Jen Sheen

List of Publications by Year
in descending order

110 papers	37,310 citations	9756 73 h-index	25716 108 g-index
136 all docs	136 docs citations	136 times ranked	24869 citing authors

#	Article	IF	Citations
1	Arabidopsis mesophyll protoplasts: a versatile cell system for transient gene expression analysis. Nature Protocols, 2007, 2, 1565-1572.	5.5	4,224
2	MAP kinase signalling cascade in Arabidopsis innate immunity. Nature, 2002, 415, 977-983.	13.7	2,407
3	SUGAR SENSING AND SIGNALING IN PLANTS: Conserved and Novel Mechanisms. Annual Review of Plant Biology, 2006, 57, 675-709.	8.6	1,919
4	Engineered GFP as a vital reporter in plants. Current Biology, 1996, 6, 325-330.	1.8	1,322
5	Multiplex and homologous recombinationâ€"mediated genome editing in Arabidopsis and Nicotiana benthamiana using guide RNA and Cas9. Nature Biotechnology, 2013, 31, 688-691.	9.4	1,280
6	A central integrator of transcription networks in plant stress and energy signalling. Nature, 2007, 448, 938-942.	13.7	1,270
7	In vitro reconstitution of an abscisic acid signalling pathway. Nature, 2009, 462, 660-664.	13.7	1,113
8	Mitogen-activated protein kinase cascades in plants: a new nomenclature. Trends in Plant Science, 2002, 7, 301-308.	4.3	1,080
9	Role of the Arabidopsis Glucose Sensor HXK1 in Nutrient, Light, and Hormonal Signaling. Science, 2003, 300, 332-336.	6.0	1,023
10	Sugar Sensing and Signaling in Plants. Plant Cell, 2002, 14, S185-S205.	3.1	946
11	Two-component circuitry in Arabidopsis cytokinin signal transduction. Nature, 2001, 413, 383-389.	13.7	857
12	A Unique Short-Chain Dehydrogenase/Reductase in Arabidopsis Glucose Signaling and Abscisic Acid Biosynthesis and Functions. Plant Cell, 2002, 14, 2723-2743.	3.1	764
13	Differential innate immune signalling via Ca2+ sensor protein kinases. Nature, 2010, 464, 418-422.	13.7	750
14	Calcium Signaling through Protein Kinases. The Arabidopsis Calcium-Dependent Protein Kinase Gene Family. Plant Physiology, 2002, 129, 469-485.	2.3	722
15	Glucoseâ€"TOR signalling reprograms the transcriptome and activates meristems. Nature, 2013, 496, 181-186.	13.7	649
16	Signal Transduction in Maize and Arabidopsis Mesophyll Protoplasts. Plant Physiology, 2001, 127, 1466-1475.	2.3	621
17	Cytokinin and auxin interaction in root stem-cell specification during early embryogenesis. Nature, 2008, 453, 1094-1097.	13.7	605
18	Sugar and hormone connections. Trends in Plant Science, 2003, 8, 110-116.	4.3	557

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19	Bacterial Effectors Target the Common Signaling Partner BAK1 to Disrupt Multiple MAMP Receptor-Signaling Complexes and Impede Plant Immunity. Cell Host and Microbe, 2008, 4, 17-27.	5.1	498
20	Convergent energy and stress signaling. Trends in Plant Science, 2008, 13, 474-482.	4.3	489
21	CDPKs in immune and stress signaling. Trends in Plant Science, 2013, 18, 30-40.	4.3	487
22	Ancient signals: comparative genomics of plant MAPK and MAPKK gene families. Trends in Plant Science, 2006, 11, 192-198.	4.3	481
23	Differential regulation of EIN3 stability by glucose and ethylene signalling in plants. Nature, 2003, 425, 521-525.	13.7	467
24	Sugars as signaling molecules. Current Opinion in Plant Biology, 1999, 2, 410-418.	3.5	466
25	Dual control of nuclear EIN3 by bifurcate MAPK cascades in C2H4 signalling. Nature, 2008, 451, 789-795.	13.7	466
26	Plant mitogen-activated protein kinase signaling cascades. Current Opinion in Plant Biology, 2001, 4, 392-400.	3.5	461
27	Discovery of nitrateâ€“CPKâ€“NLP signalling in central nutrientâ€“growth networks. Nature, 2017, 545, 311-316.	13.7	425
28	Regulatory Functions of Nuclear Hexokinase1 Complex in Glucose Signaling. Cell, 2006, 127, 579-589.	13.5	398
29	Specific Bacterial Suppressors of MAMP Signaling Upstream of MAPKKK in Arabidopsis Innate Immunity. Cell, 2006, 125, 563-575.	13.5	386
30	Two-Component Signal Transduction Pathways in Arabidopsis. Plant Physiology, 2002, 129, 500-515.	2.3	384
31	Cytokinin-mediated control of leaf longevity by AHK3 through phosphorylation of ARR2 in Arabidopsis. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 814-819.	3.3	382
32	Protein kinase signaling networks in plant innate immunity. Current Opinion in Plant Biology, 2011, 14, 519-529.	3.5	377
33	Green-fluorescent protein as a new vital marker in plant cells. Plant Journal, 1995, 8, 777-784.	2.8	375
34	Analysis of<i>Arabidopsis</i>glucose insensitive mutants,<i>gin5</i>and<i>gin6</i>, reveals a central role of the plant hormone ABA in the regulation of plant vegetative development by sugar. Genes and Development, 2000, 14, 2085-2096.	2.7	356
35	<i>Pseudomonas syringae</i> type III effector AvrRpt2 alters <i>Arabidopsis thaliana</i> auxin physiology. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 20131-20136.	3.3	349
36	The role of hexokinase in plant sugar signal transduction and growth and development. Plant Molecular Biology, 2000, 44, 451-461.	2.0	335

