Gautam Sarath

List of Publications by Citations

170 papers	6,080 citations	45 h-index	71 g-index
177 ext. papers	6,959 ext. citations	4.6 avg, IF	5.41 L-index

#	Paper	IF	Citations
170	Chemical composition and response to dilute-acid pretreatment and enzymatic saccharification of alfalfa, reed canarygrass, and switchgrass. *Biomass and Bioenergy*, **2006**, 30, 880-891	5.3	376
169	Production of butanol (a biofuel) from agricultural residues: Part II Use of corn stover and switchgrass hydrolysates?. *Biomass and Bioenergy*, **2010**, 34, 566-571	5.3	245
168	Improved Sugar Conversion and Ethanol Yield for Forage Sorghum (Sorghum bicolor L. Moench) Lines with Reduced Lignin Contents. *Bioenergy Research*, **2009**, 2, 153-164	3.1	174
167	Crystal structure of a nonsymbiotic plant hemoglobin. *Structure*, **2000**, 8, 1005-14	5.2	148
166	A nonsense mutation in a cinnamyl alcohol dehydrogenase gene is responsible for the Sorghum brown midrib6 phenotype. *Plant Physiology*, **2009**, 150, 584-95	6.6	139
165	Soybean glycinin G1 acidic chain shares IgE epitopes with peanut allergen Ara h 3. *International Archives of Allergy and Immunology*, **2000**, 123, 299-307	3.7	131
164	Downregulation of cinnamyl-alcohol dehydrogenase in switchgrass by RNA silencing results in enhanced glucose release after cellulase treatment. *PLoS ONE*, **2011**, 6, e16416	3.7	126
163	Characterization of recombinant soybean leghemoglobin a and apolar distal histidine mutants. *Journal of Molecular Biology*, **1997**, 266, 1032-42	6.5	122
162	Reactive oxygen species, ABA and nitric oxide interactions on the germination of warm-season C4-grasses. *Planta*, **2007**, 226, 697-708	4.7	122
161	Managing and enhancing switchgrass as a bioenergy feedstock. *Biofuels, Bioproducts and Biorefining*, **2008**, 2, 530-539	5.3	117
160	The Arabidopsis homolog of trithorax, ATX1, binds phosphatidylinositol 5-phosphate, and the two regulate a common set of target genes. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 6049-54	11.5	117
159	Opportunities and roadblocks in utilizing forages and small grains for liquid fuels. *Journal of Industrial Microbiology and Biotechnology*, **2008**, 35, 343-354	4.2	116
158	Nitric oxide accelerates seed germination in warm-season grasses. *Planta*, **2006**, 223, 1154-64	4.7	110
157	Review: correlations between oxygen affinity and sequence classifications of plant hemoglobins. *Biopolymers*, **2009**, 91, 1083-96	2.2	107
156	Plant hemoglobins. *Plant Physiology*, **1998**, 118, 1121-5	6.6	102
155	Modifying crops to increase cell wall digestibility. *Plant Science*, **2012**, 185-186, 65-77	5.3	95
154	Activation of the Oryza sativa non-symbiotic haemoglobin-2 promoter by the cytokinin-regulated transcription factor, ARR1. *Journal of Experimental Botany*, **2004**, 55, 1721-31	7	95

153	K8 and K12 are biotinylated in human histone H4. *FEBS Journal*, **2004**, 271, 2257-63		84
152	Lysine residues in N-terminal and C-terminal regions of human histone H2A are targets for biotinylation by biotinidase. *Journal of Nutritional Biochemistry*, **2006**, 17, 225-33	6.3	81
151	Oxidative responses of resistant and susceptible cereal leaves to symptomatic and nonsymptomatic cereal aphid (Hemiptera: Aphididae) feeding. *Journal of Economic Entomology*, **2001**, 94, 743-51	2.2	77
150	Genetic background impacts soluble and cell wall-bound aromatics in brown midrib mutants of sorghum. *Planta*, **2008**, 229, 115-27	4.7	76
