Jen Sheen

List of Publications by Year in Descending Order

108 papers	29,678 citations	69 h-index	136 g-index
136 ext. papers	34,264 ext. citations	15.5 avg, IF	7.32 L-index

#	Paper	IF	Citations
108	DNA-free CRISPR-Cas9 gene editing of wild tetraploid tomato Solanum peruvianum using protoplast regeneration.. *Plant Physiology*, **2022**,	6.6	5
107	Dynamic Nutrient Signaling Networks in Plants. *Annual Review of Cell and Developmental Biology*, **2021**, 37, 341-367	12.6	8
106	Efficient and Economical Targeted Insertion in Plant Genomes via Protoplast Regeneration. *CRISPR Journal*, **2021**, 4, 752-760	2.5	3
105	A Versatile and Efficient Plant Protoplast Platform for Genome Editing by Cas9 RNPs.. *Frontiers in Genome Editing*, **2021**, 3, 719190	2.5	2
104	Primary nitrate responses mediated by calcium signalling and diverse protein phosphorylation. *Journal of Experimental Botany*, **2020**, 71, 4428-4441	7	15
103	Model-driven discovery of calcium-related protein-phosphatase inhibition in plant guard cell signaling. *PLoS Computational Biology*, **2019**, 15, e1007429	5	10
102	Noncanonical ATG8-ABS3 interaction controls senescence in plants. *Nature Plants*, **2019**, 5, 212-224	11.5	30
101	Integration of nutrient, energy, light, and hormone signalling via TOR in plants. *Journal of Experimental Botany*, **2019**, 70, 2227-2238	7	54
100	Default Activation and Nuclear Translocation of the Plant Cellular Energy Sensor SnRK1 Regulate Metabolic Stress Responses and Development. *Plant Cell*, **2019**, 31, 1614-1632	11.6	43
99	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	5.1	20
98	TOR signaling in plants: conservation and innovation. *Development (Cambridge)*, **2018**, 145,	6.6	95
97	TOR and RPS6 transmit light signals to enhance protein translation in deetiolating seedlings. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 12823-12828	11.5	45
96	MAPK Assays in Arabidopsis MAMP-PRR Signal Transduction. *Methods in Molecular Biology*, **2017**, 1578, 155-166	1.4	2
95	Discovery of nitrate-CPK-NLP signalling in central nutrient-growth networks. *Nature*, **2017**, 545, 311-316	50.4	245
94	Dual CLAVATA3 Peptides in Arabidopsis Shoot Stem Cell Signaling. *Journal of Plant Biology*, **2017**, 60, 506-512	3	9
93	A potent Cas9-derived gene activator for plant and mammalian cells. *Nature Plants*, **2017**, 3, 930-936	11.5	117
92	Dynamic and diverse sugar signaling. *Current Opinion in Plant Biology*, **2016**, 33, 116-125	9.9	146

