in active DNA demethylation. Nature Communications, 2014, 5, 4062.	5.8	90
95	Divergent DNA methylation patterns associated with gene expression in rice cultivars with contrasting drought and salinity stress response. Scientific Reports, 2015, 5, 14922.	1.6	189
96	Heterosis and inbreeding depression of epigenetic Arabidopsis hybrids. Nature Plants, 2015, 1, 15092.	4.7	91
97	<i>Mutator</i> and <i>MULE</i> Transposons. Microbiology Spectrum, 2015, 3, MDNA3-0032-2014.	1.2	33
98	Identification of novel small ncRNAs in pollen of tomato. BMC Genomics, 2015, 16, 714.	1.2	27
99	<scp>RNA</scp> â€based regulation of transposon expression. Wiley Interdisciplinary Reviews RNA, 2015, 6, 687-708.	3.2	28
100	Epimutant Induction as a New Plant Breeding Technology. Japan Agricultural Research Quarterly, 2015, 49, 301-305.	0.1	4
101	Methods to isolate a large amount of generative cells, sperm cells and vegetative nuclei from tomato pollen for ââ,¬Å"omicsââ,¬Â•analysis. Frontiers in Plant Science, 2015, 06, 391.	1.7	19
102	Transgenerational inheritance or resetting of stress-induced epigenetic modifications: two sides of the same coin. Frontiers in Plant Science, 2015, 6, 699.	1.7	42
103	Zygotic genome activation and imprinting: parent-of-origin gene regulation in plant embryogenesis. Current Opinion in Plant Biology, 2015, 27, 29-35.	3.5	28
104	The Role of DNA Methylation in Transposable Element Silencing and Genomic Imprinting. , 2015, , 13-29.		13
105	Setting the Stage for the Next Generation: Epigenetic Reprogramming During Sexual Plant Reproduction. , 2015, , 93-118.		1
107	Chromatin dynamics during cellular differentiation in the female reproductive lineage of flowering plants. Plant Journal, 2015, 83, 160-176.	2.8	43
108	Trans-Homolog Interactions Facilitating Paramutation in Maize. Plant Physiology, 2015, 168, 1226-1236.	2.3	15
109	A test for detecting differentially methylated regions. , 2015, , .		0
110	Applying Epigenetics in Plant Breeding: Balancing Genome Stability and Phenotypic Plasticity. , 2015, , 159-192.		5
111	Identification of microRNAs associated with male flower bud development of Populus simoniiÂ×ÂPopulus nigra. Trees - Structure and Function, 2015, 29, 1329-1339.	0.9	4

#	Article	IF	CITATIONS
112	Epigenetic transitions leading to heritable, RNA-mediated de novo silencing in <i>Arabidopsis thaliana</i> . Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 917-922.	3.3	125
113	MethylC-seq library preparation for base-resolution whole-genome bisulfite sequencing. Nature Protocols, 2015, 10, 475-483.	5.5	250
114	Small RNAs in pollen. Science China Life Sciences, 2015, 58, 246-252.	2.3	16
115	SYBR Green-activated sorting of Arabidopsis pollen nuclei based on different DNA/RNA content. Plant Reproduction, 2015, 28, 61-72.	1.3	18
116	5-Hydroxymethylcytosine Is Not Present in Appreciable Quantities in <i>Arabidopsis</i> DNA. G3: Genes, Genomes, Genetics, 2015, 5, 1-8.	0.8	37
117	Mapping complex traits as a dynamic system. Physics of Life Reviews, 2015, 13, 155-185.	1.5	46
118	Going mobile: Nonâ€cellâ€autonomous small RNAs shape the genetic landscape of plants. Plant Biotechnology Journal, 2015, 13, 306-318.	4.1	47
119	A Neutrality Test for Detecting Selection on DNA Methylation Using Single Methylation Polymorphism Frequency Spectrum. Genome Biology and Evolution, 2015, 7, 154-171.	1.1	25
120	The elucidation of stress memory inheritance in Brassica rapa plants. Frontiers in Plant Science, 2015, 6, 5.	1.7	102
121	The male germline of angiosperms: repertoire of an inconspicuous but important cell lineage. Frontiers in Plant Science, 2015, 6, 173.	1.7	23
122	Evolution and function of epigenetic processes in the endosperm. Frontiers in Plant Science, 2015, 6, 130.	1.7	16
124	RNAi and Heterochromatin Assembly. Cold Spring Harbor Perspectives in Biology, 2015, 7, a019323.	2.3	236
125	Silencing of active transposable elements in plants. Current Opinion in Plant Biology, 2015, 27, 67-76.	3.5	124
126	Methylation-Sensitive Expression of a DNA Demethylase Gene Serves As an Epigenetic Rheostat. PLoS Genetics, 2015, 11, e1005142.	1.5	150
127	An AP Endonuclease Functions in Active DNA Demethylation and Gene Imprinting in Arabidopsis. PLoS Genetics, 2015, 11, e1004905.	1.5	53
128	Century-scale Methylome Stability in a Recently Diverged Arabidopsis thaliana Lineage. PLoS Genetics, 2015, 11, e1004920.	1.5	148
129	Transgenerational epigenetic inheritance: resolving uncertainty and evolving biology. Biomolecular Concepts, 2015, 6, 87-103.	1.0	21
130	A decade of pollen transcriptomics. Plant Reproduction, 2015, 28, 73-89.	1.3	149

