An siRNA pathway prevents transgenerational retrotra
stress

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#	Article	IF	Citations
2	An atypical component of RNA-directed DNA methylation machinery has both DNA methylation-dependent and -independent roles in locus-specific transcriptional gene silencing. Cell Research, 2011, 21, 1691-1700.	5.7	33
3	A â€œmille-feuilleâ€•of silencing: Epigenetic control of transposable elements. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2011, 1809, 452-458.	0.9	85
4	Intercellular and systemic movement of RNA silencing signals. EMBO Journal, 2011, 30, 3553-3563.	3.5	279
5	Epigenetic Chromatin Regulators as Mediators of Abiotic Stress Responses in Cereals. , 2011, , .		5
6	On the Coevolution of Transposable Elements and Plant Genomes. Journal of Botany, 2011, 2011, 1-9.	1.2	20
7	Hot and Retro Meet Arabidopsis. Frontiers in Plant Science, 2011, 2, 22.	1.7	0
8	Transgenerational adaptation to heavy metal salts in Arabidopsis. Frontiers in Plant Science, 2011, 2, 91.	1.7	52
9	AGO6 Functions in RNA-Mediated Transcriptional Gene Silencing in Shoot and Root Meristems in Arabidopsis thaliana. PLoS ONE, 2011, 6, e25730.	1.1	55
10	The Stem Cell State in Plant Development and in Response to Stress. Frontiers in Plant Science, 2011, 2, 53.	1.7	54
11	Epigenetic contribution to stress adaptation in plants. Current Opinion in Plant Biology, 2011, 14, 267-274.	3.5	433
12	Lessons from Model Organisms: Phenotypic Robustness and Missing Heritability in Complex Disease. PLoS Genetics, 2012, 8, e1003041.	1.5	64
13	The origin and effect of small RNA signaling in plants. Frontiers in Plant Science, 2012, 3, 179.	1.7	76
14	Transition of Chromatin Status During the Process of Recovery from Drought Stress in Arabidopsis thaliana. Plant and Cell Physiology, 2012, 53, 847-856.	1.5	208
15	Sulfamethazine Suppresses Epigenetic Silencing in Arabidopsis by Impairing Folate Synthesis. Plant Cell, 2012, 24, 1230-1241.	3.1	77
16	Low relative humidity triggers RNA-directed de novo DNA methylation and suppression of genes controlling stomatal development. Journal of Experimental Botany, 2012, 63, 3799-3813.	2.4	128
17	The Arabidopsis genus. Mobile Genetic Elements, 2012, 2, 142-144.	1.8	8
18	The effects of heat induction and the siRNA biogenesis pathway on the transgenerational transposition of ONSEN, a copia-like retrotransposon in Arabidopsis thaliana. Plant and Cell Physiology, 2012, 53, 824-833.	1.5	69
19	Role of Epigenetic Mechanisms in Plant Response to Low Temperature. Acta Biologica Cracoviensia Series Botanica, 2012, 54, .	0.5	2

#	Article	IF	Citations
20	Transgenerational inheritance of induced changes in the epigenetic state of chromatin in plants. Genes and Genetic Systems, 2012, 87, 145-152.	0.2	20
21	McClintockâ€™s challenge in the 21st century. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 20200-20203.	3.3	21
22	The Small RNA-Based Odyssey of Epigenetic Information in Plants: From Cells to Species. DNA and Cell Biology, 2012, 31, 1650-1656.	0.9	37
23	Active DNA Demethylation in Plants and Animals. Cold Spring Harbor Symposia on Quantitative Biology, 2012, 77, 161-173.	2.0	114
24	Life at the extreme: lessons from the genome. Genome Biology, 2012, 13, .	3.8	53
25	Use of Forward Genetic Screens to Identify Genes Required for RNA-Directed DNA Methylation in Arabidopsis thaliana. Cold Spring Harbor Symposia on Quantitative Biology, 2012, 77, 195-204.	2.0	22
27	Developmentally non-redundant SET domain proteins SUVH2 and SUVH9 are required for transcriptional gene silencing in Arabidopsis thaliana. Plant Molecular Biology, 2012, 79, 623-633.	2.0	40
28	Global alteration of microRNAs and transposon-derived small RNAs in cotton (Gossypium hirsutum) during Cotton leafroll dwarf polerovirus (CLRDV) infection. Plant Molecular Biology, 2012, 80, 443-460.	2.0	46
29	Stress-Induced Chromatin Changes: A Critical View on Their Heritability. Plant and Cell Physiology, 2012, 53, 801-808.	1.5	159
30	Epigenetic and epigenomic variation in Arabidopsis thaliana. Trends in Plant Science, 2012, 17, 149-154.	4.3	92
31	RNA-Directed DNA Methylation Is Involved in Regulating Photoperiod-Sensitive Male Sterility in Rice. Molecular Plant, 2012, 5, 1210-1216.	3.9	127
32	RNA regulation in plant abiotic stress responses. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2012, 1819, 149-153.	0.9	57
33	Atypical DNA methylation of genes encoding cysteine-rich peptides in Arabidopsis thaliana. BMC Plant Biology, 2012, 12, 51.	1.6	26
34	LTR Retrotransposons as Controlling Elements of Genome Response to Stress?. Topics in Current Genetics, 2012, , 273-296.	0.7	14
35	Glue for Jumping Elements: Epigenetic Means for Controlling Transposable Elements in Plants. Topics in Current Genetics, 2012, , 125-145.	0.7	4
36	Transposable element small RNAs as regulators of gene expression. Trends in Genetics, 2012, 28, 616-623.	2.9	83
37	Epigenetic control of transposon transcription and mobility in Arabidopsis. Current Opinion in Plant Biology, 2012, 15, 503-510.	3.5	110
38	The role of long non-coding RNA in transcriptional gene silencing. Current Opinion in Plant Biology, 2012, 15, 517-522.	3.5	151

#	Article	IF	Citations
39	Widespread Interspecific Divergence in Cis-Regulation of Transposable Elements in the Arabidopsis Genus. Molecular Biology and Evolution, 2012, 29, 1081-1091.	3.5	29
40	Plant Transposable Elements. Topics in Current Genetics, 2012, , .	0.7	8
42	The Progeny of Arabidopsis thaliana Plants Exposed to Salt Exhibit Changes in DNA Methylation, Histone Modifications and Gene Expression. PLoS ONE, 2012, 7, e30515.	1.1	166
43	A Highly Conserved, Small LTR Retrotransposon that Preferentially Targets Genes in Grass Genomes. PLoS ONE, 2012, 7, e32010.	1.1	54
44	The Tnt1 Retrotransposon Escapes Silencing in Tobacco, Its Natural Host. PLoS ONE, 2012, 7, e33816.	1.1	14
45	Genetic and Molecular Aspects of Plant Response to Drought in Annual Crop Species. , 0, , .		3
46	Non-coding RNAs in the plant response to abiotic stress. Planta, 2012, 236, 943-958.	1.6	44
47	Widespread dynamic DNA methylation in response to biotic stress. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E2183-91.	3.3	878
48	Small RNAs and transposon silencing in plants. Development Growth and Differentiation, 2012, 54, 100-107.	0.6	36
49	Epigenetics and the environment: emerging patterns and implications. Nature Reviews Genetics, 2012, 13, 97-109.	7.7	1,524
50	Big roles for small RNAs in polyploidy, hybrid vigor, and hybrid incompatibility. Current Opinion in Plant Biology, 2012, 15, 154-161.	3.5	132
51	Cold stress selectively unsilences tandem repeats in heterochromatin associated with accumulation of H3K9ac. Plant, Cell and Environment, 2012, 35, 2130-2142.	2.8	78
52	Hyperosmotic priming of Arabidopsis seedlings establishes a long-term somatic memory accompanied by specific changes of the epigenome. Genome Biology, 2013, 14, R59.	3.8	264
53	Genome-wide annotation of genes and noncoding RNAs of foxtail millet in response to simulated drought stress by deep sequencing. Plant Molecular Biology, 2013, 83, 459-473.	2.0	157
54	Epigenetic Memory and Control in Plants. Signaling and Communication in Plants, 2013, , .	0.5	4
55	Reconstructing de novo silencing of an active plant retrotransposon. Nature Genetics, 2013, 45, 1029-1039.	9.4	248
56	Epigenetic regulation of adaptive responses of forest tree species to the environment. Ecology and Evolution, 2013, 3, 399-415.	0.8	271
57	Long-Distance Systemic Signaling and Communication in Plants. Signaling and Communication in Plants, 2013, , .	0.5	16