149	Roles for nutrients in epigenetic events. *Journal of Nutritional Biochemistry*, **2005**, 16, 74-7	6.3	76
148	K4, K9 and K18 in human histone H3 are targets for biotinylation by biotinidase. *FEBS Journal*, **2005**, 272, 4249-59	5.7	70
147	Enhancing alfalfa conversion efficiencies for sugar recovery and ethanol production by altering lignin composition. *Bioresource Technology*, **2011**, 102, 6479-86	11	68
146	Functional characterization of cinnamyl alcohol dehydrogenase and caffeic acid O-methyltransferase in Brachypodium distachyon. *BMC Biotechnology*, **2013**, 13, 61	3.5	67
145	K12-biotinylated histone H4 marks heterochromatin in human lymphoblastoma cells. *Journal of Nutritional Biochemistry*, **2007**, 18, 760-8	6.3	64
144	Functional characterization and expression of a cytosolic iron-superoxide dismutase from cowpea root nodules. *Plant Physiology*, **2003**, 133, 773-82	6.6	64
143	Slow ligand binding kinetics dominate ferrous hexacoordinate hemoglobin reactivities and reveal differences between plants and other species. *Biochemistry*, **2006**, 45, 561-70	3.2	63
142	Chloroplast genome variation in upland and lowland switchgrass. *PLoS ONE*, **2011**, 6, e23980	3.7	62
141	Characterization of oxidative enzyme changes in buffalograsses challenged by Blissus occiduus. *Journal of Economic Entomology*, **2004**, 97, 1086-95	2.2	62
140	Characterization of peroxidase changes in resistant and susceptible warm-season turfgrasses challenged by Blissus occiduus. *Arthropod-Plant Interactions*, **2010**, 4, 45-55	2.2	61
139	Pyruvate,orthophosphate dikinase in leaves and chloroplasts of C(3) plants undergoes light-/dark-induced reversible phosphorylation. *Plant Physiology*, **2002**, 128, 1368-78	6.6	61
138	Overexpression of SbMyb60 impacts phenylpropanoid biosynthesis and alters secondary cell wall composition in Sorghum bicolor. *Plant Journal*, **2016**, 85, 378-95	6.9	59
137	Identification of IgE-binding proteins in soy lecithin. *International Archives of Allergy and Immunology*, **2001**, 126, 218-25	3.7	58
136	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	3.1	56

135	Internode structure and cell wall composition in maturing tillers of switchgrass (Panicum virgatum. L). *Bioresource Technology*, **2007**, 98, 2985-92	11	55
134	Soybean nodule sucrose synthase (nodulin-100): further analysis of its phosphorylation using recombinant and authentic root-nodule enzymes. *Archives of Biochemistry and Biophysics*, **1999**, 371, 70-82	4.1	53
133	Comparative Genomics in Switchgrass Using 61,585 High-Quality Expressed Sequence Tags. *Plant Genome*, **2008**, 1,	4.4	53
132	Plant Tolerance: A Unique Approach to Control Hemipteran Pests. *Frontiers in Plant Science*, **2016**, 7, 1363	6.2	53
131	Reversible denaturation of the soybean Kunitz trypsin inhibitor. *Archives of Biochemistry and Biophysics*, **2003**, 412, 20-6	4.1	51
130	In vivo and in vitro phosphorylation of membrane and soluble forms of soybean nodule sucrose synthase. *Plant Physiology*, **2002**, 129, 1664-73	6.6	50
129	Identification and analysis of a conserved immunoglobulin E-binding epitope in soybean G1a and G2a and peanut Ara h 3 glycinins. *Archives of Biochemistry and Biophysics*, **2002**, 408, 51-7	4.1	50
128	Synthesis of hemoglobins in rice (Oryza sativa var. Jackson) plants growing in normal and stress conditions. *Plant Science*, **2001**, 161, 279-287	5.3	49
