David Twell

List of Publications by Year
in descending order

127 papers	10,091 citations	30070 54 h-index	37204 96 g-index
135 all docs	135 docs citations	135 times ranked	7212 citing authors

#	Article	IF	Citations
1	Epigenetic reprogramming rewires transcription during the alternation of generations in Arabidopsis. ELife, 2021, 10, .	6.0	55
2	Comparative transcriptomic analysis reveals conserved programmes underpinning organogenesis and reproduction in land plants. Nature Plants, 2021, 7, 1143-1159.	9.3	61
3	MYB81, a microsporeâ€specific GAMYB transcription factor, promotes pollen mitosis I and cell lineage formation in Arabidopsis. Plant Journal, 2020, 101, 590-603.	5.7	14
4	The evolution and patterning of male gametophyte development. Current Topics in Developmental Biology, 2019, 131, 257-298.	2.2	56
5	Transcription factor DUO1 generated by neo-functionalization is associated with evolution of sperm differentiation in plants. Nature Communications, 2018, 9, 5283.	12.8	54
6	Pollen Development at High Temperature: From Acclimation to Collapse. Plant Physiology, 2017, 173, 1967-1976.	4.8	145
7	Identification of Cis-Regulatory Modules that Function in the Male Germline of Flowering Plants. Methods in Molecular Biology, 2017, 1669, 275-293.	0.9	1
8	Analysis of Fluorescent Reporter Activity in the Male Germline During Pollen Development by Confocal Microscopy. Methods in Molecular Biology, 2017, 1669, 67-75.	0.9	3
9	A Conserved cis-Regulatory Module Determines Germline Fate through Activation of the Transcription Factor DUO1 Promoter. Plant Physiology, 2017, 173, 280-293.	4.8	16
10	Transcriptome Analysis of Hamelia patens (Rubiaceae) Anthers Reveals Candidate Genes for Tapetum and Pollen Wall Development. Frontiers in Plant Science, 2017, 7, 1991.	3.6	8
11	Expression of four S. pneumoniae type 2 polysaccharide biosynthetic enzymes utilising the endogenous Kex2 protease activity in tobacco. Pakistan Journal of Pharmaceutical Sciences, 2017, 30, 439-448.	0.2	0
12	Analysis of <i>gemini pollen 3</i> mutant suggests a broad function of <scp>AUGMIN</scp> in microtubule organization during sexual reproduction in Arabidopsis. Plant Journal, 2016, 87, 188-201.	5.7	18
13	Pollen as a target of environmental changes. Plant Reproduction, 2016, 29, 1-2.	2.2	10
14	<scp>BURSTING POLLEN</scp> is required to organize the pollen germination plaque and pollen tube tip in <i>Arabidopsis thaliana</i>. New Phytologist, 2015, 206, 255-267.	7.3	28
15	SYBR Green-activated sorting of Arabidopsis pollen nuclei based on different DNA/RNA content. Plant Reproduction, 2015, 28, 61-72.	2.2	18
16	Organelles maintain spindle position in plant meiosis. Nature Communications, 2015, 6, 6492.	12.8	37
17	Young Genes out of the Male: An Insight from Evolutionary Age Analysis of the Pollen Transcriptome. Molecular Plant, 2015, 8, 935-945.	8.3	64
18	A decade of pollen transcriptomics. Plant Reproduction, 2015, 28, 73-89.	2.2	149