ARTICLE IF CITATIONS # Parental Age Affects Somatic Mutation Rates in the Progeny of Flowering Plants. Plant Physiology, 131 2.3 13 2015, 168, 247-257. Crop Epigenomics: Identifying, Unlocking, and Harnessing Cryptic Variation in Crop Genomes. 44 Molecular Plant, 2015, 8, 860-870. 133 The expanding world of small RNAs in plants. Nature Reviews Molecular Cell Biology, 2015, 16, 727-741. 932 16.1 Impact of repetitive DNA on sex chromosome evolution in plants. Chromosome Research, 2015, 23, 134 561-570. Population Genomics for Understanding Adaptation in Wild Plant Species. Annual Review of Genetics, 135 3.2 94 2015, 49, 315-338. The Application of Next Generation Sequencing Techniques to Plant Epigenomics., 2015, 13-31. 137 Epigenetic inheritance., 2015, , 183-208. 0 Autotetraploid rice methylome analysis reveals methylation variation of transposable elements and their effects on gene expression. Proceedings of the National Academy of Sciences of the United 3.3 States of America, 2015, 112, E7022-9. Paramutation in maize and related behaviors in metazoans. Seminars in Cell and Developmental 139 2.3 8 Biology, 2015, 44, 11-21. Gene expression plasticity resulting from parental leaf damage in M imulus guttatus. New Phytologist, 140 3.5 2015, 205, 894-906. Prodigious plant methylomes. Genome Biology, 2016, 17, 197. 141 4 3.8 Herbivore-Induced DNA Demethylation Changes Floral Signalling and Attractiveness to Pollinators in 1.1 Brassica rapa. PLoS ONE, 2016, 11, e0166646. <i>FASTmC</i>: A Suite of Predictive Models for Nonreference-Based Estimations of DNA Methylation. 143 0.8 18 G3: Genes, Genomes, Genetics, 2016, 6, 447-452. The multivariate association between genomewide <scp>DNA</scp> methylation and climate across the range of <i>Arabidopsis thaliana</i>. Molecular Ecology, 2016, 25, 1823-1837. 144 Emerging links between iron-sulfur clusters and 5-methylcytosine base excision repair in plants. Genes 145 0.2 16 and Genetic Systems, 2016, 91, 51-62. DNA demethylation is initiated in the central cells of <i>Arabidopsis</i> 146 National Academy of Sciences of the United States of America, 2016, 113, 15138-15143. <i>Arabidopsis</i> male sexual lineage exhibits more robust maintenance of CG methylation than 147 somatic tissues. Proceedings of the National Academy of Sciences of the United States of America, 3.3 75 2016, 113, 15132-15137. Mechanisms of epigenetic remodelling during preimplantation development. Reproduction, Fertility 148 0.1 and Development, 2016, 28, 25.

#	Article	IF	CITATIONS
149	DNA methylation changes facilitated evolution of genes derived from Mutator-like transposable elements. Genome Biology, 2016, 17, 92.	3.8	14
150	Widespread natural variation of DNA methylation within angiosperms. Genome Biology, 2016, 17, 194.	3.8	436
151	Expression analysis of fertilization/early embryogenesis-associated genes in <i>Phalaenopsis</i> orchids. Plant Signaling and Behavior, 2016, 11, e1237331.	1.2	17
152	Plant Transgenerational Epigenetics. Annual Review of Genetics, 2016, 50, 467-491.	3.2	236
153	Parental epigenetic asymmetry of <scp>PRC</scp> 2â€mediated histone modifications in the <i>Arabidopsis</i> endosperm. EMBO Journal, 2016, 35, 1298-1311.	3.5	124
154	DNA Methylation and Demethylation in Plant Immunity. Annual Review of Phytopathology, 2016, 54, 579-603.	3.5	129
155	Role of Base Excision "Repair―Enzymes in Erasing Epigenetic Marks from DNA. Chemical Reviews, 2016, 116, 12711-12729.	23.0	87
156	The function of small RNAs in plant biotic stress response. Journal of Integrative Plant Biology, 2016, 58, 312-327.	4.1	94
157	Evolutionary Fates and Dynamic Functionalization of Young Duplicate Genes in Arabidopsis Genomes Â. Plant Physiology, 2016, 172, 427-440.	2.3	30
158	Rapid separation of Arabidopsis male gametophyte developmental stages using a Percoll gradient. Nature Protocols, 2016, 11, 1817-1832.	5.5	30
159	Rapid Evolution of Genomic Imprinting in Two Species of the Brassicaceae. Plant Cell, 2016, 28, 1815-1827.	3.1	84
160	Epigenetic marks in the Hyacinthus orientalis L. mature pollen grain and during in vitro pollen tube growth. Plant Reproduction, 2016, 29, 251-263.	1.3	3
161	On the Origin of De Novo Genes in <i>Arabidopsis thaliana</i> Populations. Genome Biology and Evolution, 2016, 8, 2190-2202.	1.1	49
162	Silencing in sperm cells is directed by RNA movement from the surrounding nurse cell. Nature Plants, 2016, 2, 16030.	4.7	191
163	Cytoplasmic inheritance of parent–offspring cell structure in the clonal diatom Cyclotella meneghiniana. Proceedings of the Royal Society B: Biological Sciences, 2016, 283, 20161632.	1.2	5
164	Epigenetics: Cell-type methylomes in the root. Nature Plants, 2016, 2, 16061.	4.7	1
165	Unique cell-type-specific patterns of DNA methylation in the root meristem. Nature Plants, 2016, 2, 16058.	4.7	159
166	DISMISS: detection of stranded methylation in MeDIP-Seq data. BMC Bioinformatics, 2016, 17, 295.	1.2	16

#	Article	IF	CITATIONS
167	Protocorms and Protocorm-Like Bodies Are Molecularly Distinct from Zygotic Embryonic Tissues in <i>Phalaenopsis aphrodite</i> . Plant Physiology, 2016, 171, 2682-2700.	2.3	67
168	Epigenetic events in plant male germ cell heat stress responses. Plant Reproduction, 2016, 29, 21-29.	1.3	32
169	RNA silencing movement in plants. Journal of Integrative Plant Biology, 2016, 58, 328-342.	4.1	43
170	Reconsidering plant memory: Intersections between stress recovery, RNA turnover, and epigenetics. Science Advances, 2016, 2, e1501340.	4.7	477
171	Transgenerational response to stress in plants and its application for breeding. Journal of Experimental Botany, 2016, 67, 2081-2092.	2.4	102
172	Do Mitochondria Play a Central Role in Stress-Induced Somatic Embryogenesis?. Methods in Molecular Biology, 2016, 1359, 87-100.	0.4	9
173	Epigenetic processes in flowering plant reproduction. Journal of Experimental Botany, 2017, 68, erw486.	2.4	57
174	Transgenerational effects alter plant defence and resistance in nature. Journal of Evolutionary Biology, 2017, 30, 664-680.	0.8	43
175	Epigenetic regulation of antagonistic receptors confers rice blast resistance with yield balance. Science, 2017, 355, 962-965.	6.0	439
176	Retrotransposons and the Mammalian Germline. , 2017, , 1-28.		1
177	Role of small RNAs in epigenetic reprogramming during plant sexual reproduction. Current Opinion in Plant Biology, 2017, 36, 22-28.	3.5	51
178	Live-cell analysis of DNA methylation during sexual reproduction in <i>Arabidopsis</i> reveals context and sex-specific dynamics controlled by noncanonical RdDM. Genes and Development, 2017, 31, 72-83.	2.7	96
179	Divergent cytosine DNA methylation patterns in single ell, soybean root hairs. New Phytologist, 2017, 214, 808-819.	3.5	75
180	DNA methylation and imprinting in plants: machinery and mechanisms. Critical Reviews in Biochemistry and Molecular Biology, 2017, 52, 163-175.	2.3	66
181	No consistent daily variation in DNA methylation detected in Populus nigra leaves by methylation-sensitive amplification polymorphism analysis. Journal of Forestry Research, 2017, 28, 653-660.	1.7	6
182	DNA methylation of retrotransposons, DNA transposons and genes in sugar beet (<i>Beta vulgaris</i>) Tj ETQq1	1 0.78431 2.8	l4 ₅ gBT /Ov€
183	5-Azacytidine mediated reactivation of silenced transgenes in potato (Solanum tuberosum) at the whole plant level. Plant Cell Reports, 2017, 36, 1311-1322.	2.8	10
184	Epigenetic Regulation of Phase Transitions in Arabidopsis thaliana. RNA Technologies, 2017, , 359-383.	0.2	11

