Uell Grossniklaus

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/2644939/publications.pdf

Version: 2024-02-01

275 papers

28,136 citations

88 h-index 157 g-index

309 all docs 309 docs citations

309 times ranked 20706 citing authors

#	Article	IF	CITATIONS
1	A Gateway Cloning Vector Set for High-Throughput Functional Analysis of Genes in Planta. Plant Physiology, 2003, 133, 462-469.	4.8	2,390
2	Insights into Land Plant Evolution Garnered from the Marchantia polymorpha Genome. Cell, 2017, 171, 287-304.e15.	28.9	973
3	Maternal Control of Embryogenesis by <i>MEDEA</i> , a <i>Polycomb</i> Group Gene in <i>Arabidopsis</i> . Science, 1998, 280, 446-450.	12.6	834
4	P-element-mediated enhancer detection: a versatile method to study development in Drosophila Genes and Development, 1989, 3, 1288-1300.	5.9	689
5	The Arabidopsis <i>Somatic Embryogenesis Receptor Kinase 1</i> Gene Is Expressed in Developing Ovules and Embryos and Enhances Embryogenic Competence in Culture. Plant Physiology, 2001, 127, 803-816.	4.8	604
6	The FERONIA Receptor-like Kinase Mediates Male-Female Interactions During Pollen Tube Reception. Science, 2007, 317, 656-660.	12.6	596
7	Cellular efflux of auxin catalyzed by the Arabidopsis MDR/PGP transporter AtPGP1. Plant Journal, 2005, 44, 179-194.	5.7	496
8	Genome-Scale Proteomics Reveals <i>Arabidopsis thaliana</i> Science, 2008, 320, 938-941.	12.6	490
9	APOMIXIS: A Developmental Perspective. Annual Review of Plant Biology, 2003, 54, 547-574.	18.7	418
10	P-element-mediated enhancer detection: an efficient method for isolating and characterizing developmentally regulated genes in Drosophila Genes and Development, 1989, 3, 1301-1313.	5.9	412
11	Regulation of Arabidopsis tapetum development and function by DYSFUNCTIONAL TAPETUM1 (DYT1) encoding a putative bHLH transcription factor. Development (Cambridge), 2006, 133, 3085-3095.	2.5	400
12	The <i> Polycomb </i> > -group protein MEDEA regulates seed development by controlling expression of the MADS-box gene <i> PHERES1 </i> > Genes and Development, 2003, 17, 1540-1553.	5.9	390
13	Arabidopsis MSI1 is a component of the MEA/FIE Polycomb group complex and required for seed development. EMBO Journal, 2003, 22, 4804-4814.	7.8	379
14	Conserved Molecular Components for Pollen Tube Reception and Fungal Invasion. Science, 2010, 330, 968-971.	12.6	372
15	TheArabidopsismutantferoniadisrupts the female gametophytic control of pollen tube reception. Development (Cambridge), 2003, 130, 2149-2159.	2.5	362
16	Maintenance of genomic imprinting at the Arabidopsis medea locus requires zygotic DDM1 activity. Genes and Development, 1999, 13, 2971-2982.	5.9	313
17	Arabidopsis Female Gametophyte Gene Expression Map Reveals Similarities between Plant and Animal Gametes. Current Biology, 2010, 20, 506-512.	3.9	302
18	Genome-Wide High-Resolution Mapping of Exosome Substrates Reveals Hidden Features in the Arabidopsis Transcriptome. Cell, 2007, 131, 1340-1353.	28.9	298

#	Article	IF	Citations
19	Delayed activation of the paternal genome during seed development. Nature, 2000, 404, 91-94.	27.8	293
20	Natural Enemies Drive Geographic Variation in Plant Defenses. Science, 2012, 338, 116-119.	12.6	286
21	FIDDLEHEAD, a gene required to suppress epidermal cell interactions in Arabidopsis, encodes a putative lipid biosynthetic enzyme. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 1311-1316.	7.1	278
22	Disruption of the pollen-expressed i>FERONIA / i>homologs < i>ANXUR1 < / i>and < i>ANXUR2 < / i>triggers pollen tube discharge. Development (Cambridge), 2009, 136, 3279-3288.	2.5	273
23	Egg Cell–Secreted EC1 Triggers Sperm Cell Activation During Double Fertilization. Science, 2012, 338, 1093-1097.	12.6	273
24	PAMP (Pathogen-associated Molecular Pattern)-induced Changes in Plasma Membrane Compartmentalization Reveal Novel Components of Plant Immunity. Journal of Biological Chemistry, 2010, 285, 39140-39149.	3.4	268
25	Hi-C Analysis in Arabidopsis Identifies the KNOT, a Structure with Similarities to the flamenco Locus of Drosophila. Molecular Cell, 2014, 55, 678-693.	9.7	264
26	ATX-1, an Arabidopsis Homolog of Trithorax, Activates Flower Homeotic Genes. Current Biology, 2003, 13, 627-637.	3.9	254
27	Transgenerational epigenetic inheritance: how important is it?. Nature Reviews Genetics, 2013, 14, 228-235.	16.3	252
28	The Arabidopsis thaliana MEDEA Polycomb group protein controls expression of PHERES1 by parental imprinting. Nature Genetics, 2005, 37, 28-30.	21.4	251
29	Different Polycomb group complexes regulate common target genes in Arabidopsis. EMBO Reports, 2006, 7, 947-952.	4.5	242
30	ANXUR Receptor-Like Kinases Coordinate Cell Wall Integrity with Growth at the Pollen Tube Tip Via NADPH Oxidases. PLoS Biology, 2013, 11, e1001719.	5.6	242
31	RALF4/19 peptides interact with LRX proteins to control pollen tube growth in <i>Arabidopsis</i> Science, 2017, 358, 1600-1603.	12.6	239
32	ARABIDOPSIS TRITHORAX1 Dynamically Regulates <i>FLOWERING LOCUS C</i> Activation via Histone 3 Lysine 4 Trimethylation. Plant Cell, 2008, 20, 580-588.	6.6	236
33	The Drosophila sloppy paired locus encodes two proteins involved in segmentation that show homology to mammalian transcription factors Genes and Development, 1992, 6, 1030-1051.	5.9	232
34	Improved Brassica rapa reference genome by single-molecule sequencing and chromosome conformation capture technologies. Horticulture Research, 2018, 5, 50.	6.3	224
35	Identification of new members of Fertilisation Independent Seed Polycomb Group pathway involved in the control of seed development in <i>Arabidopsis thaliana</i> . Development (Cambridge), 2004, 131, 2971-2981.	2.5	206
36	Transcriptional Silencing by Polycomb-Group Proteins. Cold Spring Harbor Perspectives in Biology, 2014, 6, a019331-a019331.	5.5	206

