

# Robert A Martienssen

## List of Publications by Year in descending order

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102  
papers

25,507  
citations

20817

60  
h-index

33894

99  
g-index

113  
all docs

113  
docs citations

113  
times ranked

22168  
citing authors

#	ARTICLE	IF	CITATIONS
1	Dicer promotes genome stability via the bromodomain transcriptional co-activator BRD4. <i>Nature Communications</i> , 2022, 13, 1001.	12.8	10
2	Loss of Small-RNA-Directed DNA Methylation in the Plant Cell Cycle Promotes Germline Reprogramming and Somaclonal Variation. <i>Current Biology</i> , 2021, 31, 591-600.e4.	3.9	36
3	Small RNAs guide histone methylation in <i>Arabidopsis</i> embryos. <i>Genes and Development</i> , 2021, 35, 841-846.	5.9	31
4	Regulation of retrotransposition in <i>Arabidopsis</i> . <i>Biochemical Society Transactions</i> , 2021, 49, 2241-2251.	3.4	3
5	Male fertility in <i>Arabidopsis</i> requires active DNA demethylation of genes that control pollen tube function. <i>Nature Communications</i> , 2021, 12, 410.	12.8	41
6	Genome and time-of-day transcriptome of <i>Wolffia australiana</i> link morphological minimization with gene loss and less growth control. <i>Genome Research</i> , 2021, 31, 225-238.	5.5	56
7	Phase separation in plant miRNA processing. <i>Nature Cell Biology</i> , 2021, 23, 5-6.	10.3	4
8	The genetic and epigenetic landscape of the <i>Arabidopsis</i> centromeres. <i>Science</i> , 2021, 374, eabi7489.	12.6	188
9	Targeted reprogramming of H3K27me3 resets epigenetic memory in plant paternal chromatin. <i>Nature Cell Biology</i> , 2020, 22, 621-629.	10.3	149
10	Conserved chromosomal functions of RNA interference. <i>Nature Reviews Genetics</i> , 2020, 21, 311-331.	16.3	62
11	Polymerase IV Plays a Crucial Role in Pollen Development in <i>Capsella</i> . <i>Plant Cell</i> , 2020, 32, 950-966.	6.6	46
12	<i>Arabidopsis</i> DNA Replication Initiates in Intergenic, AT-Rich Open Chromatin. <i>Plant Physiology</i> , 2020, 183, 206-220.	4.8	9
13	<i>Arabidopsis</i> retrotransposon virus-like particles and their regulation by epigenetically activated small RNA. <i>Genome Research</i> , 2020, 30, 576-588.	5.5	33
14	Comparing DNA replication programs reveals large timing shifts at centromeres of endocycling cells in maize roots. <i>PLoS Genetics</i> , 2020, 16, e1008623.	3.5	4
15	RNA-induced initiation of transcriptional silencing (RITS) complex structure and function. <i>RNA Biology</i> , 2019, 16, 1133-1146.	3.1	19
16	Getting in LINE with Replication. <i>Molecular Cell</i> , 2019, 74, 415-417.	9.7	0
17	Small RNA Function in Plants: From Chromatin to the Next Generation. <i>Cold Spring Harbor Symposia on Quantitative Biology</i> , 2019, 84, 133-140.	1.1	0
18	Transposon-derived small RNAs triggered by miR845 mediate genome dosage response in <i>Arabidopsis</i> . <i>Nature Genetics</i> , 2018, 50, 186-192.	21.4	126