	Сітатіо	n Report	
#	Article	IF	Citations
185	Epigenetic Reprogramming During Plant Reproduction. RNA Technologies, 2017, , 405-425.	0.2	1
186	Epigenetics in Plant Reproductive Development: An Overview from Flowers to Seeds. RNA Technologies, 2017, , 329-357.	0.2	4
188	SDG2-Mediated H3K4me3 Is Crucial for Chromatin Condensation and Mitotic Division during Male Gametogenesis in Arabidopsis. Plant Physiology, 2017, 174, 1205-1215.	2.3	32
189	Emerging roles of chromatin in the maintenance of genome organization and function in plants. Genome Biology, 2017, 18, 96.	3.8	69
190	Epigenetics in natural animal populations. Journal of Evolutionary Biology, 2017, 30, 1612-1632.	0.8	112
192	Genetic diversity and methylation polymorphism analysis of Chrysanthemum nankingense. Biochemical Systematics and Ecology, 2017, 72, 1-7.	0.6	3
193	Cyst Nematode Parasitism Induces Dynamic Changes in the Root Epigenome. Plant Physiology, 2017, 174, 405-420.	2.3	66
194	Epigenetic mechanisms and their role in plant development. Russian Journal of Genetics, 2017, 53, 1057-1071.	0.2	10
195	The Arabidopsis DNA Methylome Is Stable under Transgenerational Drought Stress. Plant Physiology, 2017, 175, 1893-1912.	2.3	112
196	Isolation of Arabidopsis Pollen, Sperm Cells, and Vegetative Nuclei by Fluorescence-Activated Cell Sorting (FACS). Methods in Molecular Biology, 2017, 1669, 193-210.	0.4	20
197	Paternal arbuscular mycorrhizal fungal status affects DNA methylation in seeds. Biology Letters, 2017, 13, 20170407.	1.0	16
198	Silencing the tobacco gene for RNA-dependent RNA polymerase 1 and infection by potato virus Y cause remodeling of cellular organelles. Virology, 2017, 510, 127-136.	1.1	7
199	Principles of Transgenerational Small RNA Inheritance in Caenorhabditis elegans. Current Biology, 2017, 27, R720-R730.	1.8	135
200	A reciprocal inhibition between ARID1 and MET1 in male and female gametes in <i>Arabidopsis</i> . Journal of Integrative Plant Biology, 2017, 59, 657-668.	4.1	25
201	Pollen differentiation as well as pollen tube guidance and discharge are independent of the presence of gametes. Development (Cambridge), 2018, 145, .	1.2	16
202	tRNAs as primers and inhibitors of retrotransposons. Mobile Genetic Elements, 2017, 7, 1-6.	1.8	25
203	Exploiting induced and natural epigenetic variation for crop improvement. Nature Reviews Genetics, 2017, 18, 563-575.	7.7	183
204	Paramutation and related phenomena in diverse species. Nature Reviews Genetics, 2017, 18, 5-23.	7.7	112

#	Article	IF	CITATIONS
205	Bioinformatics Analysis of Small RNA Transcriptomes: The Detailed Workflow. Methods in Molecular Biology, 2017, 1456, 197-224.	0.4	1
206	Plant responses to abiotic stress: The chromatin context of transcriptional regulation. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2017, 1860, 106-122.	0.9	185
207	Abiotic stress miRNomes in the Triticeae. Functional and Integrative Genomics, 2017, 17, 145-170.	1.4	86
208	Plant Epigenomics. , 2017, , 245-258.		4
209	Inhibition of Histone H3K9 Methylation by BIX-01294 Promotes Stress-Induced Microspore Totipotency and Enhances Embryogenesis Initiation. Frontiers in Plant Science, 2017, 8, 1161.	1.7	47
210	Rosaceae Fruit Development, Ripening and Post-harvest: An Epigenetic Perspective. Frontiers in Plant Science, 2017, 8, 1247.	1.7	53
211	Comparative Analysis of Genome Wide DNA Methylation Profiles for the Genic Male Sterile Cabbage Line 01-20S and Its Maintainer Line. Genes, 2017, 8, 159.	1.0	15
212	Impact of Repetitive Elements on the Y Chromosome Formation in Plants. Genes, 2017, 8, 302.	1.0	31
213	Maize RNA PolIV affects the expression of genes with nearby TE insertions and has a genome-wide repressive impact on transcription. BMC Plant Biology, 2017, 17, 161.	1.6	32
214	Dynamic DNA methylation reconfiguration during seed development and germination. Genome Biology, 2017, 18, 171.	3.8	218
215	Plant epigenomics—deciphering the mechanisms of epigenetic inheritance and plasticity in plants. Genome Biology, 2017, 18, 132.	3.8	18
216	Extensive transcriptomic and epigenomic remodelling occurs during Arabidopsis thaliana germination. Genome Biology, 2017, 18, 172.	3.8	163
217	DNA methylation dynamics during early plant life. Genome Biology, 2017, 18, 179.	3.8	182
218	Landscape of fluid sets of hairpin-derived 21-/24-nt-long small RNAs at seed set uncovers special epigenetic features in <i>Picea glauca</i> . Genome Biology and Evolution, 2017, 9, evw283.	1.1	34
219	Whole genome DNA methylation: beyond genes silencing. Oncotarget, 2017, 8, 5629-5637.	0.8	105
220	Regulation of rice root development by a retrotransposon acting as a microRNA sponge. ELife, 2017, 6, .	2.8	60
221	The slowdown of Y chromosome expansion in dioecious Silene latifolia due to DNA loss and male-specific silencing of retrotransposons. BMC Genomics, 2018, 19, 153.	1.2	21
222	Theoretical and Applied Epigenetics in Plants. , 2018, , 265-286.		0

