Frederic Berger

List of Publications by Year
in descending order

142 papers	13,580 citations	19608 61 h-index	24915 109 g-index
168 all docs	168 docs citations	168 times ranked	9738 citing authors

#	Article	IF	Citations
1	Seminars in cell and development biology on histone variants remodelers of H2A variants associated with heterochromatin. Seminars in Cell and Developmental Biology, 2023, 135, 93-101.	2.3	7
2	Histone variants: The architects of chromatin. Seminars in Cell and Developmental Biology, 2023, 135, 1-2.	2.3	1
3	Diversification of chromatin organization in eukaryotes. Current Opinion in Cell Biology, 2022, 74, 1-6.	2.6	4
4	Which field of research would Gregor Mendel choose in the 21st century?. Plant Cell, 2022, 34, 2462-2465.	3.1	5
5	One residueâ€"one function. Science, 2022, 375, 1232-1233.	6.0	2
6	Phosphorylation of the FACT histone chaperone subunit SPT16 affects chromatin at RNA polymerase II transcriptional start sites in <i>Arabidopsis</i>. Nucleic Acids Research, 2022, 50, 5014-5028.	6.5	9
7	A Synthetic Approach to Reconstruct the Evolutionary and Functional Innovations of the Plant Histone Variant H2A.W. Current Biology, 2021, 31, 182-191.e5.	1.8	20
8	Epigenetic reprogramming rewires transcription during the alternation of generations in Arabidopsis. ELife, 2021, 10, .	2.8	55
9	The chromatin remodeler DDM1 prevents transposon mobility through deposition of histone variant H2A.W. Nature Cell Biology, 2021, 23, 391-400.	4.6	73
10	The evolution of imprinting in plants: beyond the seed. Plant Reproduction, 2021, 34, 373-383.	1.3	12
11	The histone variant H2A.W and linker histone H1 co-regulate heterochromatin accessibility and DNA methylation. Nature Communications, 2021, 12, 2683.	5.8	56
12	Crosstalk between H2A variant-specific modifications impacts vital cell functions. PLoS Genetics, 2021, 17, e1009601.	1.5	7
13	Histone variants take center stage in shaping the epigenome. Current Opinion in Plant Biology, 2021, 61, 101991.	3.5	42
14	Comparative transcriptomic analysis reveals conserved programmes underpinning organogenesis and reproduction in land plants. Nature Plants, 2021, 7, 1143-1159.	4.7	61
15	Deep evolutionary origin of gamete-directed zygote activation by KNOX/BELL transcription factors in green plants. ELife, 2021, 10, .	2.8	26
16	Role of Polycomb in the control of transposable elements. Trends in Genetics, 2021, 37, 882-889.	2.9	45
17	Identification of the sex-determining factor in the liverwort Marchantia polymorpha reveals unique evolution of sex chromosomes in a haploid system. Current Biology, 2021, 31, 5522-5532.e7.	1.8	36
18	The genetic and epigenetic landscape of the <i>Arabidopsis</i> centromeres. Science, 2021, 374, eabi7489.	6.0	188

#	Article	IF	Citations
19	Establishment of a novel method for the identification of fertilization defective mutants in Arabidopsis thaliana. Biochemical and Biophysical Research Communications, 2020, 521, 928-932.	1.0	5
20	H2A Variants in Arabidopsis: Versatile Regulators of Genome Activity. Plant Communications, 2020, 1, 100015.	3.6	40
21	RNA interference-independent reprogramming of DNA methylation in Arabidopsis. Nature Plants, 2020, 6, 1455-1467.	4.7	34
22	The evolution and functional divergence of the histone H2B family in plants. PLoS Genetics, 2020, 16, e1008964.	1.5	51
23	Histone Variants: The Nexus of Developmental Decisions and Epigenetic Memory. Annual Review of Genetics, 2020, 54, 121-149.	3.2	35
24	Marchantia TCP transcription factor activity correlates with three-dimensional chromatin structure. Nature Plants, 2020, 6, 1250-1261.	4.7	46
25	Targeted reprogramming of H3K27me3 resets epigenetic memory in plant paternal chromatin. Nature Cell Biology, 2020, 22, 621-629.	4.6	149
26	Chromatin Organization in Early Land Plants Reveals an Ancestral Association between H3K27me3, Transposons, and Constitutive Heterochromatin. Current Biology, 2020, 30, 573-588.e7.	1.8	160
27	The atypical histone variant H3.15 promotes callus formation in <i>Arabidopsis thaliana</i>. Development (Cambridge), 2020, 147, .	1.2	27
28	The evolution and functional divergence of the histone H2B family in plants. , 2020, 16, e1008964.		0
29	The evolution and functional divergence of the histone H2B family in plants. , 2020, 16, e1008964.		0
30	The evolution and functional divergence of the histone H2B family in plants. , 2020, 16, e1008964.		0
31	The evolution and functional divergence of the histone H2B family in plants. , 2020, 16, e1008964.		0
32	The evolution and functional divergence of the histone H2B family in plants. , 2020, 16, e1008964.		1
33	Emil Heitz, a true epigenetics pioneer. Nature Reviews Molecular Cell Biology, 2019, 20, 572-572.	16.1	5
34	Histone acetylation recruits the SWR1 complex to regulate active DNA demethylation in <i>Arabidopsis</i>. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 16641-16650.	3.3	73
35	Building new insights in plant gametogenesis from an evolutionary perspective. Nature Plants, 2019, 5, 663-669.	4.7	46
36	EvoChromo: towards a synthesis of chromatin biology and evolution. Development (Cambridge), 2019, 146, .	1.2	16

