Regina Feil

List of Publications by Year
in descending order

89 papers	8,277 citations	36303 51 h-index	49909 87 g-index
99 all docs	99 docs citations	99 times ranked	7943 citing authors

#	Article	IF	Citations
1	Recruitment of an ancient branching program to suppress carpel development in maize flowers. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	18
2	Rising rates of starch degradation during daytime and trehalose 6-phosphate optimize carbon availability. Plant Physiology, 2022, 189, 1976-2000.	4.8	18
3	Sucrose synthases are not involved in starch synthesis in Arabidopsis leaves. Nature Plants, 2022, 8, 574-582.	9.3	21
4	Trehalose 6â€phosphate promotes seed filling by activating auxin biosynthesis. New Phytologist, 2021, 229, 1553-1565.	7.3	67
5	Installation of C₄ photosynthetic pathway enzymes in rice using a single construct. Plant Biotechnology Journal, 2021, 19, 575-588.	8.3	78
6	Regulation of shoot branching in arabidopsis by trehalose 6â€phosphate. New Phytologist, 2021, 229, 2135-2151.	7.3	95
7	Phytochromes control metabolic flux, and their action at the seedling stage determines adult plant biomass. Journal of Experimental Botany, 2021, 72, 3263-3278.	4.8	6
8	Expression of a Bacterial Trehalose-6-phosphate Synthase otsA Increases Oil Accumulation in Plant Seeds and Vegetative Tissues. Frontiers in Plant Science, 2021, 12, 656962.	3.6	12
9	Impact of the SnRK1 protein kinase on sucrose homeostasis and the transcriptome during the diel cycle. Plant Physiology, 2021, 187, 1357-1373.	4.8	39
10	Perturbations in plant energy homeostasis prime lateral root initiation via SnRK1-bZIP63-ARF19 signaling. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	34
11	Restriction of cytosolic sucrose hydrolysis profoundly alters development, metabolism, and gene expression in Arabidopsis roots. Journal of Experimental Botany, 2021, 72, 1850-1863.	4.8	14
12	Genetic manipulation of trehaloseâ€6â€phosphate synthase results in changes in the soluble sugar profile in transgenic sugarcane stems. Plant Direct, 2021, 5, e358.	1.9	12
13	AKINÎ²1, a regulatory subunit of SnRK1, regulates organic acid metabolism and acts as a global regulator of genes involved in carbon, lipid and nitrogen metabolism. Journal of Experimental Botany, 2020, 71, 1010-1028.	4.8	11
14	Carbon starvation reduces carbohydrate and anthocyanin accumulation in redâ€fleshed fruit via trehalose 6â€phosphate and MYB27. Plant, Cell and Environment, 2020, 43, 819-835.	5.7	33
15	Proteomic and metabolomic profiling underlines the stageâ€and timeâ€dependent effects of high temperature on grape berry metabolism. Journal of Integrative Plant Biology, 2020, 62, 1132-1158.	8.5	45
16	The trehalose 6â€phosphate pathway impacts vegetative phase change in <i>Arabidopsis thaliana</i>. Plant Journal, 2020, 104, 768-780.	5.7	45
17	Functional Features of TREHALOSE-6-PHOSPHATE SYNTHASE1, an Essential Enzyme in Arabidopsis[OPEN]. Plant Cell, 2020, 32, 1949-1972.	6.6	69
18	Protein Phosphorylation Dynamics Under Carbon/Nitrogen-Nutrient Stress and Identification of a Cell Death-Related Receptor-Like Kinase in Arabidopsis. Frontiers in Plant Science, 2020, 11, 377.	3.6	28