#	Article	IF	Citations
58	Mechanism for full-length RNA processing of Arabidopsis genes containing intragenic heterochromatin. Nature Communications, 2013, 4, 2301.	5.8	82
59	Arabidopsis HIT4 encodes a novel chromocentre-localized protein involved in the heat reactivation of transcriptionally silent loci and is essential for heat tolerance in plants. Journal of Experimental Botany, 2013, 64, 1689-1701.	2.4	32
60	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
61	Roles, and establishment, maintenance and erasing of the epigenetic cytosine methylation marks in plants. Journal of Genetics, 2013, 92, 629-666.	0.4	24
62	Hidden genetic nature of epigenetic natural variation in plants. Trends in Plant Science, 2013, 18, 625-632.	4.3	39
63	Dynamics and biological relevance of DNA demethylation in Arabidopsis antibacterial defense. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 2389-2394.	3.3	396
64	How important are transposons for plant evolution?. Nature Reviews Genetics, 2013, 14, 49-61.	7.7	711
65	Epigenetics and crop improvement. Trends in Genetics, 2013, 29, 241-247.	2.9	110
66	Evolution of the ONSEN retrotransposon family activated upon heat stress in Brassicaceae. Gene, 2013, 518, 256-261.	1.0	59
67	Transgenerational changes in Arabidopsis thaliana in response to UV-C, heat and cold. Biocatalysis and Agricultural Biotechnology, 2013, 2, 226-233.	1.5	5
68	Biotechnology for mechanisms that counteract salt stress in extremophile species: a genome-based view. Plant Biotechnology Reports, 2013, 7, 27-37.	0.9	24
69	Variations in genomic DNA methylation during the long-term in vitro proliferation of oil palm embryogenic suspension cultures. Plant Cell Reports, 2013, 32, 359-368.	2.8	73
70	The impact of transposable elements in environmental adaptation. Molecular Ecology, 2013, 22, 1503-1517.	2.0	464
71	Epigenetic Modifications in Plants Under Adverse Conditions: Agricultural Applications. , 2013, , 233-267.		4
72	Epigenetic Regulation of Genome Stability in Plants in Response to Stress. Signaling and Communication in Plants, 2013, , 41-56.	0.5	2
73	Arguments for standardizing transposable element annotation in plant genomes. Trends in Plant Science, 2013, 18, 367-376.	4.3	26
74	Changes in homologous recombination frequency in Arabidopsis thaliana plants exposed to stress depend on time of exposure during development and on duration of stress exposure. Physiology and Molecular Biology of Plants, 2013, 19, 479-488.	1.4	14
75	Pre-conditioning the epigenetic response to high vapor pressure deficit increases the drought tolerance ofArabidopsis thaliana. Plant Signaling and Behavior, 2013, 8, e25974.	1.2	23

#	Article	IF	Citations
76	The Initiation of Epigenetic Silencing of Active Transposable Elements Is Triggered by RDR6 and 21-22 Nucleotide Small Interfering RNAs Â Â. Plant Physiology, 2013, 162, 116-131.	2.3	267
77	Mutations in EDM2 selectively affect silencing states of transposons and induce plant developmental plasticity. Scientific Reports, 2013, 3, 1701.	1.6	23
78	Arabidopsis Non-Coding RNA Regulation in Abiotic Stress Responses. International Journal of Molecular Sciences, 2013, 14, 22642-22654.	1.8	47
79	Transgenerational, Dynamic Methylation of Stomata Genes in Response to Low Relative Humidity. International Journal of Molecular Sciences, 2013, 14, 6674-6689.	1.8	51
80	Transposon Variants and Their Effects on Gene Expression in Arabidopsis. PLoS Genetics, 2013, 9, e1003255.	1.5	122
81	The PRP6-like splicing factor STA1 is involved in RNA-directed DNA methylation by facilitating the production of Pol V-dependent scaffold RNAs. Nucleic Acids Research, 2013, 41, 8489-8502.	6.5	40
82	Control of transposon activity by a histone H3K4 demethylase in rice. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 1953-1958.	3.3	100
83	Comparative Genomic Paleontology across Plant Kingdom Reveals the Dynamics of TE-Driven Genome Evolution. Genome Biology and Evolution, 2013, 5, 954-965.	1.1	148
84	The RdDM Pathway Is Required for Basal Heat Tolerance in Arabidopsis. Molecular Plant, 2013, 6, 396-410.	3.9	154
85	Small RNAs and regulation of transposons in plants. Genes and Genetic Systems, 2013, 88, 3-7.	0.2	34
87	Life at the extreme: lessons from the genome. Genome Biology, 2013, 13, 241.	3.8	72
88	Parentâ€ofâ€origin control of transgenerational retrotransposon proliferation in Arabidopsis. EMBO Reports, 2013, 14, 823-828.	2.0	22
90	Phenotypic Effects of Salt and Heat Stress over Three Generations in Arabidopsis thaliana. PLoS ONE, 2013, 8, e80819.	1.1	55
91	Significance of SODD expression in childhood acute lymphoblastic leukemia and its influence on chemotherapy. Genetics and Molecular Research, 2014, 13, 2020-2031.	0.3	5
92	Transgenerational phenotypic and epigenetic changes in response to heat stress inArabidopsis thaliana. Plant Signaling and Behavior, 2014, 9, e27971.	1.2	66
93	Epigenetic responses to heat stress at different time scales and the involvement of small RNAs. Plant Signaling and Behavior, 2014, 9, e970430.	1.2	42
94	Transgenerational changes in plant physiology and in transposon expression in response to UV-C stress in Arabidopsis thaliana. Plant Signaling and Behavior, 2014, 9, e976490.	1.2	20
95	Chromatin dynamics during plant sexual reproduction. Frontiers in Plant Science, 2014, 5, 354.	1.7	33

#	Article	IF	Citations
96	Natural CMT2 Variation Is Associated With Genome-Wide Methylation Changes and Temperature Seasonality. PLoS Genetics, 2014, 10, e1004842.	1.5	147
97	How a Retrotransposon Exploits the Plant's Heat Stress Response for Its Activation. PLoS Genetics, 2014, 10, e1004115.	1.5	280
98	The SET Domain Proteins SUVH2 and SUVH9 Are Required for Pol V Occupancy at RNA-Directed DNA Methylation Loci. PLoS Genetics, 2014, 10, e1003948.	1.5	152
99	The Ability to Form Homodimers Is Essential for RDM1 to Function in RNA-Directed DNA Methylation. PLoS ONE, 2014, 9, e88190.	1.1	16
100	Low Temperature-Responsive Changes in the Anther Transcriptomeâ€™s Repeat Sequences Are Indicative of Stress Sensitivity and Pollen Sterility in Rice Strains Â, Â Â. Plant Physiology, 2014, 164, 671-682.	2.3	30
101	Epigenetic Regulation in Plant Responses to the Environment. Cold Spring Harbor Perspectives in Biology, 2014, 6, a019471-a019471.	2.3	210
102	TE-Tracker: systematic identification of transposition events through whole-genome resequencing. BMC Bioinformatics, 2014, 15, 377.	1.2	27
103	Epigenetics in an ecotoxicological context. Mutation Research - Genetic Toxicology and Environmental Mutagenesis, 2014, 764-765, 36-45.	0.9	124
104	DNA memories of early social life. Neuroscience, 2014, 264, 64-75.	1.1	59
105	Transposon variation by order during allopolyploidisation between <scp>B</scp>rassica oleracea and <scp>B</scp>rassica rapa. Plant Biology, 2014, 16, 825-835.	1.8	25
106	Tree immunity: growing old without antibodies. Trends in Plant Science, 2014, 19, 367-370.	4.3	33
107	Genome stability in the uvh6 mutant of Arabidopsis thaliana. Plant Cell Reports, 2014, 33, 979-991.	2.8	5
108	Interplay between chromatin and RNA processing. Current Opinion in Plant Biology, 2014, 18, 60-65.	3.5	13
109	Transgenerational Epigenetic Inheritance: Myths and Mechanisms. Cell, 2014, 157, 95-109.	13.5	1,393
110	RNA-directed DNA methylation: an epigenetic pathway of increasing complexity. Nature Reviews Genetics, 2014, 15, 394-408.	7.7	1,309
111	Epigenetics: Beyond Chromatin Modifications and Complex Genetic Regulation. Plant Physiology, 2014, 165, 933-947.	2.3	126
112	Identification of genes preventing transgenerational transmission of stress-induced epigenetic states. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 8547-8552.	3.3	112
113	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