127	Rice Ovate Family Protein 2 (OFP2) alters hormonal homeostasis and vasculature development. *Plant Science*, **2015**, 241, 177-88	5.3	47
126	Analysis of expressed sequence tags and the identification of associated short tandem repeats in switchgrass. *Theoretical and Applied Genetics*, **2005**, 111, 956-64	6	46
125	The WRKY transcription factor family and senescence in switchgrass. *BMC Genomics*, **2015**, 16, 912	4.5	45
124	Senescence, dormancy and tillering in perennial C4 grasses. *Plant Science*, **2014**, 217-218, 140-51	5.3	43
123	Ethanol yields and cell wall properties in divergently bred switchgrass genotypes. *Bioresource Technology*, **2011**, 102, 9579-85	11	43
122	The role of acid phosphatases in plant phosphorus metabolism. *Physiologia Plantarum*, **1994**, 90, 791-800	4.6	39
121	The pyruvate, orthophosphate dikinase regulatory proteins of Arabidopsis possess a novel, unprecedented Ser/Thr protein kinase primary structure. *Plant Journal*, **2008**, 53, 854-63	6.9	38
120	Prokaryotic BirA ligase biotinylates K4, K9, K18 and K23 in histone H3. *BMB Reports*, **2008**, 41, 310-5	5.5	38
119	Characterization of Oxidative Enzyme Changes in Buffalograsses Challenged by Blissus occiduus. *Journal of Economic Entomology*, **2004**, 97, 1086-1095	2.2	37
118	Switchgrass (Panicum virgatum L) flag leaf transcriptomes reveal molecular signatures of leaf development, senescence, and mineral dynamics. *Functional and Integrative Genomics*, **2015**, 15, 1-16	3.8	36

117	Genic microsatellite markers derived from EST sequences of switchgrass (Panicum virgatum L.). *Molecular Ecology Notes*, **2006**, 6, 185-187		36
116	Mycobacterium smegmatis L-alanine dehydrogenase (Ald) is required for proficient utilization of alanine as a sole nitrogen source and sustained anaerobic growth. *Journal of Bacteriology*, **2002**, 184, 5001-10	3.5	36
115	Dynamic change in photosynthetic pigments and chlorophyll degradation elicited by cereal aphid feeding. *Entomologia Experimentalis Et Applicata*, **2002**, 105, 43-53	2.1	35
114	TNT biotransformation and detoxification by a Pseudomonas aeruginosa strain. *Biodegradation*, **2003**, 14, 309-19	4.1	33
113	C-Terminal 23 kDa polypeptide of soybean Gly m Bd 28 K is a potential allergen. *Planta*, **2004**, 220, 56-63	4.7	31
112	Microwave pretreatment effects on switchgrass and miscanthus solubilization in subcritical water and hydrolysate utilization for hydrogen production. *Biomass and Bioenergy*, **2018**, 108, 48-54	5.3	31
111	Biotinylation of K12 in histone H4 decreases in response to DNA double-strand breaks in human JAr choriocarcinoma cells. *Journal of Nutrition*, **2005**, 135, 2337-42	4.1	30
110	Further analysis of maize C(4) pyruvate,orthophosphate dikinase phosphorylation by its bifunctional regulatory protein using selective substitutions of the regulatory Thr-456 and catalytic His-458 residues. *Archives of Biochemistry and Biophysics*, **2000**, 375, 165-70	4.1	30
109	Molecular cloning of the cowpea leghemoglobin II gene and expression of its cDNA in Escherichia coli. Purification and characterization of the recombinant protein. *Plant Physiology*, **1997**, 114, 493-500	6.6	29
108	Estrogen receptor-alpha populations change with age in commercial laying hens. *Poultry Science*, **2003**, 82, 1624-9	3.9	29
107	Tyrosine B10 inhibits stabilization of bound carbon monoxide and oxygen in soybean leghemoglobin. *Biochemistry*, **2004**, 43, 6241-52	3.2	28