#	Article	IF	Citations
19	Hierarchical clustering reveals unique features in the diel dynamics of metabolites in the CAM orchid Phalaenopsis. Journal of Experimental Botany, 2019, 70, 3269-3281.	4.8	11
20	Relationship between irradiance and levels of Calvinâ€“Benson cycle and other intermediates in the model eudicot Arabidopsis and the model monocot rice. Journal of Experimental Botany, 2019, 70, 5809-5825.	4.8	23
21	The regulatory landscape of a core maize domestication module controlling bud dormancy and growth repression. Nature Communications, 2019, 10, 3810.	12.8	116
22	Nitrate acts at the <i>Arabidopsis thaliana</i> shoot apical meristem to regulate flowering time. New Phytologist, 2019, 223, 814-827.	7.3	52
23	Mal de RÃo Cuarto virus infection causes hormone imbalance and sugar accumulation in wheat leaves. BMC Plant Biology, 2019, 19, 112.	3.6	18
24	Control of meristem determinacy by trehalose 6-phosphate phosphatases is uncoupled from enzymatic activity. Nature Plants, 2019, 5, 352-357.	9.3	70
25	Multiple circadian clock outputs regulate diel turnover of carbon and nitrogen reserves. Plant, Cell and Environment, 2019, 42, 549-573.	5.7	49
26	The Role of Abscisic Acid Signaling in Maintaining the Metabolic Balance Required for Arabidopsis Growth under Nonstress Conditions. Plant Cell, 2019, 31, 84-105.	6.6	84
27	Doseâ€dependent interactions between two loci trigger altered shoot growth in BGâ€5ÂÃ—ÂKrotzenburgâ€0 (Kroâ€0) hybrids of <i>Arabidopsis thaliana</i>. New Phytologist, 2018, 217, 392-406.	7.3	12
28	Feedback regulation by trehalose 6â€phosphate slows down starch mobilization below the rate that would exhaust starch reserves at dawn in Arabidopsis leaves. Plant Direct, 2018, 2, e00078.	1.9	35
29	Trehalose 6-Phosphate Positively Regulates Fatty Acid Synthesis by Stabilizing WRINKLED1. Plant Cell, 2018, 30, 2616-2627.	6.6	156
30	Quantification of Soluble Sugars and Sugar Alcohols by LC-MS/MS. Methods in Molecular Biology, 2018, 1778, 87-100.	0.9	14
31	Response of Arabidopsis primary metabolism and circadian clock to low night temperature in a natural light environment. Journal of Experimental Botany, 2018, 69, 4881-4895.	4.8	73
32	The signal metabolite trehaloseâ€6â€phosphate inhibits the sucrolytic activity of sucrose synthase from developing castor beans. FEBS Letters, 2018, 592, 2525-2532.	2.8	26
33	<i>Xanthomonas citri</i> ssp. <i>citri</i> requires the outer membrane porin OprB for maximal virulence and biofilm formation. Molecular Plant Pathology, 2017, 18, 720-733.	4.2	17
34	Trehalose 6-phosphate signal is closely related to sorbitol in apple fruit (<i>Malus domestica</i>) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 1	1.2	17
35	Starch Synthase 4 and Plastidal Phosphorylase Differentially Affect Starch Granule Number and Morphology. Plant Physiology, 2017, 174, 73-85.	4.8	41
36	Getting back to nature: a reality check for experiments in controlled environments. Journal of Experimental Botany, 2017, 68, 4463-4477.	4.8	89

#	Article	IF	Citations
37	Trehalose 6â€phosphate is involved in triggering axillary bud outgrowth in garden pea (<i>Pisum) Tj ETQq1 1 0.784314 rgBT /Overloc	5.7	147
38	Leaf Starch Turnover Occurs in Long Days and in Falling Light at the End of the Day. Plant Physiology, 2017, 174, 2199-2212.	4.8	80
39	The role of Tre6P and SnRK1 in maize early kernel development and events leading to stress-induced kernel abortion. BMC Plant Biology, 2017, 17, 74.	3.6	53
40	Trehalose 6â€"phosphate coordinates organic and amino acid metabolism with carbon availability. Plant Journal, 2016, 85, 410-423.	5.7	176
41	Light-dependent activation of phospho<i>enol</i>pyruvate carboxylase by reversible phosphorylation in cluster roots of white lupin plants: diurnal control in response to photosynthate supply. Annals of Botany, 2016, 118, 637-643.	2.9	11
42	FUM2, a Cytosolic Fumarase, Is Essential for Acclimation to Low Temperature in <i>Arabidopsis thaliana</i>. Plant Physiology, 2016, 172, 118-127.	4.8	48
43	The interplay between carbon availability and growth in different zones of the growing maize leaf. Plant Physiology, 2016, 172, pp.00994.2016.	4.8	24
44	Metabolic and Transcriptional Analysis of Durum Wheat Responses to Elevated CO2at Low and High Nitrate Supply. Plant and Cell Physiology, 2016, 57, 2133-2146.	3.1	67
45	Time-Series Transcriptomics Reveals That <i>AGAMOUS-LIKE22</i> Affects Primary Metabolism and Developmental Processes in Drought-Stressed Arabidopsis. Plant Cell, 2016, 28, 345-366.	6.6	92
46	Acclimation of metabolism to light in <scp><i>A</i></scp><i>rabidopsis thaliana</i>: the glucose 6â€phosphate/phosphate translocator <scp>GPT</scp>2 directs metabolic acclimation. Plant, Cell and Environment, 2015, 38, 1404-1417.	5.7	79
47	The dual nature of trehalose in citrus canker disease: a virulence factor for Xanthomonas citri subsp. citri and a trigger for plant defence responses. Journal of Experimental Botany, 2015, 66, 2795-2811.	4.8	47
48	Trehalose-6-phosphate synthase 1 is not the only active TPS in <i>Arabidopsis thaliana</i>. Biochemical Journal, 2015, 466, 283-290.	3.7	77
49	Transcription Factor Arabidopsis Activating Factor1 Integrates Carbon Starvation Responses with Trehalose Metabolism. Plant Physiology, 2015, 169, 379-390.	4.8	62
50	The trehalose pathway in maize: conservation and gene regulation in response to the diurnal cycle and extended darkness. Journal of Experimental Botany, 2014, 65, 5959-5973.	4.8	52
51	Genetic Evidence That Chain Length and Branch Point Distributions Are Linked Determinants of Starch Granule Formation in Arabidopsis Â Â. Plant Physiology, 2014, 165, 1457-1474.	4.8	46
52	Regulatory Properties of ADP Glucose Pyrophosphorylase Are Required for Adjustment of Leaf Starch Synthesis in Different Photoperiods Â Â. Plant Physiology, 2014, 166, 1733-1747.	4.8	78
53	The sucroseâ€"trehalose 6-phosphate (Tre6P) nexus: specificity and mechanisms of sucrose signalling by Tre6P. Journal of Experimental Botany, 2014, 65, 1051-1068.	4.8	326
54	Arabidopsis Coordinates the Diurnal Regulation of Carbon Allocation and Growth across a Wide Range of Photoperiods. Molecular Plant, 2014, 7, 137-155.	8.3	244

