Tony Bacic

List of Publications by Citations

188 papers	10,398 citations	53 h-index	97 g-index
193 ext. papers	12,737 ext. citations	6.5 avg, IF	6.27 L-index

#	Paper	IF	Citations
188	FunRich: An open access standalone functional enrichment and interaction network analysis tool. *Proteomics*, **2015**, 15, 2597-601	4.8	735
187	Determining the polysaccharide composition of plant cell walls. *Nature Protocols*, **2012**, 7, 1590-607	18.8	402
186	Heterogeneity in the chemistry, structure and function of plant cell walls. *Nature Chemical Biology*, **2010**, 6, 724-32	11.7	398
185	Cellulose synthase-like CslF genes mediate the synthesis of cell wall (1,3;1,4)-beta-D-glucans. *Science*, **2006**, 311, 1940-2	33.3	346
184	Arabinogalactan-proteins: key regulators at the cell surface?. *Plant Physiology*, **2010**, 153, 403-19	6.6	337
183	Metabolic responses to salt stress of barley (Hordeum vulgare L.) cultivars, Sahara and Clipper, which differ in salinity tolerance. *Journal of Experimental Botany*, **2009**, 60, 4089-103	7	318
182	The fasciclin-like arabinogalactan proteins of Arabidopsis. A multigene family of putative cell adhesion molecules. *Plant Physiology*, **2003**, 133, 1911-25	6.6	269
181	The CesA gene family of barley. Quantitative analysis of transcripts reveals two groups of co-expressed genes. *Plant Physiology*, **2004**, 134, 224-36	6.6	248
180	High-throughput mapping of cell-wall polymers within and between plants using novel microarrays. *Plant Journal*, **2007**, 50, 1118-28	6.9	241
179	O-glycosylated cell wall proteins are essential in root hair growth. *Science*, **2011**, 332, 1401-3	33.3	220
178	Changes in cell wall composition during ripening of grape berries. *Plant Physiology*, **1998**, 118, 783-92	6.6	193
177	The complex structures of arabinogalactan-proteins and the journey towards understanding function. *Plant Molecular Biology*, **2001**, 47, 161-176	4.6	190
176	Using genomic resources to guide research directions. The arabinogalactan protein gene family as a test case. *Plant Physiology*, **2002**, 129, 1448-63	6.6	190
175	The classical arabinogalactan protein gene family of arabidopsis. *Plant Cell*, **2000**, 12, 1751-68	11.6	190
174	The genetics and transcriptional profiles of the cellulose synthase-like HvCslF gene family in barley. *Plant Physiology*, **2008**, 146, 1821-33	6.6	177
173	The charophycean green algae provide insights into the early origins of plant cell walls. *Plant Journal*, **2011**, 68, 201-11	6.9	172
172	Arabinogalactan proteins are required for apical cell extension in the moss Physcomitrella patens. *Plant Cell*, **2005**, 17, 3051-65	11.6	162