#	Article	IF	Citations
114	NATURAL VARIATION IN EPIGENETIC GENE REGULATION AND ITS EFFECTS ON PLANT DEVELOPMENTAL TRAITS. Evolution; International Journal of Organic Evolution, 2014, 68, 620-631.	1.1	38
115	Insight into small RNA abundance and expression in high- and low-temperature stress response using deep sequencing in Arabidopsis. Plant Physiology and Biochemistry, 2014, 84, 105-114.	2.8	34
116	Epigenetic Memory for Stress Response and Adaptation in Plants. Plant and Cell Physiology, 2014, 55, 1859-1863.	1.5	321
117	Epigenetic reprogramming in plant sexual reproduction. Nature Reviews Genetics, 2014, 15, 613-624.	7.7	234
118	Epigenetic regulation and functional exaptation of transposable elements in higher plants. Current Opinion in Plant Biology, 2014, 21, 83-88.	3.5	59
119	Epigenetic memory in plants. EMBO Journal, 2014, 33, 1987-1998.	3.5	181
120	Plant Models of Transgenerational Epigenetic Inheritance. , 2014, , 147-161.		5
121	Genomic localization of AtRE1 and AtRE2, copia-type retrotransposons, in natural variants of Arabidopsis thaliana. Molecular Genetics and Genomics, 2014, 289, 821-835.	1.0	2
122	Control of transposable elements in Arabidopsis thaliana. Chromosome Research, 2014, 22, 217-223.	1.0	52
123	Arabidopsis miR156 Regulates Tolerance to Recurring Environmental Stress through SPL Transcription Factors. Plant Cell, 2014, 26, 1792-1807.	3.1	511
124	Stress-induced transcriptional activation of retrotransposon-like sequences in the Scots pine (Pinus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	0.6	46
125	Environmental History Modulates Arabidopsis Pattern-Triggered Immunity in a HISTONE ACETYLTRANSFERASE1â€“Dependent Manner Â. Plant Cell, 2014, 26, 2676-2688.	3.1	133
127	An Rrp6-like Protein Positively Regulates Noncoding RNA Levels and DNA Methylation in Arabidopsis. Molecular Cell, 2014, 54, 418-430.	4.5	45
128	Development and Characterisation of Irap Markers From Expressed Retrotransposon-like sequences in Pinus sylvestris L.. Proceedings of the Latvian Academy of Sciences, 2014, 67, 485-492.	0.0	2
129	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
130	Genomic methylation patterns in archaeological barley show de-methylation as a time-dependent diagenetic process. Scientific Reports, 2014, 4, 5559.	1.6	63
131	Dynamics and Reversibility of the DNA Methylation Landscape of Grapevine Plants (Vitis vinifera) Stressed by In Vitro Cultivation and Thermotherapy. PLoS ONE, 2015, 10, e0126638.	1.1	43
132	Chromatin resetting mechanisms preventing transgenerational inheritance of epigenetic states. Frontiers in Plant Science, 2015, 6, 380.	1.7	24

#	Article	IF	Citations
133	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
134	Crop epigenetics and the molecular hardware of genotype Ã— environment interactions. Frontiers in Plant Science, 2015, 6, 968.	1.7	20
135	siRNA-directed DNA Methylation in Plants. Current Genomics, 2015, 16, 23-31.	0.7	73
137	Mechanisms of Transposable Element Evolution in Plants and Their Effects on Gene Expression. , 2015, , 133-164.		2
138	Genetic and epigenetic control of plant heat responses. Frontiers in Plant Science, 2015, 06, 267.	1.7	260
139	Chromatin dynamics during cellular differentiation in the female reproductive lineage of flowering plants. Plant Journal, 2015, 83, 160-176.	2.8	43
140	FT-like proteins induce transposon silencing in the shoot apex during floral induction in rice. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E901-10.	3.3	54
141	The Methyl-CpG-Binding Protein MBD7 Facilitates Active DNA Demethylation to Limit DNA Hyper-Methylation and Transcriptional Gene Silencing. Molecular Cell, 2015, 57, 971-983.	4.5	112
142	Transgenerational inheritance of epigenetic response to cold in Arabidopsis thaliana. Biocatalysis and Agricultural Biotechnology, 2015, 4, 1-10.	1.5	10
143	Controlled activation of retrotransposition for plant breeding. Current Opinion in Biotechnology, 2015, 32, 200-206.	3.3	67
144	High-temperature effect on genes engaged in DNA methylation and affected by DNA methylation in Arabidopsis. Plant Physiology and Biochemistry, 2015, 87, 102-108.	2.8	94
145	SSAP analysis reveals candidate genes associated with deastringency in persimmon (Diospyros kaki) Tj ETQq1 1 0.784314 rgBT /Over	0.6	14
146	Epigenetic variation and environmental change: Fig. 1.. Journal of Experimental Botany, 2015, 66, 3541-3548.	2.4	84
147	Molecular characterization of a transcriptionally active Ty1/copia-like retrotransposon in Gossypium. Plant Cell Reports, 2015, 34, 1037-1047.	2.8	18
148	Silencing of active transposable elements in plants. Current Opinion in Plant Biology, 2015, 27, 67-76.	3.5	124
150	Transposable Elements Contribute to Activation of Maize Genes in Response to Abiotic Stress. PLoS Genetics, 2015, 11, e1004915.	1.5	346
151	Chromatin changes in response to drought, salinity, heat, and cold stresses in plants. Frontiers in Plant Science, 2015, 6, 114.	1.7	367
152	A small RNA mediated regulation of a stress-activated retrotransposon and the tissue specific transposition during the reproductive period in Arabidopsis. Frontiers in Plant Science, 2015, 6, 48.	1.7	43

#	Article	IF	Citations
153	The expanding world of small RNAs in plants. Nature Reviews Molecular Cell Biology, 2015, 16, 727-741.	16.1	932
154	Arabidopsis <scp>HIT</scp>4, a regulator involved in heatâ€triggered reorganization of chromatin and release of transcriptional gene silencing, relocates from chromocenters to the nucleolus in response to heat stress. New Phytologist, 2015, 205, 544-554.	3.5	25
155	Horizontal Transfers and the New Model of TE-Driven Genome Evolution in Eukaryotes. , 2015, , 77-92.		1
156	Stress and the dynamic genome: Steroids, epigenetics, and the transposome. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 6828-6833.	3.3	124
157	Diffuse Decapping Enzyme DCP2 Accumulates in DCP1 Foci Under Heat Stress in Arabidopsis thaliana. Plant and Cell Physiology, 2015, 56, 107-115.	1.5	32
158	Gene expression plasticity resulting from parental leaf damage in M imulus guttatus. New Phytologist, 2015, 205, 894-906.	3.5	22
159	LTR retrotransposons, handy hitchhikers of plant regulation and stress response. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2015, 1849, 403-416.	0.9	133
160	Epigenetic Mechanisms and Inheritance of Acquired Susceptibility to Disease. , 2016, , 531-552.		1
161	Stress Responsive Non-protein Coding RNAs. , 2016, , .		1
162	The Arabidopsis thaliana mobilome and its impact at the species level. ELife, 2016, 5, .	2.8	271
163	Recurrent evolution of heat-responsiveness in Brassicaceae COPIA elements. Genome Biology, 2016, 17, 209.	3.8	77
164	Characterization of a heat-activated retrotransposon in natural accessions of <i>Arabidopsis thaliana</i>. Genes and Genetic Systems, 2016, 91, 293-299.	0.2	7
165	Regulation of Non-coding RNAs in Heat Stress Responses of Plants. Frontiers in Plant Science, 2016, 7, 1213.	1.7	104
166	Moving through the Stressed Genome: Emerging Regulatory Roles for Transposons in Plant Stress Response. Frontiers in Plant Science, 2016, 7, 1448.	1.7	117
167	The <scp>LORE</scp>1 insertion mutant resource. Plant Journal, 2016, 88, 306-317.	2.8	123
168	Priming and memory of stress responses in organisms lacking a nervous system. Biological Reviews, 2016, 91, 1118-1133.	4.7	388
169	Stress-induced and epigenetic-mediated maize transcriptome regulation study by means of transcriptome reannotation and differential expression analysis. Scientific Reports, 2016, 6, 30446.	1.6	57
170	Inducible Transposition of a Heat-Activated Retrotransposon in Tissue Culture. Plant and Cell Physiology, 2017, 58, pcw202.	1.5	23