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37	Feedback control of gene expression. Photosynthesis Research, 1994, 39, 427-438.	1.6	320
38	Fumonisin B1â€"Induced Cell Death in Arabidopsis Protoplasts Requires Jasmonate-, Ethylene-, and Salicylate-Dependent Signaling Pathways. Plant Cell, 2000, 12, 1823-1835.	3.1	313
39	Sugar sensing in higher plants. Trends in Plant Science, 1997, 2, 208-214.	4.3	293
40	Involvement of Maize Dof Zinc Finger Proteins in Tissue-Specific and Light-Regulated Gene Expression. Plant Cell, 1998, 10, 75-89.	3.1	277
41	Suppression of auxin signal transduction by a MAPK cascade in higher plants. Nature, 1998, 395, 716-720.	13.7	270
42	Signal transduction in maize and Arabidopsis mesophyll protoplasts. Plant Physiology, 2001, 127, 1466-75.	2.3	264
43	Bifurcation of Arabidopsis NLR Immune Signaling via Ca2+-Dependent Protein Kinases. PLoS Pathogens, 2013, 9, e1003127.	2.1	257
44	Rapamycin and Glucose-Target of Rapamycin (TOR) Protein Signaling in Plants. Journal of Biological Chemistry, 2012, 287, 2836-2842.	1.6	234
45	Dynamic and diverse sugar signaling. Current Opinion in Plant Biology, 2016, 33, 116-125.	3.5	226
46	Emerging connections in the ethylene signaling network. Trends in Plant Science, 2009, 14, 270-279.	4.3	203
47	The Role of Target of Rapamycin Signaling Networks in Plant Growth and Metabolism. Plant Physiology, 2014, 164, 499-512.	2.3	199
48	C4GENE EXPRESSION. Annual Review of Plant Biology, 1999, 50, 187-217.	14.2	197
49	Master regulators in plant glucose signaling networks. Journal of Plant Biology, 2014, 57, 67-79.	0.9	191
50	A potent Cas9-derived gene activator for plant and mammalian cells. Nature Plants, 2017, 3, 930-936.	4.7	187
51	Pathogen-secreted proteases activate a novel plant immune pathway. Nature, 2015, 521, 213-216.	13.7	183
52	TOR signaling in plants: conservation and innovation. Development (Cambridge), 2018, 145, .	1.2	166
53	Advances in Cytokinin Signaling. Science, 2007, 318, 68-69.	6.0	163
54	Elicitation and suppression of microbe-associated molecular pattern-triggered immunity in plant?microbe interactions. Cellular Microbiology, 2007, 9, 1385-1396.	1.1	156