171	Fruit Calcium: Transport and Physiology. *Frontiers in Plant Science*, **2016**, 7, 569	6.2	153
170	Mass spectrometry imaging for plant biology: a review. *Phytochemistry Reviews*, **2016**, 15, 445-488	7.7	149
169	Pollen tubes of Nicotiana alata express two genes from different beta-glucan synthase families. *Plant Physiology*, **2001**, 125, 2040-52	6.6	140
168	Plant cell walls: the skeleton of the plant world. *Functional Plant Biology*, **2010**, 37, 357	2.7	134
167	Mixed-linkage (1-->3),(1-->4)-beta-D-glucan is not unique to the Poales and is an abundant component of Equisetum arvense cell walls. *Plant Journal*, **2008**, 54, 510-21	6.9	133
166	(1,3;1,4)-beta-D-glucans in cell walls of the poaceae, lower plants, and fungi: a tale of two linkages. *Molecular Plant*, **2009**, 2, 873-82	14.4	132
165	Over-expression of specific HvCslF cellulose synthase-like genes in transgenic barley increases the levels of cell wall (1,3;1,4)-β-glucans and alters their fine structure. *Plant Biotechnology Journal*, **2011**, 9, 117-35	11.6	131
164	REVIEW: Variability in Fine Structures of Noncellulosic Cell Wall Polysaccharides from Cereal Grains: Potential Importance in Human Health and Nutrition. *Cereal Chemistry*, **2010**, 87, 272-282	2.4	125
163	Characterization of the Arabidopsis lysine-rich arabinogalactan-protein AtAGP17 mutant (rat1) that results in a decreased efficiency of agrobacterium transformation. *Plant Physiology*, **2004**, 135, 2162-71	6.6	118
162	Arabinogalactan-proteins and the research challenges for these enigmatic plant cell surface proteoglycans. *Frontiers in Plant Science*, **2012**, 3, 140	6.2	113
161	Wine protein haze: mechanisms of formation and advances in prevention. *Journal of Agricultural and Food Chemistry*, **2015**, 63, 4020-30	5.7	106
160	Cell-Type-Specific H+-ATPase Activity in Root Tissues Enables K+ Retention and Mediates Acclimation of Barley (Hordeum vulgare) to Salinity Stress. *Plant Physiology*, **2016**, 172, 2445-2458	6.6	99
159	Preparation of plant cells for transmission electron microscopy to optimize immunogold labeling of carbohydrate and protein epitopes. *Nature Protocols*, **2012**, 7, 1716-27	18.8	91
158	Evolution and development of cell walls in cereal grains. *Frontiers in Plant Science*, **2014**, 5, 456	6.2	88
157	Root cell wall solutions for crop plants in saline soils. *Plant Science*, **2018**, 269, 47-55	5.3	87
156	The response of the maize nitrate transport system to nitrogen demand and supply across the lifecycle. *New Phytologist*, **2013**, 198, 82-94	9.8	85
155	Differential accumulation of callose, arabinoxylan and cellulose in nonpenetrated versus penetrated papillae on leaves of barley infected with Blumeria graminis f. sp. hordei. *New Phytologist*, **2014**, 204, 650-660	9.8	82
154	Effects of structural variation in xyloglucan polymers on interactions with bacterial cellulose. *American Journal of Botany*, **2006**, 93, 1402-14	2.7	80

153	Grape marc as a source of carbohydrates for bioethanol: Chemical composition, pre-treatment and saccharification. *Bioresource Technology*, **2015**, 193, 76-83	11	76
152	THE COMPLEX POLYSACCHARIDES OF THE RAPHID DIATOM PINNULARIA VIRIDIS (BACILLARIOPHYCEAE)1. *Journal of Phycology*, **2003**, 39, 543-554	3	75
151	Molecular characterization of a stigma-specific gene encoding an arabinogalactan-protein (AGP) from Nicotiana alata. *Plant Journal*, **1996**, 9, 313-23	6.9	75
150	Root spatial metabolite profiling of two genotypes of barley (Hordeum vulgare L.) reveals differences in response to short-term salt stress. *Journal of Experimental Botany*, **2016**, 67, 3731-45	7	74
149	Molecular cloning of cDNAs encoding the protein backbones of arabinogalactan-proteins from the filtrate of suspension-cultured cells of Pyrus communis and Nicotiana alata. *Plant Journal*, **1995**, 8, 269-81	6.9	71
148	Hitting the Wall-Sensing and Signaling Pathways Involved in Plant Cell Wall Remodeling in Response to Abiotic Stress. *Plants*, **2018**, 7,	4.5	69
147	Identification of a novel group of putative Arabidopsis thaliana beta-(1,3)-galactosyltransferases. *Plant Molecular Biology*, **2008**, 68, 43-59	4.6	68
146	Arabidopsis leucine-rich repeat extensin (LRX) proteins modify cell wall composition and influence plant growth. *BMC Plant Biology*, **2015**, 15, 155	5.3	65
145	Post-translational modifications of arabinogalactan-peptides of Arabidopsis thaliana. Endoplasmic reticulum and glycosylphosphatidylinositol-anchor signal cleavage sites and hydroxylation of proline. *Journal of Biological Chemistry*, **2004**, 279, 45503-11	5.4	64
144	Revised Phylogeny of the Gene Superfamily: Insights into Cell Wall Evolution. *Plant Physiology*, **2018**, 177, 1124-1141	6.6	64
143	Unique aspects of the structure and dynamics of elementary I cellulose microfibrils revealed by computational simulations. *Plant Physiology*, **2015**, 168, 3-17	6.6	63
142	Regulation of Meristem Morphogenesis by Cell Wall Synthases in Arabidopsis. *Current Biology*, **2016**, 26, 1404-15	6.3	61
141	Endosymbiosis undone by stepwise elimination of the plastid in a parasitic dinoflagellate. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 5767-72	11.5	60
140	Detection of QTL for metabolic and agronomic traits in wheat with adjustments for variation at genetic loci that affect plant phenology. *Plant Science*, **2015**, 233, 143-154	5.3	60
139	Current challenges in cell wall biology in the cereals and grasses. *Frontiers in Plant Science*, **2012**, 3, 130	6.2	59
138	A (1-->4)-beta-mannan-specific monoclonal antibody and its use in the immunocytochemical location of galactomannans. *Planta*, **2001**, 214, 235-42	4.7	59
137	Evidence for land plant cell wall biosynthetic mechanisms in charophyte green algae. *Annals of Botany*, **2014**, 114, 1217-36	4.1	55
136	The impact of constitutive heterologous expression of a moss Na+ transporter on the metabolomes of rice and barley. *Metabolomics*, **2007**, 3, 307-317	4.7	53