106	Characterization of Class III Peroxidases from Switchgrass. *Plant Physiology*, **2017**, 173, 417-433	6.6	27
105	Two distinct waxy alleles impact the granule-bound starch synthase in sorghum. *Molecular Breeding* , **2009**, 24, 349-359	3.4	27
104	Cell-wall composition and accessibility to hydrolytic enzymes is differentially altered in divergently bred switchgrass (Panicum virgatum L.) genotypes. *Applied Biochemistry and Biotechnology*, **2008**, 150, 1-14	3.2	27
103	12-Oxo-Phytodienoic Acid Acts as a Regulator of Maize Defense against Corn Leaf Aphid. *Plant Physiology*, **2019**, 179, 1402-1415	6.6	27
102	Bacteroids Are Stable during Dark-Induced Senescence of Soybean Root Nodules. *Plant Physiology*, **1986**, 82, 346-50	6.6	26
101	Transcriptional analysis of defense mechanisms in upland tetraploid switchgrass to greenbugs. *BMC Plant Biology*, **2017**, 17, 46	5.3	24
100	Plant hemoglobins: a journey from unicellular green algae to vascular plants. *New Phytologist*, **2020** , 227, 1618-1635	9.8	24

99	Physiological responses of resistant and susceptible barley, Hordeum vulgare to the Russian wheat aphid, Diurpahis noxia (Mordvilko). *Arthropod-Plant Interactions*, **2009**, 3, 233-240	2.2	24
98	Peptide motif of the cattle MHC class I antigen BoLA-A11. *Immunogenetics*, **1995**, 42, 302-3	3.2	24
97	Seasonal switchgrass ecotype contributions to soil organic carbon, deep soil microbial community composition and rhizodeposit uptake during an extreme drought. *Soil Biology and Biochemistry*, **2017**, 112, 191-203	7.5	23
96	Overexpression of SbMyb60 in Sorghum bicolor impacts both primary and secondary metabolism. *New Phytologist*, **2018**, 217, 82-104	9.8	23
95	Global Responses of Resistant and Susceptible Sorghum () to Sugarcane Aphid (). *Frontiers in Plant Science*, **2019**, 10, 145	6.2	22
94	Mapping and analysis of a hemoglobin gene family from Oryza sativa. *Plant Physiology and Biochemistry*, **2002**, 40, 199-202	5.4	22
93	In vitro enzymatic chlorophyll catabolism in wheat elicited by cereal aphid feeding. *Entomologia Experimentalis Et Applicata*, **2001**, 101, 159-166	2.1	22
92	Targeting of the soybean leghemoglobin to tobacco chloroplasts: effects on aerobic metabolism in transgenic plants. *Plant Science*, **2000**, 155, 193-202	5.3	22
91	Molecular Cloning, Functional Characterization, and Subcellular Localization of Soybean Nodule Dihydrolipoamide Reductase. *Plant Physiology*, **2002**, 128, 300-313	6.6	20
90	Liquid chromatography-mass spectrometry investigation of enzyme-resistant xylooligosaccharide structures of switchgrass associated with ammonia pretreatment, enzymatic saccharification, and fermentation. *Bioresource Technology*, **2012**, 110, 437-47	11	19
89	P39, a novel soybean protein allergen, belongs to a plant-specific protein family and is present in protein storage vacuoles. *Journal of Agricultural and Food Chemistry*, **2008**, 56, 2266-72	5.7	19
88	Cloning and characterization of a caesalpinoid (Chamaecrista fasciculata) hemoglobin: the structural transition from a nonsymbiotic hemoglobin to a leghemoglobin. *Proteins: Structure, Function and Bioinformatics*, **2008**, 72, 252-60	4.2	19
87	Physiological Responses of Resistant and Susceptible Buffalograsses to Blissus Occiduus (Hemiptera: Blissidae) Feeding. *Journal of Economic Entomology*, **2006**, 99, 222-228	2.2	19