#	Article	IF	Citations
55	Dissecting the Subcellular Compartmentation of Proteins and Metabolites in Arabidopsis Leaves Using Non-aqueous Fractionation. Molecular and Cellular Proteomics, 2014, 13, 2246-2259.	3.8	58
56	A fluorometric assay for trehalose in the picomole range. Plant Methods, 2013, 9, 21.	4.3	59
57	Regulation of Flowering by Trehalose-6-Phosphate Signaling in <i>Arabidopsis thaliana</i>. Science, 2013, 339, 704-707.	12.6	571
58	Feedback Inhibition of Starch Degradation in Arabidopsis Leaves Mediated by Trehalose 6-Phosphate Â Â. Plant Physiology, 2013, 163, 1142-1163.	4.8	167
59	Overexpression of the Trehalase Gene <i>AtTRE1</i> Leads to Increased Drought Stress Tolerance in Arabidopsis and Is Involved in Abscisic Acid-Induced Stomatal Closure Â Â. Plant Physiology, 2013, 161, 1158-1171.	4.8	117
60	Metabolic profiling reveals coordinated switches in primary carbohydrate metabolism in grape berry (Vitis vinifera L.), a non-climacteric fleshy fruit. Journal of Experimental Botany, 2013, 64, 1345-1355.	4.8	125
61	Loss of Starch Granule Initiation Has a Deleterious Effect on the Growth of Arabidopsis Plants Due to an Accumulation of ADP-Glucose Â. Plant Physiology, 2013, 163, 75-85.	4.8	68
62	Starch synthase 4 is essential for coordination of starch granule formation with chloroplast division during Arabidopsis leaf expansion. New Phytologist, 2013, 200, 1064-1075.	7.3	93
63	Metabolic Fluxes in an Illuminated <i>Arabidopsis</i> Rosette Â. Plant Cell, 2013, 25, 694-714.	6.6	303
64	Misexpression of a Chloroplast Aspartyl Protease Leads to Severe Growth Defects and Alters Carbohydrate Metabolism in Arabidopsis Â Â. Plant Physiology, 2012, 160, 1237-1250.	4.8	34
65	Expansive Evolution of the TREHALOSE-6-PHOSPHATE PHOSPHATASE Gene Family in Arabidopsis Â. Plant Physiology, 2012, 160, 884-896.	4.8	120
66	Trehalose metabolism is activated upon chilling in grapevine and might participate in Burkholderia phytofirmans induced chilling tolerance. Planta, 2012, 236, 355-369.	3.2	69
67	<i>Burkholderia phytofirmans</i>PsJN Acclimates Grapevine to Cold by Modulating Carbohydrate Metabolism. Molecular Plant-Microbe Interactions, 2012, 25, 496-504.	2.6	199
68	Mutagenesis of cysteineâ€ƒ81 prevents dimerization of the APS1 subunit of ADPâ€glucose pyrophosphorylase and alters diurnal starch turnover in <i>Arabidopsis thaliana</i> leaves. Plant Journal, 2012, 70, 231-242.	5.7	75
69	Fructokinase is required for carbon partitioning to cellulose in aspen wood. Plant Journal, 2012, 70, 967-977.	5.7	64
70	Seed-specific elevation of non-symbiotic hemoglobin AtHb1: beneficial effects and underlying molecular networks in Arabidopsis thaliana. BMC Plant Biology, 2011, 11, 48.	3.6	53
71	RETINOBLASTOMA-RELATED PROTEIN controls the transition to autotrophic plant development. Development (Cambridge), 2011, 138, 2977-2986.	2.5	53
72	Sucrose non-fermenting kinase 1 (SnRK1) coordinates metabolic and hormonal signals during pea cotyledon growth and differentiation. Plant Journal, 2010, 61, 324-338.	5.7	122