135	Heterogeneous xylose-rich glycans are associated with extracellular glycoproteins from the biofouling diatom Craspedostauros australis (Bacillariophyceae). *European Journal of Phycology*, **2003**, 38, 351-360	2.2	53
134	Prospecting for Energy-Rich Renewable Raw Materials: Agave Leaf Case Study. *PLoS ONE*, **2015**, 10, e0135382	3.7	51
133	Interactions of arabinoxylan and (1,3)(1,4)-β-glucan with cellulose networks. *Biomacromolecules*, **2015**, 16, 1232-9	6.9	50
132	Plant cell wall engineering: applications in biofuel production and improved human health. *Current Opinion in Biotechnology*, **2014**, 26, 79-84	11.4	50
131	Determining the subcellular location of synthesis and assembly of the cell wall polysaccharide (1,3; 1,4)-β-D-glucan in grasses. *Plant Cell*, **2015**, 27, 754-71	11.6	49
130	Regulation of Starch Stores by a Ca(2+)-Dependent Protein Kinase Is Essential for Viable Cyst Development in Toxoplasma gondii. *Cell Host and Microbe*, **2015**, 18, 670-81	23.4	49
129	Arabinogalactan proteins have deep roots in eukaryotes: identification of genes and epitopes in brown algae and their role in Fucus serratus embryo development. *New Phytologist*, **2016**, 209, 1428-41	9.8	48
128	KNS4/UPEX1: A Type II Arabinogalactan β(1,3)-Galactosyltransferase Required for Pollen Exine Development. *Plant Physiology*, **2017**, 173, 183-205	6.6	47
127	Isolation and characterization of cell walls from the mesocarp of mature grape berries (Vitis vinifera). *Planta*, **1997**, 203, 93-100	4.7	47
126	VARIATIONS IN THE SUBSTITUTED 3-LINKED MANNANS CLOSELY ASSOCIATED WITH THE SILICIFIED WALLS OF DIATOMS1. *Journal of Phycology*, **2005**, 41, 1154-1161	3	46
125	Characterization of ion contents and metabolic responses to salt stress of different Arabidopsis AtHKT1;1 genotypes and their parental strains. *Molecular Plant*, **2013**, 6, 350-68	14.4	45
124	Membrane fractionation and enrichment of callose synthase from pollen tubes of Nicotiana alata Link et Otto. *Planta*, **1998**, 205, 380-8	4.7	45
123	BETA/KAPPA-CARRAGEENANS AS EVIDENCE FOR CONTINUED SEPARATION OF THE FAMILIES DICRANEMATACEAE AND SARCODIACEAE (GIGARTINALES, RHODOPHYTA)1. *Journal of Phycology*, **1993**, 29, 833-844	3	42
122	Quantitative structural organisation model for wheat endosperm cell walls: Cellulose as an important constituent. *Carbohydrate Polymers*, **2018**, 196, 199-208	10.3	41
121	Are designer plant cell walls a realistic aspiration or will the plasticity of the plant's metabolism win out?. *Current Opinion in Biotechnology*, **2014**, 26, 108-14	11.4	40
120	The barley (Hordeum vulgare) cellulose synthase-like D2 gene (HvCslD2) mediates penetration resistance to host-adapted and nonhost isolates of the powdery mildew fungus. *New Phytologist*, **2016**, 212, 421-33	9.8	39
119	Re-evaluation of the role of a transmitting tract-specific glycoprotein on pollen tube growth. *Plant Journal*, **1998**, 13, 529-535	6.9	39
118	Insights into the Evolution of Hydroxyproline-Rich Glycoproteins from 1000 Plant Transcriptomes. *Plant Physiology*, **2017**, 174, 904-921	6.6	36