#	Article	IF	Citations
37	A simple and robust protocol for immunostaining Arabidopsis pollen nuclei. Plant Reproduction, 2019, 32, 39-43.	1.3	11
38	An ancient antisenseâ€driven <scp>RNA</scp> switch drives plant sex determination. EMBO Journal, 2019, 38, .	3.5	1
39	New cues for body axis formation in plant embryos. Current Opinion in Plant Biology, 2019, 47, 16-21.	3.5	9
40	A pharmacological study of <i>Arabidopsis</i> cell fusion between the persistent synergid and endosperm. Journal of Cell Science, 2018, 131, .	1.2	6
41	Transcription factor DUO1 generated by neo-functionalization is associated with evolution of sperm differentiation in plants. Nature Communications, 2018, 9, 5283.	5.8	54
42	LHP1 Interacts with ATRX through Plant-Specific Domains at Specific Loci Targeted by PRC2. Molecular Plant, 2018, 11, 1038-1052.	3.9	25
43	Histone H2A variants confer specific properties to nucleosomes and impact on chromatin accessibility. Nucleic Acids Research, 2018, 46, 7675-7685.	6.5	65
44	Acupuncture and Neural Mechanism in the Management of Low Back Painâ€"An Update. Medicines (Basel,) Tj ETQq0 0 0 rgBT /Overlock	0.7	91
45	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
46	Genome-Wide Profiling of Histone Modifications and Histone Variants in Arabidopsis thaliana and Marchantia polymorpha. Methods in Molecular Biology, 2017, 1610, 93-106.	0.4	9
47	Compartmentalization of DNA Damage Response between Heterochromatin and Euchromatin Is Mediated by Distinct H2A Histone Variants. Current Biology, 2017, 27, 1192-1199.	1.8	71
48	Heterochromatin and DNA damage repair: Use different histone variants and relax. Nucleus, 2017, 8, 583-588.	0.6	18
49	Insights into Land Plant Evolution Garnered from the Marchantia polymorpha Genome. Cell, 2017, 171, 287-304.e15.	13.5	973
50	Live-Cell Imaging of F-Actin Dynamics During Fertilization in Arabidopsis thaliana. Methods in Molecular Biology, 2017, 1669, 47-54.	0.4	4
51	DNA replicationâ€"coupled histone modification maintains Polycomb gene silencing in plants. Science, 2017, 357, 1146-1149.	6.0	144
52	The histone H3 variant H3.3 regulates gene body DNA methylation in Arabidopsis thaliana. Genome Biology, 2017, 18, 94.	3.8	116
53	Histone variants in plant transcriptional regulation. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2017, 1860, 123-130.	0.9	57
54	Cytoskeleton dynamics control the first asymmetric cell division in <i>Arabidopsis</i> zygote. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 14157-14162.	3.3	129