#	Article	IF	Citations
37	The art and design of genetic screens: Arabidopsis thaliana. Nature Reviews Genetics, 2002, 3, 124-136.	16.3	199
38	Developmental genetics of gametophytic apomixis. Trends in Genetics, 2001, 17, 597-604.	6.7	195
39	Maternal Epigenetic Pathways Control Parental Contributions to Arabidopsis Early Embryogenesis. Cell, 2011, 145, 707-719.	28.9	193
40	Selection of T-DNA-Tagged Male and Female Gametophytic Mutants by Segregation Distortion in Arabidopsis. Genetics, 1998, 149, 621-631.	2.9	189
41	Activation of the U2 snRNA promoter by the octamer motif defines a new class of RNA polymerase II enhancer elements Genes and Development, 1988, 2, 1764-1778.	5.9	186
42	The molecular and genetic basis of ovule and megagametophyte development. Seminars in Cell and Developmental Biology, 1998, 9, 227-238.	5.0	186
43	SETH1 and SETH2, Two Components of the Glycosylphosphatidylinositol Anchor Biosynthetic Pathway, Are Required for Pollen Germination and Tube Growth in Arabidopsis Â[W]. Plant Cell, 2004, 16, 229-240.	6.6	178
44	CrRLK1L receptor-like kinases: not just another brick in the wall. Current Opinion in Plant Biology, 2012, 15, 659-669.	7.1	178
45	Selected aspects of transgenerational epigenetic inheritance and resetting in plants. Current Opinion in Plant Biology, 2011, 14, 195-203.	7.1	175
46	Polycomb group and trithorax group proteins in Arabidopsis. Biochimica Et Biophysica Acta Gene Regulatory Mechanisms, 2007, 1769, 375-382.	2.4	173
47	A Calcium Dialog Mediated by the FERONIA Signal Transduction Pathway Controls Plant Sperm Delivery. Developmental Cell, 2014, 29, 491-500.	7.0	172
48	Short Integuments 1/suspensor 1/carpel Factory, a Dicer Homolog, Is a Maternal Effect Gene Required for Embryo Development in Arabidopsis. Plant Physiology, 2002, 130, 808-822.	4.8	171
49	Apomixis technology developmentâ€"virgin births in farmers' fields?. Nature Biotechnology, 2004, 22, 687-691.	17.5	168
50	The Central Cell Plays a Critical Role in Pollen Tube Guidance in <i>Arabidopsis</i> . Plant Cell, 2007, 19, 3563-3577.	6.6	163
51	Embryo and Endosperm Inherit Distinct Chromatin and Transcriptional States from the Female Gametes in <i>Arabidopsis</i> Å Â. Plant Cell, 2010, 22, 307-320.	6.6	160
52	Tackling Drought Stress: RECEPTOR-LIKE KINASES Present New Approaches. Plant Cell, 2012, 24, 2262-2278.	6.6	155
53	LACHESIS Restricts Gametic Cell Fate in the Female Gametophyte of Arabidopsis. PLoS Biology, 2007, 5, e47.	5.6	153
54	Evolutionary Ecology of the Prezygotic Stage. Science, 2004, 303, 971-975.	12.6	151

#	Article	IF	CITATIONS
55	Deterministic protein inference for shotgun proteomics data provides new insights into Arabidopsis pollen development and function. Genome Research, 2009, 19, 1786-1800.	5.5	151
56	LAF1, a MYB transcription activator for phytochrome A signaling. Genes and Development, 2001, 15, 2613-2625.	5.9	146
57	Positive darwinian selection at the imprinted MEDEA locus in plants. Nature, 2007, 448, 349-352.	27.8	144
58	Interaction of the Arabidopsis Polycomb group proteins FIE and MEA mediates their common phenotypes. Current Biology, 2000, 10, 1535-1538.	3.9	142
59	The protein expression landscape of the <i>Arabidopsis</i> root. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 6811-6818.	7.1	140
60	Plant germline formation: common concepts and developmental flexibility in sexual and asexual reproduction. Development (Cambridge), 2015, 142, 229-241.	2.5	137
61	Dynamic regulatory interactions of Polycomb group genes: MEDEA autoregulation is required for imprinted gene expression in Arabidopsis. Genes and Development, 2006, 20, 1081-1086.	5.9	133
62	The walls have ears: the role of plant CrRLK1Ls in sensing and transducing extracellular signals. Journal of Experimental Botany, 2011, 62, 1581-1591.	4.8	133
63	Pattern formation during early ovule development in Arabidopsis thaliana. Developmental Biology, 2004, 273, 321-334.	2.0	132
64	The MADS Domain Protein DIANA Acts Together with AGAMOUS-LIKE80 to Specify the Central Cell in <i>Arabidopsis</i> Ovules. Plant Cell, 2008, 20, 2088-2101.	6.6	132
65	Be more specific! Laser-assisted microdissection of plant cells. Trends in Plant Science, 2005, 10, 397-406.	8.8	129
66	Arabidopsis Genes Essential for Seedling Viability: Isolation of Insertional Mutants and Molecular Cloning. Genetics, 2001, 159, 1765-1778.	2.9	129
67	Localized expression of sloppy paired protein maintains the polarity of Drosophila parasegments Genes and Development, 1994, 8, 899-913.	5.9	127
68	Genomic imprinting and seed development: endosperm formation with and without sex. Current Opinion in Plant Biology, 2001, 4, 21-27.	7.1	127
69	Receptor-like cytoplasmic kinase MARIS functions downstream of <i>Cr</i> RLK1L-dependent signaling during tip growth. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 12211-12216.	7.1	125
70	Developmentally regulated Drosophila gene family encoding the fork head domain Proceedings of the National Academy of Sciences of the United States of America, 1992, 89, 8754-8758.	7.1	124
71	Regulation and Flexibility of Genomic Imprinting during Seed Development. Plant Cell, 2011, 23, 16-26.	6.6	124
72	Genetic subtraction profiling identifies genes essential for Arabidopsis reproduction and reveals interaction between the female gametophyte and the maternal sporophyte. Genome Biology, 2007, 8, R204.	9.6	122