#	Article	IF	CITATIONS
223	Exploring the extent and scope of epigenetic inheritance. Nature Reviews Endocrinology, 2018, 14, 345-355.	4.3	71
224	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
225	Applied RNA Bioscience. , 2018, , .		1
226	Potential roles for transposable elements in creating imprinted expression. Current Opinion in Genetics and Development, 2018, 49, 8-14.	1.5	21
227	Small RNA pathways responsible for non-cell-autonomous regulation of plant reproduction. Plant Reproduction, 2018, 31, 21-29.	1.3	18
228	Sexual-lineage-specific DNA methylation regulates meiosis in Arabidopsis. Nature Genetics, 2018, 50, 130-137.	9.4	153
229	Transposon-derived small RNAs triggered by miR845 mediate genome dosage response in Arabidopsis. Nature Genetics, 2018, 50, 186-192.	9.4	126
230	Epigenetics, Epigenomics and Crop Improvement. Advances in Botanical Research, 2018, 86, 287-324.	0.5	26
231	Profiling Developmentally and Environmentally Controlled Chromatin Reprogramming. Methods in Molecular Biology, 2018, 1675, 3-30.	0.4	1
232	Active DNA demethylation: mechanism and role in plant development. Plant Cell Reports, 2018, 37, 77-85.	2.8	70
233	RNA-mediated transgenerational inheritance in ciliates and plants. Chromosoma, 2018, 127, 19-27.	1.0	14
234	Piecing together <i>cis</i> â€regulatory networks: insights from epigenomics studies in plants. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2018, 10, e1411.	6.6	13
235	Population Epigenomics: Advancing Understanding of Phenotypic Plasticity, Acclimation, Adaptation and Diseases. Population Genomics, 2018, , 179-260.	0.2	18
236	Parental experience modifies the Mimulus methylome. BMC Genomics, 2018, 19, 746.	1.2	10
237	Pervasive read-through transcription of T-DNAs is frequent in tobacco BY-2 cells and can effectively induce silencing. BMC Plant Biology, 2018, 18, 252.	1.6	3
238	Epigenetic Mechanisms in Plants. Advances in Botanical Research, 2018, 88, 21-47.	0.5	8
239	Contribution of epigenetic variation to adaptation in Arabidopsis. Nature Communications, 2018, 9, 4446.	5.8	118
240	DNA Methylation and the Evolution of Developmental Complexity in Plants. Frontiers in Plant Science, 2018, 9, 1447.	1.7	68

		CITATION REPORT		
#	Article		IF	CITATIONS
241	Sexual and Non-sexual Reproduction. Advances in Botanical Research, 2018, 88, 117-1	.63.	0.5	4
242	Methylome and Epialleles in Rice Epilines Selected for Energy Use Efficiency. Agronomy	y, 2018, 8, 163.	1.3	6
243	Partial maintenance of organ-specific epigenetic marks during plant asexual reproduct heritable phenotypic variation. Proceedings of the National Academy of Sciences of the of America, 2018, 115, E9145-E9152.	ion leads to e United States	3.3	65
244	Transgenerational Epigenetic Inheritance. Annual Review of Genetics, 2018, 52, 21-41.		3.2	208
245	DDM1 Represses Noncoding RNA Expression and RNA-Directed DNA Methylation in He Plant Physiology, 2018, 177, 1187-1197.	terochromatin.	2.3	47
246	Sex and the flower $\hat{a} \in$ " developmental aspects of sex chromosome evolution. Annals o 122, 1085-1101.	f Botany, 2018,	1.4	21
247	Size Distribution of Small Interfering RNAs in Various Organs at Different Developmen Primarily Determined by the Dicing Activity of Dicer-Like Proteins in Plants. Plant and C 2018, 59, 2228-2238.	tal Stages is :ell Physiology,	1.5	11
248	Dynamic DNA Methylation in Plant Growth and Development. International Journal of I Sciences, 2018, 19, 2144.	Molecular	1.8	187
249	Long-term evolutionary DNA methylation dynamic of protein-coding genes and its und mechanism. Gene, 2018, 677, 96-104.	erlying	1.0	2
250	Extensive epigenetic reprogramming during the life cycle of Marchantia polymorpha. C 2018, 19, 9.	Genome Biology,	3.8	64
251	Locus-specific control of the de novo DNA methylation pathway in Arabidopsis by the Nature Genetics, 2018, 50, 865-873.	CLASSY family.	9.4	103
252	Sex Determination in <i>Ceratopteris richardii</i> Is Accompanied by Transcriptome C Drive Epigenetic Reprogramming of the Young Gametophyte. G3: Genes, Genomes, Ge 2205-2214.	hanges That enetics, 2018, 8,	0.8	22
253	Disrupted Genome Methylation in Response to High Temperature Has Distinct Affects Abortion and Anther Indehiscence. Plant Cell, 2018, 30, 1387-1403.	on Microspore	3.1	82
254	Loss of RNA-Directed DNA Methylation in Maize Chromomethylase and DDM1-Type Nu Remodeler Mutants. Plant Cell, 2018, 30, 1617-1627.	ucleosome	3.1	41
255	Characterization of Imprinted Genes in Rice Reveals Conservation of Regulation and In Other Plant Species. Plant Physiology, 2018, 177, 1754-1771.	ıprinting with	2.3	50
256	Plant Noncoding RNAs: Hidden Players in Development and Stress Responses. Annual and Developmental Biology, 2019, 35, 407-431.	Review of Cell	4.0	228
257	Heterogeneous transposable elements as silencers, enhancers and targets of meiotic r Chromosoma, 2019, 128, 279-296.	ecombination.	1.0	28
258	Elimination of a Retrotransposon for Quenching Genome Instability in Modern Rice. M 2019, 12, 1395-1407.	olecular Plant,	3.9	12