86	TNT nitroreductase from a Pseudomonas aeruginosa strain isolated from TNT-contaminated soil. *Soil Biology and Biochemistry*, **2001**, 33, 875-881	7.5	19
85	Engineering Saccharomyces cerevisiae to produce feruloyl esterase for the release of ferulic acid from switchgrass. *Journal of Industrial Microbiology and Biotechnology*, **2011**, 38, 1961-7	4.2	18
84	Partial purification and characterization of a methyl-parathion resistance-associated general esterase in Diabrotica virgifera virgifera (Coleoptera: Chrysomelidae). *Pesticide Biochemistry and Physiology*, **2004**, 78, 114-125	4.9	18
83	Insect and plant-derived miRNAs in greenbug (Schizaphis graminum) and yellow sugarcane aphid (Sipha flava) revealed by deep sequencing. *Gene*, **2017**, 599, 68-77	3.8	17
82	Towards uncovering the roles of switchgrass peroxidases in plant processes. *Frontiers in Plant Science*, **2013**, 4, 202	6.2	17

81	Selective chemical oxidation and depolymerization of switchgrass [corrected] (Panicum virgatum L.) xylan with [corrected] oligosaccharide product analysis by mass spectrometry. *Rapid Communications in Mass Spectrometry*, **2011**, 25, 941-50	2.2	17
80	Cloning and expression of an atrazine inducible cytochrome P450, CYP4G33, from Chironomus tentans (Diptera: Chironomidae). *Pesticide Biochemistry and Physiology*, **2007**, 89, 104-110	4.9	17
79	A single amino acid substitution in soybean VSPalpha increases its acid phosphatase activity nearly 20-fold. *Planta*, **2004**, 219, 1071-9	4.7	17
78	Modeling the tertiary structure of a maize (Zea mays ssp. mays) non-symbiotic hemoglobin. *Plant Physiology and Biochemistry*, **2004**, 42, 891-7	5.4	17
77	Assessing modulation of stromal and thylakoid light-harvesting complex-II phosphatase activities with phosphopeptide substrates. *Photosynthesis Research*, **1995**, 44, 107-15	3.7	17
76	Detection and purification of modified leghemoglobins from soybean root nodules. *Plant Science*, **1994**, 100, 31-40	5.3	17
75	Purification and characterization of a soybean cotyledon aminopeptidase. *Plant Science*, **1991**, 75, 9-17	5.3	17
74	Contrasting metabolism in perenniating structures of upland and lowland switchgrass plants late in the growing season. *PLoS ONE*, **2014**, 9, e105138	3.7	17
73	Physiological and biochemical responses of resistant and susceptible wheat to injury by Russian wheat aphid. *Journal of Economic Entomology*, **2007**, 100, 1692-703	2.2	17
72	Immunodetection of Triticum mosaic virus by DAS- and DAC-ELISA using antibodies produced against coat protein expressed in Escherichia coli: potential for high-throughput diagnostic methods. *Journal of Virological Methods*, **2013**, 189, 196-203	2.6	16
71	Switchgrass PviCAD1: understanding residues important for substrate preferences and activity. *Applied Biochemistry and Biotechnology*, **2012**, 168, 1086-100	3.2	16
70	Next-Generation Sequencing of Crown and Rhizome Transcriptome from an Upland, Tetraploid Switchgrass. *Bioenergy Research*, **2012**, 5, 649-661	3.1	16
69	Physiological responses of resistant and susceptible buffalograsses to Blissus occiduus (Hemiptera: Blissidae) feeding. *Journal of Economic Entomology*, **2006**, 99, 222-8	2.2	16
68	High-throughput immunoblotting identifies biotin-dependent signaling proteins in HepG2 hepatocarcinoma cells. *Journal of Nutrition*, **2005**, 135, 1659-66	4.1	16
67	Purification and characterization of a soybean root nodule phosphatase expressed in Pichia pastoris. *Protein Expression and Purification*, **1998**, 14, 125-30	2	16