#	Article	IF	CITATIONS
73	Transcriptional Programs of Early Reproductive Stages in Arabidopsis. Plant Physiology, 2004, 135, 1765-1775.	4.8	119
74	Transcriptome Analysis of the Arabidopsis Megaspore Mother Cell Uncovers the Importance of RNA Helicases for Plant Germline Development. PLoS Biology, 2011, 9, e1001155.	5.6	119
75	Contribution of epigenetic variation to adaptation in Arabidopsis. Nature Communications, 2018, 9, 4446.	12.8	118
76	A BsisterMADS-box gene involved in ovule and seed development in petunia and Arabidopsis. Plant Journal, 2006, 47, 934-946.	5.7	117
77	<i>CLO/GFA1</i> and <i>ATO</i> are novel regulators of gametic cell fate in plants. Plant Journal, 2008, 56, 913-921.	5.7	117
78	How to Avoid Sex. Plant Cell, 2001, 13, 1491-1498.	6.6	107
79	CHR11, a chromatin-remodeling factor essential for nuclear proliferation during female gametogenesis in Arabidopsis thaliana. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 17231-17236.	7.1	107
80	A Versatile and Reliable Two-Component System for Tissue-Specific Gene Induction in Arabidopsis Â. Plant Physiology, 2006, 141, 1194-1204.	4.8	106
81	The pollen tube: a soft shell with a hard core. Plant Journal, 2013, 73, 617-627.	5.7	106
82	Evolutionary origins of the endosperm in flowering plants. Genome Biology, 2002, 3, reviews1026.1.	9.6	105
83	Members of the RKD transcription factor family induce an egg cellâ€like gene expression program. Plant Journal, 2011, 67, 280-291.	5.7	105
84	A Dynamic Reciprocal RBR-PRC2 Regulatory Circuit Controls Arabidopsis Gametophyte Development. Current Biology, 2008, 18, 1680-1686.	3.9	104
85	The Maternal to Zygotic Transition in Animals and Plants. Cold Spring Harbor Symposia on Quantitative Biology, 2008, 73, 89-100.	1.1	104
86	A Powerful Method for Transcriptional Profiling of Specific Cell Types in Eukaryotes: Laser-Assisted Microdissection and RNA Sequencing. PLoS ONE, 2012, 7, e29685.	2.5	104
87	Marchantia MpRKD Regulates the Gametophyte-Sporophyte Transition by Keeping Egg Cells Quiescent in the Absence of Fertilization. Current Biology, 2016, 26, 1782-1789.	3.9	104
88	Genomic imprinting, methylation and molecular evolution of maize Enhancer of zeste (Mez) homologs. Plant Journal, 2007, 49, 325-337.	5.7	97
89	RETINOBLASTOMA RELATED1 mediates germline entry in <i>Arabidopsis</i> . Science, 2017, 356, .	12.6	97
90	<i>VERDANDI</i> Is a Direct Target of the MADS Domain Ovule Identity Complex and Affects Embryo Sac Differentiation in <i>Arabidopsis</i> Ii>Â. Plant Cell, 2010, 22, 1702-1715.	6.6	92