	Сітатіс	CITATION REPORT	
#	Article	IF	CITATIONS
259	Bulk to Individuality: Specifying Plants' Cellular Functions Through Single-Cell Omics. , 2019, , 277-314		1
260	Comprehensive study on the concept of spectral-domain reflection and refraction. Applied Physics Express, 2019, 12, 102013.	1.1	0
261	Genome-Wide Reinforcement of DNA Methylation Occurs during Somatic Embryogenesis in Soybean. Plant Cell, 2019, 31, 2315-2331.	3.1	55
262	Small RNA Mobility: Spread of RNA Silencing Effectors and its Effect on Developmental Processes and Stress Adaptation in Plants. International Journal of Molecular Sciences, 2019, 20, 4306.	1.8	21
263	Artificially induced phased siRNAs promote virus resistance in transgenic plants. Virology, 2019, 537, 208-215.	1.1	11
264	Active DNA Demethylation in Plants. International Journal of Molecular Sciences, 2019, 20, 4683.	1.8	44
265	Transcriptomics of Arabidopsis sperm cells at single-cell resolution. Plant Reproduction, 2019, 32, 29-38.	1.3	23
266	Plant models of transgenerational epigenetic inheritance. , 2019, , 263-282.		5
267	Epigenetic Regulation of Plant Gametophyte Development. International Journal of Molecular Sciences, 2019, 20, 3051.	1.8	14
268	Heritable generational epigenetic effects through small noncoding RNA. , 2019, , 185-212.		1
269	Diversity and dynamics of DNA methylation: epigenomic resources and tools for crop breeding. Breeding Science, 2019, 69, 191-204.	0.9	30
270	Current evidence for a role of epigenetic mechanisms in response to ionizing radiation in an ecotoxicological context. Environmental Pollution, 2019, 251, 469-483.	3.7	39
271	Epigenetics and Heterosis in Crop Plants. , 2019, , 129-147.		10
272	Regulation of Parent-of-Origin Allelic Expression in the Endosperm. Plant Physiology, 2019, 180, 1498-1519.	2.3	25
273	Molecular basis of transitivity in plant RNA silencing. Molecular Biology Reports, 2019, 46, 4645-4660.	1.0	10
274	The poly(A) polymerase <scp>PAPS</scp> 1 interacts with the <scp>RNA</scp> â€directed <scp>DNA</scp> â€methylation pathway in sporophyte and pollen development. Plant Journal, 2019, 99, 655-672.	2.8	12
275	DNA demethylation by ROS1a in rice vegetative cells promotes methylation in sperm. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 9652-9657.	3.3	56
276	Epigenetic dynamics during flowering plant reproduction: evidence for reprogramming?. New Phytologist, 2019, 224, 91-96.	3.5	70

# 277	ARTICLE An Overview of the Epigenetic Landscape of the Male Germline. , 2019, , 355-380.	IF	Citations
278	Spontaneous mutations in maize pollen are frequent in some lines and arise mainly from retrotranspositions and deletions. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 10734-10743.	3.3	23
279	Intercellular delivery of small RNAs in plant gametes. New Phytologist, 2019, 224, 86-90.	3.5	17
280	Epigenetic Mechanisms of Abiotic Stress Response and Memory in Plants. , 2019, , 1-64.		24
281	Global Methylomic and Transcriptomic Analyses Reveal the Broad Participation of DNA Methylation in Daily Gene Expression Regulation of Populus trichocarpa. Frontiers in Plant Science, 2019, 10, 243.	1.7	21
282	Epigenetic signatures associated with imprinted paternally expressed genes in the Arabidopsis endosperm. Genome Biology, 2019, 20, 41.	3.8	40
283	A Role for Epigenetic Regulation in the Adaptation and Stress Responses of Non-model Plants. Frontiers in Plant Science, 2019, 10, 246.	1.7	137
284	Small RNA Function in Plants: From Chromatin to the Next Generation. Cold Spring Harbor Symposia on Quantitative Biology, 2019, 84, 133-140.	2.0	0
285	Tissue-specific transposon-associated small RNAs in the gymnosperm tree, Norway spruce. BMC Genomics, 2019, 20, 997.	1.2	12
286	Epigenetics Regulates Reproductive Development in Plants. Plants, 2019, 8, 564.	1.6	18
287	Spontaneous epimutations in plants. New Phytologist, 2019, 221, 1253-1259.	3.5	80
288	Novel Nuclear Functions of Arabidopsis ARGONAUTE1: Beyond RNA Interference. Plant Physiology, 2019, 179, 1030-1039.	2.3	24
289	The evolution and patterning of male gametophyte development. Current Topics in Developmental Biology, 2019, 131, 257-298.	1.0	56
290	Ageing in trees: Role of body size optimization in demographic senescence. Perspectives in Plant Ecology, Evolution and Systematics, 2019, 36, 41-51.	1.1	5
291	Detecting differential DNA methylation from sequencing of bisulfite converted DNA of diverse species. Briefings in Bioinformatics, 2019, 20, 33-46.	3.2	17
292	The mechanism and function of active DNA demethylation in plants. Journal of Integrative Plant Biology, 2020, 62, 148-159.	4.1	82
293	Chromatin dynamics during interphase and cell division: similarities and differences between model and crop plants. Journal of Experimental Botany, 2020, 71, 5205-5222.	2.4	32
294	Climateâ€dependent variation in cold tolerance of weedy rice and rice mediated by <i>OsICE1</i> promoter methylation. Molecular Ecology, 2020, 29, 121-137.	2.0	21

#	Article	IF	CITATIONS
295	Understanding epigenomics based on the rice model. Theoretical and Applied Genetics, 2020, 133, 1345-1363.	1.8	17
296	Dynamic distribution of ARGONAUTE1 (AGO1) and ARGONAUTE4 (AGO4) in Hyacinthus orientalis L. pollen grains and pollen tubes growing in vitro. Protoplasma, 2020, 257, 793-805.	1.0	2
297	Genomic imprinting in plants—revisiting existing models. Genes and Development, 2020, 34, 24-36.	2.7	114
298	RNA-directed DNA Methylation and sexual reproduction: expanding beyond the seed. Current Opinion in Plant Biology, 2020, 54, 11-17.	3.5	24
299	Genome-wide redistribution of 24-nt siRNAs in rice gametes. Genome Research, 2020, 30, 173-184.	2.4	32
300	MSH1-induced heritable enhanced growth vigor through grafting is associated with the RdDM pathway in plants. Nature Communications, 2020, 11, 5343.	5.8	48
301	A genome assembly and the somatic genetic and epigenetic mutation rate in a wild long-lived perennial Populus trichocarpa. Genome Biology, 2020, 21, 259.	3.8	68
302	The unusual <i>dRemp</i> retrotransposon is abundant, highly mutagenic, and mobilized only in the second pollen mitosis of some maize lines. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 18091-18098.	3.3	1
303	DREAM complex suppresses DNA methylation maintenance genes and precludes DNA hypermethylation. Nature Plants, 2020, 6, 942-956.	4.7	52
304	Principles of Epigenetic Homeostasis Shared Between Flowering Plants and Mammals. Trends in Genetics, 2020, 36, 751-763.	2.9	24
305	DNA methylation is reconfigured at the onset of reproduction in rice shoot apical meristem. Nature Communications, 2020, 11, 4079.	5.8	42
306	AlphaBeta: computational inference of epimutation rates and spectra from high-throughput DNA methylation data in plants. Genome Biology, 2020, 21, 260.	3.8	24
307	Stable unmethylated DNA demarcates expressed genes and their cis-regulatory space in plant genomes. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 23991-24000.	3.3	67
308	Chromatin regulates expression of small RNAs to help maintain transposon methylome homeostasis in Arabidopsis. Genome Biology, 2020, 21, 251.	3.8	61
309	Epigenetic silencing of clustered tRNA genes in Arabidopsis. Nucleic Acids Research, 2020, 48, 10297-10312.	6.5	12
310	Small DNA Methylation, Big Player in Plant Abiotic Stress Responses and Memory. Frontiers in Plant Science, 2020, 11, 595603.	1.7	82
311	Mimulus sRNAs Are Wound Responsive and Associated with Transgenerationally Plastic Genes but Rarely Both. International Journal of Molecular Sciences, 2020, 21, 7552.	1.8	5
312	Segregation of an MSH1 RNAi transgene produces heritable non-genetic memory in association with methylome reprogramming. Nature Communications, 2020, 11, 2214.	5.8	50