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55	Role of the Rice Hexokinases<i>OsHXK5</i>and<i>OsHXK6</i>as Glucose Sensors Â Â. Plant Physiology, 2009, 149, 745-759.	2.3	155
56	Ancient signals: comparative genomics of green plant CDPKs. Trends in Plant Science, 2014, 19, 79-89.	4.3	152
57	AGROBEST: an efficient Agrobacterium-mediated transient expression method for versatile gene function analyses in Arabidopsis seedlings. Plant Methods, 2014, 10, 19.	1.9	152
58	From The Cover: Expression of an active tobacco mitogen-activated protein kinase kinase kinase enhances freezing tolerance in transgenic maize. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 3298-3303.	3.3	143
59	Sugar Sensing and Signaling. The Arabidopsis Book, 2008, 6, e0117.	0.5	142
60	Novel links in the plant TOR kinase signaling network. Current Opinion in Plant Biology, 2015, 28, 83-91.	3.5	132
61	Functional Analysis of Two Maize cDNAs Encoding T7-like RNA Polymerases. Plant Cell, 1999, 11, 911-926.	3.1	120
62	Expression and evolutionary features of the hexokinase gene family in Arabidopsis. Planta, 2008, 228, 411-425.	1.6	117
63	Molecular identification of phenylalanine ammonia-lyase as a substrate of a specific constitutively active Arabidopsis CDPK expressed in maize protoplasts. FEBS Letters, 2001, 503, 185-188.	1.3	110
64	Comprehensive Protein-Based Artificial MicroRNA Screens for Effective Gene Silencing in Plants. Plant Cell, 2013, 25, 1507-1522.	3.1	110
65	The <i><scp>P</scp>seudomonas syringae</i> effector HopF2 suppresses Arabidopsis immunity by targeting <scp>BAK</scp>1. Plant Journal, 2014, 77, 235-245.	2.8	110
66	Integration of nutrient, energy, light, and hormone signalling via TOR in plants. Journal of Experimental Botany, 2019, 70, 2227-2238.	2.4	108
67	Sugar Sensing in Higher Plants. Plant Cell, 1994, 6, 1665.	3.1	105
68	Default Activation and Nuclear Translocation of the Plant Cellular Energy Sensor SnRK1 Regulate Metabolic Stress Responses and Development. Plant Cell, 2019, 31, 1614-1632.	3.1	104
69	Protocol: a rapid and economical procedure for purification of plasmid or plant DNA with diverse applications in plant biology. Plant Methods, 2010, 6, 1.	1.9	91
70	TOR and RPS6 transmit light signals to enhance protein translation in deetiolating <i>Arabidopsis</i> seedlings. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 12823-12828.	3.3	85
71	The Nâ€terminal region of <i>Pseudomonas</i> type III effector AvrPtoB elicits Ptoâ€dependent immunity and has two distinct virulence determinants. Plant Journal, 2007, 52, 595-614.	2.8	81
72	Phosphorelay and Transcription Control in Cytokinin Signal Transduction. Science, 2002, 296, 1650-1652.	6.0	80

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73	Introduction of Plasmid DNA into Cells. , 2001, Chapter 1, Unit1.8.		79
74	Intercepting Host MAPK Signaling Cascades by Bacterial Type III Effectors. Cell Host and Microbe, 2007, 1, 167-174.	5.1	77
75	The hybrid Fourâ€<scp>CBS</scp>â€Domain <scp>KIN</scp>Î²Î³ subunit functions as the canonical Î³ subunit of the plant energy sensor Sn<scp>RK</scp>1. Plant Journal, 2013, 75, 11-25.	2.8	77
76	The Use of Protoplasts to Study Innate Immune Responses. , 2007, 354, 1-10.		76
77	Stem-cell-triggered immunity through CLV3pâ€"FLS2 signalling. Nature, 2011, 473, 376-379.	13.7	72
78	Low Glucose Uncouples Hexokinase1-Dependent Sugar Signaling from Stress and Defense Hormone Abscisic Acid and C2H4 Responses in Arabidopsis. Plant Physiology, 2010, 152, 1180-1182.	2.3	71
79	Dynamic Nutrient Signaling Networks in Plants. Annual Review of Cell and Developmental Biology, 2021, 37, 341-367.	4.0	67
80	Maize C4 photosynthesis involves differential regulation of phosphoenolpyruvate carboxylase genes.. Plant Journal, 1992, 2, 221-232.	2.8	65
81	<i>Arabidopsis</i> Cytokinin Signaling Pathway. Science's STKE: Signal Transduction Knowledge Environment, 2007, 2007, cm5.	4.1	63
82	Noncanonical ATG8â€"ABS3 interaction controls senescence in plants. Nature Plants, 2019, 5, 212-224.	4.7	60
83	Mesophyll-specific, light and metabolic regulation of the C4 PPCZm1 promoter in transgenic maize. Plant Molecular Biology, 2001, 45, 1-15.	2.0	46
84	Dissection of abscisic acid signal transduction pathways in barley aleurone layers. Plant Molecular Biology, 2001, 47, 437-448.	2.0	45
85	Epitope-tagged protein-based artificial miRNA screens for optimized gene silencing in plants. Nature Protocols, 2014, 9, 939-949.	5.5	45
86	Primary nitrate responses mediated by calcium signalling and diverse protein phosphorylation. Journal of Experimental Botany, 2020, 71, 4428-4441.	2.4	45
87	Molecular Mechanisms Underlying the Differential Expression of Maize Pyruvate, Orthophosphate Dikinase Genes. Plant Cell, 1991, 3, 225.	3.1	44
88	Plant sugar sensing and signaling â€" a complex reality. Trends in Plant Science, 1999, 4, 250.	4.3	42
89	Cas9-Based Genome Editing in Arabidopsis and Tobacco. Methods in Enzymology, 2014, 546, 459-472.	0.4	42
90	Moving beyond translation: Glucose-TOR signaling in the transcriptional control of cell cycle. Cell Cycle, 2013, 12, 1989-1990.	1.3	41

