Scott E Sattler

List of Publications by Year
in descending order

78	3,909	29	60
papers	citations	h-index	g-index
		172457	128289

81	81	81	4105
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Vitamin E Is Essential for Seed Longevity and for Preventing Lipid Peroxidation during Germination. Plant Cell, 2004, 16, 1419-1432.	6.6	552
2	Characterization of Tocopherol Cyclases from Higher Plants and Cyanobacteria. Evolutionary Implications for Tocopherol Synthesis and Function. Plant Physiology, 2003, 132, 2184-2195.	4.8	239
3	Improved Sugar Conversion and Ethanol Yield for Forage Sorghum (Sorghum bicolor L. Moench) Lines with Reduced Lignin Contents. Bioenergy Research, 2009, 2, 153-164.	3.9	198
4	Highly Divergent Methyltransferases Catalyze a Conserved Reaction in Tocopherol and Plastoquinone Synthesis in Cyanobacteria and Photosynthetic Eukaryotes. Plant Cell, 2003, 15, 2343-2356.	6.6	192
5	A Nonsense Mutation in a Cinnamyl Alcohol Dehydrogenase Gene Is Responsible for the Sorghum <i>brown midrib6</i> Phenotype Â Â. Plant Physiology, 2009, 150, 584-595.	4.8	175
6	Nonenzymatic Lipid Peroxidation Reprograms Gene Expression and Activates Defense Markers in Arabidopsis Tocopherol-Deficient Mutants. Plant Cell, 2007, 18, 3706-3720.	6.6	168
7	Brown midrib mutations and their importance to the utilization of maize, sorghum, and pearl millet lignocellulosic tissues. Plant Science, 2010, 178, 229-238.	3.6	154
8	<i>Brown midrib2</i> (<i>Bmr2</i>) encodes the major 4â€coumarate:coenzymeâ€ƒA ligase involved in lignin biosynthesis in sorghum (<i>Sorghum bicolor</i> (L.) Moench). Plant Journal, 2012, 70, 818-830.	5.7	145
9	Modifying lignin to improve bioenergy feedstocks: strengthening the barrier against pathogens?â€. Frontiers in Plant Science, 2013, 4, 70.	3.6	141
10	Opportunities and roadblocks in utilizing forages and small grains for liquid fuels. Journal of Industrial Microbiology and Biotechnology, 2008, 35, 343-354.	3.0	128
11	Overexpression of <i>SbMyb60</i> impacts phenylpropanoid biosynthesis and alters secondary cell wall composition in <i>Sorghum bicolor</i>. Plant Journal, 2016, 85, 378-395.	5.7	119
12	Biochemical and Structural Analysis of Substrate Specificity of a Phenylalanine Ammonia-Lyase. Plant Physiology, 2018, 176, 1452-1468.	4.8	99
13	Genetic background impacts soluble and cell wall-bound aromatics in brown midrib mutants of sorghum. Planta, 2008, 229, 115-127.	3.2	84
14	Elucidation of the Structure and Reaction Mechanism of Sorghum Hydroxycinnamoyltransferase and Its Structural Relationship to Other Coenzyme A-Dependent Transferases and Synthases Â Â. Plant Physiology, 2013, 162, 640-651.	4.8	82
15	Identification and Characterization of Four Missense Mutations in Brown midrib 12 (Bmr12), the Caffeic O-Methyltranferase (COMT) of Sorghum. Bioenergy Research, 2012, 5, 855-865.	3.9	66
16	The WRKY transcription factor family and senescence in switchgrass. BMC Genomics, 2015, 16, 912.	2.8	62
17	Characterization of Novel Sorghum <i>brown midrib</i> Mutants from an EMS-Mutagenized Population. G3: Genes, Genomes, Genetics, 2014, 4, 2115-2124.	1.8	59
18	SbCOMT (Bmr12) is involved in the biosynthesis of tricin-lignin in sorghum. PLoS ONE, 2017, 12, e0178160.	2.5	59