66	Analysis of peroxidase activity of rice (Oryza sativa) recombinant hemoglobin 1: implications for in vivo function of hexacoordinate non-symbiotic hemoglobins in plants. *Phytochemistry*, **2010**, 71, 21-6	4	15
65	Cloning and expression analysis of hemoglobin genes from maize (Zea mays ssp. mays) and teosinte (Zea mays ssp. parviglumis). *Biochimica Et Biophysica Acta Gene Regulatory Mechanisms*, **2001**, 1522, 1-8		15
64	Karyotype variation is indicative of subgenomic and ecotypic differentiation in switchgrass. *BMC Plant Biology*, **2012**, 12, 117	5.3	14

63	Switchgrass Contains Two Cinnamyl Alcohol Dehydrogenases Involved in Lignin Formation. *Bioenergy Research*, **2011**, 4, 120-133	3.1	14
62	An avidin-based assay for histone debiotinylase activity in human cell nuclei. *Journal of Nutritional Biochemistry*, **2007**, 18, 475-81	6.3	14
61	Guard cell protoplasts contain acetylcholinesterase activity. *Plant Science*, **1995**, 109, 119-127	5.3	14
60	Chinch bug (Hemiptera: Blissidae) mouthpart morphology, probing frequencies, and locations on resistant and susceptible germplasm. *Journal of Economic Entomology*, **2006**, 99, 212-21	2.2	14
59	Global changes in mineral transporters in tetraploid switchgrasses (Panicum virgatum L.). *Frontiers in Plant Science*, **2014**, 4, 549	6.2	13
58	Insect resistance of a full sib family of tetraploid switchgrass Panicum virgatum L. with varying lignin levels. *Genetic Resources and Crop Evolution*, **2013**, 60, 975-984	2	13
57	Categories of Resistance to Greenbug and Yellow Sugarcane Aphid (Hemiptera: Aphididae) in Three Tetraploid Switchgrass Populations. *Bioenergy Research*, **2014**, 7, 909-918	3.1	12
56	Evaluation of tetraploid switchgrass (Poales: Poaceae) populations for host suitability and differential resistance to four cereal aphids. *Journal of Economic Entomology*, **2014**, 107, 424-31	2.2	12
55	Identification, characterization, and gene expression analysis of nucleotide binding site (NB)-type resistance gene homologues in switchgrass. *BMC Genomics*, **2016**, 17, 892	4.5	12
54	Overexpression of the Sorghum bicolor SbCCoAOMT alters cell wall associated hydroxycinnamoyl groups. *PLoS ONE*, **2018**, 13, e0204153	3.7	12
53	Characterization of Greenbug Feeding Behavior and Aphid (Hemiptera: Aphididae) Host Preference in Relation to Resistant and Susceptible Tetraploid Switchgrass Populations. *Bioenergy Research*, **2015**, 8, 165-174	3.1	11
52	ABA, ROS and NO are Key Players During Switchgrass Seed Germination. *Plant Signaling and Behavior*, **2007**, 2, 492-3	2.5	11
51	In silico analysis of a flavohemoglobin from Sinorhizobium meliloti strain 1021. *Microbiological Research*, **2003**, 158, 215-27	5.3	11
50	Biotinylation of K8 and K12 co-occurs with acetylation and mono-methylation in human histone H4. *FASEB Journal*, **2006**, 20, A610	0.9	11
49	Evaluation of Greenbug and Yellow Sugarcane Aphid Feeding Behavior on Resistant and Susceptible Switchgrass Cultivars. *Bioenergy Research*, **2018**, 11, 480-490	3.1	10
48	Chapter 17:Switchgrass. *RSC Energy and Environment Series*, **2010**, 341-380	0.6	10
47	A continuous, quantitative fluorescent assay for plant caffeic acid O-methyltransferases. *Journal of Agricultural and Food Chemistry*, **2010**, 58, 5220-6	5.7	10