91	Pathogen-secreted proteases activate a novel plant immune pathway. *Nature*, **2015**, 521, 213-6	50.4	138
90	Novel links in the plant TOR kinase signaling network. *Current Opinion in Plant Biology*, **2015**, 28, 83-91	9.9	91
89	Epitope-tagged protein-based artificial miRNA screens for optimized gene silencing in plants. *Nature Protocols*, **2014**, 9, 939-49	18.8	41
88	Master Regulators in Plant Glucose Signaling Networks. *Journal of Plant Biology*, **2014**, 57, 67-79	3	151
87	Ancient signals: comparative genomics of green plant CDPKs. *Trends in Plant Science*, **2014**, 19, 79-89	13.1	106
86	AGROBEST: an efficient Agrobacterium-mediated transient expression method for versatile gene function analyses in Arabidopsis seedlings. *Plant Methods*, **2014**, 10, 19	5.8	115
85	Cas9-based genome editing in Arabidopsis and tobacco. *Methods in Enzymology*, **2014**, 546, 459-72	1.7	34
84	The Pseudomonas syringae effector HopF2 suppresses Arabidopsis immunity by targeting BAK1. *Plant Journal*, **2014**, 77, 235-45	6.9	76
83	The role of target of rapamycin signaling networks in plant growth and metabolism. *Plant Physiology*, **2014**, 164, 499-512	6.6	152
82	Multiplex and homologous recombination-mediated genome editing in Arabidopsis and Nicotiana benthamiana using guide RNA and Cas9. *Nature Biotechnology*, **2013**, 31, 688-91	44.5	1001
81	CDPKs in immune and stress signaling. *Trends in Plant Science*, **2013**, 18, 30-40	13.1	358
80	The cytokinin side chain commands shooting. *Developmental Cell*, **2013**, 27, 371-2	10.2	1
79	The hybrid four-CBS-domain KIN□ subunit functions as the canonical □ subunit of the plant energy sensor SnRK1. *Plant Journal*, **2013**, 75, 11-25	6.9	59
78	Glucose-TOR signalling reprograms the transcriptome and activates meristems. *Nature*, **2013**, 496, 181-6	50.4	430
77	Phosphorylation of D-allose by hexokinase involved in regulation of OsABF1 expression for growth inhibition in Oryza sativa L. *Planta*, **2013**, 237, 1379-91	4.7	19
76	Comprehensive protein-based artificial microRNA screens for effective gene silencing in plants. *Plant Cell*, **2013**, 25, 1507-22	11.6	94
75	Bifurcation of Arabidopsis NLR immune signaling via Ca□+-dependent protein kinases. *PLoS Pathogens*, **2013**, 9, e1003127	7.6	193
74	Rapamycin and glucose-target of rapamycin (TOR) protein signaling in plants. *Journal of Biological Chemistry*, **2012**, 287, 2836-42	5.4	181

73	Transient expression assays for quantifying signaling output. *Methods in Molecular Biology*, **2012**, 876, 195-206	1.4	15
72	Complexity in differential peptide-receptor signaling: response to Segonzac et Al. and Mueller et Al. commentaries. *Plant Cell*, **2012**, 24, 3177-85	11.6	10
71	Stem-cell-triggered immunity through CLV3p-FLS2 signalling. *Nature*, **2011**, 473, 376-9	50.4	63
70	Protein kinase signaling networks in plant innate immunity. *Current Opinion in Plant Biology*, **2011**, 14, 519-29	9.9	310
69	Differential innate immune signalling via Ca(2+) sensor protein kinases. *Nature*, **2010**, 464, 418-22	50.4	580
68	Discover and connect cellular signaling. *Plant Physiology*, **2010**, 154, 562-6	6.6	15
67	Low glucose uncouples hexokinase1-dependent sugar signaling from stress and defense hormone abscisic acid and C2H4 responses in Arabidopsis. *Plant Physiology*, **2010**, 152, 1180-2	6.6	63
66	Protocol: a rapid and economical procedure for purification of plasmid or plant DNA with diverse applications in plant biology. *Plant Methods*, **2010**, 6, 1	5.8	60
65	Role of the rice hexokinases OsHXK5 and OsHXK6 as glucose sensors. *Plant Physiology*, **2009**, 149, 745-56	6.6	113
64	In vitro reconstitution of an abscisic acid signalling pathway. *Nature*, **2009**, 462, 660-4	50.4	833
63	Emerging connections in the ethylene signaling network. *Trends in Plant Science*, **2009**, 14, 270-9	13.1	174
62	Dual control of nuclear EIN3 by bifurcate MAPK cascades in C2H4 signalling. *Nature*, **2008**, 451, 789-95	50.4	392
61	Cytokinin and auxin interaction in root stem-cell specification during early embryogenesis. *Nature*, **2008**, 453, 1094-7	50.4	491
60	Convergent energy and stress signaling. *Trends in Plant Science*, **2008**, 13, 474-82	13.1	419
59	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	23.4	410
58	Sugar sensing and signaling. *The Arabidopsis Book*, **2008**, 6, e0117	3	109
57	Expression and evolutionary features of the hexokinase gene family in Arabidopsis. *Planta*, **2008**, 228, 411-25	4.7	84
56	Arabidopsis mesophyll protoplasts: a versatile cell system for transient gene expression analysis. *Nature Protocols*, **2007**, 2, 1565-72	18.8	2947