ARTICLE IF CITATIONS # Targeted reprogramming of H3K27me3 resets epigenetic memory in plant paternal chromatin. Nature 313 4.6 149 Cell Biology, 2020, 22, 621-629. Epigenetic Mechanisms in Nematode–Plant Interactions. Annual Review of Phytopathology, 2020, 58, 119-138. 314 3.5 315 Exploration of space to achieve scientific breakthroughs. Biotechnology Advances, 2020, 43, 107572. 6.0 21 DEMETER-mediated DNA Demethylation in Gamete Companion Cells and the Endosperm, and its Possible 316 0.9 Role in Embryo Development in Arabidopsis. Journal of Plant Biology, 2020, 63, 321-329. Introduction to plant small RNAs., 2020, , 3-35. 317 1 High expression in maize pollen correlates with genetic contributions to pollen fitness as well as with coordinated transcription from neighboring transposable elements. PLoS Genetics, 2020, 16, 1.5 e1008462. 319 A Prion Epigenetic Switch Establishes an Active Chromatin State. Cell, 2020, 180, 928-940.e14. 13.5 54 Does variable epigenetic inheritance fuel plant evolution?. Genome, 2020, 63, 253-262. Transgenerational stress memory of water deficit in peanut production. Field Crops Research, 2020, 248, 107712. 321 2.3 16 Polymerase IV Plays a Crucial Role in Pollen Development in <i>Capsella</i>. Plant Cell, 2020, 32, 3.1 950-966. DNA methylation dynamics of sperm cell lineage development in tomato. Plant Journal, 2021, 105, 323 7 2.8 565-579. Loss of Small-RNA-Directed DNA Methylation in the Plant Cell Cycle Promotes Germline 1.8 Reprogramming and Somaclonal Variation. Current Biology, 2021, 31, 591-600.e4. Integrating multi-omics data for crop improvement. Journal of Plant Physiology, 2021, 257, 153352. 325 1.6 78 Fundamentally different repetitive element composition of sex chromosomes in <i>Rumex acetosa</i>. 1.4 Annals of Botany, 2021, 127, 33-47. The Arabidopsis active demethylase ROS1 cis-regulates defence genes by erasing DNA methylation at 327 2.8 62 promoter-regulatory regions. ELife, 2021, 10, . Hybrid seed incompatibility in Capsella is connected to chromatin condensation defects in the endosperm. PLoS Genetics, 2021, 17, e1009370. Perspective: 50 years of plant chromosome biology. Plant Physiology, 2021, 185, 731-753. 330 2.31 Plant Epigenetics: Propelling DNA Methylation Variation across the Cell Cycle. Current Biology, 2021, 1.8 31, R129-R131.

	CITATION	CITATION REPORT	
#	Article	IF	CITATIONS
332	Find your identity – methylation dynamics in the sperm cell lineage. Plant Journal, 2021, 105, 563-564.	2.8	0
334	Insights into the Role of Transcriptional Gene Silencing in Response to Herbicide-Treatments in Arabidopsis thaliana. International Journal of Molecular Sciences, 2021, 22, 3314.	1.8	12
335	Secondary siRNAs in Plants: Biosynthesis, Various Functions, and Applications in Virology. Frontiers in Plant Science, 2021, 12, 610283.	1.7	32
336	Male gametophyte development in flowering plants: A story of quarantine and sacrifice. Journal of Plant Physiology, 2021, 258-259, 153365.	1.6	13
338	The epiallelic potential of transposable elements and its evolutionary significance in plants. Philosophical Transactions of the Royal Society B: Biological Sciences, 2021, 376, 20200123.	1.8	37
340	The evolution of imprinting in plants: beyond the seed. Plant Reproduction, 2021, 34, 373-383.	1.3	12
341	Dynamics of DNA Methylation and Its Functions in Plant Growth and Development. Frontiers in Plant Science, 2021, 12, 596236.	1.7	84
342	Heat stress response mechanisms in pollen development. New Phytologist, 2021, 231, 571-585.	3.5	84
343	<i>Heterosis in Genomic Era: Advances in the Molecular Understanding and Techniques for Rapid Exploitation </i> . Critical Reviews in Plant Sciences, 2021, 40, 218-242.	2.7	8
344	Small RNAs guide histone methylation in <i>Arabidopsis</i> embryos. Genes and Development, 2021, 35, 841-846.	2.7	31
345	Epigenetic Regulation of Temperature Responses – Past Successes and Future Challenges. Journal of Experimental Botany, 2021, , .	2.4	9
346	Reproduction Multitasking: The Male Gametophyte. Annual Review of Plant Biology, 2021, 72, 581-614.	8.6	56
347	Gene expression variation in <i>Arabidopsis</i> embryos at single-nucleus resolution. Development (Cambridge), 2021, 148, .	1.2	22
348	Proteomic Analysis of Generative and Vegetative Nuclei Reveals Molecular Characteristics of Pollen Cell Differentiation in Lily. Frontiers in Plant Science, 2021, 12, 641517.	1.7	1
349	Epigenetics and plant reproduction: Multiple steps for responsibly handling succession. Current Opinion in Plant Biology, 2021, 61, 102032.	3.5	20
350	The epigenetic origin of life history transitions in plants and algae. Plant Reproduction, 2021, 34, 267-285.	1.3	16
351	The Impact of Different Environmental Conditions during Vegetative Propagation on Growth, Survival, and Biochemical Characteristics in Populus Hybrids in Clonal Field Trial. Forests, 2021, 12, 892.	0.9	0
352	Nurse cell–derived small RNAs define paternal epigenetic inheritance in <i>Arabidopsis</i> . Science, 2021, 373, .	6.0	88