46	Structural Requirements for Phosphorylation of C4-Leaf Phosphoenolpyruvate Carboxylase by its Highly Regulated Protein-Serine Kinase. A Comparative Study with Synthetic-Peptide Substrates and Mutant Target Proteins. *Functional Plant Biology*, **1997**, 24, 443	2.7	10

45	Switchgrass ecotypes alter microbial contribution to deep-soil C. *Soil*, **2016**, 2, 185-197	5.8	10
44	Seasonal below-ground metabolism in switchgrass. *Plant Journal*, **2017**, 92, 1059-1075	6.9	9
43	Analysis of a ferric leghemoglobin reductase from cowpea (Vigna unguiculata) root nodules. *Plant Science*, **2000**, 154, 161-170	5.3	9
42	High-performance liquid chromatographic separation of leghemoglobins from soybean root nodules. *Analytical Biochemistry*, **1986**, 154, 224-31	3.1	8
41	Soybean root nodule ultrastructure during dark-induced stress and recovery. *Protoplasma*, **1986**, 132, 69-75	3.4	8
40	Fall armyworm (Spodoptera frugiperda Smith) feeding elicits differential defense responses in upland and lowland switchgrass. *PLoS ONE*, **2019**, 14, e0218352	3.7	7
39	Overexpression of ferulate 5-hydroxylase increases syringyl units in Sorghum bicolor. *Plant Molecular Biology*, **2020**, 103, 269-285	4.6	7
38	Genetic Parameters and Prediction of Breeding Values in Switchgrass Bred for Bioenergy. *Crop Science*, **2017**, 57, 1464-1474	2.4	7
37	Abolishing activity against ascorbate in a cytosolic ascorbate peroxidase from switchgrass. *Phytochemistry*, **2013**, 94, 45-52	4	7
36	Comparative Analysis of End Point Enzymatic Digests of Arabino-Xylan Isolated from Switchgrass (Panicum virgatum L) of Varying Maturities using LC-MSn. *Metabolites*, **2012**, 2, 959-82	5.6	7
35	Penicillin-binding proteins in the pathogenic intestinal spirochete Brachyspira pilosicoli. *Antimicrobial Agents and Chemotherapy*, **2005**, 49, 1561-3	5.9	7
34	Dephosphorylation of the thylakoid membrane light-harvesting complex-II by a stromal protein phosphatase. *Photosynthesis Research*, **1995**, 45, 195-201	3.7	7
33	Transcriptional Profiling of Resistant and Susceptible Buffalograsses in Response to Blissus occiduus (Hemiptera: Blissidae) Feeding. *Journal of Economic Entomology*, **2015**, 108, 1354-62	2.2	6
32	Characterization of the Arthropod Community Associated with Switchgrass (Poales: Poaceae) in Nebraska. *Journal of the Kansas Entomological Society*, **2011**, 84, 87-104	0.5	6
31	Morphology and Proteome Characterization of the Salivary Glands of the Western Chinch Bug (Hemiptera: Blissidae). *Journal of Economic Entomology*, **2015**, 108, 2055-64	2.2	5
30	Generation of Octaploid Switchgrass by Seedling Treatment with Mitotic Inhibitors. *Bioenergy Research*, **2017**, 10, 344-352	3.1	5
29	Biotinyl-methyl 4-(amidomethyl)benzoate is a competitive inhibitor of human biotinidase. *Journal of Nutritional Biochemistry*, **2008**, 19, 826-32	6.3	5
28	A simple, single-tube radioisotopic assay for the phosphorylation/inactivation activity of the pyruvate,orthophosphate dikinase regulatory protein. *Photosynthesis Research*, **1994**, 40, 295-301	3.7	5

27	Rice (Oryza) hemoglobins. *F1000Research*, **2014**, 3, 253	3.6	5
26	Molecular cloning, functional characterization, and subcellular localization of soybean nodule dihydrolipoamide reductase. *Plant Physiology*, **2002**, 128, 300-13	6.6	5
25	Interplay of phytohormones facilitate sorghum tolerance to aphids. *Plant Molecular Biology*, **2020**, 1	4.6	5
24	Proteomic Responses of Switchgrass and Prairie Cordgrass to Senescence. *Frontiers in Plant Science* , **2016**, 7, 293	6.2	5