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19	From Arabidopsis to agriculture: engineering improved Vitamin E content in soybean. Trends in Plant Science, 2004, 9, 365-367.	8.8	53
20	Alteration in Lignin Biosynthesis Restricts Growth of <i>Fusarium</i> spp. in Brown Midrib Sorghum. Phytopathology, 2010, 100, 671-681.	2.2	53
21	Simultaneous conversion of all cell wall components by an oleaginous fungus without chemi-physical pretreatment. Green Chemistry, 2015, 17, 1657-1667.	9.0	53
22	Transcriptional analysis of defense mechanisms in upland tetraploid switchgrass to greenbugs. BMC Plant Biology, 2017, 17, 46.	3.6	53
23	The Structure and Catalytic Mechanism of <i>Sorghum bicolor</i> Caffeoyl-CoA <i>O</i>-Methyltransferase. Plant Physiology, 2016, 172, 78-92.	4.8	46
24	Characterization of novel <i>Brown midrib 6</i> mutations affecting lignin biosynthesis in sorghum. Journal of Integrative Plant Biology, 2016, 58, 136-149.	8.5	46
25	Global Responses of Resistant and Susceptible Sorghum (Sorghum bicolor) to Sugarcane Aphid (Melanaphis sacchari). Frontiers in Plant Science, 2019, 10, 145.	3.6	44
26	Characterization of Class III Peroxidases from Switchgrass. Plant Physiology, 2017, 173, 417-433.	4.8	43
27	Overexpression of <i>SbMyb60</i> in <i>Sorghum bicolor</i> impacts both primary and secondary metabolism. New Phytologist, 2018, 217, 82-104.	7.3	42
28	Two distinct waxy alleles impact the granule-bound starch synthase in sorghum. Molecular Breeding, 2009, 24, 349-359.	2.1	38
29	Structure and Function of the Cytochrome P450 Monooxygenase Cinnamate 4-hydroxylase from <i>Sorghum bicolor</i>. Plant Physiology, 2020, 183, 957-973.	4.8	36
30	Determination of the Structure and Catalytic Mechanism of <i>Sorghum bicolor</i> Caffeic Acid <i>O</i>-Methyltransferase and the Structural Impact of Three <i>brown midrib12</i> Mutations Â. Plant Physiology, 2014, 165, 1440-1456.	4.8	33
31	The Enzyme Activity and Substrate Specificity of Two Major Cinnamyl Alcohol Dehydrogenases in Sorghum (<i>Sorghum bicolor</i>), SbCAD2 and SbCAD4. Plant Physiology, 2017, 174, 2128-2145.	4.8	32
32	Structural and Biochemical Characterization of Cinnamoyl-CoA Reductases. Plant Physiology, 2017, 173, 1031-1044.	4.8	29
33	Efficacy of Singular and Stacked <i>brown midrib 6</i> and <i>12</i> in the Modification of Lignocellulose and Grain Chemistry. Journal of Agricultural and Food Chemistry, 2010, 58, 3611-3616.	5.2	28
34	Characterization of fluorescent Pseudomonas spp. associated with roots and soil of two sorghum genotypes. European Journal of Plant Pathology, 2013, 136, 469-481.	1.7	25
35	Overexpression of the Sorghum bicolor SbCCoAOMT alters cell wall associated hydroxycinnamoyl groups. PLoS ONE, 2018, 13, e0204153.	2.5	25
36	Loss of COMT activity reduces lateral root formation and alters the response to water limitation in sorghum <i>brown midrib</i> (<i>bmr</i>) <i>12</i> mutant. New Phytologist, 2021, 229, 2780-2794.	7.3	25