#	Article	IF	Citations
55	FrÃ©dÃ©ric Berger. Current Biology, 2016, 26, R1170-R1171.	1.8	0
56	Fertilization-independent Cell-fusion between the Synergid and Central Cell in the Polycomb Mutant. Cell Structure and Function, 2016, 41, 121-125.	0.5	8
57	Editorial overview: Genome architecture and expression: Connecting genome composition and nuclear architecture with function. Current Opinion in Genetics and Development, 2016, 37, iv-vi.	1.5	4
58	The Naming of Names: Guidelines for Gene Nomenclature in<i>Marchantia</i>. Plant and Cell Physiology, 2016, 57, 257-261.	1.5	60
59	Marchantia. Current Biology, 2016, 26, R186-R187.	1.8	16
60	The central cell nuclear position at the micropylar end is maintained by the balance of F-actin dynamics, but dispensable for karyogamy in Arabidopsis. Plant Reproduction, 2015, 28, 103-110.	1.3	28
61	Epigenetic Modifications at Developmental Transitions in Arabidopsis. , 2015, , 119-131.		0
62	Diversification of histone H2A variants during plant evolution. Trends in Plant Science, 2015, 20, 419-425.	4.3	85
63	Complementation of Seed Maturation Phenotypes by Ectopic Expression of ABSCISIC ACID INSENSITIVE3, FUSCA3 and LEAFY COTYLEDON2 in Arabidopsis. Plant and Cell Physiology, 2015, 56, 1215-1228.	1.5	77
64	Chromatin remodelling during male gametophyte development. Plant Journal, 2015, 83, 177-188.	2.8	67
65	The HIRA complex that deposits the histone H3.3 is conserved in <i>Arabidopsis</i> and facilitates transcriptional dynamics. Biology Open, 2014, 3, 794-802.	0.6	58
66	Epigenetic reprogramming in plant sexual reproduction. Nature Reviews Genetics, 2014, 15, 613-624.	7.7	234
67	The Histone Variant H2A.W Defines Heterochromatin and Promotes Chromatin Condensation in Arabidopsis. Cell, 2014, 158, 98-109.	13.5	257
68	Gamete Attachment Requires GEX2 for Successful Fertilization in Arabidopsis. Current Biology, 2014, 24, 170-175.	1.8	108
69	Dynamic F-actin movement is essential for fertilization in Arabidopsis thaliana. ELife, 2014, 3, .	2.8	86
70	RNA-directed DNA methylation regulates parental genomic imprinting at several loci in <i>Arabidopsis</i>. Development (Cambridge), 2013, 140, 2953-2960.	1.2	80
71	Integration of epigenetic and genetic controls of seed size by cytokinin in <i>Arabidopsis</i>. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 15479-15484.	3.3	114
72	Dynamic Deposition of Histone Variant H3.3 Accompanies Developmental Remodeling of the Arabidopsis Transcriptome. PLoS Genetics, 2012, 8, e1002658.	1.5	118

#	Article	IF	Citations
73	Polycomb Group Complexes Mediate Developmental Transitions in Plants. Plant Physiology, 2012, 158, 35-43.	2.3	86
74	Reprogramming of DNA Methylation in Pollen Guides Epigenetic Inheritance via Small RNA. Cell, 2012, 151, 194-205.	13.5	506
75	DNA Methylation Dynamics during Sexual Reproduction in Arabidopsis thaliana. Current Biology, 2012, 22, 1825-1830.	1.8	214
76	Endosperm: food for humankind and fodder for scientific discoveries. New Phytologist, 2012, 195, 290-305.	3.5	127
77	A unified phylogeny-based nomenclature for histone variants. Epigenetics and Chromatin, 2012, 5, 7.	1.8	265
78	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
79	Epigenetic reprogramming during plant reproduction and seed development. Current Opinion in Plant Biology, 2012, 15, 63-69.	3.5	37
80	Imaging fertilization in flowering plants, not so abominable after all. Journal of Experimental Botany, 2011, 62, 1651-1658.	2.4	22
81	Germline Specification and Function in Plants. Annual Review of Plant Biology, 2011, 62, 461-484.	8.6	186
82	Retinoblastoma protein is essential for early meiotic events in<i>Arabidopsis</i>. EMBO Journal, 2011, 30, 744-755.	3.5	41
83	Live-Cell Imaging Reveals the Dynamics of Two Sperm Cells during Double Fertilization in Arabidopsis thaliana. Current Biology, 2011, 21, 497-502.	1.8	187
84	Green love talks; cellâ€“cell communication during double fertilization in flowering plants. AoB PLANTS, 2011, 2011, plr015.	1.2	29
85	Histone3 variants in plants. Chromosoma, 2010, 119, 27-33.	1.0	63
86	Polycomb group gene function in sexual and asexual seed development in angiosperms. Sexual Plant Reproduction, 2010, 23, 123-133.	2.2	44
87	DNA methylation reprogramming during plant sexual reproduction?. Trends in Genetics, 2010, 26, 394-399.	2.9	42
88	Zygotic Resetting of the HISTONE 3 Variant Repertoire Participates in Epigenetic Reprogramming in Arabidopsis. Current Biology, 2010, 20, 2137-2143.	1.8	214
89	DNA LIGASE I exerts a maternal effect on seed development in<i>Arabidopsis thaliana</i>. Development (Cambridge), 2010, 137, 73-81.	1.2	55
90	Sperm entry is sufficient to trigger division of the central cell but the paternal genome is required for endosperm development in <i>Arabidopsis</i>. Development (Cambridge), 2010, 137, 2683-2690.	1.2	99