#	Article	IF	Citations
171	Structural Genomics of Angiosperm Trees: Genome Duplications, Ploidy, and Repeat Sequences. Plant Genetics and Genomics: Crops and Models, 2016, , 101-120.	0.3	0
172	DNA methylation changes and TE activity induced in tissue cultures of barley (Hordeum vulgare L.). Journal of Biological Research, 2016, 23, 19.	2.2	37
173	SlAGO4A, a core factor of RNA-directed DNA methylation (RdDM) pathway, plays an important role under salt and drought stress in tomato. Molecular Breeding, 2016, 36, 1.	1.0	31
174	Epigenetic variability in plants: Heritability, adaptability, evolutionary significance. Russian Journal of Plant Physiology, 2016, 63, 181-192.	0.5	13
175	DNA Damage-Induced Transcription of Transposable Elements and Long Non-coding RNAs in Arabidopsis Is Rare and ATM-Dependent. Molecular Plant, 2016, 9, 1142-1155.	3.9	39
176	A Multigenic Network of ARGONAUTE4 Clade Members Controls Early Megaspore Formation in Arabidopsis. Genetics, 2016, 204, 1045-1056.	1.2	59
177	Full-length autonomous transposable elements are preferentially targeted by expression-dependent forms of RNA-directed DNA methylation. Genome Biology, 2016, 17, 170.	3.8	118
178	Transgenerational Genome Instability in Plants. , 2016, , 615-633.		4
179	DNA Methylation and Demethylation in Plant Immunity. Annual Review of Phytopathology, 2016, 54, 579-603.	3.5	129
180	Transposon Activity in Plant Genomes. , 2016, , 83-108.		5
182	Pathogen Infection and MORC Proteins Affect Chromatin Accessibility of Transposable Elements and Expression of Their Proximal Genes in Arabidopsis. Molecular Plant-Microbe Interactions, 2016, 29, 674-687.	1.4	11
183	A Stress-Activated Transposon in Arabidopsis Induces Transgenerational Abscisic Acid Insensitivity. Scientific Reports, 2016, 6, 23181.	1.6	106
184	Small <scp>RNAs</scp>: essential regulators of gene expression and defenses against environmental stresses in plants. Wiley Interdisciplinary Reviews RNA, 2016, 7, 356-381.	3.2	52
185	Evolution of plant genome architecture. Genome Biology, 2016, 17, 37.	3.8	331
186	Methods for accurate quantification of LTR-retrotransposon copy number using short-read sequence data: a case study in Sorghum. Molecular Genetics and Genomics, 2016, 291, 1871-1883.	1.0	5
187	Plant Fidelity in Somatic Embryogenesis-Regenerated Plants. , 2016, , 121-150.		8
188	The dynamic genome: transposons and environmental adaptation in the nervous system. Epigenomics, 2016, 8, 237-249.	1.0	36
189	Epigenetic events in plant male germ cell heat stress responses. Plant Reproduction, 2016, 29, 21-29.	1.3	32

#	Article	IF	Citations
190	A role for palindromic structures in the cis-region of maize Sirevirus LTRs in transposable element evolution and host epigenetic response. Genome Research, 2016, 26, 226-237.	2.4	22
191	Reconsidering plant memory: Intersections between stress recovery, RNA turnover, and epigenetics. Science Advances, 2016, 2, e1501340.	4.7	477
192	The First Rule of Plant Transposable Element Silencing: Location, Location, Location. Plant Cell, 2016, 28, 304-313.	3.1	153
193	Creating Order from Chaos: Epigenome Dynamics in Plants with Complex Genomes. Plant Cell, 2016, 28, 314-325.	3.1	89
194	Genome-Wide Characterization of Maize Small RNA Loci and Their Regulation in the required to maintain repression6-1 (rmr6-1) Mutant and Long-Term Abiotic Stresses Â. Plant Physiology, 2016, 170, 1535-1548.	2.3	36
195	Level of tissue differentiation influences the activation of a heat-inducible flower-specific system for genetic containment in poplar (Populus tremula L.). Plant Cell Reports, 2016, 35, 369-384.	2.8	5
196	Mechanistic and evolutionary questions about epigenetic conflicts between transposable elements and their plant hosts. Current Opinion in Plant Biology, 2016, 30, 123-133.	3.5	39
197	Decoding Lamarckâ€"transgenerational control of metabolism by noncoding RNAs. Pflugers Archiv European Journal of Physiology, 2016, 468, 959-969.	1.3	8
198	Transposable element influences on gene expression in plants. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2017, 1860, 157-165.	0.9	188
199	Transposable elements (<scp>TE</scp>s) contribute to stressâ€related long intergenic noncoding <scp>RNA</scp>s in plants. Plant Journal, 2017, 90, 133-146.	2.8	116
200	Epigenetic regulation of antagonistic receptors confers rice blast resistance with yield balance. Science, 2017, 355, 962-965.	6.0	439
201	Divergent cytosine DNA methylation patterns in singleâ€cell, soybean root hairs. New Phytologist, 2017, 214, 808-819.	3.5	75
202	Resolving fineâ€grained dynamics of retrotransposons: comparative analysis of inferential methods and genomic resources. Plant Journal, 2017, 90, 979-993.	2.8	10
203	Cold tolerance of the Asian tiger mosquito Aedes albopictus and its response to epigenetic alterations. Journal of Insect Physiology, 2017, 99, 113-121.	0.9	19
204	The association of changes in DNA methylation with temperature-dependent sex determination in cucumber. Journal of Experimental Botany, 2017, 68, 2899-2912.	2.4	53
205	Transposable Element Misregulation Is Linked to the Divergence between Parental piRNA Pathways in Drosophila Hybrids. Genome Biology and Evolution, 2017, 9, 1450-1470.	1.1	26
206	Small RNAs Reflect Grandparental Environments in Apomictic Dandelion. Molecular Biology and Evolution, 2017, 34, 2035-2040.	3.5	23
207	Epigenetics in Plantâ€"Pathogen Interactions. RNA Technologies, 2017, , 385-404.	0.2	5

#	Article	IF	Citations
208	Dynamic DNA Methylation Patterns in Stress Response. RNA Technologies, 2017, , 281-302.	0.2	23
209	Plant Epigenetics: Non-coding RNAs as Emerging Regulators. RNA Technologies, 2017, , 129-147.	0.2	0
210	LTR-retrotransposons in plants: Engines of evolution. Gene, 2017, 626, 14-25.	1.0	177
212	Rice Epigenomics: How Does Epigenetic Manipulation of Crops Contribute to Agriculture?. RNA Technologies, 2017, , 427-443.	0.2	0
213	Genetic and epigenetic variation of transposable elements in Arabidopsis. Current Opinion in Plant Biology, 2017, 36, 135-141.	3.5	79
214	Cyst Nematode Parasitism Induces Dynamic Changes in the Root Epigenome. Plant Physiology, 2017, 174, 405-420.	2.3	66
215	Genome-wide identification of heat stress-responsive small RNAs in tall fescue (Festuca arundinacea) by high-throughput sequencing. Journal of Plant Physiology, 2017, 213, 157-165.	1.6	17
216	Jumping genes: Genomic ballast or powerhouse of biological diversification. Molecular Ecology, 2017, 26, 4587-4590.	2.0	7
217	The Arabidopsis DNA Methylome Is Stable under Transgenerational Drought Stress. Plant Physiology, 2017, 175, 1893-1912.	2.3	112
218	Transcriptionally active LTR retroelement-related sequences and their relationship with small RNA in moso bamboo (Phyllostachys edulis). Molecular Breeding, 2017, 37, 1.	1.0	8
219	Ecological plant epigenetics: Evidence from model and nonâ€model species, and the way forward. Ecology Letters, 2017, 20, 1576-1590.	3.0	279
220	Small RNAs in regulating temperature stress response in plants. Journal of Integrative Plant Biology, 2017, 59, 774-791.	4.1	43
221	Developmental Restriction of Retrotransposition Activated in Arabidopsis by Environmental Stress. Genetics, 2017, 207, 813-821.	1.2	24
222	High-frequency recombination between members of an LTR retrotransposon family during transposition bursts. Nature Communications, 2017, 8, 1283.	5.8	39
223	Small RNA Activity in Archeological Barley Shows Novel Germination Inhibition in Response to Environment. Molecular Biology and Evolution, 2017, 34, 2555-2562.	3.5	15
224	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
225	Transcriptional Regulatory Network of Plant Heat Stress Response. Trends in Plant Science, 2017, 22, 53-65.	4.3	782
226	Multilevel Regulation of Abiotic Stress Responses in Plants. Frontiers in Plant Science, 2017, 8, 1564.	1.7	149

#	Article	IF	Citations
227	Epigenetic Regulation of a Heat-Activated Retrotransposon in Cruciferous Vegetables. Epigenomes, 2017, 1, 7.	0.8	5
228	Genome and Epigenome Surveillance Processes Underlying UV Exposure in Plants. Genes, 2017, 8, 316.	1.0	22
229	Inhibition of RNA polymerase II allows controlled mobilisation of retrotransposons for plant breeding. Genome Biology, 2017, 18, 134.	3.8	84
230	TGTT and AACA: two transcriptionally active LTR retrotransposon subfamilies with a specific LTR structure and horizontal transfer in four Rosaceae species. Mobile DNA, 2017, 8, 14.	1.3	2
231	Transposons: a blessing curse. Current Opinion in Plant Biology, 2018, 42, 23-29.	3.5	163
232	Proliferation of Regulatory DNA Elements Derived from Transposable Elements in the Maize Genome. Plant Physiology, 2018, 176, 2789-2803.	2.3	71
233	Modeling Interactions between Transposable Elements and the Plant Epigenetic Response: A Surprising Reliance on Element Retention. Genome Biology and Evolution, 2018, 10, 803-815.	1.1	35
234	Branching out: a new era of investigating physiological processes in forest trees using genomic tools. Tree Physiology, 2018, 38, 303-310.	1.4	5
235	Horizontal acquisition of transposable elements and viral sequences: patterns and consequences. Current Opinion in Genetics and Development, 2018, 49, 15-24.	1.5	109
236	Memory and Learning in Plants. Signaling and Communication in Plants, 2018, , .	0.5	25
237	Transcriptome analysis of Pinus halepensis under drought stress and during recovery. Tree Physiology, 2018, 38, 423-441.	1.4	96
238	Recent expansion of heat-activated retrotransposons in the coral symbiont Symbiodinium microadriaticum. ISME Journal, 2018, 12, 639-643.	4.4	21
239	Arabidopsis RNA Polymerase V Mediates Enhanced Compaction and Silencing of Geminivirus and Transposon Chromatin during Host Recovery from Infection. Journal of Virology, 2018, 92, .	1.5	38
240	Role of Epigenetics in Transgenerational Changes: Genome Stability in Response to Plant Stress. Signaling and Communication in Plants, 2018, , 79-109.	0.5	1
241	Contribution of transposable elements in the plant's genome. Gene, 2018, 665, 155-166.	1.0	57
242	Exaptation of transposable element coding sequences. Current Opinion in Genetics and Development, 2018, 49, 34-42.	1.5	59
243	Sequence-Independent Identification of Active LTR Retrotransposons in Arabidopsis. Molecular Plant, 2018, 11, 508-511.	3.9	23
244	Stress response regulation by epigenetic mechanisms: changing of the guards. Physiologia Plantarum, 2018, 162, 239-250.	2.6	47