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91	Maize C4 photosynthesis involves differential regulation of phosphoenolpyruvate carboxylase genes. Plant Journal, 1992, 2, 221-232.	2.8	39
92	DNA-free CRISPR-Cas9 gene editing of wild tetraploid tomato <i>Solanum peruvianum</i> using protoplast regeneration. Plant Physiology, 2022, 188, 1917-1930.	2.3	39
93	Model-driven discovery of calcium-related protein-phosphatase inhibition in plant guard cell signaling. PLoS Computational Biology, 2019, 15, e1007429.	1.5	34
94	Mitogen-activated protein kinases MPK3 and MPK6 are required for stem cell maintenance in the Arabidopsis shoot apical meristem. Plant Cell Reports, 2019, 38, 311-319.	2.8	31
95	Phosphorylation of d-allose by hexokinase involved in regulation of OsABF1 expression for growth inhibition in Oryza sativa L.. Planta, 2013, 237, 1379-1391.	1.6	28
96	Involvement of Maize Dof Zinc Finger Proteins in Tissue-Specific and Light-Regulated Gene Expression. Plant Cell, 1998, 10, 75.	3.1	21
97	Glucose Signaling Through Nuclear Hexokinase1 Complex inArabidopsis. Plant Signaling and Behavior, 2007, 2, 123-124.	1.2	18
98	Transient Expression Assays for Quantifying Signaling Output. Methods in Molecular Biology, 2011, 876, 195-206.	0.4	18
99	Discover and Connect Cellular Signaling. Plant Physiology, 2010, 154, 562-566.	2.3	17
100	Endless Hide-and-Seek: Dynamic Co-evolution in Plant-Bacterium Warfare. Journal of Integrative Plant Biology, 2007, 49, 105-111.	4.1	15
101	Dual CLAVATA3 peptides in Arabidopsis shoot stem cell signaling. Journal of Plant Biology, 2017, 60, 506-512.	0.9	15
102	Complexity in Differential Peptideâ€“Receptor Signaling: Response to Segonzac et al. and Mueller et al. Commentaries. Plant Cell, 2012, 24, 3177-3185.	3.1	14
103	Functional Analysis of Two Maize cDNAs Encoding T7-Like RNA Polymerases. Plant Cell, 1999, 11, 911.	3.1	13
104	Nuclear Actions in Innate Immune Signaling. Cell, 2007, 128, 821-823.	13.5	12
105	A Versatile and Efficient Plant Protoplast Platform for Genome Editing by Cas9 RNPs. Frontiers in Genome Editing, 2021, 3, 719190.	2.7	12
106	TOR kinase, a GPS in the complex nutrient and hormonal signaling networks to guide plant growth and development. Journal of Experimental Botany, 2022, 73, 7041-7054.	2.4	12
107	Maize rbcS Promoter Activity Depends on Sequence Elements Not Found in Dicot rbcS Promoters. Plant Cell, 1991, 3, 997.	3.1	11
108	Efficient and Economical Targeted Insertion in Plant Genomes via Protoplast Regeneration. CRISPR Journal, 2021, 4, 752-760.	1.4	9

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109	MAPK Assays in Arabidopsis MAMP-PRR Signal Transduction. Methods in Molecular Biology, 2017, 1578, 155-166.	0.4	5
110	The Cytokinin Side Chain Commands Shooting. Developmental Cell, 2013, 27, 371-372.	3.1	2