Sheila McCormick

List of Publications by Year
in descending order

95 papers	6,767 citations	87888 38 h-index	64796 79 g-index
207 all docs	207 docs citations	207 times ranked	5566 citing authors

#	Article	IF	Citations
1	Leaf disc transformation of cultivated tomato (L. esculentum) using Agrobacterium tumefaciens. Plant Cell Reports, 1986, 5, 81-84.	5.6	528
2	Control of Male Gametophyte Development. Plant Cell, 2004, 16, S142-S153.	6.6	512
3	TECHNICAL ADVANCE: Temperature as a determinant factor for increased and reproducible <i>inÂvitro</i> pollen germination in <i>Arabidopsis thaliana</i>. Plant Journal, 2007, 52, 570-582.	5.7	354
4	Comparative Transcriptomics of Arabidopsis Sperm Cells Â. Plant Physiology, 2008, 148, 1168-1181.	4.8	339
5	A Large Family of Genes That Share Homology withCLAVATA3. Plant Physiology, 2001, 126, 939-942.	4.8	316
6	Isolation and expression of an anther-specific gene from tomato. Molecular Genetics and Genomics, 1989, 217, 240-245.	2.4	270
7	Proteome mapping of mature pollen ofArabidopsis thaliana. Proteomics, 2005, 5, 4864-4884.	2.2	238
8	A compendium of methods useful for characterizing <i>Arabidopsis</i> pollen mutants and gametophyticallyâ€•expressed genes. Plant Journal, 2004, 39, 761-775.	5.7	233
9	LAT52 protein is essential for tomato pollen development: pollen expressing antisense LAT52 RNA hydrates and germinates abnormally and cannot achieve fertilization. Plant Journal, 1994, 6, 321-338.	5.7	209
10	Transient Expression of Chimeric Genes Delivered into Pollen by Microprojectile Bombardment. Plant Physiology, 1989, 91, 1270-1274.	4.8	197
11	RNA-Seq of Arabidopsis Pollen Uncovers Novel Transcription and Alternative Splicing Â Â Â. Plant Physiology, 2013, 162, 1092-1109.	4.8	195
12	A distinct mechanism regulating a pollen-specific guanine nucleotide exchange factor for the small GTPase Rop in <i>Arabidopsis thaliana</i>. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 18830-18835.	7.1	194
13	A Cysteine-Rich Extracellular Protein, LAT52, Interacts with the Extracellular Domain of the Pollen Receptor Kinase LePRK2[W]. Plant Cell, 2002, 14, 2277-2287.	6.6	185
14	Molecular and genetic characterization of two pollen-expressed genes that have sequence similarity to pectate lyases of the plant pathogen Erwinia. Plant Molecular Biology, 1990, 14, 17-28.	3.9	167
15	Green Sperm. Identification of Male Gamete Promoters in Arabidopsis. Plant Physiology, 2005, 138, 2124-2133.	4.8	155
16	Proper regulation of a sperm-specific <i>cis</i>-nat-siRNA is essential for double fertilization in <i>Arabidopsis</i>. Genes and Development, 2010, 24, 1010-1021.	5.9	152
17	Sperm cells of <i>Zea mays</i> have a complex complement of mRNAs. Plant Journal, 2003, 34, 697-707.	5.7	151
18	Kinase partner protein interacts with the LePRK1 and LePRK2 receptor kinases and plays a role in polarized pollen tube growth. Plant Journal, 2005, 42, 492-503.	5.7	150