#	Article	IF	Citations
245	Epigenetic regulation â€“ contribution to herbicide resistance in weeds?. Pest Management Science, 2018, 74, 275-281.	1.7	41
246	Heat stress alters genome-wide profiles of circular RNAs in Arabidopsis. Plant Molecular Biology, 2018, 96, 217-229.	2.0	116
247	Accumulation of the coumarin scopolin under abiotic stress conditions is mediated by the Arabidopsis thaliana <scp>THO</scp>/<scp>TREX</scp> complex. Plant Journal, 2018, 93, 431-444.	2.8	42
248	Piecing together cisâ€regulatory networks: insights from epigenomics studies in plants. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2018, 10, e1411.	6.6	13
250	Transposable Elements as Tool for Crop Improvement. Advances in Botanical Research, 2018, , 165-202.	0.5	11
251	Pectin Methylesterases: Cell Wall Remodeling Proteins Are Required for Plant Response to Heat Stress. Frontiers in Plant Science, 2018, 9, 1612.	1.7	151
253	A DNA methylation reader complex that enhances gene transcription. Science, 2018, 362, 1182-1186.	6.0	181
254	EpiRILs. Advances in Botanical Research, 2018, , 87-116.	0.5	6
255	Sexual and Non-sexual Reproduction. Advances in Botanical Research, 2018, 88, 117-163.	0.5	4
256	Integration between ROS Regulatory Systems and Other Signals in the Regulation of Various Types of Heat Responses in Plants. International Journal of Molecular Sciences, 2018, 19, 3370.	1.8	54
257	Shaping Plant Adaptability, Genome Structure and Gene Expression through Transposable Element Epigenetic Control: Focus on Methylation. Agronomy, 2018, 8, 180.	1.3	25
258	Transgenerational Epigenetic Inheritance. Annual Review of Genetics, 2018, 52, 21-41.	3.2	208
259	Dynamics and function of DNA methylation in plants. Nature Reviews Molecular Cell Biology, 2018, 19, 489-506.	16.1	1,145
260	Epigenomics of Plant Responses to Environmental Stress. Epigenomes, 2018, 2, 6.	0.8	51
261	Transposable elements: all mobile, all different, some stress responsive, some adaptive?. Current Opinion in Genetics and Development, 2018, 49, 106-114.	1.5	81
262	Exploring potential roles for the interaction of MOM1 with SUMO and the SUMO E3 ligase-like protein PIAL2 in transcriptional silencing. PLoS ONE, 2018, 13, e0202137.	1.1	5
263	Transcriptional control and exploitation of an immuneâ€responsive family of plant retrotransposons. EMBO Journal, 2018, 37, .	3.5	45
264	Characterization of a heat-activated retrotransposon in Vigna angularis. Breeding Science, 2018, 68, 168-176.	0.9	16

#	Article	IF	Citations
265	Genome-Wide Transcript and Small RNA Profiling Reveals Transcriptomic Responses to Heat Stress. Plant Physiology, 2019, 181, 609-629.	2.3	49
266	Plant Noncoding RNAs: Hidden Players in Development and Stress Responses. Annual Review of Cell and Developmental Biology, 2019, 35, 407-431.	4.0	228
267	The NRPD1 N-terminus contains a Pol IV-specific motif that is critical for genome surveillance in Arabidopsis. Nucleic Acids Research, 2019, 47, 9037-9052.	6.5	14
268	Elimination of a Retrotransposon for Quenching Genome Instability in Modern Rice. Molecular Plant, 2019, 12, 1395-1407.	3.9	12
269	Transposition favors the generation of large effect mutations that may facilitate rapid adaption. Nature Communications, 2019, 10, 3421.	5.8	134
270	Crosstalk between epigenetic silencing and infection byÂtobacco rattle virus in Arabidopsis. Molecular Plant Pathology, 2019, 20, 1439-1452.	2.0	27
271	DNA Methylation: Toward Crop Disease Resistance Improvement. Trends in Plant Science, 2019, 24, 1137-1150.	4.3	76
272	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
273	Environmental and epigenetic regulation of Rider retrotransposons in tomato. PLoS Genetics, 2019, 15, e1008370.	1.5	51
274	Transgenerational activation of an autonomous DNA transposon, Dart1-24, by 5-azaC treatment in rice. Theoretical and Applied Genetics, 2019, 132, 3347-3355.	1.8	5
275	Plant models of transgenerational epigenetic inheritance. , 2019, , 263-282.		5
276	What drives phenotypic divergence among coral clonemates of Acropora palmata?. Molecular Ecology, 2019, 28, 3208-3224.	2.0	37
277	Heritable generational epigenetic effects through small noncoding RNA. , 2019, , 185-212.		1
278	Extensive profiling in Arabidopsis reveals abundant polysome-associated 24-nt small RNAs including AGO5-dependent pseudogene-derived siRNAs. Rna, 2019, 25, 1098-1117.	1.6	12
279	Evidence of developmental escape from transcriptional gene silencing in <scp>MESSI</scp> retrotransposons. New Phytologist, 2019, 223, 950-964.	3.5	6
280	Genome invasion by a hypomethylated satellite repeat in Australian crucifer Ballantinia antipoda. Plant Journal, 2019, 99, 1066-1079.	2.8	3
281	Non-coding RNAs and transposable elements in plant genomes: emergence, regulatory mechanisms and roles in plant development and stress responses. Planta, 2019, 250, 23-40.	1.6	58
282	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

#	Article	IF	Citations
283	Epigenetic Mechanisms of Abiotic Stress Response and Memory in Plants. , 2019, , 1-64.		24
284	An H3K27me3 demethylase-HSFA2 regulatory loop orchestrates transgenerational thermomemory in Arabidopsis. Cell Research, 2019, 29, 379-390.	5.7	149
285	Transgenerational Response to Nitrogen Deprivation in Arabidopsis thaliana. International Journal of Molecular Sciences, 2019, 20, 5587.	1.8	7
286	Photodamage repair pathways contribute to the accurate maintenance of the DNA methylome landscape upon UV exposure. PLoS Genetics, 2019, 15, e1008476.	1.5	16
287	Tissue-specific transposon-associated small RNAs in the gymnosperm tree, Norway spruce. BMC Genomics, 2019, 20, 997.	1.2	12
288	An EnSpm interspersed repeat identified in Triticum aestivum and implicated in resistance to Diuraphis noxia. South African Journal of Plant and Soil, 2019, 36, 1-9.	0.4	0
289	Transcriptional activation of long terminal repeat retrotransposon sequences in the genome of pitaya under abiotic stress. Plant Physiology and Biochemistry, 2019, 135, 460-468.	2.8	21
290	An LTR retrotransposon insertion was the cause of worldâ€™s first low erucic acid Brassica rapa oilseed cultivar. Molecular Breeding, 2019, 39, 1.	1.0	4
291	Sensitive detection of pre-integration intermediates of long terminal repeat retrotransposons in crop plants. Nature Plants, 2019, 5, 26-33.	4.7	35
292	Stress-Driven Transposable Element De-repression Dynamics and Virulence Evolution in a Fungal Pathogen. Molecular Biology and Evolution, 2020, 37, 221-239.	3.5	83
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	Epigenetic regulation in plant abiotic stress responses. Journal of Integrative Plant Biology, 2020, 62, 563-580.	4.1	292
295	RNA-directed DNA Methylation. PLoS Genetics, 2020, 16, e1009034.	1.5	165
296	Evolutionary Dynamics of Transposable Elements Following a Shared Polyploidization Event in the Tribe Andropogoneae. G3: Genes, Genomes, Genetics, 2020, 10, 4387-4398.	0.8	9
297	The plastic genome: The impact of transposable elements on gene functionality and genomic structural variations. Genesis, 2020, 58, e23399.	0.8	18
298	Non-coding RNA polymerases that silence transposable elements and reprogram gene expression in plants. Transcription, 2020, 11, 172-191.	1.7	19
299	Germ Granules Allow Transmission of Small RNA-Based Parental Responses in the â€œGerm Plasmâ€• IScience, 2020, 23, 101831.	1.9	19
300	Plant Non-Coding RNAs: Origin, Biogenesis, Mode of Action and Their Roles in Abiotic Stress. International Journal of Molecular Sciences, 2020, 21, 8401.	1.8	57