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19	Nucleoporin MOS7/Nup88 is required for mitosis in gametogenesis and seed development in <i>Arabidopsis</i>. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 18393-18398.	7.1	23
20	Differential gene expression and alternative splicing in insect immune specificity. BMC Genomics, 2014, 15, 1031.	2.8	48
21	An EAR-Dependent Regulatory Module Promotes Male Germ Cell Division and Sperm Fertility in <i>Arabidopsis</i>. Plant Cell, 2014, 26, 2098-2113.	6.6	67
22	Arabidopsis Fused kinase TWO-IN-ONE dominantly inhibits male meiotic cytokinesis. Plant Reproduction, 2014, 27, 7-17.	2.2	18
23	Identification of a Sphingolipid Î±-Glucuronosyltransferase That Is Essential for Pollen Function in<i>Arabidopsis</i>Â Â Â. Plant Cell, 2014, 26, 3314-3325.	6.6	80
24	Artificial microRNAs reveal cell-specific differences in small RNA activity in pollen. Current Biology, 2013, 23, R599-R601.	3.9	61
25	Fertilization Recovery after Defective Sperm Cell Release in Arabidopsis. Current Biology, 2012, 22, 1084-1089.	3.9	118
26	Arabidopsis Fused kinase and the Kinesinâ€12 subfamily constitute a signalling module required for phragmoplast expansion. Plant Journal, 2012, 72, 308-319.	5.7	41
27	Germline Specification and Function in Plants. Annual Review of Plant Biology, 2011, 62, 461-484.	18.7	186
28	Male gametogenesis and germline specification in flowering plants. Sexual Plant Reproduction, 2011, 24, 149-160.	2.2	146
29	The R2R3 MYB Transcription Factor DUO1 Activates a Male Germline-Specific Regulon Essential for Sperm Cell Differentiation in<i>Arabidopsis</i>Â Â. Plant Cell, 2011, 23, 534-549.	6.6	160
30	Endoplasmic Reticulumâ€" and Golgi-Localized Phospholipase A2 Plays Critical Roles in <i>Arabidopsis</i> Pollen Development and Germination Â. Plant Cell, 2011, 23, 94-110.	6.6	76
31	A Conserved, Mg2+-Dependent Exonuclease Degrades Organelle DNA during<i>Arabidopsis</i>Pollen Development Â. Plant Cell, 2011, 23, 1608-1624.	6.6	53
32	<i>SIDECAR POLLEN</i>suggests a plant-specific regulatory network underlying asymmetric microspore division in Arabidopsis. Plant Signaling and Behavior, 2011, 6, 416-419.	2.4	12
33	Small RNA activity and function in angiosperm gametophytes. Journal of Experimental Botany, 2011, 62, 1601-1610.	4.8	24
34	Life after meiosis: patterning the angiosperm male gametophyte. Biochemical Society Transactions, 2010, 38, 577-582.	3.4	37
35	The SIDECAR POLLEN gene encodes a microspore-specific LOB/AS2 domain protein required for the correct timing and orientation of asymmetric cell division. Plant Journal, 2010, 64, 839-850.	5.7	60
36	Small RNAs in angiosperm gametophytes: from epigenetics to gamete development. Genes and Development, 2010, 24, 1081-1085.	5.9	17

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37	The tobacco MAP215/Dis1-family protein TMBP200 is required for the functional organization of microtubule arrays during male germline establishment. Journal of Experimental Botany, 2010, 61, 969-981.	4.8	38
38	A ticket for the live show: Microtubules in male gametophyte development. Plant Signaling and Behavior, 2010, 5, 614-617.	2.4	13
39	Male gametophyte development: a molecular perspective. Journal of Experimental Botany, 2009, 60, 1465-1478.	4.8	287
40	Small RNA Pathways Are Present and Functional in the Angiosperm Male Gametophyte. Molecular Plant, 2009, 2, 500-512.	8.3	68
41	<i>Arabidopsis</i>DUO POLLEN3 Is a Key Regulator of Male Germline Development and Embryogenesis Â. Plant Cell, 2009, 21, 1940-1956.	6.6	82
42	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.	7.1	69
43	A dynamic DUO of regulatory proteins coordinates gamete specification and germ cell mitosis in the angiosperm male germline. Plant Signaling and Behavior, 2009, 4, 1159-1162.	2.4	4
44	Imprinting of the Polycomb Group Gene MEDEA Serves as a Ploidy Sensor in Arabidopsis. PLoS Genetics, 2009, 5, e1000663.	3.5	141
45	A Plant Germline-Specific Integrator of Sperm Specification and Cell Cycle Progression. PLoS Genetics, 2009, 5, e1000430.	3.5	152
46	MicroRNA and tasiRNA diversity in mature pollen of Arabidopsis thaliana. BMC Genomics, 2009, 10, 643.	2.8	112
47	AtbZIP34 is required for Arabidopsis pollen wall patterning and the control of several metabolic pathways in developing pollen. Plant Molecular Biology, 2009, 70, 581-601.	3.9	86
48	Induction of RNAâ€directed DNA methylation upon decondensation of constitutive heterochromatin. EMBO Reports, 2009, 10, 1015-1021.	4.5	167
49	Functional divergence of the duplicated <i>AtKIN14a</i> and <i>AtKIN14b</i> genes: critical roles in Arabidopsis meiosis and gametophyte development. Plant Journal, 2008, 53, 1013-1026.	5.7	34
50	Control of plant germline proliferation by SCFFBL17 degradation of cell cycle inhibitors. Nature, 2008, 455, 1134-1137.	27.8	180
51	Dual function of Arabidopsis glucan synthaseâ€like genes <i>GSL8</i> and <i>GSL10</i> in male gametophyte development and plant growth. Plant Journal, 2008, 54, 911-923.	5.7	101
52	<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
53	Arabidopsis Kinesins HINKEL and TETRASPORE Act Redundantly to Control Cell Plate Expansion during Cytokinesis in the Male Gametophyte. Molecular Plant, 2008, 1, 794-799.	8.3	37
54	The conserved cysteine-rich domain of a tesmin/TSO1-like protein binds zinc in vitro and TSO1 is required for both male and female fertility in Arabidopsis thaliana. Journal of Experimental Botany, 2007, 58, 3657-3670.	4.8	59