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37	Response of <i>Fusarium thapsinum</i> to Sorghum <i>brown midrib</i> Lines and to Phenolic Metabolites. Plant Disease, 2014, 98, 1300-1308.	1.4	22
38	Switchgrass Contains Two Cinnamyl Alcohol Dehydrogenases Involved in Lignin Formation. Bioenergy Research, 2011, 4, 120-133.	3.9	20
39	Improved sugar yields from biomass sorghum feedstocks: comparing low-lignin mutants and pretreatment chemistries. Biotechnology for Biofuels, 2016, 9, 251.	6.2	20
40	Contrasting Metabolism in Perenniating Structures of Upland and Lowland Switchgrass Plants Late in the Growing Season. PLoS ONE, 2014, 9, e105138.	2.5	20
41	Morphological Characterization of a New and Easily Recognizable Nuclear Male Sterile Mutant of Sorghum (Sorghum bicolor). PLoS ONE, 2017, 12, e0165195.	2.5	20
42	Switchgrass PviCAD1: Understanding Residues Important for Substrate Preferences and Activity. Applied Biochemistry and Biotechnology, 2012, 168, 1086-1100.	2.9	19
43	Fighting on two fronts: Elevated insect resistance in flooded maize. Plant, Cell and Environment, 2020, 43, 223-234.	5.7	18
44	Interplay of phytohormones facilitate sorghum tolerance to aphids. Plant Molecular Biology, 2022, 109, 639-650.	3.9	18
45	Dichotomous Role of Jasmonic Acid in Modulating Sorghum Defense Against Aphids. Molecular Plant-Microbe Interactions, 2022, 35, 755-767.	2.6	18
46	Overexpression of ferulate 5-hydroxylase increases syringyl units in Sorghum bicolor. Plant Molecular Biology, 2020, 103, 269-285.	3.9	17
47	Dedicated Herbaceous Biomass Feedstock Genetics and Development. Bioenergy Research, 2016, 9, 399-411.	3.9	16
48	Evaluation of Public Sweet Sorghum A-Lines for Use in Hybrid Production. Bioenergy Research, 2013, 6, 91-102.	3.9	15
49	Deployment of SNP (CAPS and KASP) markers for allelic discrimination and easy access to functional variants for brown midrib genes bmr6 and bmr12 in Sorghum bicolor. Molecular Breeding, 2019, 39, 1.	2.1	14
50	Soil and root populations of fluorescent Pseudomonas spp. associated with seedlings and field-grown plants are affected by sorghum genotype. Plant and Soil, 2010, 335, 439-455.	3.7	13
51	Response of nearâ€isogenic sorghum lines, differing at the <i>P</i> locus for plant colour, to grain mould and head smut fungi. Annals of Applied Biology, 2013, 163, 91-101.	2.5	13
52	Organ-specific transcriptome profiling of metabolic and pigment biosynthesis pathways in the floral ornamental progenitor species Anthurium amnicola Dressler. Scientific Reports, 2017, 7, 1596.	3.3	13
53	Response of sorghum stalk pathogens to brown midrib plants and soluble phenolic extracts from near isogenic lines. European Journal of Plant Pathology, 2017, 148, 941-953.	1.7	13
54	Seasonal belowâ€ground metabolism in switchgrass. Plant Journal, 2017, 92, 1059-1075.	5.7	13