55	A central integrator of transcription networks in plant stress and energy signalling. *Nature*, **2007**, 448, 938-42	50.4	974
54	Elicitation and suppression of microbe-associated molecular pattern-triggered immunity in plant-microbe interactions. *Cellular Microbiology*, **2007**, 9, 1385-96	3.9	136
53	The N-terminal region of Pseudomonas type III effector AvrPtoB elicits Pto-dependent immunity and has two distinct virulence determinants. *Plant Journal*, **2007**, 52, 595-614	6.9	69
52	Endless Hide-and-Seek: Dynamic Co-evolution in Plant-Bacterium Warfare. *Journal of Integrative Plant Biology*, **2007**, 49, 105-111	8.3	14
51	The use of protoplasts to study innate immune responses. *Methods in Molecular Biology*, **2007**, 354, 1-9	1.4	72
50	Glucose signaling through nuclear hexokinase1 complex in Arabidopsis. *Plant Signaling and Behavior*, **2007**, 2, 123-4	2.5	14
49	Pseudomonas syringae type III effector AvrRpt2 alters Arabidopsis thaliana auxin physiology. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 20131-6	11.5	276
48	Nuclear actions in innate immune signaling. *Cell*, **2007**, 128, 821-3	56.2	11
47	Intercepting host MAPK signaling cascades by bacterial type III effectors. *Cell Host and Microbe*, **2007**, 1, 167-74	23.4	70
46	Advances in cytokinin signaling. *Science*, **2007**, 318, 68-9	33.3	137
45	Arabidopsis cytokinin signaling pathway. *Sciences STKE: Signal Transduction Knowledge Environment*, **2007**, 2007, cm5		54
44	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, 814-9	11.5	333
43	Specific bacterial suppressors of MAMP signaling upstream of MAPKKK in Arabidopsis innate immunity. *Cell*, **2006**, 125, 563-75	56.2	341
42	Regulatory functions of nuclear hexokinase1 complex in glucose signaling. *Cell*, **2006**, 127, 579-89	56.2	330
41	Sugar sensing and signaling in plants: conserved and novel mechanisms. *Annual Review of Plant Biology*, **2006**, 57, 675-709	30.7	1574
40	Ancient signals: comparative genomics of plant MAPK and MAPKK gene families. *Trends in Plant Science*, **2006**, 11, 192-8	13.1	379
39	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, 3298-303	11.5	119
38	Differential regulation of EIN3 stability by glucose and ethylene signalling in plants. *Nature*, **2003**, 425, 521-5	50.4	410

37	Role of the Arabidopsis glucose sensor HXK1 in nutrient, light, and hormonal signaling. *Science*, **2003**, 300, 332-6	33.3	874
36	Sugar and hormone connections. *Trends in Plant Science*, **2003**, 8, 110-6	13.1	498
35	MAP kinase signalling cascade in Arabidopsis innate immunity. *Nature*, **2002**, 415, 977-83	50.4	1990
34	Two-component signal transduction pathways in Arabidopsis. *Plant Physiology*, **2002**, 129, 500-15	6.6	327
33	Calcium signaling through protein kinases. The Arabidopsis calcium-dependent protein kinase gene family. *Plant Physiology*, **2002**, 129, 469-85	6.6	630
32	Sugar sensing and signaling in plants. *Plant Cell*, **2002**, 14 Suppl, S185-205	11.6	794
31	A unique short-chain dehydrogenase/reductase in Arabidopsis glucose signaling and abscisic acid biosynthesis and functions. *Plant Cell*, **2002**, 14, 2723-43	11.6	653
30	Phosphorelay and transcription control in cytokinin signal transduction. *Science*, **2002**, 296, 1650-2	33.3	75
29	Mitogen-activated protein kinase cascades in plants: a new nomenclature. *Trends in Plant Science*, **2002**, 7, 301-8	13.1	891
28	Dissection of abscisic acid signal transduction pathways in barley aleurone layers. *Plant Molecular Biology*, **2001**, 47, 437-48	4.6	41
27	Mesophyll-specific, light and metabolic regulation of the C4 PPCZm1 promoter in transgenic maize. *Plant Molecular Biology*, **2001**, 45, 1-15	4.6	40
26	Two-component circuitry in Arabidopsis cytokinin signal transduction. *Nature*, **2001**, 413, 383-9	50.4	736
25	Plant mitogen-activated protein kinase signaling cascades. *Current Opinion in Plant Biology*, **2001**, 4, 392-400	9.9	389
24	Signal Transduction in Maize and Arabidopsis Mesophyll Protoplasts. *Plant Physiology*, **2001**, 127, 1466-1475	6.6	515
23	Introduction of plasmid DNA into cells. *Current Protocols in Molecular Biology*, **2001**, Chapter 1, Unit1.8	2.9	63
22	Molecular identification of phenylalanine ammonia-lyase as a substrate of a specific constitutively active Arabidopsis CDPK expressed in maize protoplasts. *FEBS Letters*, **2001**, 503, 185-8	3.8	85
21	Signal transduction in maize and Arabidopsis mesophyll protoplasts. *Plant Physiology*, **2001**, 127, 1466-75	6.6	243
20	The role of hexokinase in plant sugar signal transduction and growth and development. *Plant Molecular Biology*, **2000**, 44, 451-61	4.6	266