#	Article	IF	Citations
91	Functional redundancy: the respective roles of the two sloppy paired genes in Drosophila segmentation Proceedings of the National Academy of Sciences of the United States of America, 1994, 91, 6324-6328.	7.1	91
92	Apomixis in agriculture: the quest for clonal seeds. Sexual Plant Reproduction, 2001, 14, 179-187.	2.2	88
93	Dynamic regulation of Polycomb group activity during plant development. Current Opinion in Plant Biology, 2012, 15, 523-529.	7.1	87
94	Cytoplasmic Ca2+ changes dynamically during the interaction of the pollen tube with synergid cells. Development (Cambridge), 2012, 139, 4202-4209.	2.5	86
95	The Triploid Endosperm Genome of Arabidopsis Adopts a Peculiar, Parental-Dosage-Dependent Chromatin Organization. Plant Cell, 2007, 19, 1782-1794.	6.6	85
96	Analysis of Transposon Insertion Mutants Highlights the Diversity of Mechanisms Underlying Male Progamic Development in Arabidopsis. Genetics, 2004, 167, 1975-1986.	2.9	84
97	Stearoyl-acyl carrier protein desaturases are associated with floral isolation in sexually deceptive orchids. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 5696-5701.	7.1	84
98	She's the boss: signaling in pollen tube reception. Current Opinion in Plant Biology, 2011, 14, 622-627.	7.1	83
99	Structural basis for recognition of RALF peptides by LRX proteins during pollen tube growth. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 7494-7503.	7.1	83
100	Functional analysis of related Cr <scp>RLK</scp> 1L receptorâ€like kinases in pollen tube reception. EMBO Reports, 2015, 16, 107-115.	4.5	82
101	Characterization of chromosomal architecture in Arabidopsis by chromosome conformation capture. Genome Biology, 2013, 14, R129.	9.6	79
102	LRX Proteins Play a Crucial Role in Pollen Grain and Pollen Tube Cell Wall Development. Plant Physiology, 2018, 176, 1981-1992.	4.8	79
103	Intronic regulatory elements determine the divergent expression patterns of <i>AGAMOUS‣IKE6</i> subfamily members in Arabidopsis. Plant Journal, 2009, 59, 987-1000.	5.7	77
104	The RPN1 Subunit of the 26S Proteasome in Arabidopsis Is Essential for Embryogenesis. Plant Cell, 2005, 17, 2723-2737.	6.6	76
105	Model organisms — A historical perspective. Journal of Proteomics, 2010, 73, 2054-2063.	2.4	76
106	Epigenetic Variation, Inheritance, and Selection in Plant Populations. Cold Spring Harbor Symposia on Quantitative Biology, 2012, 77, 97-104.	1.1	74
107	Genomic Imprinting in the Endosperm Is Systematically Perturbed in Abortive Hybrid Tomato Seeds. Molecular Biology and Evolution, 2016, 33, 2935-2946.	8.9	74
108	Characterization of the phosphoproteome of mature Arabidopsis pollen. Plant Journal, 2012, 72, 89-101.	5.7	73

#	Article	IF	Citations
109	6 Genomic imprinting during seed development. Advances in Genetics, 2002, 46, 165-214.	1.8	71
110	Developmental Regulation of Expression and Activity of Multiple Forms of the Drosophila RAC Protein Kinase. Journal of Biological Chemistry, 1995, 270, 4066-4075.	3.4	68
111	The Arabidopsis CUL4-DDB1 complex interacts with MSI1 and is required to maintain <i>MEDEA</i> parental imprinting. EMBO Journal, 2011, 30, 731-743.	7.8	68
112	Apomictic and Sexual Germline Development Differ with Respect to Cell Cycle, Transcriptional, Hormonal and Epigenetic Regulation. PLoS Genetics, 2014, 10, e1004476.	3.5	68
113	Theoretical and experimental evidence indicates that there is no detectable auxin gradient in the angiosperm female gametophyte. Development (Cambridge), 2013, 140, 4544-4553.	2.5	64
114	Extensive epigenetic reprogramming during the life cycle of Marchantia polymorpha. Genome Biology, 2018, 19, 9.	8.8	64
115	Genomic Imprinting in the Arabidopsis Embryo Is Partly Regulated by PRC2. PLoS Genetics, 2013, 9, e1003862.	3.5	63
116	Epigenetic inheritance of expression states in plant development: the role of Polycomb group proteins. Current Opinion in Cell Biology, 2002, 14, 773-779.	5.4	61
117	Confocal microscopy of whole ovules for analysis of reproductive development: the elongate1 mutant affects meiosis II. Plant Journal, 2005, 43, 309-320.	5.7	61
118	Selection-Driven Evolution of Sex-Biased Genes Is Consistent with Sexual Selection in Arabidopsis thaliana. Molecular Biology and Evolution, 2014, 31, 574-583.	8.9	61
119	Epigenetic control of plant development: new layers of complexity. Current Opinion in Plant Biology, 2004, 7, 11-19.	7.1	59
120	Molecular control of autonomous embryo and endosperm development. Sexual Plant Reproduction, 2008, 21, 79-88.	2.2	59
121	Genetic Interaction of an Origin Recognition Complex Subunit and the Polycomb Group Gene MEDEA during Seed Development[W]. Plant Cell, 2004, 16, 1035-1046.	6.6	58
122	Epigenetic regulation and reprogramming during gamete formation in plants. Current Opinion in Genetics and Development, 2011, 21, 124-133.	3.3	58
123	Arabidopsis CUL3A and CUL3B genes are essential for normal embryogenesis. Plant Journal, 2005, 43, 437-448.	5.7	56
124	TURAN and EVAN Mediate Pollen Tube Reception in Arabidopsis Synergids through Protein Glycosylation. PLoS Biology, 2015, 13, e1002139.	5.6	55
125	The Arabidopsis Somatic Embryogenesis Receptor Kinase 1 Gene Is Expressed in Developing Ovules and Embryos and Enhances Embryogenic Competence in Culture. Plant Physiology, 2001, 127, 803-816.	4.8	54
126	Apomixis Allows the Transgenerational Fixation of Phenotypes in Hybrid Plants. Current Biology, 2016, 26, 331-337.	3.9	53