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55	MADS-complexes regulate transcriptome dynamics during pollen maturation. Genome Biology, 2007, 8, R249.	9.6	95
56	Arabidopsis Gene Family Profiler (aGFP) â€“ user-oriented transcriptomic database with easy-to-use graphic interface. BMC Plant Biology, 2007, 7, 39.	3.6	18
57	Generalization of DNA microarray dispersion properties: microarray equivalent of t-distribution. Biology Direct, 2006, 1, 27.	4.6	15
58	A blossoming romance: gamete interactions in flowering plants. Nature Cell Biology, 2006, 8, 14-16.	10.3	7
59	Identification of microspore-active promoters that allow targeted manipulation of gene expression at early stages of microgametogenesis in Arabidopsis. BMC Plant Biology, 2006, 6, 31.	3.6	48
60	Integrating Membrane Transport with Male Gametophyte Development and Function through Transcriptomics. Plant Physiology, 2006, 140, 1151-1168.	4.8	171
61	<i>In vivo</i> studies on the roles of Tic110, Tic40 and Hsp93 during chloroplast protein import. Plant Journal, 2005, 41, 412-428.	5.7	189
62	A Novel Class of MYB Factors Controls Sperm-Cell Formation in Plants. Current Biology, 2005, 15, 244-248.	3.9	210
63	A Divergent Cellular Role for the FUSED Kinase Family in the Plant-Specific Cytokinetic Phragmoplast. Current Biology, 2005, 15, 2107-2111.	3.9	98
64	Expression of Î²-galactosidase and Î²-xylosidase genes during microspore and pollen development. Planta, 2005, 220, 931-940.	3.2	52
65	Translation initiation factors eIF4E and eIFiso4E are required for polysome formation and regulate plant growth in tobacco. Plant Molecular Biology, 2005, 57, 749-760.	3.9	45
66	Male Germ Line Development in Arabidopsis. duo pollen Mutants Reveal Gametophytic Regulators of Generative Cell Cycle Progression. Plant Physiology, 2005, 137, 297-307.	4.8	126
67	A Molecular-Genetic Study of the Arabidopsis Toc75 Gene Family. Plant Physiology, 2005, 138, 715-733.	4.8	117
68	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
69	Analysis of Transposon Insertion Mutants Highlights the Diversity of Mechanisms Underlying Male Progamic Development in Arabidopsis. Genetics, 2004, 167, 1975-1986.	2.9	84
70	The Putative Arabidopsis Homolog of Yeast Vps52p Is Required for Pollen Tube Elongation, Localizes to Golgi, and Might Be Involved in Vesicle Trafficking. Plant Physiology, 2004, 135, 1480-1490.	4.8	54
71	Expression Patterns of a Novel AtCHX Gene Family Highlight Potential Roles in Osmotic Adjustment and K+ Homeostasis in Pollen Development. Plant Physiology, 2004, 136, 2532-2547.	4.8	148
72	Gemini pollen 2, a male and female gametophytic cytokinesis defective mutation. Sexual Plant Reproduction, 2004, 17, 63-70.	2.2	27