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19	Pollen Tube Localization Implies a Role in Pollenâ€“Pistil Interactions for the Tomato Receptor-like Protein Kinases LePRK1 and LePRK2. Plant Cell, 1998, 10, 319-330.	6.6	146
20	LeSTIG1, an extracellular binding partner for the pollen receptor kinases LePRK1 and LePRK2, promotes pollen tube growthin vitro. Plant Journal, 2004, 39, 343-353.	5.7	139
21	Male Gametophyte Development. Plant Cell, 1993, 5, 1265.	6.6	128
22	The Arabidopsis Gene Tardy Asynchronous Meiosis Is Required for the Normal Pace and Synchrony of Cell Division during Male Meiosis. Plant Physiology, 2001, 127, 1157-1166.	4.8	113
23	<i>PROCERA</i> encodes a DELLA protein that mediates control of dissected leaf form in tomato. Plant Journal, 2008, 56, 603-612.	5.7	110
24	Pollen Germinates Precociously in the Anthers of raring-to-go, an Arabidopsis Gametophytic Mutant. Plant Physiology, 2001, 126, 685-695.	4.8	93
25	Reduced leaf complexity in tomato wiry mutants suggests a role for PHAN and KNOX genes in generating compound leaves. Development (Cambridge), 2003, 130, 4405-4415.	2.5	91
26	A Collection of <i>Ds</i> Insertional Mutants Associated With Defects in Male Gametophyte Development and Function in <i>Arabidopsis thaliana</i>. Genetics, 2009, 181, 1369-1385.	2.9	84
27	Interdependence of Endomembrane Trafficking and Actin Dynamics during Polarized Growth of Arabidopsis Pollen Tubes Â Â Â. Plant Physiology, 2010, 152, 2200-2210.	4.8	83
28	The Pollen Receptor Kinase LePRK2 Mediates Growth-Promoting Signals and Positively Regulates Pollen Germination and Tube Growth Â. Plant Physiology, 2008, 148, 1368-1379.	4.8	78
29	Pollen Tube Localization Implies a Role in Pollen-Pistil Interactions for the Tomato Receptor-Like Protein Kinases LePRK1 and LePRK2. Plant Cell, 1998, 10, 319.	6.6	75
30	New pollen-specific receptor kinases identified in tomato, maize and Arabidopsis: the tomato kinases show overlapping but distinct localization patterns on pollen tubes. Plant Molecular Biology, 2002, 50, 1-16.	3.9	65
31	The receptor kinases LePRK1 and LePRK2 associate in pollen and when expressed in yeast, but dissociate in the presence of style extract. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 6860-6865.	7.1	64
32	Tomato Pistil Factor STIG1 Promotes in Vivo Pollen Tube Growth by Binding to Phosphatidylinositol 3-Phosphate and the Extracellular Domain of the Pollen Receptor Kinase LePRK2. Plant Cell, 2014, 26, 2505-2523.	6.6	64
33	Arabidopsis Tetraspanins Are Confined to Discrete Expression Domains and Cell Types in Reproductive Tissues and Form Homo- and Heterodimers When Expressed in Yeast Â Â Â. Plant Physiology, 2013, 163, 696-712.	4.8	60
34	Antisense phenotypes reveal a role for SHY, a pollen-specific leucine-rich repeat protein, in pollen tube growth. Plant Journal, 2004, 39, 643-654.	5.7	55
35	GEX3, Expressed in the Male Gametophyte and in the Egg Cell of Arabidopsis thaliana Is Essential for Micropylar Pollen Tube Guidance and Plays a Role during Early Embryogenesis. Molecular Plant, 2008, 1, 586-598.	8.3	55
36	Transformation of tomato with Agrobacterium tumefaciens. , 1991, , 311-319.		54