#	Article	IF	Citations
301	Twenty years of transposable element analysis in the Arabidopsis thaliana genome. Mobile DNA, 2020, 11, 28.	1.3	72
302	Epigenetic Mechanisms of Plant Adaptation to Biotic and Abiotic Stresses. International Journal of Molecular Sciences, 2020, 21, 7457.	1.8	94
303	The contribution of transposable elements to transcriptional novelty in plants: theFLCaffair. Transcription, 2020, 11, 192-198.	1.7	21
304	Chromatin regulates expression of small RNAs to help maintain transposon methylome homeostasis in Arabidopsis. Genome Biology, 2020, 21, 251.	3.8	61
305	Identification and characterization of SET domain family genes in bread wheat (Triticum aestivum L.). Scientific Reports, 2020, 10, 14624.	1.6	17
306	Comparative genomics of muskmelon reveals a potential role for retrotransposons in the modification of gene expression. Communications Biology, 2020, 3, 432.	2.0	29
307	Exploring the Biochemical Origin of DNA Sequence Variation in Barley Plants Regenerated via in Vitro Anther Culture. International Journal of Molecular Sciences, 2020, 21, 5770.	1.8	14
308	Sequence Composition of Bacterial Chromosome Clones in a Transgressive Root-Knot Nematode Resistance Chromosome Region in Tetraploid Cotton. Frontiers in Plant Science, 2020, 11, 574486.	1.7	3
309	Small DNA Methylation, Big Player in Plant Abiotic Stress Responses and Memory. Frontiers in Plant Science, 2020, 11, 595603.	1.7	82
310	Genomic and Transcriptomic Survey Provides New Insight into the Organization and Transposition Activity of Highly Expressed LTR Retrotransposons of Sunflower (Helianthus annuus L.). International Journal of Molecular Sciences, 2020, 21, 9331.	1.8	13
311	Stress, Adaptation, and the Deep Genome: Why Transposons Matter. Integrative and Comparative Biology, 2020, 60, 1495-1505.	0.9	15
312	Transcriptome analysis of heat stressed seedlings with or without pre-heat treatment in Cryptomeria japonica. Molecular Genetics and Genomics, 2020, 295, 1163-1172.	1.0	8
313	Memory of 5-min heat stress in Arabidopsis thaliana. Plant Signaling and Behavior, 2020, 15, 1778919.	1.2	13
314	Silencing ofMutatorElements in Maize Involves Distinct Populations of Small RNAs and Distinct Patterns of DNA Methylation. Genetics, 2020, 215, 379-391.	1.2	19
315	Molecular mechanisms regulating priming and stress memory. , 2020, , 247-265.		2
316	Molecular genetic analyses of abiotic stress responses during plant reproductive development. Journal of Experimental Botany, 2020, 71, 2870-2885.	2.4	38
317	Transposon age and non-CG methylation. Nature Communications, 2020, 11, 1221.	5.8	37
318	Transcriptomic Insights into Mechanisms of Early Seed Maturation in the Garden Pea (Pisum sativum) Tj ETQq1 1 0.784314 rgBT /Ove	1.8	14

#	Article	IF	Citations
319	Divergent DNA Methylation Signatures of Juvenile Seedlings, Grafts and Adult Apple Trees. Epigenomes, 2020, 4, 4.	0.8	12
320	RNA directed DNA methylation and seed plant genome evolution. Plant Cell Reports, 2020, 39, 983-996.	2.8	19
321	The R-Loop Atlas of Arabidopsis Development and Responses to Environmental Stimuli. Plant Cell, 2020, 32, 888-903.	3.1	61
322	Polymerase IV Plays a Crucial Role in Pollen Development in Capsella. Plant Cell, 2020, 32, 950-966.	3.1	46
324	Heat stress-induced transposon activation correlates with 3D chromatin organization rearrangement in Arabidopsis. Nature Communications, 2020, 11, 1886.	5.8	102
325	Arabidopsis retrotransposon virus-like particles and their regulation by epigenetically activated small RNA. Genome Research, 2020, 30, 576-588.	2.4	33
326	Role of H1 and DNA methylation in selective regulation of transposable elements during heat stress. New Phytologist, 2021, 229, 2238-2250.	3.5	40
327	The genome of Draba nivalis shows signatures of adaptation to the extreme environmental stresses of the Arctic. Molecular Ecology Resources, 2021, 21, 661-676.	2.2	14
328	The canonical RdDM pathway mediates the control of seed germination timing under salinity. Plant Journal, 2021, 105, 691-707.	2.8	4
329	A Predictive Approach to Infer the Activity and Natural Variation of Retrotransposon Families in Plants. Methods in Molecular Biology, 2021, 2250, 1-14.	0.4	7
330	Transgenerational genome instability in plants. , 2021, , 659-678.		2
331	Identification of Active Transposable Elements in Plants: The Mobilome-Seq Approach. Methods in Molecular Biology, 2021, 2250, 95-102.	0.4	1
333	Transposable Elements and Genome Expansion in Cultivated and Wild Potato and Tomato Species. Compendium of Plant Genomes, 2021, , 201-214.	0.3	2
334	When junk DNA turns functional: transposon-derived non-coding RNAs in plants. Journal of Experimental Botany, 2021, 72, 4132-4143.	2.4	23
336	Genetic and epigenetic variation in transposable element expression responses to abiotic stress in maize. Plant Physiology, 2021, 186, 420-433.	2.3	16
337	Recent advancement of NGS technologies to detect active transposable elements in plants. Genes and Genomics, 2021, 43, 289-294.	0.5	11
338	Transcriptional activity of transposable elements along an elevational gradient in Arabidopsis arenosa. Mobile DNA, 2021, 12, 7.	1.3	30
339	DNA hypomethylation in tetraploid rice potentiates stress-responsive gene expression for salt tolerance. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	44

#	Article	IF	Citations
340	On the Role of Transposable Elements in the Regulation of Gene Expression and Subgenomic Interactions in Crop Genomes. Critical Reviews in Plant Sciences, 2021, 40, 157-189.	2.7	28
341	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
342	Molecular mechanisms of plant tolerance to heat stress: current landscape and future perspectives. Plant Cell Reports, 2021, 40, 2247-2271.	2.8	51
343	Dynamics of DNA Methylation and Its Functions in Plant Growth and Development. Frontiers in Plant Science, 2021, 12, 596236.	1.7	84
344	Genetic and environmental modulation of transposition shapes the evolutionary potential of Arabidopsis thaliana. Genome Biology, 2021, 22, 138.	3.8	76
345	Jumpstarting evolution: How transposition can facilitate adaptation to rapid environmental changes. Current Opinion in Plant Biology, 2021, 61, 102043.	3.5	21
346	RNA-directed DNA methylation prevents rapid and heritable reversal of transposon silencing under heat stress in Zea mays. PLoS Genetics, 2021, 17, e1009326.	1.5	24
347	Robustification of GWAS to explore effective SNPs addressing the challenges of hidden population stratification and polygenic effects. Scientific Reports, 2021, 11, 13060.	1.6	4
348	Stage-Specific Characterization of Physiological Response to Heat Stress in the Wheat Cultivar Norin 61. International Journal of Molecular Sciences, 2021, 22, 6942.	1.8	4
350	The Structural, Functional and Evolutionary Impact of Transposable Elements in Eukaryotes. Genes, 2021, 12, 918.	1.0	31
352	Deciphering the Epigenetic Alphabet Involved in Transgenerational Stress Memory in Crops. International Journal of Molecular Sciences, 2021, 22, 7118.	1.8	36
353	Plantsâ€™ Epigenetic Mechanisms and Abiotic Stress. Genes, 2021, 12, 1106.	1.0	64
354	Differential nuclease sensitivity profiling uncovers a drought responsive change in maize leaf chromatin structure for two large retrotransposon derivatives, Uloh and Vegu. Plant Direct, 2021, 5, e337.	0.8	1
355	DNA methyltransferase CHROMOMETHYLASE3 prevents ONSEN transposon silencing under heat stress. PLoS Genetics, 2021, 17, e1009710.	1.5	23
357	The epigenetic chromatin-based regulation of somatic heat stress memory in plants. Plant Gene, 2021, 27, 100318.	1.4	10
358	Epigenome plasticity in plants. Nature Reviews Genetics, 2022, 23, 55-68.	7.7	73
359	Small RNAs: The Essential Regulators in Plant Thermotolerance. Frontiers in Plant Science, 2021, 12, 726762.	1.7	10
360	Comprehensive Mechanism of Gene Silencing and Its Role in Plant Growth and Development. Frontiers in Plant Science, 2021, 12, 705249.	1.7	36