#	Article	IF	Citations
354	DNA repair- and nucleotide metabolism-related genes exhibit differential CHG methylation patterns in natural and synthetic polyploids (Brassica napus L.). Horticulture Research, 2021, 8, 142.	2.9	12
355	Repression of CHROMOMETHYLASE 3 prevents epigenetic collateral damage in Arabidopsis. ELife, 2021, 10, .	2.8	28
356	Epigenetics for Crop Improvement in Times of Global Change. Biology, 2021, 10, 766.	1.3	53
357	Non-Thermal Plasmas Affect Plant Growth and DNA Methylation Patterns in Glycine max. Journal of Plant Growth Regulation, 2022, 41, 2732-2742.	2.8	7
358	License to Regulate: Noncoding RNA Special Agents in Plant Meiosis and Reproduction. Frontiers in Plant Science, 2021, 12, 662185.	1.7	3
359	Genetic toolbox and regulatory circuits of plant-nematode associations. Plant Physiology and Biochemistry, 2021, 165, 137-146.	2.8	2
360	Multigenerational epigenetic inheritance: Transmitting information across generations. Seminars in Cell and Developmental Biology, 2022, 127, 121-132.	2.3	32
361	Pathway conversion enables a double-lock mechanism to maintain DNA methylation and genome stability. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	18
362	Drought induces variation in the DNA methylation status of the barley HvDME promoter. Journal of Plant Research, 2021, 134, 1351-1362.	1.2	7
363	DNA demethylases remodel DNA methylation in rice gametes and zygote and are required for reproduction. Molecular Plant, 2021, 14, 1569-1583.	3.9	29
364	Evolution of CG Methylation Maintenance Machinery in Plants. Epigenomes, 2021, 5, 19.	0.8	11
365	Regulation of retrotransposition in Arabidopsis. Biochemical Society Transactions, 2021, 49, 2241-2251.	1.6	3
366	New insights into cell–cell communications during seed development in flowering plants. Journal of Integrative Plant Biology, 2022, 64, 215-229.	4.1	14
367	Role of Chromatin Architecture in Plant Stress Responses: An Update. Frontiers in Plant Science, 2020, 11, 603380.	1.7	56
368	Male fertility in Arabidopsis requires active DNA demethylation of genes that control pollen tube function. Nature Communications, 2021, 12, 410.	5.8	41
369	When Simple Meets Complex: Pollen and the -Omics. , 2017, , 247-292.		5
370	Systemic Epigenetic Signaling in Plants. Signaling and Communication in Plants, 2013, , 71-104.	0.5	2
371	Establishment, maintenance, and biological roles of non-CG methylation in plants. Essays in Biochemistry, 2019, 63, 743-755.	2.1	49

		CITATION REPORT		
#	Article		IF	CITATIONS
382	Evolution and function of genomic imprinting in plants. Genes and Development, 2015, 2	29, 2517-2531.	2.7	133
383	<i>Mutator</i> and <i>MULE</i> Transposons. , 0, , 801-826.			2
384	Epigenome Editing of Potato by Grafting Using Transgenic Tobacco as siRNA Donor. PLose e0161729.	S ONE, 2016, 11,	1.1	34
385	Mechanisms of epigenetic inheritance of variable traits through the germline. Reproducti R251-R263.	ion, 2020, 159,	1.1	18
386	RNAi-mediated Resistance against Plant Parasitic Nematodes of Wheat Plants Obtained i Bioregulators of Microbiological Origin. Current Chemical Biology, 2019, 13, 73-89.	n Vitro Using	0.2	10
387	Polycomb mutant partially suppresses DNA hypomethylation–associated phenotypes i Science Alliance, 2021, 4, e202000848.	n Arabidopsis. Life	1.3	23
388	Natural epigenetic polymorphisms lead to intraspecific variation in Arabidopsis gene imp 2014, 3, e03198.	rinting. ELife,	2.8	183
389	Hyperosmotic stress memory in Arabidopsis is mediated by distinct epigenetically labile s genome and is restricted in the male germline by DNA glycosylase activity. ELife, 2016, 5	sites in the , .	2.8	282
390	Non-canonical RNA-directed DNA methylation participates in maternal and environmenta seed dormancy. ELife, 2019, 8, .	Il control of	2.8	49
391	Natural depletion of histone H1 in sex cells causes DNA demethylation, heterochromatin decondensation and transposon activation. ELife, 2019, 8, .		2.8	61
392	A new role for histone demethylases in the maintenance of plant genome integrity. ELife	, 2020, 9, .	2.8	33
393	Asymmetric expression of Argonautes in reproductive tissues. Plant Physiology, 2022, 18	88, 38-43.	2.3	17
394	Deciphering the synergistic and redundant roles of CG and non G DNA methylation in development and transposable element silencing. New Phytologist, 2022, 233, 722-737.	ı plant	3.5	12
396	Doubled Haploid Production through Microspore Culture. Springer Protocols, 2022, , 15	1-166.	0.1	1
400	Silicon Era of Carbon-Based Life: Application of Genomics and Bioinformatics in Crop Stre , 2016, , 137-165.	ess Research.		0
402	Current status and prospects of epigenetic information in sexual reproductive processes Journal of Plant Biotechnology, 2017, 44, 19-26.	of plants.	0.1	0
417	Stress responses and epigenomic instability mark the loss of somatic embryogenesis con grapevine. Plant Physiology, 2022, 188, 490-508.	npetence in	2.3	12
421	Bypassing reproductive barriers in hybrid seeds using chemically induced epimutagenesis 2022, 34, 989-1001.	s. Plant Cell,	3.1	16