#	Article	IF	Citations
91	Parental Genome Dosage Imbalance Deregulates Imprinting in Arabidopsis. PLoS Genetics, 2010, 6, e1000885.	1.5	63
92	Polycomb group-dependent imprinting of the actin regulator<i>AtFH5</i>regulates morphogenesis in<i>Arabidopsis thaliana</i>. Development (Cambridge), 2009, 136, 3399-3404.	1.2	61
93	Proliferation and cell fate establishment during Arabidopsis male gametogenesis depends on the Retinoblastoma protein. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 7257-7262.	3.3	69
94	Gamete-specific epigenetic mechanisms shape genomic imprinting. Current Opinion in Plant Biology, 2009, 12, 637-642.	3.5	64
95	The two male gametes share equal ability to fertilize the egg cell in Arabidopsis thaliana. Current Biology, 2009, 19, R19-R20.	1.8	67
96	Reproductive Biology: Receptor-Like Kinases Orchestrate Love Songs inÂPlants. Current Biology, 2009, 19, R647-R649.	1.8	7
97	Double-fertilization, from myths to reality. Sexual Plant Reproduction, 2008, 21, 3-5.	2.2	23
98	The strictest usage of the term epigenetic. Seminars in Cell and Developmental Biology, 2008, 19, 525-526.	2.3	0
99	Double fertilization â€“ caught in the act. Trends in Plant Science, 2008, 13, 437-443.	4.3	166
100	Retinoblastoma and Its Binding Partner MSI1 Control Imprinting in Arabidopsis. PLoS Biology, 2008, 6, e194.	2.6	220
101	A Dialogue between the SirÃ¨ne Pathway in Synergids and the Fertilization Independent Seed Pathway in the Central Cell Controls Male Gamete Release during Double Fertilization in Arabidopsis. Molecular Plant, 2008, 1, 659-666.	3.9	43
102	Maternal Control of Male-Gamete Delivery in<i>Arabidopsis</i>Involves a Putative GPI-Anchored Protein Encoded by the<i>LORELEI</i>Gene. Plant Cell, 2008, 20, 3038-3049.	3.1	166
103	Chromatin assembly factor 1 regulates the cell cycle but not cell fate during male gametogenesis in<i>Arabidopsis thaliana</i>. Development (Cambridge), 2008, 135, 65-73.	1.2	96
104	DNA Methylation Causes Predominant Maternal Controls of Plant Embryo Growth. PLoS ONE, 2008, 3, e2298.	1.1	64
105	The Female Gametophyte and the Endosperm Control Cell Proliferation and Differentiation of the Seed Coat in Arabidopsis. Plant Cell, 2007, 18, 3491-3501.	3.1	111
106	Distinct Dynamics of HISTONE3 Variants between the Two Fertilization Products in Plants. Current Biology, 2007, 17, 1032-1037.	1.8	252
107	Convergent evolution of genomic imprinting in plants and mammals. Trends in Genetics, 2007, 23, 192-199.	2.9	238
108	Polycomb Group Complexes Self-Regulate Imprinting of the Polycomb Group Gene MEDEA in Arabidopsis. Current Biology, 2006, 16, 486-492.	1.8	194