#	Article	IF	Citations
361	De novo genome assembly and in natura epigenomics reveal salinityâ€induced DNA methylation in the mangrove tree Bruguiera gymnorhiza. New Phytologist, 2022, 233, 2094-2110.	3.5	25
362	Regulation of retrotransposition in Arabidopsis. Biochemical Society Transactions, 2021, 49, 2241-2251.	1.6	3
363	Extensively Current Activity of Transposable Elements in Natural Rice Accessions Revealed by Singleton Insertions. Frontiers in Plant Science, 2021, 12, 745526.	1.7	5
364	Genomic impact of stress-induced transposable element mobility in Arabidopsis. Nucleic Acids Research, 2021, 49, 10431-10447.	6.5	60
365	DRD1, a SWI/SNF-like chromatin remodeling protein, regulates a heat-activated transposon in <i>Arabidopsis thaliana</i>. Genes and Genetic Systems, 2021, 96, 151-158.	0.2	4
366	How Stress Facilitates Phenotypic Innovation Through Epigenetic Diversity. Frontiers in Plant Science, 2020, 11, 606800.	1.7	31
367	How to Activate Heat-Responsible Retrotransposon ONSEN in Brassicaceae Species. Methods in Molecular Biology, 2021, 2250, 189-194.	0.4	1
368	Landscaping Plant Epigenetics. Methods in Molecular Biology, 2014, 1112, 1-24.	0.4	6
369	Systemic Epigenetic Signaling in Plants. Signaling and Communication in Plants, 2013, , 71-104.	0.5	2
370	Aluminum-Induced Changes on DNA Damage, DNA Methylation and LTR Retrotransposon Polymorphism in Maize. Arabian Journal for Science and Engineering, 2018, 43, 123-131.	1.7	34
371	Mobility connects: transposable elements wire new transcriptional networks by transferring transcription factor binding motifs. Biochemical Society Transactions, 2020, 48, 1005-1017.	1.6	33
384	The effect of zebularine on the heat-activated retrotransposon <i>ONSEN</i> in <i>Arabidopsis thaliana</i> and <i>Vigna angularis</i>. Genes and Genetic Systems, 2020, 95, 165-172.	0.2	9
385	<i>ONSEN</i> shows different transposition activities in RdDM pathway mutants. Genes and Genetic Systems, 2020, 95, 183-190.	0.2	11
386	Kicking against the PRCs â€“ A Domesticated Transposase Antagonises Silencing Mediated by Polycomb Group Proteins and Is an Accessory Component of Polycomb Repressive Complex 2. PLoS Genetics, 2015, 11, e1005660.	1.5	68
387	Sequencing the extrachromosomal circular mobilome reveals retrotransposon activity in plants. PLoS Genetics, 2017, 13, e1006630.	1.5	118
388	Arabidopsis C-Terminal Domain Phosphatase-Like 1 Functions in miRNA Accumulation and DNA Methylation. PLoS ONE, 2013, 8, e74739.	1.1	19
389	GREAM: A Web Server to Short-List Potentially Important Genomic Repeat Elements Based on Over-/Under-Representation in Specific Chromosomal Locations, Such as the Gene Neighborhoods, within or across 17 Mammalian Species. PLoS ONE, 2015, 10, e0133647.	1.1	5
390	Use of Combined MSAP and NGS Techniques to Identify Differentially Methylated Regions in Somaclones: A Case Study of Two Stable Somatic Wheat Mutants. PLoS ONE, 2016, 11, e0165749.	1.1	15

#	Article	IF	Citations
391	A Viral Immunity Chromosome in the Marine Picoeukaryote, Ostreococcus tauri. PLoS Pathogens, 2016, 12, e1005965.	2.1	38
392	Chromatin-Based Epigenetic Regulation of Plant Abiotic Stress Response. Current Genomics, 2016, 17, 490-498.	0.7	64
394	A role for MED14 and UVH6 in heterochromatin transcription upon destabilization of silencing. Life Science Alliance, 2018, 1, e201800197.	1.3	14
395	Plant Responses to Heat Stress: Physiology, Transcription, Noncoding RNAs, and Epigenetics. International Journal of Molecular Sciences, 2021, 22, 117.	1.8	156
396	DNA methylation in Arabidopsis has a genetic basis and shows evidence of local adaptation. ELife, 2015, 4, e05255.	2.8	457
397	Hyperosmotic stress memory in Arabidopsis is mediated by distinct epigenetically labile sites in the genome and is restricted in the male germline by DNA glycosylase activity. ELife, 2016, 5, .	2.8	282
398	Population scale mapping of transposable element diversity reveals links to gene regulation and epigenomic variation. ELife, 2016, 5, .	2.8	181
399	Environmentally-induced epigenetic conversion of a piRNA cluster. ELife, 2019, 8, .	2.8	26
400	Diversification of the Caenorhabditis heat shock response by Helitron transposable elements. ELife, 2019, 8, .	2.8	21
401	Heritable Epigenetic Variation and its Potential Applications for Crop Improvement. Plant Breeding and Biotechnology, 2013, 1, 307-319.	0.3	28
402	Structural Equation Modeling (SEM) Analysis of Sequence Variation and Green Plant Regeneration via Anther Culture in Barley. Cells, 2021, 10, 2774.	1.8	9
403	Hybridization and polyploidization effects on LTR-retrotransposon activation in potato genome. Journal of Plant Research, 2022, 135, 81-92.	1.2	9
405	The Dynamism of Transposon Methylation for Plant Development and Stress Adaptation. International Journal of Molecular Sciences, 2021, 22, 11387.	1.8	43
406	<i>At</i>L1 a Non-LTR Retrotrasposon Fragment in the Genome of <i>Arabidopsis thaliana </i> with Homology to Plants and Animals. American Journal of Plant Sciences, 2013, 04, 806-816.	0.3	1
412	GENETIC TRANSFORMATION OF CORN AND WHEAT BY USING TRANSCRIPTIONAL FACTORS: ADVANSIS AND PERSPECTIVES FOR PRACTICAL USING. Fiziologia Rastenij I Genetika, 2017, 49, 384-397.	0.1	1
413	In Silico Analysis of Mobilome Response to Salt Stress in Phaseolus vulgaris L.. TÃ¼rkiye TarÄ±msal AraÅŸtÄ±rmalar Dergisi, 0, , .	0.5	0
416	Rice Epigenetic Pathways: Great Genetic Variation and Implication for Rapid Rice Breeding. Journal of Plant Genetics and Crop Research, 2018, 1, 40-46.	0.0	0
418	In silico analysis of drought responsive transposons and transcription factors in Solanum tuberosum L.. Harran TarÄ±m Ve GÄ±da Bilimleri Dergisi, 2019, 23, 189-195.	0.0	1

#	Article	IF	Citations
421	Effect of azacytidine administration with/without folic acid on the histology and genomic DNA methylation of mice liver. GSC Biological and Pharmaceutical Sciences, 2020, 11, 196-203.	0.1	0
423	Impact of transposable elements on the evolution of complex living systems and their epigenetic control. BioSystems, 2021, 210, 104566.	0.9	6
424	The Evolutionary Volte-Face of Transposable Elements: From Harmful Jumping Genes to Major Drivers of Genetic Innovation. Cells, 2021, 10, 2952.	1.8	15
425	Identification and Analysis of Small Interfering RNAs Associated With Heat Stress in Flowering Chinese Cabbage Using High-Throughput Sequencing. Frontiers in Genetics, 2021, 12, 746816.	1.1	3
426	The Protective Effect of Zingeron Against Salt Stress in Barley. Journal of the Institute of Science and Technology, 0, , 2932-2942.	0.3	3
427	Integrated Genome-Scale Analysis and Northern Blot Detection of Retrotransposon siRNAs Across Plant Species. Methods in Molecular Biology, 2020, 2166, 387-411.	0.4	3
428	Regulation of High-Temperature Stress Response by Small RNAs. Concepts and Strategies in Plant Sciences, 2020, , 171-197.	0.6	3
433	The Epigenetic Mechanisms Underlying Thermomorphogenesis and Heat Stress Responses in Arabidopsis. Plants, 2021, 10, 2439.	1.6	7
434	DNA methylation and histone modifications induced by abiotic stressors in plants. Genes and Genomics, 2022, 44, 279-297.	0.5	10
435	CicerSpTEdb: A web-based database for high-resolution genome-wide identification of transposable elements in Cicer species. PLoS ONE, 2021, 16, e0259540.	1.1	5
436	Nearby transposable elements impact plant stress gene regulatory networks: a meta-analysis in A. thaliana and S. lycopersicum. BMC Genomics, 2022, 23, 18.	1.2	19
437	Epigenetic regulation of thermomorphogenesis and heat stress tolerance. New Phytologist, 2022, 234, 1144-1160.	3.5	54
438	Genetic and molecular mechanisms underlying root architecture and function under heat stressâ€"A hidden story. Plant, Cell and Environment, 2022, 45, 771-788.	2.8	40
439	Grape ASR-Silencing Sways Nuclear Proteome, Histone Marks and Interplay of Intrinsically Disordered Proteins. International Journal of Molecular Sciences, 2022, 23, 1537.	1.8	2
441	Small RNAs mediate transgenerational inheritance of genome-wide trans-acting epialleles in maize. Genome Biology, 2022, 23, 53.	3.8	19
442	Traces of transposable elements in genome dark matter co-opted by flowering gene regulation networks. , 0, 2, .		3
443	Epigenetic Regulation of Heat Stress in Plant Male Reproduction. Frontiers in Plant Science, 2022, 13, 826473.	1.7	9
444	Spatial Features and Functional Implications of Plant 3D Genome Organization. Annual Review of Plant Biology, 2022, 73, 173-200.	8.6	13