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19	Genome-Wide Analysis of the Arabidopsis Replication Timing Program. <i>Plant Physiology</i> , 2018, 176, 2166-2185.	4.8	36
20	Nucleosomes and DNA methylation shape meiotic DSB frequency in <i>Arabidopsis thaliana</i> transposons and gene regulatory regions. <i>Genome Research</i> , 2018, 28, 532-546.	5.5	190
21	Epigenetic activation of meiotic recombination near <i>Arabidopsis thaliana</i> centromeres via loss of H3K9me2 and non-CG DNA methylation. <i>Genome Research</i> , 2018, 28, 519-531.	5.5	138
22	Tie-Break: Host and Retrotransposons Play tRNA. <i>Trends in Cell Biology</i> , 2018, 28, 793-806.	7.9	38
23	Live-cell analysis of DNA methylation during sexual reproduction in <i>Arabidopsis</i> reveals context and sex-specific dynamics controlled by noncanonical RdDM. <i>Genes and Development</i> , 2017, 31, 72-83.	5.9	96
24	Natural variation and dosage of the HEI10 meiotic E3 ligase control <i>Arabidopsis</i> crossover recombination. <i>Genes and Development</i> , 2017, 31, 306-317.	5.9	147
25	Transcriptional reprogramming in cellular quiescence. <i>RNA Biology</i> , 2017, 14, 843-853.	3.1	50
26	The Conserved RNA Binding Cyclophilin, Rct1, Regulates Small RNA Biogenesis and Splicing Independent of Heterochromatin Assembly. <i>Cell Reports</i> , 2017, 19, 2477-2489.	6.4	6
27	Genetic and epigenetic variation of transposable elements in Arabidopsis. <i>Current Opinion in Plant Biology</i> , 2017, 36, 135-141.	7.1	79
28	Genomic Analysis of the DNA Replication Timing Program during Mitotic S Phase in Maize ( <i>Zea mays</i> ). <i>Genome Research</i> , 2017, 27, 1010-1020.	6.6	28
29	New roles for Dicer in the nucleolus and its relevance to cancer. <i>Cell Cycle</i> , 2017, 16, 1643-1653.	2.6	16
30	Barbara McClintock's Final Years as Nobelist and Mentor: A Memoir. <i>Cell</i> , 2017, 170, 1049-1054.	28.9	2
31	The Arabidopsis thaliana mobilome and its impact at the species level. <i>ELife</i> , 2016, 5, .	6.0	271
32	A diffusion model for the coordination of DNA replication in <i>Schizosaccharomyces pombe</i> . <i>Scientific Reports</i> , 2016, 6, 18757.	3.3	15
33	RNA interference is essential for cellular quiescence. <i>Science</i> , 2016, 354, .	12.6	52
34	Dicer in action at replication-transcription collisions. <i>Molecular and Cellular Oncology</i> , 2015, 2, e991224.	0.7	2
35	The histone methyltransferase SDG8 mediates the epigenetic modification of light and carbon responsive genes in plants. <i>Genome Biology</i> , 2015, 16, 79.	8.8	91
36	Argonautes team up to silence transposable elements in <i>Arabidopsis</i> . <i>EMBO Journal</i> , 2015, 34, 579-580.	7.8	2

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37	RNAi and Heterochromatin Assembly. <i>Cold Spring Harbor Perspectives in Biology</i> , 2015, 7, a019323.	5.5	236
38	The expanding world of small RNAs in plants. <i>Nature Reviews Molecular Cell Biology</i> , 2015, 16, 727-741.	37.0	932
39	Loss of Karma transposon methylation underlies the mantled somaclonal variant of oil palm. <i>Nature</i> , 2015, 525, 533-537.	27.8	405
40	Differential sRNA Regulation in Leaves and Roots of Sugarcane under Water Depletion. <i>PLoS ONE</i> , 2014, 9, e93822.	2.5	37
41	The oil palm VIRESCENS gene controls fruit colour and encodes a R2R3-MYB. <i>Nature Communications</i> , 2014, 5, 4106.	12.8	67
42	miRNAs trigger widespread epigenetically activated siRNAs from transposons in Arabidopsis. <i>Nature</i> , 2014, 508, 411-415.	27.8	331
43	Selective Methylation of Histone H3 Variant H3.1 Regulates Heterochromatin Replication. <i>Science</i> , 2014, 343, 1249-1253.	12.6	165
44	Transgenerational Epigenetic Inheritance: Myths and Mechanisms. <i>Cell</i> , 2014, 157, 95-109.	28.9	1,393
45	Dicer Promotes Transcription Termination at Sites of Replication Stress to Maintain Genome Stability. <i>Cell</i> , 2014, 159, 572-583.	28.9	102
46	RNA interference in the nucleus: roles for small RNAs in transcription, epigenetics and beyond. <i>Nature Reviews Genetics</i> , 2013, 14, 100-112.	16.3	871
47	Establishing epigenetic variation during genome reprogramming. <i>RNA Biology</i> , 2013, 10, 490-494.	3.1	23
48	RNA-directed DNA methylation regulates parental genomic imprinting at several loci in Arabidopsis. <i>Development (Cambridge)</i> , 2013, 140, 2953-2960.	2.5	80
49	The maize methylome influences mRNA splice sites and reveals widespread paramutation-like switches guided by small RNA. <i>Genome Research</i> , 2013, 23, 1651-1662.	5.5	260
50	Oil palm genome sequence reveals divergence of interfertile species in Old and New worlds. <i>Nature</i> , 2013, 500, 335-339.	27.8	468
51	Reprogramming of DNA Methylation in Pollen Guides Epigenetic Inheritance via Small RNA. <i>Cell</i> , 2012, 151, 194-205.	28.9	506
52	Lsd1 and Lsd2 Control Programmed Replication Fork Pauses and Imprinting in Fission Yeast. <i>Cell Reports</i> , 2012, 2, 1513-1520.	6.4	33
53	FACS-based purification of Arabidopsis microspores, sperm cells and vegetative nuclei. <i>Plant Methods</i> , 2012, 8, 44.	4.3	76
54	Origins of Novel Phenotypic Variation in Polyploids. , 2012, , 57-76.		15