#	Article	IF	Citations
109	Endosperm: an integrator of seed growth and development. Current Opinion in Plant Biology, 2006, 9, 664-670.	3.5	192
110	Maintenance of DNA Methylation during the Arabidopsis Life Cycle Is Essential for Parental Imprinting. Plant Cell, 2006, 18, 1360-1372.	3.1	264
111	Polycomb group genes control developmental timing of endosperm. Plant Journal, 2005, 42, 663-674.	2.8	91
112	Plant formin AtFH5 is an evolutionarily conserved actin nucleator involved in cytokinesis. Nature Cell Biology, 2005, 7, 374-380.	4.6	167
113	A Novel Class of MYB Factors Controls Sperm-Cell Formation in Plants. Current Biology, 2005, 15, 244-248.	1.8	210
114	Loss of Function of MULTICOPY SUPPRESSOR OF IRA 1 Produces Nonviable Parthenogenetic Embryos in Arabidopsis. Current Biology, 2005, 15, 750-754.	1.8	115
115	Control of reproduction by Polycomb Group complexes in animals and plants. International Journal of Developmental Biology, 2005, 49, 707-716.	0.3	71
116	MINISEED3 (MINI3), a WRKY family gene, and HAIKU2 (IKU2), a leucine-rich repeat (LRR) KINASE gene, are regulators of seed size in Arabidopsis. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 17531-17536.	3.3	476
117	Maternal Control of Integument Cell Elongation and Zygotic Control of Endosperm Growth Are Coordinated to Determine Seed Size in Arabidopsis. Plant Cell, 2005, 17, 52-60.	3.1	342
118	Identification of new members of Fertilisation Independent Seed Polycomb Group pathway involved in the control of seed development in Arabidopsis thaliana. Development (Cambridge), 2004, 131, 2971-2981.	1.2	206
119	PLANT SCIENCES: Imprinting--a Green Variation. Science, 2004, 303, 483-485.	6.0	23
120	The Immunophilin-Interacting Protein AtFIP37 from Arabidopsis Is Essential for Plant Development and Is Involved in Trichome Endoreduplication. Plant Physiology, 2004, 134, 1283-1292.	2.3	107
121	Chromatin dynamics and Arabidopsis development. Chromosome Research, 2003, 11, 277-304.	1.0	30
122	Female Control of Male Gamete Delivery during Fertilization in Arabidopsis thaliana. Current Biology, 2003, 13, 432-436.	1.8	267
123	Endosperm: the crossroad of seed development. Current Opinion in Plant Biology, 2003, 6, 42-50.	3.5	196
124	Three SAC1-like genes show overlapping patterns of expression in Arabidopsis but are remarkably silent during embryo development. Plant Journal, 2003, 34, 293-306.	2.8	39
125	Arabidopsis haiku Mutants Reveal New Controls of Seed Size by Endosperm. Plant Physiology, 2003, 131, 1661-1670.	2.3	250
126	Expression and disruption of the Arabidopsis TOR (target of rapamycin) gene. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 6422-6427.	3.3	430

#	ARTICLE	IF	CITATIONS
127	Cellularisation in the endosperm of Arabidopsis thaliana is coupled to mitosis and shares multiple components with cytokinesis. Development (Cambridge), 2002, 129, 5567-5576.	1.2	103
128	Editorial overview: A look into the workshop. Current Opinion in Plant Biology, 2002, 5, 477-479.	3.5	0
129	Maternal control of seed development. Seminars in Cell and Developmental Biology, 2001, 12, 381-386.	2.3	62
130	Paternal Chromosome Incorporation into the Zygote Nucleus Is Controlled by maternal haploid in Drosophila. Developmental Biology, 2001, 231, 383-396.	0.9	45
131	The Drosophila maternal gene sÃ©same is required for sperm chromatin remodeling at fertilization. Chromosoma, 2001, 110, 430-440.	1.0	48
132	Polycomb group genes control pattern formation in plant seed. Current Biology, 2001, 11, 277-281.	1.8	133
133	Dynamic Analyses of the Expression of the HISTONE::YFP Fusion Protein in Arabidopsis Show That Syncytial Endosperm Is Divided in Mitotic Domains. Plant Cell, 2001, 13, 495.	3.1	4
134	Dynamic Analyses of the Expression of the HISTONE::YFP Fusion Protein in Arabidopsis Show That Syncytial Endosperm Is Divided in Mitotic Domains. Plant Cell, 2001, 13, 495-509.	3.1	348
135	Mutations in the PILZ group genes disrupt the microtubule cytoskeleton and uncouple cell cycle progression from cell division in Arabidopsis embryo and endosperm. European Journal of Cell Biology, 1999, 78, 100-108.	1.6	116
136	Endosperm development. Current Opinion in Plant Biology, 1999, 2, 28-32.	3.5	167
137	Gametes, Fertilization and Early Embryogenesis in Flowering Plants. Advances in Botanical Research, 1998, 28, 231-261.	0.5	16
138	Extracellular matrix and pattern in plant embryos: on the lookout for developmental information. Trends in Genetics, 1995, 11, 344-348.	2.9	51
139	Cellular effects of olomoucine, an inhibitor of cyclin-dependent kinases. Biology of the Cell, 1995, 83, 105-120.	0.7	131
140	Endogenous releasable cell wall factors control cell fate during embryogenesis in the multicellular alga Fucus. Biology of the Cell, 1995, 84, 88-88.	0.7	0
141	Establishment of the apical-basal axis in multicellular plant embryos. Biology of the Cell, 1995, 84, 7-11.	0.7	4
142	Ratio confocal imaging of free cytoplasmic calcium gradients in polarising and polarised<i>Fucus</i>zygotes. Zygote, 1993, 1, 9-15.	0.5	81