#	Article	IF	Citations
127	Chromatin modification and remodeling during early seed development. Current Opinion in Genetics and Development, 2007, 17, 473-479.	3.3	50
128	Starch Turnover and Metabolism during Flower and Early Embryo Development. Plant Physiology, 2016, 172, 2388-2402.	4.8	50
129	3D mechanical characterization of single cells and small organisms using acoustic manipulation and force microscopy. Nature Communications, 2021, 12, 2583.	12.8	50
130	A bright future for apomixis. Trends in Plant Science, 1998, 3, 415-416.	8.8	49
131	The <i><scp>P</scp>olycomb</i> group protein <scp>MEDEA</scp> and the <scp>DNA</scp> methyltransferase <scp>MET</scp> 1 interact to repress autonomous endosperm development in <scp>A</scp> rabidopsis. Plant Journal, 2013, 73, 776-787.	5.7	49
132	HiCdat: a fast and easy-to-use Hi-C data analysis tool. BMC Bioinformatics, 2015, 16, 277.	2.6	49
133	Seed Production Affects Maternal Growth and Senescence in Arabidopsis. Plant Physiology, 2016, 171, 392-404.	4.8	49
134	Identification of a DNA methylation-independent imprinting control region at the <i>Arabidopsis MEDEA</i> locus. Genes and Development, 2012, 26, 1837-1850.	5.9	48
135	Measuring the Mechanical Properties of Plant Cell Walls. Plants, 2015, 4, 167-182.	3.5	48
136	Diverse functions of Polycomb group proteins during plant development. Seminars in Cell and Developmental Biology, 2003, 14, 77-84.	5.0	47
137	Characterization of the three Arabidopsis thaliana RAD21 cohesins reveals differential responses to ionizing radiation. Journal of Experimental Botany, 2006, 57, 971-983.	4.8	47
138	Dosage-Sensitive Function of RETINOBLASTOMA RELATED and Convergent Epigenetic Control Are Required during the Arabidopsis Life Cycle. PLoS Genetics, 2010, 6, e1000988.	3.5	47
139	Female gametophytic cell specification and seed development require the function of the putative <i>Arabidopsis</i> INCENP ortholog <i>WYRD</i> Development (Cambridge), 2011, 138, 3409-3420.	2.5	47
140	Adaptation and extinction in experimentally fragmented landscapes. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 19120-19125.	7.1	46
141	Identification of imprinted genes subject to parent-of-origin specific expression in Arabidopsis thaliana seeds. BMC Plant Biology, 2011, 11, 113.	3.6	46
142	The Genetic Basis of Pollinator Adaptation in a Sexually Deceptive Orchid. PLoS Genetics, 2012, 8, e1002889.	3.5	46
143	SNP-Ratio Mapping (SRM): Identifying Lethal Alleles and Mutations in Complex Genetic Backgrounds by Next-Generation Sequencing. Genetics, 2012, 191, 1381-1386.	2.9	46
144	Transcriptome and Proteome Data Reveal Candidate Genes for Pollinator Attraction in Sexually Deceptive Orchids. PLoS ONE, 2013, 8, e64621.	2.5	46

#	Article	IF	Citations
145	Different yet similar: evolution of imprinting in flowering plants and mammals. F1000prime Reports, 2014, 6, 63.	5.9	45
146	Haplotype-resolved genomes of geminivirus-resistant and geminivirus-susceptible African cassava cultivars. BMC Biology, 2019, 17, 75.	3.8	42
147	Analysis of plant germline development by highâ€throughput RNA profiling: technical advances and new insights. Plant Journal, 2012, 70, 18-29.	5.7	40
148	<i>Arabidopsis GLAUCE</i> promotes fertilization-independent endosperm development and expression of paternally inherited alleles. Development (Cambridge), 2007, 134, 4107-4117.	2.5	39
149	The female gametophyte: an emerging model for cell type-specific systems biology in plant development. Frontiers in Plant Science, 2015, 6, 907.	3.6	39
150	Genomic Imprinting in Plants. Results and Problems in Cell Differentiation, 1999, 25, 23-40.	0.7	39
151	Quantifying growth mechanics of living, growing plant cells in situ using microrobotics. Micro and Nano Letters, 2011, 6, 311.	1.3	37
152	Plant germline development: a tale of cross-talk, signaling, and cellular interactions. Sexual Plant Reproduction, 2011, 24, 91-95.	2.2	37
153	Rcount: simple and flexible RNA-Seq read counting. Bioinformatics, 2015, 31, 436-437.	4.1	36
154	Massively Parallelized Pollen Tube Guidance and Mechanical Measurements on a Lab-on-a-Chip Platform. PLoS ONE, 2016, 11, e0168138.	2.5	36
155	Plant genetics: a decade of integration. Nature Genetics, 2003, 33, 294-304.	21.4	35
156	Intrachromosomal excision of a hybrid Ds element induces large genomic deletions in Arabidopsis. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 2969-2974.	7.1	35
157	A pseudomoleculeâ€scale genome assembly of the liverwort <i>Marchantia polymorpha</i> , Plant Journal, 2020, 101, 1378-1396.	5.7	35
158	An Egg Apparatus-Specific Enhancer of Arabidopsis, Identified by Enhancer Detection. Plant Physiology, 2005, 139, 1421-1432.	4.8	33
159	3D Manipulation and Imaging of Plant Cells using Acoustically Activated Microbubbles. Small Methods, 2019, 3, 1800527.	8.6	33
160	The Maternal-to-Zygotic Transition in Flowering Plants. Current Topics in Developmental Biology, 2015, 113, 351-371.	2.2	32
161	Polyspermy produces tri-parental seeds in maize. Current Biology, 2017, 27, R1300-R1302.	3.9	32
162	Unveiling the gene-expression profile of pollen. Genome Biology, 2003, 5, 205.	9.6	31