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55	RNA Interference and Heterochromatin Assembly. <i>Cold Spring Harbor Perspectives in Biology</i> , 2011, 3, a003731-a003731.	5.5	62
56	Genome reprogramming and small interfering RNA in the <i>Arabidopsis</i> germline. <i>Current Opinion in Genetics and Development</i> , 2011, 21, 134-139.	3.3	30
57	Multiple roles for small RNAs during plant reproduction. <i>Current Opinion in Plant Biology</i> , 2011, 14, 588-593.	7.1	60
58	RNAi promotes heterochromatic silencing through replication-coupled release of RNA Pol II. <i>Nature</i> , 2011, 479, 135-138.	27.8	142
59	H3K9me-Independent Gene Silencing in Fission Yeast Heterochromatin by Clr5 and Histone Deacetylases. <i>PLoS Genetics</i> , 2011, 7, e1001268.	3.5	28
60	Heterochromatin, small RNA and postfertilization dysgenesis in allopolyploid and interploid hybrids of <i>Arabidopsis</i> . <i>New Phytologist</i> , 2010, 186, 46-53.	7.3	86
61	Control of female gamete formation by a small RNA pathway in <i>Arabidopsis</i> . <i>Nature</i> , 2010, 464, 628-632.	27.8	574
62	Small RNA Makes Its Move. <i>Science</i> , 2010, 328, 834-835.	12.6	22
63	<i>Arabidopsis thaliana</i> Chromosome 4 Replicates in Two Phases That Correlate with Chromatin State. <i>PLoS Genetics</i> , 2010, 6, e1000982.	3.5	65
64	Germline Reprogramming of Heterochromatin in Plants. <i>Cold Spring Harbor Symposia on Quantitative Biology</i> , 2010, 75, 269-274.	1.1	6
65	Epigenetic Reprogramming and Small RNA Silencing of Transposable Elements in Pollen. <i>Cell</i> , 2009, 136, 461-472.	28.9	908
66	The B73 Maize Genome: Complexity, Diversity, and Dynamics. <i>Science</i> , 2009, 326, 1112-1115.	12.6	3,612
67	Endogenous TasiRNAs Mediate Non-Cell Autonomous Effects on Gene Regulation in <i>Arabidopsis thaliana</i> . <i>PLoS ONE</i> , 2009, 4, e5980.	2.5	92
68	RNAi, heterochromatin and the cell cycle. <i>Trends in Genetics</i> , 2008, 24, 511-517.	6.7	68
69	Nucleolar Dominance and DNA Methylation Directed by Small Interfering RNA. <i>Molecular Cell</i> , 2008, 32, 753-754.	9.7	7
70	Epigenetic Inheritance and Reprogramming in Plants and Fission Yeast. <i>Cold Spring Harbor Symposia on Quantitative Biology</i> , 2008, 73, 265-271.	1.1	31
71	Epigenomic Consequences of Immortalized Plant Cell Suspension Culture. <i>PLoS Biology</i> , 2008, 6, e302.	5.6	179
72	<i>Arabidopsis</i> TFL2/LHP1 Specifically Associates with Genes Marked by Trimethylation of Histone H3 Lysine 27. <i>PLoS Genetics</i> , 2007, 3, e86.	3.5	537