23	Identification of an orthologous clade of peroxidases that respond to feeding by greenbugs (Schizaphis graminum) in C grasses. *Functional Plant Biology*, **2016**, 43, 1134-1148	2.7	5
22	A Two-Amino Acid Difference in the Coat Protein of Satellite panicum mosaic virus Isolates Is Responsible for Differential Synergistic Interactions with Panicum mosaic virus. *Molecular Plant-Microbe Interactions*, **2019**, 32, 479-490	3.6	5
21	Switchgrass Genetics and Breeding Challenges **2013**, 7-31		4
20	Monitoring wheat mitochondrial compositional and respiratory changes using Fourier transform mid-infrared spectroscopy in response to agrochemical treatments. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2017**, 173, 727-732	4.4	4
19	Rice (Oryza) hemoglobins. *F1000Research*, **2014**, 3, 253	3.6	4
18	Transcriptomic and volatile signatures associated with maize defense against corn leaf aphid. *BMC Plant Biology*, **2021**, 21, 138	5.3	4
17	Transcriptome divergence during leaf development in two contrasting switchgrass (Panicum virgatum L.) cultivars. *PLoS ONE*, **2019**, 14, e0222080	3.7	3
16	Persistence of rye (Secale cereale L.) chromosome arm 1RS in wheat (Triticum aestivum L.) breeding programs of the Great Plains of North America. *Genetic Resources and Crop Evolution*, **2019**, 66, 941-950	2	3
15	Enhanced metabolism and selection of pyrethroid-resistant western corn rootworms (Diabrotica virgifera virgifera LeConte). *Pesticide Biochemistry and Physiology*, **2020**, 164, 165-172	4.9	3
14	Purification and characterization of acylation stimulating protein from porcine serum. *Protein Expression and Purification*, **2002**, 25, 348-52	2	3
13	Greenbug (Schizaphis graminum) herbivory significantly impacts protein and phosphorylation abundance in switchgrass (Panicum virgatum). *Scientific Reports*, **2020**, 10, 14842	4.9	3
12	Aphid-Responsive Defense Networks in Hybrid Switchgrass. *Frontiers in Plant Science*, **2020**, 11, 1145	6.2	3
11	Mineral Element Analyses of Switchgrass Biomass: Comparison of the Accuracy and Precision of Laboratories. *Agronomy Journal*, **2017**, 109, 735-738	2.2	2
10	Job compensation in the biotechnology core laboratory. *Nature Biotechnology*, **2000**, 18, 686-9	44.5	2

9	Genetic (co)variation and accuracy of selection for resistance to viral mosaic disease and production traits in an inter-ecotypic switchgrass breeding population. *Crop Science*, **2021**, 61, 1652-1665	2.4	2
8	Divergent Switchgrass Cultivars Modify Cereal Aphid Transcriptomes. *Journal of Economic Entomology*, **2019**, 112, 1887-1901	2.2	1
7	Predicting the field establishment of perennial grass feedstocks: progress made and challenges ahead. *Biofuels*, **2012**, 3, 653-656	2	1
6	Registration of NE Trailblazer C-1, NE Trailblazer C0, NE Trailblazer C2, NE Trailblazer C3, NE Trailblazer C4, and NE Trailblazer C5 Switchgrass Germplasms. *Journal of Plant Registrations*, **2016**, 10, 159-165	0.7	1
5	Potassium Nitrate Alters Buffalograss Bur Permeability. *Hortscience: A Publication of the American Society for Hortcultural Science*, **2016**, 51, 1566-1572	2.4	0
4	Gene Expression and Physiological Differences in Neo-Octoploid Switchgrass Subjected to Drought Stress. *Bioenergy Research*, **2020**, 13, 63-78	3.1	
3	Microscopy Assists Understanding Important Aspects of Bioenergy Grasses. *Microscopy and Microanalysis*, **2019**, 25, 1140-1141	0.5	
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