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73	Transcriptome analysis of haploid male gametophyte development in Arabidopsis. Genome Biology, 2004, 5, R85.	8.8	658
74	Male Gametogenesis. , 2004, , 663-668.		0
75	halfman, an Arabidopsis male gametophytic mutant associated with a 150ï¿½kb chromosomal deletion adjacent to an introduced Ds transposable element. Sexual Plant Reproduction, 2003, 16, 99-102.	2.2	16
76	Regulation of pollen tube growth by Rac-like GTPases. Journal of Experimental Botany, 2003, 54, 73-81.	4.8	72
77	AtCSLA7, a Cellulose Synthase-Like Putative Glycosyltransferase, Is Important for Pollen Tube Growth and Embryogenesis in Arabidopsis. Plant Physiology, 2003, 131, 547-557.	4.8	109
78	Comparative Analysis of the Arabidopsis Pollen Transcriptome Â. Plant Physiology, 2003, 132, 640-652.	4.8	477
79	The 5â€²-Untranslated Region of the ntp303 Gene Strongly Enhances Translation during Pollen Tube Growth, But Not during Pollen Maturation. Plant Physiology, 2002, 129, 342-353.	4.8	51
80	Genetic Control of Male Germ Unit Organization in Arabidopsis. Plant Physiology, 2002, 129, 865-875.	4.8	73
81	MOR1/GEM1 has an essential role in the plant-specific cytokinetic phragmoplast. Nature Cell Biology, 2002, 4, 711-714.	10.3	220
82	Functional analysis of cis-regulatory elements within the promoter of the tobacco late pollen gene g10. Plant Molecular Biology, 2001, 45, 577-585.	3.9	190
83	Novel Anther-Specific myb Genes from Tobacco as Putative Regulators of Phenylalanine Ammonia-Lyase Expression. Plant Physiology, 2001, 126, 1738-1753.	4.8	55
84	Novel Patterns of Ectopic Cell Plate Growth and Lipid Body Distribution in the Arabidopsis <i>gemini pollen1</i>Mutant. Plant Physiology, 2001, 126, 899-909.	4.8	75
85	Isolation and characterisation of two pollen-specific LIM domain protein cDNAs from Nicotiana tabacum. Sexual Plant Reproduction, 2000, 12, 339-345.	2.2	13
86	The translationally repressed pollen-specific ntp303 mRNA is stored in non-polysomal mRNPs during pollen maturation. Sexual Plant Reproduction, 2000, 13, 135-144.	2.2	42
87	The pollen-specific gene Ntp303 encodes a 69-kDa glycoprotein associated with the vegetative membranes and the cell wall. Sexual Plant Reproduction, 2000, 12, 276-284.	2.2	32
88	Analysis of a translational enhancer present within the 5â€²-terminal sequence of the genomic RNA of potato virus S. Archives of Virology, 1999, 144, 1451-1461.	2.1	13
89	Functional architecture of a late pollen promoter: pollen-specific transcription is developmentally regulated by multiple stage-specific and co-dependent activator elements. Plant Molecular Biology, 1998, 37, 859-869.	3.9	219
90	An evolutionary conserved group of plant GSK-3/shaggy-like protein kinase genes preferentially expressed in developing pollen. Biochimica Et Biophysica Acta Gene Regulatory Mechanisms, 1998, 1442, 261-273.	2.4	35

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91	Asymmetric division and cell-fate determination in developing pollen. Trends in Plant Science, 1998, 3, 305-310.	8.8	148
92	Selection of T-DNA-Tagged Male and Female Gametophytic Mutants by Segregation Distortion in Arabidopsis. Genetics, 1998, 149, 621-631.	2.9	189
93	Activities of CaMV 35S andnospromoters in pollen: implications for field release of transgenic plants. Journal of Experimental Botany, 1997, 48, 265-275.	4.8	124
94	A novel nucleic acid helicase gene identified by promoter trapping in Arabidopsis. Plant Journal, 1997, 11, 1307-1314.	5.7	39
95	A novel transient assay system demonstrates that DT-Atsm is a temperature-sensitive toxin in plant tissues. Plant Science, 1996, 113, 59-65.	3.6	3
96	Analysis of the promoter of an abscisic acid responsive late embryogenesis abundant gene of Arabidopsis thaliana. Plant Science, 1996, 114, 181-192.	3.6	17
97	Maturation-specific translational enhancement mediated by the 5'-UTR of a late pollen transcript. Plant Journal, 1996, 10, 613-623.	5.7	52
98	The Significance of Microspore Division and Division Symmetry for Vegetative Cell-Specific Transcription and Generative Cell Differentiation. Plant Cell, 1995, 7, 65.	6.6	33
99	Pollen viability and transgene expression following storage in honey. Transgenic Research, 1995, 4, 226-231.	2.4	16
100	Functional dissection of the promoter of the pollenâ€specific gene <i>NTP303</i> reveals a novel pollenâ€specific, and conserved <i>cis</i>â€regulatory element. Plant Journal, 1995, 8, 55-63.	5.7	71
101	Analysis of gene regulation in growing pollen tubes of angiosperm and gymnosperm species using microprojectile bombardment. Physiologia Plantarum, 1995, 93, 445-450.	5.2	9
102	Diphtheria toxin-mediated cell ablation in developing pollen: Vegetative cell ablation blocks generative cell migration. Protoplasma, 1995, 187, 144-154.	2.1	34
103	The Small Cysteine-Rich Protein P14 of Beet Necrotic Yellow Vein Virus Regulates Accumulation of RNA 2 in Cis and Coat Protein in Trans. Virology, 1995, 210, 73-81.	2.4	42
104	Analysis of gene regulation in growing pollen tubes of angiosperm and gymnosperm species using microprojectile bombardment. Physiologia Plantarum, 1995, 93, 445-450.	5.2	9
105	The Significance of Microspore Division and Division Symmetry for Vegetative Cell-Specific Transcription and Generative Cell Differentiation.. Plant Cell, 1995, 7, 65-74.	6.6	137
106	Analysis of a translational enhancer upstream from the coat protein open reading frame of potato virus S. Archives of Virology, 1994, 134, 321-333.	2.1	15
107	In vivo characterisation of a translational enhancer upstream from the coat protein open reading frame of potato virus S. Archives of Virology, 1994, 137, 123-132.	2.1	8
108	Pollen maturation: Where ubiquitin is not required?. BioEssays, 1994, 16, 873-875.	2.5	7

