Paul A Nakata

List of Publications by Year
in descending order

57 papers	2,999 citations	279778 23 h-index	161844 54 g-index
57 all docs	57 docs citations	57 times ranked	3224 citing authors

#	Article	IF	Citations
1	CALCIUM OXALATE IN PLANTS: Formation and Function. Annual Review of Plant Biology, 2005, 56, 41-71.	18.7	922
2	Advances in our understanding of calcium oxalate crystal formation and function in plants. Plant Science, 2003, 164, 901-909.	3.6	355
3	The Subunit Structure of Potato Tuber ADPglucose Pyrophosphorylase. Plant Physiology, 1990, 93, 785-790.	4.8	177
4	Medicago truncatula Mutants Demonstrate the Role of Plant Calcium Oxalate Crystals as an Effective Defense against Chewing Insects. Plant Physiology, 2006, 141, 188-195.	4.8	175
5	CRISPR/Cas9-mediated genome editing and gene replacement in plants: Transitioning from lab to field. Plant Science, 2015, 240, 130-142.	3.6	139
6	Comparison of the primary sequences of two potato tuber ADP-glucose pyrophosphorylase subunits. Plant Molecular Biology, 1991, 17, 1089-1093.	3.9	84
7	Plant calcium oxalate crystal formation, function, and its impact on human health. Frontiers in Biology, 2012, 7, 254-266.	0.7	84
8	Isolation of Medicago truncatula Mutants Defective in Calcium Oxalate Crystal Formation. Plant Physiology, 2000, 124, 1097-1104.	4.8	77
9	Silencing of OsGRXS17 in rice improves drought stress tolerance by modulating ROS accumulation and stomatal closure. Scientific Reports, 2017, 7, 15950.	3.3	64
10	A Previously Unknown Oxalyl-CoA Synthetase Is Important for Oxalate Catabolism in Arabidopsis. Plant Cell, 2012, 24, 1217-1229.	6.6	63
11	Consumption of polysaccharides from Auricularia auricular modulates the intestinal microbiota in mice. Food Research International, 2019, 123, 383-392.	6.2	63
12	Tomato expressing Arabidopsis glutaredoxin gene AtGRXS17 confers tolerance to chilling stress via modulating cold responsive components. Horticulture Research, 2015, 2, 15051.	6.3	62
13	Oxalate Reduces Calcium Availability in the Pads of the Prickly Pear Cactus through Formation of Calcium Oxalate Crystals. Journal of Agricultural and Food Chemistry, 2004, 52, 1371-1374.	5.2	43
14	The MAPK Kinase Kinase GmMEKK1 Regulates Cell Death and Defense Responses. Plant Physiology, 2018, 178, 907-922.	4.8	42
15	Expression of a monothiol glutaredoxin, AtGRXS17, in tomato (Solanum lycopersicum) enhances drought tolerance. Biochemical and Biophysical Research Communications, 2017, 491, 1034-1039.	2.1	37
16	An oxalylâ€CoA synthetase is important for oxalate metabolism in Saccharomyces cerevisiae. FEBS Letters, 2014, 588, 160-166.	2.8	36
17	An Oxalyl-CoA Dependent Pathway of Oxalate Catabolism Plays a Role in Regulating Calcium Oxalate Crystal Accumulation and Defending against Oxalate-Secreting Phytopathogens in Medicago truncatula. PLoS ONE, 2016, 11, e0149850.	2.5	35
18	Increased calcium bioavailability in mice fed genetically engineered plants lacking calcium oxalate. Plant Molecular Biology, 2007, 64, 613-618.	3.9	31

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19	The expanding footprint of CRISPR/Cas9 in the plant sciences. Plant Cell Reports, 2016, 35, 1451-1468.	5.6	30
20	Purification, identification and functional characterization of an immunomodulatory protein from Pleurotus eryngii. Food and Function, 2018, 9, 3764-3775.	4.6	28
21	Oxalic acid biosynthesis is encoded by an operon inBurkholderia glumae. FEMS Microbiology Letters, 2010, 304, 177-182.	1.8	26
22	Calcium oxalate crystal morphology mutants from Medicago truncatula. Planta, 2002, 215, 380-386.	3.2	25
23	Calcium oxalate crystal formation is not essential for growth of Medicago truncatula. Plant Physiology and Biochemistry, 2003, 41, 325-329.	5.8	25
24	Engineering Calcium Oxalate Crystal Formation in Arabidopsis. Plant and Cell Physiology, 2012, 53, 1275-1282.	3.1	22
25	An Assessment of Engineered Calcium Oxalate Crystal Formation on Plant Growth and Development as a Step toward Evaluating Its Use to Enhance Plant Defense. PLoS ONE, 2015, 10, e0141982.	2.5	22
26	MedicagoÂtruncatulaâ€derived calcium oxalate crystals have a negative impact on chewing insect performance via their physical properties. Entomologia Experimentalis Et Applicata, 2009, 131, 208-215.	1.4	20
27	Arabidopsis Glutaredoxin S17 Contributes to Vegetative Growth, Mineral Accumulation, and Redox Balance during Iron Deficiency. Frontiers in Plant Science, 2017, 8, 1045.	3.6	20
28	Endoplasmic reticulum sub-compartments are involved in calcium sequestration within raphide crystal idioblasts of Pistia stratiotes L. Plant Science, 2003, 165, 205-212.	3.6	19
29	The oxalic acid biosynthetic activity of Burkholderia mallei is encoded by a single locus. Microbiological Research, 2011, 166, 531-538.	5.3	19
30	Calcium oxalate crystal morphology. Trends in Plant Science, 2002, 7, 324.	8.8	16
31	Isolated Medicago truncatula mutants with increased calcium oxalate crystal accumulation have decreased ascorbic acid levels. Plant Physiology and Biochemistry, 2007, 45, 216-220.	5.8	16
32	A set of GFP organelle marker lines for intracellular localization studies in Medicago truncatula. Plant Science, 2012, 188-189, 19-24.	3.6	16
33	Cardiacâ€specific ablation of glutaredoxin 3 leads to cardiac hypertrophy and heart failure. Physiological Reports, 2019, 7, e14071.	1.7	15
34	Calreticulin is enriched in the crystal idioblasts of Pistia stratiotes. Plant Physiology and Biochemistry, 2003, 41, 425-430.	5.8	14
35	Calcium oxalate content affects the nutritional availability of calcium from Medicago truncatula leaves. Plant Science, 2007, 172, 958-961.	3.6	14
36	A genetic mutation that reduces calcium oxalate content increases calcium availability in Medicago truncatula. Functional Plant Biology, 2006, 33, 703.	2.1	13