#	Article	IF	Citations
163	Transposons and Tandem Repeats Are Not Involved in the Control of Genomic Imprinting at the MEDEA Locus in Arabidopsis. Cold Spring Harbor Symposia on Quantitative Biology, 2004, 69, 465-476.	1.1	31
164	Characterization of size-dependent mechanical properties of tip-growing cells using a lab-on-chip device. Lab on A Chip, 2017, 17, 82-90.	6.0	31
165	Proteogenomic Analysis Greatly Expands the Identification of Proteins Related to Reproduction in the Apogamous Fern Dryopteris affinis ssp. affinis. Frontiers in Plant Science, 2017, 8, 336.	3.6	31
166	The First High-Resolution DNA "Methylome― Cell, 2006, 126, 1025-1028.	28.9	30
167	Seeds—An evolutionary innovation underlying reproductive success in flowering plants. Current Topics in Developmental Biology, 2019, 131, 605-642.	2.2	30
168	Real-time automated characterization of 3D morphology and mechanics of developing plant cells. International Journal of Robotics Research, 2015, 34, 1136-1146.	8.5	29
169	Chromosome conformation capture-based studies reveal novel features of plant nuclear architecture. Current Opinion in Plant Biology, 2017, 36, 149-157.	7.1	29
170	Genomic Origin and Organization of the Allopolyploid Primula egaliksensis Investigated by in situ Hybridization. Annals of Botany, 2008, 101, 919-927.	2.9	28
171	Computational analysis and characterization of UCE-like elements (ULEs) in plant genomes. Genome Research, 2012, 22, 2455-2466.	5.5	28
172	Amino Acid Change in an Orchid Desaturase Enables Mimicry of the Pollinator's Sex Pheromone. Current Biology, 2016, 26, 1505-1511.	3.9	27
173	The SMC5/6 Complex Subunit NSE4A Is Involved in DNA Damage Repair and Seed Development. Plant Cell, 2019, 31, 1579-1597.	6.6	27
174	Adaptive reduction of male gamete number in the selfing plant Arabidopsis thaliana. Nature Communications, 2020, 11 , 2885.	12.8	27
175	Atypical DNA methylation of genes encoding cysteine-rich peptides in Arabidopsis thaliana. BMC Plant Biology, 2012, 12, 51.	3.6	26
176	A subunit of the oligosaccharyltransferase complex is required for interspecific gametophyte recognition in Arabidopsis. Nature Communications, 2016, 7, 10826.	12.8	26
177	To preserve or to destroy, that is the question: the role of the cell wall integrity pathway in pollen tube growth. Current Opinion in Plant Biology, 2019, 52, 131-139.	7.1	26
178	Invasive DNA elements modify the nuclear architecture of their insertion site by KNOT-linked silencing in Arabidopsis thaliana. Genome Biology, 2019, 20, 120.	8.8	26
179	The Boechera Genus as a Resource for Apomixis Research. Frontiers in Plant Science, 2019, 10, 392.	3.6	26
180	Molecular Characterization of the <i>glauce</i> Mutant: A Central Cell–Specific Function Is Required for Double Fertilization in <i>Arabidopsis</i> Plant Cell, 2012, 24, 3264-3277.	6.6	25

#	Article	IF	CITATIONS
181	Genome-Wide Targets Regulated by the OsMADS1 Transcription Factor Reveals Its DNA Recognition Properties. Plant Physiology, 2016, 172, 372-388.	4.8	25
182	Nuclear fusions contribute to polyploidization of the gigantic nuclei in the chalazal endosperm of Arabidopsis. Planta, 2004, 220, 38-46.	3.2	24
183	Assembly of the Boechera retrofracta Genome and Evolutionary Analysis of Apomixis-Associated Genes. Genes, 2018, 9, 185.	2.4	24
184	Feeling the force: how pollen tubes deal with obstacles. New Phytologist, 2018, 220, 187-195.	7.3	24
185	Organ geometry channels reproductive cell fate in the Arabidopsis ovule primordium. ELife, 2021, 10, .	6.0	24
186	Hybridization Alters Spontaneous Mutation Rates in a Parent-of-Origin-Dependent Fashion in Arabidopsis Â. Plant Physiology, 2014, 165, 424-437.	4.8	23
187	Seed Development and Genomic Imprinting in Plants. , 2005, 38, 237-262.		22
188	TAF13 interacts with PRC2 members and is essential for Arabidopsis seed development. Developmental Biology, 2013, 379, 28-37.	2.0	22
189	Nonlinear Enzyme Kinetics Can Lead to High Metabolic Flux Control Coefficients: Implications for the Evolution of Dominance. Journal of Theoretical Biology, 1996, 182, 299-302.	1.7	20
190	response: Parental conflict and infanticide during embryogenesis. Trends in Plant Science, 1998, 3, 328.	8.8	20
191	Quantitative Genetics Identifies Cryptic Genetic Variation Involved in the Paternal Regulation of Seed Development. PLoS Genetics, 2016, 12, e1005806.	3.5	20
192	The Armadillo Repeat Gene <i>ZAK IXIK</i> Promotes <i>Arabidopsis</i> Early Embryo and Endosperm Development through a Distinctive Gametophytic Maternal Effect. Plant Cell, 2012, 24, 4026-4043.	6.6	19
193	Efficient preparation of Arabidopsis pollen tubes for ultrastructural analysis using chemical and cryo-fixation. BMC Plant Biology, 2017, 17, 176.	3.6	18
194	Epigenetics: The Flowers That Come In From The Cold. Current Biology, 2002, 12, R129-R131.	3.9	17
195	A single touch can provide sufficient mechanical stimulation to trigger Venus flytrap closure. PLoS Biology, 2020, 18, e3000740.	5.6	17
196	halfman, an Arabidopsis male gametophytic mutant associated with a 150 $"i_2"$ ½kb chromosomal deletion adjacent to an introduced Ds transposable element. Sexual Plant Reproduction, 2003, 16, 99-102.	2.2	16
197	Genomic Imprinting in Plants: A Predominantly Maternal Affair. , 0, , 174-200.		16
198	Parental contributions to the transcriptome of early plant embryos. Current Opinion in Genetics and Development, 2013, 23, 72-74.	3.3	16