#	Article	IF	Citations
73	AtTPS1-mediated trehalose 6-phosphate synthesis is essential for embryogenic and vegetative growth and responsiveness to ABA in germinating seeds and stomatal guard cells. Plant Journal, 2010, 64, no-no.	5.7	173
74	Use of reverseâ€phase liquid chromatography, linked to tandem mass spectrometry, to profile the Calvin cycle and other metabolic intermediates in Arabidopsis rosettes at different carbon dioxide concentrations. Plant Journal, 2009, 59, 826-839.	5.7	216
75	Normal growth of <i>Arabidopsis</i> requires cytosolic invertase but not sucrose synthase. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 13124-13129.	7.1	349
76	Sugar-induced increases in trehalose 6-phosphate are correlated with redox activation of ADPglucose pyrophosphorylase and higher rates of starch synthesis in Arabidopsis thaliana. Biochemical Journal, 2006, 397, 139-148.	3.7	518
77	Impact of the C?N status on the amino acid profile in tobacco source leaves. Plant, Cell and Environment, 2006, 29, 2055-2076.	5.7	85
78	Regulation of secondary metabolism by the carbon-nitrogen status in tobacco: nitrate inhibits large sectors of phenylpropanoid metabolism. Plant Journal, 2006, 46, 533-548.	5.7	324
79	Restriction of nyctinastic movements and application of tensile forces to leaves affects diurnal patterns of expansion growth. Functional Plant Biology, 2002, 29, 1247.	2.1	31
80	Title is missing!. , 1999, 215, 143-153.		49
81	Relationship between NH⁺₄ Assimilation Rate and <i>in Vivo</i> Phospho<i>enol</i>pyruvate Carboxylase Activity. Plant Physiology, 1990, 94, 284-290.	4.8	94
82	Regulation of Carbon Partitioning to Respiration during Dark Ammonium Assimilation by the Green Alga <i>Selenastrum minutum</i>. Plant Physiology, 1990, 93, 166-175.	4.8	74
83	Anaerobic Metabolism in the N-Limited Green Alga Selenastrum minutum. Plant Physiology, 1990, 94, 1116-1123.	4.8	43
84	Independent changes of inorganic pyrophosphate and the AT/ADP or UTP/UDP ratios in plant cell suspension cultures. Plant Science, 1990, 66, 59-63.	3.6	73
85	Reduced-activity mutants of phosphoglucose isomerase in the cytosol and chloroplast of Clarkia xantiana. Planta, 1989, 178, 110-122.	3.2	96
86	Short-term water stress leads to a stimulation of sucrose synthesis by activating sucrose-phosphate synthase. Planta, 1989, 177, 535-546.	3.2	176
87	Response of photosynthetic electron transport and carbon metabolism to a sudden decrease of irradiance in the saturating or the limiting range. Biochimica Et Biophysica Acta - Bioenergetics, 1989, 973, 241-249.	1.0	19
88	Fluoride leads to an increase of inorganic pyrophosphate and an inhibition of photosynthetic sucrose synthesis in spinach leaves. Biochimica Et Biophysica Acta - Bioenergetics, 1989, 973, 263-271.	1.0	60
89	Coarse control of sucrose-phosphate synthase in leaves: Alterations of the kinetic properties in response to the rate of photosynthesis and the accumulation of sucrose. Planta, 1988, 174, 217-230.	3.2	281