#	Article	IF	Citations
445	Cis-regulatory sequences in plants: Their importance, discovery, and future challenges. Plant Cell, 2022, 34, 718-741.	3.1	125
446	An Epigenetic Alphabet of Crop Adaptation to Climate Change. Frontiers in Genetics, 2022, 13, 818727.	1.1	15
447	DNA methylation-free Arabidopsis reveals crucial roles of DNA methylation in regulating gene expression and development. Nature Communications, 2022, 13, 1335.	5.8	81
448	Molecular basis of priming-induced acquired tolerance to multiple abiotic stresses in plants. Journal of Experimental Botany, 2022, 73, 3355-3371.	2.4	18
452	Understanding plant stress memory response for abiotic stress resilience: Molecular insights and prospects. Plant Physiology and Biochemistry, 2022, 179, 10-24.	2.8	78
453	Transposable Elements in the Genome of the Lichen-Forming Fungus Umbilicaria pustulata and Their Distribution in Different Climate Zones along Elevation. Biology, 2022, 11, 24.	1.3	2
455	Long terminal repeats (LTR) and transcription factors regulate PHRE1 and PHRE2 activity in Moso bamboo under heat stress. BMC Plant Biology, 2021, 21, 585.	1.6	6
456	Specificities and Dynamics of Transposable Elements in Land Plants. Biology, 2022, 11, 488.	1.3	20
457	Diverse and mobile:<scp>eccDNA</scp>â€based identification of carrot lowâ€copyâ€number<scp>LTR</scp>retrotransposons active in callus cultures. Plant Journal, 2022, 110, 1811-1828.	2.8	11
467	Abiotic stress-mediated transcription regulation, chromatin dynamics, and gene expression in plants: Arabidopsis as a role model. , 2022, , 321-345.		0
468	Roles of transposable elements on plant genome evolution, epigenetics and adaptation. Chinese Science Bulletin, 2022, 67, 3024-3035.	0.4	1
469	The Functional Interplay between Ethylene, Hydrogen Sulfide, and Sulfur in Plant Heat Stress Tolerance. Biomolecules, 2022, 12, 678.	1.8	17
470	Comprehensive analysis of both long and short read transcriptomes of a clonal and a seed-propagated model species reveal the prerequisites for transcriptional activation of autonomous and non-autonomous transposons in plants. Mobile DNA, 2022, 13, 16.	1.3	0
471	Unravelling the Role of Epigenetic Modifications in Development and Reproduction of Angiosperms: A Critical Appraisal. Frontiers in Genetics, 2022, 13, .	1.1	7
473	Reproductive-Stage Heat Stress in Cereals: Impact, Plant Responses and Strategies for Tolerance Improvement. International Journal of Molecular Sciences, 2022, 23, 6929.	1.8	14
474	Exploitation of epigenetic variation of crop wild relatives for crop improvement and agrobiodiversity preservation. Theoretical and Applied Genetics, 2022, 135, 3987-4003.	1.8	7
475	Experimentally heatâ€induced transposition increases drought tolerance in Arabidopsis thaliana. New Phytologist, 2022, 236, 182-194.	3.5	12
476	Epigenetic marks for mitigating abiotic stresses in plants. Journal of Plant Physiology, 2022, 275, 153740.	1.6	15

#	Article	IF	Citations
477	Chromosome-level genome assembly of the aquatic plant Nymphoides indica reveals transposable element bursts and NBS-LRR gene family expansion shedding light on its invasiveness. DNA Research, 2022, 29, .	1.5	4
479	Widespread and transgenerational retrotransposon activation in interâ€and intraspecies recombinant inbred populations of Lotus japonicus. Plant Journal, 2022, 111, 1397-1410.	2.8	3
481	Epigenetic regulation of ecotype-specific expression of the heat-activated transposon ONSEN. Frontiers in Plant Science, 0, 13, .	1.7	5
482	Characterization of Transposon-Derived Accessible Chromatin Regions in Rice (Oryza Sativa). International Journal of Molecular Sciences, 2022, 23, 8947.	1.8	2
483	The evolution and function of transposons in epigenetic regulation in response to the environment. Current Opinion in Plant Biology, 2022, 69, 102277.	3.5	8
484	Application of RNAi technology: a novel approach to navigate abiotic stresses. Molecular Biology Reports, 2022, 49, 10975-10993.	1.0	2
485	Environmental stress and transposons in plants. Genes and Genetic Systems, 2022, 97, 169-175.	0.2	7
486	Nitrogen starvation induces genomeâ€wide activation of transposable elements in Arabidopsis. Journal of Integrative Plant Biology, 2022, 64, 2374-2384.	4.1	5
488	Transgenerational effects of chromium stress at the phenotypic and molecular level in Arabidopsis thaliana. Journal of Hazardous Materials, 2023, 442, 130092.	6.5	4
489	Molecular insights into mechanisms underlying thermo-tolerance in tomato. Frontiers in Plant Science, 0, 13, .	1.7	7
490	Environmental response in gene expression and DNA methylation reveals factors influencing the adaptive potential of Arabidopsis lyrata. ELife, 0, 11, .	2.8	4
491	Non-coding RNAs fine-tune the balance between plant growth and abiotic stress tolerance. Frontiers in Plant Science, 0, 13, .	1.7	9
492	Stress-responsive retrotransposable elements in conifers. Genes and Genetic Systems, 2022, , .	0.2	0
493	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
495	Plant Non-coding Transcriptomics: Overview of lncRNAs in Abiotic Stress Responses. , 2022, , 79-96.		1
496	Regulatory mechanism of a heat-activated retrotransposon by DDR complex in Arabidopsis thaliana. Frontiers in Plant Science, 0, 13, .	1.7	1
497	The Chlamydomonas Genome Project, version 6: Reference assemblies for mating-type plus and minus strains reveal extensive structural mutation in the laboratory. Plant Cell, 2023, 35, 644-672.	3.1	24
498	Epigenetic stress memory: A new approach to study cold and heat stress responses in plants. Frontiers in Plant Science, 0, 13, .	1.7	15

#	Article	IF	Citations
499	Retrotransposons: How the continuous evolutionary front shapes plant genomes for response to heat stress. Frontiers in Plant Science, 0, 13, .	1.7	5
501	Plantâ€specific histone deacetylases associate with <scp>ARGONAUTE4</scp> to promote heterochromatin stabilization and plant heat tolerance. New Phytologist, 0, , .	3.5	0
502	Specific suppression of long terminal repeat retrotransposon mobilization in plants. Plant Physiology, 2023, 191, 2245-2255.	2.3	2
503	Polymorphic inverted repeats near coding genes impact chromatin topology and phenotypic traits in Arabidopsis thaliana. Cell Reports, 2023, 42, 112029.	2.9	5
509	Epigenetic Regulation During Plant Development and the Capacity for Epigenetic Memory. Annual Review of Plant Biology, 2023, 74, 87-109.	8.6	7
510	Plant Small RNAs: Their Biogenesis, Regulatory Roles, and Functions. Annual Review of Plant Biology, 2023, 74, 21-51.	8.6	27
512	Plants and Small Molecules: An Up-and-Coming Synergy. Plants, 2023, 12, 1729.	1.6	3
520	Editorial: DNA methylation in plants associated with abiotic stress, volume II. Frontiers in Plant Science, 0, 14, .	1.7	0
528	Regulation of gene editing using T-DNA concatenation. Nature Plants, 2023, 9, 1398-1408.	4.7	2
529	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
533	Genome Structure of Triticeae Species. , 2023, , 43-70.		1