#	Article	IF	Citations
199	Non-random chromosome arrangement in triploid endosperm nuclei. Chromosoma, 2017, 126, 115-124.	2.2	16
200	High precision, localized proton gradients and fluxes generated by a microelectrode device induce differential growth behaviors of pollen tubes. Lab on A Chip, 2017, 17, 671-680.	6.0	16
201	The Polycomb group protein MEDEA controls cell proliferation and embryonic patterning in Arabidopsis. Developmental Cell, 2021, 56, 1945-1960.e7.	7.0	15
202	The Maize Megagametophyte., 2009,, 79-104.		15
203	How to Avoid Sex: The Genetic Control of Gametophytic Apomixis. Plant Cell, 2001, 13, 1491.	6.6	14
204	Early paternal gene activity in Arabidopsis. Nature, 2001, 414, 710-710.	27.8	13
205	Efficient and Rapid Isolation of Early-stage Embryos from Arabidopsis thaliana Seeds. Journal of Visualized Experiments, 2013, , .	0.3	13
206	Parental Age Affects Somatic Mutation Rates in the Progeny of Flowering Plants. Plant Physiology, 2015, 168, 247-257.	4.8	13
207	Acute heat stress during stamen development affects both the germline and sporophytic lineages in Arabidopsis thaliana (L.) Heynh Environmental and Experimental Botany, 2020, 173, 103992.	4.2	13
208	TRAUCO, a Trithorax-group gene homologue, is required for early embryogenesis in Arabidopsis thaliana. Journal of Experimental Botany, 2010, 61, 1215-1224.	4.8	12
209	Female gametophytic mutants of Arabidopsis thaliana identified in a gene trap insertional mutagenesis screen. International Journal of Developmental Biology, 2011, 55, 73-84.	0.6	12
210	Aberrant imprinting may underlie evolution of parthenogenesis. Scientific Reports, 2018, 8, 10626.	3.3	12
211	Consistent Reanalysis of Genome-wide Imprinting Studies in Plants Using Generalized Linear Models Increases Concordance across Datasets. Scientific Reports, 2019, 9, 1320.	3.3	12
212	Laser-Assisted Microdissection Applied to Floral Tissues. Methods in Molecular Biology, 2014, 1110, 329-344.	0.9	12
213	Differential gene expression profiling of one- and two-dimensional apogamous gametophytes of the fern Dryopteris affinis ssp. affinis. Plant Physiology and Biochemistry, 2020, 148, 302-311.	5 . 8	11
214	The differentially regulated genes TvQR1 and TvPirin of the parasitic plant Triphysaria exhibit distinctive natural allelic diversity. BMC Plant Biology, 2013, 13, 28.	3.6	10
215	Cell-specific expression profiling of rare cell types as exemplified by its impact on our understanding of female gametophyte development. Current Opinion in Plant Biology, 2013, 16, 41-49.	7.1	10
216	Cell-Type Specific Chromatin Analysis in Whole-Mount Plant Tissues by Immunostaining. Methods in Molecular Biology, 2018, 1675, 443-454.	0.9	10

#	Article	IF	Citations
217	Endosperm and Seed Transcriptomes Reveal Possible Roles for Small RNA Pathways in Wild Tomato Hybrid Seed Failure. Genome Biology and Evolution, 2021, 13, .	2.5	10
218	The HUPO initiative on Model Organism Proteomes, iMOP. Proteomics, 2012, 12, 340-345.	2.2	9
219	Kinematics Governing Mechanotransduction in the Sensory Hair of the Venus flytrap. International Journal of Molecular Sciences, 2021, 22, 280.	4.1	9
220	Sexual Hieracium pilosella plants are better inter-specific, while apomictic plants are better intra-specific competitors. Perspectives in Plant Ecology, Evolution and Systematics, 2014, 16, 43-51.	2.7	8
221	Laser-assisted Microdissection (LAM) as a Tool for Transcriptional Profiling of Individual Cell Types. Journal of Visualized Experiments, 2016, , .	0.3	8
222	Differentially Methylated Region-Representational Difference Analysis (DMR-RDA): A Powerful Method to Identify DMRs in Uncharacterized Genomes. Methods in Molecular Biology, 2017, 1456, 113-125.	0.9	8
223	The <i>Physcomitrium patens</i> egg cell expresses several distinct epigenetic components and utilizes homologues of <i>BONOBO</i> genes for cell specification. New Phytologist, 2022, 233, 2614-2628.	7.3	8
224	Dual-axis Cellular Force Microscope for mechanical characterization of living plant cells. , 2016, , .		7
225	Chromatin Conformation Capture-Based Analysis of Nuclear Architecture. Methods in Molecular Biology, 2017, 1456, 15-32.	0.9	7
226	A Microrobotic System for Simultaneous Measurement of Turgor Pressure and Cell-Wall Elasticity of Individual Growing Plant Cells. IEEE Robotics and Automation Letters, 2019, 4, 641-646.	5.1	7
227	Dynamics of apomictic and sexual reproduction during primary succession on a glacier forefield in the Swiss Alps. Scientific Reports, 2020, 10, 8269.	3.3	7
228	Probing the micromechanics of the fastest growing plant cell — The pollen tube. , 2016, 2016, 461-464.		6
229	Maybe she's NOT the boss: male–female crosstalk during sexual plant reproduction. Genome Biology, 2016, 17, 96.	8.8	6
230	Cell type-specific genome scans of DNA methylation divergence indicate an important role for transposable elements. Genome Biology, 2020, 21, 172.	8.8	6
231	Patterning of the angiosperm female gametophyte through the prism of theoretical paradigms. Biochemical Society Transactions, 2014, 42, 332-339.	3.4	5
232	Whole-mount Clearing and Staining of Arabidopsis Flower Organs and Siliques. Journal of Visualized Experiments, 2018, , .	0.3	5
233	Engineering of Apomixis in Crop Plants: What Can We Learn from Sexual Model Systems?. , 2003, , 309-314.		5
234	Transposon Excision from an Atypical Site: A Mechanism of Evolution of Novel Transposable Elements. PLoS ONE, 2007, 2, e965.	2.5	4