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37	Two Arabidopsis AGC kinases are critical for the polarized growth of pollen tubes. Plant Journal, 2009, 58, 474-484.	5.7	48
38	<i>S</i>-Adenosylmethionine Synthetase 3 Is Important for Pollen Tube Growth. Plant Physiology, 2016, 172, 244-253.	4.8	47
39	The regulation of vesicle trafficking by small GTPases and phospholipids during pollen tube growth. Sexual Plant Reproduction, 2010, 23, 87-93.	2.2	40
40	Overexpression of <i>Arabidopsis thaliana PTEN</i> caused accumulation of autophagic bodies in pollen tubes by disrupting phosphatidylinositol 3â€phosphate dynamics. Plant Journal, 2011, 68, 1081-1092.	5.7	40
41	<i>Arabidopsis thaliana</i> GEX1 has dual functions in gametophyte development and early embryogenesis. Plant Journal, 2011, 68, 620-632.	5.7	37
42	Callose plug deposition patterns vary in pollen tubes of Arabidopsis thaliana ecotypes and tomato species. BMC Plant Biology, 2012, 12, 178.	3.6	32
43	Overexpression of the Tomato Pollen Receptor Kinase LePRK1 Rewires Pollen Tube Growth to a Blebbing Mode. Plant Cell, 2014, 26, 3538-3555.	6.6	32
44	An ARID Domain-Containing Protein within Nuclear Bodies Is Required for Sperm Cell Formation in Arabidopsis thaliana. PLoS Genetics, 2014, 10, e1004421.	3.5	31
45	The juxtamembrane and carboxy-terminal domains of Arabidopsis PRK2 are critical for ROP-induced growth in pollen tubes. Journal of Experimental Botany, 2013, 64, 5599-5610.	4.8	30
46	Gametophytic and Sporophytic Expression of Anther-Specific Genes in Developing Tomato Anthers. Plant Cell, 1989, 1, 727.	6.6	29
47	Self-incompatibility and other pollen-pistil interactions. Current Opinion in Plant Biology, 1998, 1, 18-25.	7.1	28
48	STIL, a peculiar molecule from styles, specifically dephosphorylates the pollen receptor kinase LePRK2 and stimulates pollen tube growth in vitro. BMC Plant Biology, 2010, 10, 33.	3.6	28
49	AGCVIII kinases: at the crossroads of cellular signaling. Trends in Plant Science, 2009, 14, 689-695.	8.8	23
50	Pollen. Current Biology, 2013, 23, R988-R990.	3.9	22
51	Intercellular communication in Arabidopsis thaliana pollen discovered via AHG3 transcript movement from the vegetative cell to sperm. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 13378-13383.	7.1	21
52	Reproductive Dialog. Science, 2007, 317, 606-607.	12.6	20
53	Is there more than one way to attract a pollen tube?. Trends in Plant Science, 2005, 10, 260-263.	8.8	18
54	Signaling in pollenâ€"pistil interactions. Seminars in Cell and Developmental Biology, 1999, 10, 139-147.	5.0	17

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55	A role for PHANTASTICA in medio-lateral regulation of adaxial domain development in tomato and tobacco leaves. Annals of Botany, 2012, 109, 407-418.	2.9	16
56	Gametophytic Selfâ€Incompatibility Is Operative in <i>Miscanthus sinensis</i> (Poaceae) and Is Affected by Pistil Age. Crop Science, 2017, 57, 1948-1956.	1.8	10
57	Heterochromatic silencing is reinforced by ARID1â€mediated small RNA movement in Arabidopsis pollen. New Phytologist, 2021, 229, 3269-3280.	7.3	10
58	Abscisic acid (ABA) receptors: light at the end of the tunnel. F1000 Biology Reports, 2010, 2, .	4.0	9
59	Chloroplastâ€targeted antioxidant protein protects against necrotrophic fungal attack. Plant Journal, 2017, 92, 759-760.	5.7	9
60	Rhizobial strainâ€dependent restriction of nitrogen fixation in a legumeâ€<i>Rhizobium</i> symbiosis. Plant Journal, 2018, 93, 3-4.	5.7	9
61	Kinase Partner Protein Plays a Key Role in Controlling the Speed and Shape of Pollen Tube Growth in Tomato. Plant Physiology, 2020, 184, 1853-1869.	4.8	7
62	Molecular biology of male gametogenesis. Euphytica, 1994, 79, 245-250.	1.2	6
63	The Arabidopsis MEI1 gene likely encodes a protein with BRCT domains. Sexual Plant Reproduction, 2002, 14, 355-357.	2.2	5
64	Regulation of pollen tube polarity. Plant Signaling and Behavior, 2008, 3, 345-347.	2.4	5
65	Manipulating the cell/air space ratio to optimize photosynthesis. Plant Journal, 2017, 92, 979-980.	5.7	4
66	Ta Ta for now: <i>Thlapsi arvense</i> (pennycress), an emerging model for genetic analyses. Plant Journal, 2018, 96, 1091-1092.	5.7	4
67	Remembrance of stresses past: heat shock factors and histone hypermethylation are key. Plant Journal, 2018, 95, 399-400.	5.7	4
68	<scp>RNA</scp>â€directed <scp>DNA</scp> methylation and seed development: an unexpected difference between <i>Arabidopsis thaliana</i> and <i>Brassica rapa</i>. Plant Journal, 2018, 94, 573-574.	5.7	3
69	Binding sites for pentatricopeptide repeat proteins differentially activate chloroplast transgenes. Plant Journal, 2018, 94, 6-7.	5.7	3
70	Directed evolution of <scp>DGAT</scp>1 to increase triacylglycerol content. Plant Journal, 2017, 92, 165-166.	5.7	2
71	A 3â€dimensional biomechanical model of guard cell mechanics. Plant Journal, 2017, 92, 3-4.	5.7	2
72	Transformation of pollen by particle bombardment. , 1991, , 631-644.		2