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109	Optimization of transient gene expression in pollen of Norway spruce (Picea abies) by particle acceleration. Physiologia Plantarum, 1994, 92, 412-416.	5.2	27
110	Methanol does not specifically inhibit endogenous Î²-glucuronidase (GUS) activity. Plant Science, 1994, 97, 61-67.	3.6	15
111	Optimization of transient gene expression in pollen of Norway spruce (Picea abies) by particle acceleration. Physiologia Plantarum, 1994, 92, 412-416.	5.2	3
112	Differential activation and conserved vegetative cell-specific activity of a late pollen promoter in species with bicellular and tricellular pollen. Plant Journal, 1994, 5, 543-550.	5.7	39
113	Activation and developmental regulation of an Arabidopsis anther-specific promoter in microspores and pollen of Nicotiana tabacum. Sexual Plant Reproduction, 1993, 6, 217.	2.2	19
114	Use of a nuclear-targeted beta-glucuronidase fusion protein to demonstrate vegetative cell-specific gene expression in developing pollen. Plant Journal, 1992, 2, 887-892.	5.7	62
115	Deletion analysis of pollen-expressed promoters. In Vitro Cellular and Developmental Biology - Plant, 1991, 27, 15-20.	2.1	10
116	Promoter analysis of genes that are coordinately expressed during pollen development reveals pollen-specific enhancer sequences and shared regulatory elements.. Genes and Development, 1991, 5, 496-507.	5.9	282
117	Transformation of pollen by particle bombardment. , 1991, , 631-644.		2
118	Transient Expression of Chimeric Genes Delivered into Pollen by Microprojectile Bombardment. Plant Physiology, 1989, 91, 1270-1274.	4.8	197
119	Isolation and expression of an anther-specific gene from tomato. Molecular Genetics and Genomics, 1989, 217, 240-245.	2.4	270
120	Structural diversity of the patatin gene family in potato cv. Desiree. Molecular Genetics and Genomics, 1988, 212, 325-336.	2.4	68
121	The 5? flanking DNA of a patatin gene directs tuber specific expression of a chimaeric gene in potato. Plant Molecular Biology, 1987, 9, 345-375.	3.9	40
122	Developmental regulation of RI TL-DNA gene expression in roots, shoots and tubers of transformed potato (Solanum tuberosum cv. Desiree). Plant Molecular Biology, 1986, 6, 321-330.	3.9	54
123	Genetic manipulation in cultivars of oilseed rape (Brassica napus) using Agrobacterium. Theoretical and Applied Genetics, 1985, 71, 325-329.	3.6	78
124	Genetic modification of potato development using Ri T-DNA. Theoretical and Applied Genetics, 1985, 70, 440-446.	3.6	156
125	Expression of shoot-inducing Ti TL-DNA in differentiated tissues of potato (Solanum tuberosum cv) Tj ETQq1 1 0.784314 rgBT /Overlock	3.9	22
126	Pollen Development, aÂGenetic and Transcriptomic View. , 0, , 15-45.		29

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127	Overexpression of TWO-IN-ONE Domains Inhibits Cytokinesis in Arabidopsis. Journal of Plant Biology, 0, , .	2.1	0