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73	Noncoding RNAs and Gene Silencing. <i>Cell</i> , 2007, 128, 763-776.	28.9	372
74	<i>S. pombe</i> LSD1 Homologs Regulate Heterochromatin Propagation and Euchromatic Gene Transcription. <i>Molecular Cell</i> , 2007, 26, 89-101.	9.7	102
75	Transposable elements and the epigenetic regulation of the genome. <i>Nature Reviews Genetics</i> , 2007, 8, 272-285.	16.3	1,709
76	Epigenetic Natural Variation in <i>Arabidopsis thaliana</i> . <i>PLoS Biology</i> , 2007, 5, e174.	5.6	400
77	Ribonuclease Activity of Dis3 Is Required for Mitotic Progression and Provides a Possible Link between Heterochromatin and Kinetochore Function. <i>PLoS ONE</i> , 2007, 2, e317.	2.5	75
78	Slicing and Spreading of Heterochromatic Silencing by RNA Interference. <i>Cold Spring Harbor Symposia on Quantitative Biology</i> , 2006, 71, 497-503.	1.1	15
79	Specification of Leaf Polarity in <i>Arabidopsis</i> via the trans-Acting siRNA Pathway. <i>Current Biology</i> , 2006, 16, 933-938.	3.9	340
80	MicroRNA-Targeted and Small Interfering RNA-Mediated mRNA Degradation Is Regulated by Argonaute, Dicer, and RNA-Dependent RNA Polymerase in <i>Arabidopsis</i> . <i>Plant Cell</i> , 2006, 18, 1559-1574.	6.6	141
81	Argonaute Slicing Is Required for Heterochromatic Silencing and Spreading. <i>Science</i> , 2006, 313, 1134-1137.	12.6	182
82	Genomic changes in synthetic <i>Arabidopsis</i> polyploids. <i>Plant Journal</i> , 2005, 41, 221-230.	5.7	320
83	RNA interference and heterochromatin in the fission yeast <i>Schizosaccharomyces pombe</i> . <i>Trends in Genetics</i> , 2005, 21, 450-456.	6.7	129
84	Epigenomic mapping in <i>Arabidopsis</i> using tiling microarrays. <i>Chromosome Research</i> , 2005, 13, 299-308.	2.2	46
85	Differential Regulation of Strand-Specific Transcripts from <i>Arabidopsis</i> Centromeric Satellite Repeats. <i>PLoS Genetics</i> , 2005, 1, e79.	3.5	162
86	Global Effects on Gene Expression in Fission Yeast by Silencing and RNA Interference Machineries. <i>Molecular and Cellular Biology</i> , 2005, 25, 590-601.	2.3	132
87	RNA Polymerase II Is Required for RNAi-Dependent Heterochromatin Assembly. <i>Science</i> , 2005, 309, 467-469.	12.6	258
88	The role of ARGONAUTE1 (AGO1) in meristem formation and identity. <i>Developmental Biology</i> , 2005, 280, 504-517.	2.0	148
89	Global expression changes resulting from loss of telomeric DNA in fission yeast. <i>Genome Biology</i> , 2004, 6, R1.	9.6	35
90	RNA interference is required for normal centromere function in fission yeast. <i>Chromosome Research</i> , 2003, 11, 137-146.	2.2	284

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91	Understanding mechanisms of novel gene expression in polyploids. <i>Trends in Genetics</i> , 2003, 19, 141-147.	6.7	812
92	The crystal structure of the Argonaute2 PAZ domain reveals an RNA binding motif in RNAi effector complexes. <i>Nature Structural and Molecular Biology</i> , 2003, 10, 1026-1032.	8.2	487
93	Maintenance of heterochromatin by RNA interference of tandem repeats. <i>Nature Genetics</i> , 2003, 35, 213-214.	21.4	188
94	Genes and Transposons Are Differentially Methylated in Plants, but Not in Mammals. <i>Genome Research</i> , 2003, 13, 2658-2664.	5.5	122
95	Regulation of Heterochromatic Silencing and Histone H3 Lysine-9 Methylation by RNAi. <i>Science</i> , 2002, 297, 1833-1837.	12.6	1,889
96	Dependence of Heterochromatic Histone H3 Methylation Patterns on the <i>Arabidopsis</i> Gene <i>DDM1</i> . <i>Science</i> , 2002, 297, 1871-1873.	12.6	417
97	DNA Methylation and Epigenetic Inheritance in Plants and Filamentous Fungi. <i>Science</i> , 2001, 293, 1070-1074.	12.6	456
98	Robertson's <i>Mutator</i> transposons in <i>A. thaliana</i> are regulated by the chromatin-remodeling gene <i>Decrease in DNA Methylation</i> ( <i>DDM1</i> ). <i>Genes and Development</i> , 2001, 15, 591-602.	5.9	294
99	Differential methylation of genes and retrotransposons facilitates shotgun sequencing of the maize genome. <i>Nature Genetics</i> , 1999, 23, 305-308.	21.4	237
100	Genetic Definition and Sequence Analysis of <i>Arabidopsis</i> Centromeres. <i>Science</i> , 1999, 286, 2468-2474.	12.6	417
101	Chromosomal imprinting in plants. <i>Current Opinion in Genetics and Development</i> , 1998, 8, 240-244.	3.3	51
102	<i>Arabidopsis thaliana</i> DNA methylation mutants. <i>Science</i> , 1993, 260, 1926-1928.	12.6	668