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73	Cell-specific cis-natural antisense transcripts (cis-NATs) in the sperm and the pollen vegetative cells of Arabidopsis thaliana. F1000Research, 2018, 7, 93.	1.6	2
74	A Strong Inhibitor of Gene Expression in the 5' Untranslated Region of the Pollen-Specific LAT59 Gene of Tomato. Plant Cell, 1997, 9, 2025.	6.6	1
75	Is there more to plant reproduction?. Trends in Plant Science, 2002, 7, 421.	8.8	1
76	Surprise: The classic <i>white seedling 3</i> mutant in maize lacks plastoquinoneâ€9 but can still make carotenoids. Plant Journal, 2018, 93, 797-798.	5.7	1
77	Unilateral incompatibility is linked to reduced pollen expression of a farnesyl pyrophosphate synthase. Plant Journal, 2018, 93, 415-416.	5.7	1
78	Using <i>Brachypodium distachyon</i> natural populations to uncover genomic regions under selection. Plant Journal, 2018, 96, 485-486.	5.7	1
79	A nonâ€invasive and versatile way to assess plasmodesmatal connections. Plant Journal, 2018, 94, 749-750.	5.7	1
80	Location, location, location: lipid metabolism varies in different parts of the seed. Plant Journal, 2018, 94, 913-914.	5.7	1
81	Polycomb Repressive Complex 1 and links to <scp>RNA</scp> processes in <i>Physcomitrella patens</i>. Plant Journal, 2019, 97, 219-220.	5.7	1
82	Pollen Specificity Elements Reside in 30 bp of the Proximal Promoters of Two Pollen-Expressed Genes. Plant Cell, 1995, 7, 373.	6.6	0
83	Edward H. Coe, Jr.: An Advocate for Green Power. , 1999, , 247-250.		0
84	Discovery of new QTLs underlying hybrid fertility and reproductive isolation in rice. Plant Journal, 2017, 92, 347-348.	5.7	0
85	New tools to assess cell polarity and division in the developing Arabidopsis embryo. Plant Journal, 2018, 93, 961-962.	5.7	0
86	An arbuscular mycorrhizal fungus adjusts its secretome depending on developmental stage and host plant. Plant Journal, 2018, 94, 409-410.	5.7	0
87	Nanoscale imaging of xyloglucan in plant cell walls. Plant Journal, 2018, 93, 209-210.	5.7	0
88	Assessing transcriptional network changes accompanying cell differentiation. Plant Journal, 2018, 94, 213-214.	5.7	0
89	<scp>MEDIATOR</scp>18 modulates viability of root initial cells. Plant Journal, 2018, 96, 893-894.	5.7	0
90	Undegraded peptides in organelles convey toxic signals. Plant Journal, 2018, 96, 703-704.	5.7	0

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91	Altered phenotypes via graftâ€transmitted si<scp>RNA</scp>s. Plant Journal, 2018, 96, 3-4.	5.7	0
92	<scp>mRNA</scp> degradationâ€based biosensors for boron. Plant Journal, 2018, 95, 761-762.	5.7	0
93	Regulation of diurnal growth: phytochrome interacting factor 5 is degraded by the E3 ubiquitin ligase <scp>CUL</scp>4<scp>^{COP}</scp>^{1â€}<scp>^{SPA}</scp>. Plant Journal, 2018, 96, 249-250.	5.7	0
94	Recombinases and <i>rhizogenes</i> for easy gene stacking. Plant Journal, 2018, 95, 571-572.	5.7	0
95	Red fruit, orange fruit, orange fruit, red fruit: genome editing in tomato. Plant Journal, 2018, 95, 3-4.	5.7	0