19	Fumonisin B1-induced cell death in arabidopsis protoplasts requires jasmonate-, ethylene-, and salicylate-dependent signaling pathways. *Plant Cell*, **2000**, 12, 1823-36	11.6	293
18	Analysis of Arabidopsis glucose insensitive mutants, gin5 and gin6, 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	12.6	234
17	Functional analysis of two maize cDNAs encoding T7-like RNA polymerases. *Plant Cell*, **1999**, 11, 911-26	11.6	112
16	Sugars as signaling molecules. *Current Opinion in Plant Biology*, **1999**, 2, 410-8	9.9	412
15	Plant sugar sensing and signaling - a complex reality. *Trends in Plant Science*, **1999**, 4, 250	13.1	33
14	C4 GENE EXPRESSION. *Annual Review of Plant Biology*, **1999**, 50, 187-217		178
13	Functional Analysis of Two Maize cDNAs Encoding T7-Like RNA Polymerases. *Plant Cell*, **1999**, 11, 911	11.6	1
12	Suppression of auxin signal transduction by a MAPK cascade in higher plants. *Nature*, **1998**, 395, 716-20	50.4	235
11	Involvement of maize Dof zinc finger proteins in tissue-specific and light-regulated gene expression. *Plant Cell*, **1998**, 10, 75-89	11.6	244
10	Involvement of Maize Dof Zinc Finger Proteins in Tissue-Specific and Light-Regulated Gene Expression. *Plant Cell*, **1998**, 10, 75	11.6	2
9	Sugar sensing in higher plants. *Trends in Plant Science*, **1997**, 2, 208-214	13.1	273
8	Engineered GFP as a vital reporter in plants. *Current Biology*, **1996**, 6, 325-30	6.3	1226
7	Green-fluorescent protein as a new vital marker in plant cells. *Plant Journal*, **1995**, 8, 777-84	6.9	345
6	Feedback control of gene expression. *Photosynthesis Research*, **1994**, 39, 427-38	3.7	284
5	Sugar Sensing in Higher Plants. *Plant Cell*, **1994**, 6, 1665	11.6	63
4	Maize C4 photosynthesis involves differential regulation of phosphoenolpyruvate carboxylase genes. *Plant Journal*, **1992**, 2, 221-32	6.9	59
3	Maize C4 photosynthesis involves differential regulation of phosphoenolpyruvate carboxylase genes. *Plant Journal*, **1992**, 2, 221-232	6.9	31
2	Maize rbcS Promoter Activity Depends on Sequence Elements Not Found in Dicot rbcS Promoters. *Plant Cell*, **1991**, 3, 997	11.6	4

1	Molecular Mechanisms Underlying the Differential Expression of Maize Pyruvate, Orthophosphate Dikinase Genes. *Plant Cell*, **1991**, 3, 225	11.6	16