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55	Pathogen and drought stress affect cell wall and phytohormone signaling to shape host responses in a sorghum COMT bmr12 mutant. BMC Plant Biology, 2021, 21, 391.	3.6	13
56	Helicoverpa zea (Lepidoptera: Noctuidae) and Spodoptera frugiperda (Lepidoptera: Noctuidae) Responses to Sorghum bicolor (Poales: Poaceae) Tissues From Lowered Lignin Lines. Journal of Insect Science, 2015, 15, 2-2.	1.5	12
57	Identification of an orthologous clade of peroxidases that respond to feeding by greenbugs (Schizaphis graminum) in C4 grasses. Functional Plant Biology, 2016, 43, 1134.	2.1	12
58	Response of Sweet Sorghum Lines to Stalk Pathogens <i>Fusarium thapsinum</i> and <i>Macrophomina phaseolina</i>. Plant Disease, 2016, 100, 896-903.	1.4	12
59	<i>PhenoImage</i>: An openâ€source graphical user interfaceÂfor plant imageÂanalysis. The Plant Phenome Journal, 2021, 4, e20015.	2.0	12
60	A Continuous, Quantitative Fluorescent Assay for Plant Caffeic Acid <i>O</i>-Methyltransferases. Journal of Agricultural and Food Chemistry, 2010, 58, 5220-5226.	5.2	11
61	Resistance to greenbugs in the sorghum nested association mapping population. Arthropod-Plant Interactions, 2019, 13, 261-269.	1.1	11
62	Response of Sorghum Enhanced in Monolignol Biosynthesis to Stalk Rot Pathogens. Plant Disease, 2019, 103, 2277-2287.	1.4	10
63	Reprogramming of sorghum proteome in response to sugarcane aphid infestation. Plant Science, 2022, 320, 111289.	3.6	10
64	The Sorghum (Sorghum bicolor) Brown Midrib 30 Gene Encodes a Chalcone Isomerase Required for Cell Wall Lignification. Frontiers in Plant Science, 2021, 12, 732307.	3.6	9
65	Registration of N619 to N640 Grain Sorghum Lines with Waxy or Wild-Type Endosperm. Journal of Plant Registrations, 2015, 9, 249-253.	0.5	8
66	Sorghum Brown Midrib19 (Bmr19) Gene Links Lignin Biosynthesis to Folate Metabolism. Genes, 2021, 12, 660.	2.4	8
67	Effect of waxy (Low Amylose) on Fungal Infection of Sorghum Grain. Phytopathology, 2015, 105, 786-796.	2.2	7
68	Field damage of sorghum (Sorghum bicolor) with reduced lignin levels by naturally occurring insect pests and pathogens. Journal of Pest Science, 2016, 89, 885-895.	3.7	7
69	Differences in <i>Fusarium</i> Species in <i>brown midrib</i> Sorghum and in Air Populations in Production Fields. Phytopathology, 2017, 107, 1353-1363.	2.2	7
70	Field response of nearâ€isogenic brown midrib sorghum lines to fusarium stalk rot, and response of wildtype lines to controlled water deficit. Plant Pathology, 2018, 67, 1474-1482.	2.4	7
71	Genome-wide association mapping of resistance to the sorghum aphid in Sorghum bicolor. Genomics, 2022, 114, 110408.	2.9	7
72	Functional and structural insight into the flexibility of cytochrome P450 reductases from Sorghum bicolor and its implications for lignin composition. Journal of Biological Chemistry, 2022, 298, 101761.	3.4	6

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73	Evaluation of Interallelic <i>waxy</i>, Hetero<i>waxy</i>, and Wildâ€Type Grain Sorghum Hybrids. Crop Science, 2016, 56, 113-121.	1.8	3
74	Registration of A/BN641 and RN642 <i>waxy</i> Grain Sorghum Genetic Stocks. Journal of Plant Registrations, 2015, 9, 258-261.	0.5	3
75	Registration of three new <i>bmr12</i> sorghum mutants from an ethyl methane sulfonateâ€"induced BTx623 mutant population. Journal of Plant Registrations, 0, , .	0.5	2
76	Field Evaluation of Sorghum (Sorghum bicolor) Lines that Overexpress Two Monolignol-Related Genes that Alter Cell Wall Composition. Bioenergy Research, 2020, , 1.	3.9	1
77	Registration of N614, A 3 N615, N616, and N617 Shattercane Genetic Stocks with Cytoplasmic or Nuclear Male Sterility and Juicy or Dry Midribs. Journal of Plant Registrations, 2013, 7, 245-249.	0.5	1
78	Association of dhurrin levels and post-flowering non-senescence with resistance to stalk rot pathogens in Sorghum bicolor. European Journal of Plant Pathology, 2022, 163, 237-254.	1.7	0