#	Article	IF	CITATIONS
422	The miRNome function transitions from regulating developmental genes to transposable elements during pollen maturation. Plant Cell, 2022, 34, 784-801.	3.1	17
423	Heterochromatin is a quantitative trait associated with spontaneous epiallele formation. Nature Communications, 2021, 12, 6958.	5.8	32
424	Epigenetic Modifications in Plant Development and Reproduction. Epigenomes, 2021, 5, 25.	0.8	11
426	Reinforcement of CHH methylation through RNA-directed DNA methylation ensures sexual reproduction in rice. Plant Physiology, 2022, 188, 1189-1209.	2.3	26
427	Silencing and anti-silencing mechanisms that shape the epigenome in plants. Genes and Genetic Systems, 2021, 96, 217-228.	0.2	4
428	Progressive DNA demethylation in epigenetic hybrids between parental plants with and without methylation of the transgene promoter. Theoretical and Applied Genetics, 2022, 135, 883-893.	1.8	0
429	Molecular mechanisms of transgenerational epigenetic inheritance. Nature Reviews Genetics, 2022, 23, 325-341.	7.7	182
430	Epigenetic targeting of transposon relics: beating the dead horses of the genome?. Epigenetics, 2022, 17, 1331-1344.	1.3	3
431	Bypassing reproductive barriers by chemical epimutagenesis. Plant Cell, 2022, 34, 947-948.	3.1	0
432	Epigenetic Regulation of Heat Stress in Plant Male Reproduction. Frontiers in Plant Science, 2022, 13, 826473.	1.7	9
434	Gene Body Methylation in Plants: Mechanisms, Functions, and Important Implications for Understanding Evolutionary Processes. Genome Biology and Evolution, 2022, 14, .	1.1	39
435	Biotic stress-induced epigenetic changes and transgenerational memory in plants. Biologia (Poland), 2022, 77, 2007-2021.	0.8	5
436	Somatic DNA demethylation generates tissue-specific methylation states and impacts flowering time. Plant Cell, 2022, 34, 1189-1206.	3.1	24
437	Resetting of the 24-nt siRNA landscape in rice zygotes. Genome Research, 2022, 32, 309-323.	2.4	13
438	Role of DNA Methylation and Epialleles in Eukaryotes. , 2021, 58, 1-16.		0
441	H3K27 methylation regulates the fate of two cell lineages in male gametophytes. Plant Cell, 2022, 34, 2989-3005.	3.1	7
442	Signatures of polygenic adaptation align with genomeâ€wide methylation patterns in wild strawberry plants. New Phytologist, 2022, 235, 1501-1514.	3.5	6
443	Unravelling the Role of Epigenetic Modifications in Development and Reproduction of Angiosperms: A Critical Appraisal. Frontiers in Genetics, 2022, 13, .	1.1	7

ARTICLE IF CITATIONS How do plants remember drought?. Planta, 2022, 256, . 27 444 1.6 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. 445 3.1 Identification and Characterization of DNA Demethylase Genes and Their Association With Thermal 446 1.1 3 Stress in Wheat (Triticum aestivum L.). Frontiers in Genetics, 0, 13, . Genomic imprinting regulates establishment and release of seed dormancy. Current Opinion in Plant 447 Biology, 2022, 69, 102264. Plant DNA Methylation: An Epigenetic Mark in Development, Environmental Interactions, and 448 1.8 24 Evolution. International Journal of Molecular Sciences, 2022, 23, 8299. Methylation in DNA, histone, and RNA during flowering under stress condition: A review. Plant Science, 2022, 324, 111431. 449 1.7 Epigenetic dynamics during sexual reproduction: At the nexus of developmental control and genomic 450 3.5 5 integrity. Current Opinion in Plant Biology, 2022, 69, 102278. Plant Epigenomics. , 2023, , 263-286. Spatiotemporal Dynamics of TE and H3K9me2 Reprogramming During Pollen Mitosis Requires an 452 0.4 0 ARID1-Based Heterochromatic Machinery. SSRN Electronic Journal, 0, , . Epigenetic Dynamics and Regulation of Plant Male Reproduction. International Journal of Molecular 1.8 Sciences, 2022, 23, 10420. Epigenomic reprogramming in iAs-mediated carcinogenesis. Advances in Pharmacology, 2022, , . 455 1.2 0 Transcriptional Stress Memory and Transgenerational Inheritance of Drought Tolerance in Plants. 456 1.8 International Journal of Molecular Sciences, 2022, 23, 12918. Hybridization alters maternal and paternal genome contributions to early plant embryogenesis. 457 1.2 1 Development (Cambridge), 2022, 149, . Unlocking grapevine in vitro regeneration: Issues and perspectives for genetic improvement and functional genomic studies. Plant Physiology and Biochemistry, 2022, 193, 99-109. 2.8 <scp>DNA</scp> methylation in clonal duckweed (<i>Lemna minor</i>L.) lineages reflects current and 459 2.0 11 historical environmental exposures. Molecular Ecology, 2023, 32, 428-443. Rearranged Endogenized Plant Pararetroviruses as Evidence of Heritable RNA-based Immunity. Molecular Biology and Evolution, 2023, 40, . Predictable and stable epimutations induced during clonal plant propagation with embryonic 461 1.52 transcription factor. PLoS Genetics, 2022, 18, e1010479. Insights into Mobile Small-RNAs Mediated Signaling in Plants. Plants, 2022, 11, 3155. 1.6

#	Article	IF	CITATIONS
463	Parental regulation of seed development. , 2022, 1, 1-12.		1
464	Shaping inheritance: how distinct reproductive strategies influence DNA methylation memory in plants. Current Opinion in Genetics and Development, 2023, 78, 102018.	1.5	6
465	The Epigenetic Control of the Transposable Element Life Cycle in Plant Genomes and Beyond. Annual Review of Genetics, 2022, 56, 63-87.	3.2	19
466	Single-nucleus RNA-seq reveals that MBD5, MBD6, and SILENZIO maintain silencing in the vegetative cell of developing pollen. Cell Reports, 2022, 41, 111699.	2.9	13
467	Cell-type-specific alternative splicing in the Arabidopsis germline. Plant Physiology, 2023, 192, 85-101.	2.3	3
468	Active DNA demethylation in plants: 20 years of discovery and beyond. Journal of Integrative Plant Biology, 2022, 64, 2217-2239.	4.1	6
469	DNA methylation dynamics during germline development. Journal of Integrative Plant Biology, 2022, 64, 2240-2251.	4.1	9
470	The role of DNA methylation in the maintenance of phenotypic variation induced by grafting chimerism in <i>Brassica</i> . Horticulture Research, 2023, 10, .	2.9	2
471	Extensive de novo activity stabilizes epigenetic inheritance of CG methylation in Arabidopsis transposons. Cell Reports, 2023, 42, 112132.	2.9	8
472	Present and future challenges for the investigation of transgenerational epigenetic inheritance. Environment International, 2023, 172, 107776.	4.8	14
473	Epigenetic Regulation During Plant Development and the Capacity for Epigenetic Memory. Annual Review of Plant Biology, 2023, 74, 87-109.	8.6	7
474	Distinct chromatin signatures in the Arabidopsis male gametophyte. Nature Genetics, 2023, 55, 706-720.	9.4	12
475	50 years of sperm cell isolations: from structural to omic studies. Journal of Experimental Botany, 0, ,	2.4	1
489	Regulation of plant epigenetic memory in response to cold and heat stress: towards climate resilient agriculture. Functional and Integrative Genomics, 2023, 23, .	1.4	4
496	Non-Coding RNA and Its Prospective Utilization in Plant Breeding. , 0, , .		0
498	Stress Memory and Priming Applications in Plants: Potential for Breeders. , 0, , .		0
500	MBD2 couples DNA methylation to transposable element silencing during male gametogenesis. Nature Plants, 2024, 10, 13-24.	4.7	1