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37	Genetic evidence for differences in the pathways of druse and prismatic calcium oxalate crystal formation in Medicago truncatula. Functional Plant Biology, 2007, 34, 332.	2.1	13
38	Redoxâ€engineering enhances maize thermotolerance and grain yield in the field. Plant Biotechnology Journal, 2022, 20, 1819-1832.	8.3	13
39	Axenic culture of Pistia stratiotes for use in plant biochemical studies. Aquatic Botany, 1998, 60, 161-168.	1.6	12
40	The generation of a transposon-mutagenized Burkeholderia glumae library to isolate novel mutants. Plant Science, 2002, 162, 267-271.	3.6	12
41	Sequential subtractive approach facilitates identification of differentially expressed genes. Plant Physiology and Biochemistry, 2002, 40, 307-312.	5.8	11
42	Contrasting calcium localization and speciation in leaves of the <scp>M</scp>edicago truncatula mutant cod5 analyzed via synchrotron Xâ€“ray techniques. Plant Journal, 2013, 76, 627-633.	5.7	11
43	Development of a rapid and efficient protoplast isolation and transfection method for chickpea (Cicer) Tj ETQq1 1 0.784314 rgBT /Over	1.6	10
44	Influence of the calcium oxalate defective 4 (cod4) mutation on the growth, oxalate content, and calcium content of Medicago truncatula. Plant Science, 2003, 164, 617-621.	3.6	9
45	Influence of calcium oxalate crystal accumulation on the calcium content of seeds from Medicago truncatula. Plant Science, 2012, 185-186, 246-249.	3.6	9
46	An Arabidopsis Oxalyl-CoA Decarboxylase, AtOXC, Is Important for Oxalate Catabolism in Plants. International Journal of Molecular Sciences, 2021, 22, 3266.	4.1	8
47	Enhancement of Plant Productivity by Manipulation of ADPglucose Pyrophosphorylase. Stadler Genetics Symposia Series, 1993, , 161-191.	0.0	8
48	Effect of Acyl Activating Enzyme (AAE) 3 on the growth and development of Medicago truncatula. Biochemical and Biophysical Research Communications, 2018, 505, 255-260.	2.1	7
49	Alteration of iron responsive gene expression in Arabidopsis glutaredoxin S17 loss of function plants with or without iron stress. Plant Signaling and Behavior, 2020, 15, 1758455.	2.4	7
50	Cis-elements important for the expression of the ADP-glucose pyrophosphorylase small-subunit are located both upstream and downstream from its structural gene. Molecular Genetics and Genomics, 1996, 250, 581-592.	2.4	6
51	Construction of pDUO: A bicistronic shuttle vector series for dual expression of recombinant proteins. Plasmid, 2017, 89, 16-21.	1.4	6
52	Crucial Role of Mammalian Glutaredoxin 3 in Cardiac Energy Metabolism in Diet-induced Obese Mice Revealed by Transcriptome Analysis. International Journal of Biological Sciences, 2021, 17, 2871-2883.	6.4	3
53	Cis. Molecular Genetics and Genomics, 1996, 250, 581.	2.4	2
54	Bioavailability of calcium from modified carrots expressing a plant Ca2+/H+ transporter. FASEB Journal, 2006, 20, A196.	0.5	2

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55	A conserved oxalyl-coenzyme A decarboxylase in oxalate catabolism. Plant Signaling and Behavior, 2022, 17, 2062555.	2.4	1
56	Plants defective in calcium oxalate crystal formation have more bioavailable calcium. FASEB Journal, 2007, 21, A356.	0.5	0
57	Determining the Biochemical Properties of the Oxalate Biosynthetic Component (Obc)1 from Burkholderia mallei. PLoS ONE, 2016, 11, e0163294.	2.5	0