#	Article	IF	Citations
235	Paternal Patterning Cue. Science, 2009, 323, 1439-1440.	12.6	4
236	Quantification of Mechanical Forces and Physiological Processes Involved in Pollen Tube Growth Using Microfluidics and Microrobotics. Methods in Molecular Biology, 2020, 2160, 275-292.	0.9	4
237	A dynamic architecture of life. F1000Research, 2015, 4, 1288.	1.6	4
238	Altering sexual development in Arabidopsis. Journal of Plant Biology, 1998, 41, 73-81.	2.1	3
239	Mechanical factors contributing to the Venus flytrap's rate-dependent response to stimuli. Biomechanics and Modeling in Mechanobiology, 2021, 20, 2287-2297.	2.8	3
240	Laser-Assisted Microdissection of Plant Embryos for Transcriptional Profiling. Methods in Molecular Biology, 2020, 2122, 127-139.	0.9	3
241	Sexual and Apogamous Species of Woodferns Show Different Protein and Phytohormone Profiles. Frontiers in Plant Science, 2021, 12, 718932.	3.6	3
242	Plant biology. Current Opinion in Plant Biology, 2000, 3, 1-9.	7.1	2
243	An Introduction to Male Germline Development. Methods in Molecular Biology, 2017, 1669, 3-15.	0.9	2
244	Chromatin Immunoprecipitation Protocol for Histone Modifications and Protein-DNA Binding Analyses in Arabidopsis. Methods in Molecular Biology, 2017, 1456, 1-13.	0.9	2
245	Epigenetics and Metabolism. Learning Materials in Biosciences, 2021, , 179-201.	0.4	2
246	Genomic Imprinting. Learning Materials in Biosciences, 2021, , 91-115.	0.4	2
247	Chromatin Immunoprecipitation Protocol for Histone Modifications and Protein–DNA Binding Analyses in Arabidopsis. Methods in Molecular Biology, 2010, 631, 209-220.	0.9	2
248	Simultaneous measurement of turgor pressure and cell wall elasticity in growing pollen tubes. Methods in Cell Biology, 2020, 160, 297-310.	1.1	2
249	Determination of the Developmental Origin of Seeds Containing Endosperm Using Flow Cytometric Analysis. Bio-protocol, 2015, 5, .	0.4	2
250	Plant biology. Current Opinion in Plant Biology, 1999, 2, 339-346.	7.1	1
251	How to Fine-Tune an Epigenetic Switch. Developmental Cell, 2012, 23, 453-454.	7.0	1
252	High-throughput analysis of the morphology and mechanics of tip growing cells using a microrobotic platform. , 2014, , .		1

#	Article	IF	CITATIONS
253	The Gametophyte of Fern: Born to Reproduce. , 2018, , 3-19.		1
254	Identification of Parent-of-Origin-Dependent QTLs Using Bulk-Segregant Sequencing (Bulk-Seq). Methods in Molecular Biology, 2018, 1675, 361-371.	0.9	1
255	Apomixis and genetic background affect distinct traits in Hieracium pilosella L. grown under competition. BMC Biology, 2021, 19, 177.	3.8	1
256	Parent-of-Origin Effects and Seed Development. , 2002, , .		1
257	Measuring Cytomechanical Forces on Growing Pollen Tubes. , 2017, , 65-85.		1
258	APO2001: A Sexy Apomixer in Como. Plant Cell, 2001, 13, 1480.	6.6	0
259	Paper alert: Plant biology. Current Opinion in Plant Biology, 2001, 4, 463-472.	7.1	0
260	Epigenetic changes in ecological systems under selection. New Biotechnology, 2012, 29, S25.	4.4	0
261	Examining Female Meiocytes of Maize by Confocal Microscopy. Methods in Molecular Biology, 2013, 990, 45-52.	0.9	0
262	In vivo tracking and measurement of pollen tube vesicle motion. , 2017, , .		0
263	Labâ€onâ€aâ€Chip and Arrays: 3D Manipulation and Imaging of Plant Cells using Acoustically Activated Microbubbles (Small Methods 3/2019). Small Methods, 2019, 3, 1970006.	8.6	0
264	Preface. Current Topics in Developmental Biology, 2019, 131, xvii-xviii.	2.2	0
265	Cellular Memory. Learning Materials in Biosciences, 2021, , 49-66.	0.4	0
266	The Use of Sexual Model Systems to Identify Elements of Apomixis. , 2007, , 77-78.		0
267	Fast and flexible processing of large FRET image stacks using the FRET-IBRA toolkit. PLoS Computational Biology, 2022, 18, e1009242.	3.2	0
268	A single touch can provide sufficient mechanical stimulation to trigger Venus flytrap closure. , 2020, 18, e3000740.		0
269	A single touch can provide sufficient mechanical stimulation to trigger Venus flytrap closure. , 2020, 18, e3000740.		0
270	A single touch can provide sufficient mechanical stimulation to trigger Venus flytrap closure. , 2020, 18, e3000740.		0

#	Article	IF	CITATIONS
271	A single touch can provide sufficient mechanical stimulation to trigger Venus flytrap closure. , 2020, 18, e3000740.		O
272	A single touch can provide sufficient mechanical stimulation to trigger Venus flytrap closure. , 2020, 18, e3000740.		0
273	A single touch can provide sufficient mechanical stimulation to trigger Venus flytrap closure. , 2020, 18, e3000740.		O
274	A single touch can provide sufficient mechanical stimulation to trigger Venus flytrap closure. , 2020, 18, e3000740.		0
275	A single touch can provide sufficient mechanical stimulation to trigger Venus flytrap closure. , 2020, 18, e3000740.		O