117	Pipeline to Identify Hydroxyproline-Rich Glycoproteins. *Plant Physiology*, **2017**, 174, 886-903	6.6	35
116	Genome Wide Association Mapping for Arabinoxylan Content in a Collection of Tetraploid Wheats. *PLoS ONE*, **2015**, 10, e0132787	3.7	34
115	Role of a callose synthase zymogen in regulating wall deposition in pollen tubes of Nicotiana alata Link et Otto. *Planta*, **1999**, 208, 528-538	4.7	33
114	Loss of LOFSEP Transcription Factor Function Converts Spikelet to Leaf-Like Structures in Rice. *Plant Physiology*, **2018**, 176, 1646-1664	6.6	33
113	Metabolic profiling of transgenic wheat over-expressing the high-molecular-weight Dx5 glutenin subunit. *Metabolomics*, **2009**, 5, 239-252	4.7	32
112	A REVISION OF THE SYSTEMATICS OF THE NIZYMENIACEAE (GIGARTINALES, RHODOPHYTA) BASED ON POLYSACCHARIDES, ANATOMY, AND NUCLEOTIDE SEQUENCES1. *Journal of Phycology*, **1995**, 31, 153-166	3	32
111	The dynamics of cereal cyst nematode infection differ between susceptible and resistant barley cultivars and lead to changes in (1,3;1,4)-β-glucan levels and HvCslF gene transcript abundance. *New Phytologist*, **2015**, 207, 135-147	9.8	31
110	Structural analysis and molecular model of a self-incompatibility RNase from wild tomato. *Plant Physiology*, **1998**, 116, 463-9	6.6	31
109	The plant secretory pathway seen through the lens of the cell wall. *Protoplasma*, **2017**, 254, 75-94	3.4	30
108	Plant glycosylphosphatidylinositol anchored proteins at the plasma membrane-cell wall nexus. *Journal of Integrative Plant Biology*, **2018**, 60, 649-669	8.3	30
107	Genetic variation in the root growth response of barley genotypes to salinity stress. *Functional Plant Biology*, **2013**, 40, 516-530	2.7	30
106	Genetic Diversity and Genome Wide Association Study of β-Glucan Content in Tetraploid Wheat Grains. *PLoS ONE*, **2016**, 11, e0152590	3.7	30
105	-linked Glycan Micro-heterogeneity in Glycoproteins of Arabidopsis. *Molecular and Cellular Proteomics*, **2018**, 17, 413-421	7.6	29
104	Hyphal cell walls from the plant pathogen Rhynchosporium secalis contain (1,3/1,6)-beta-D-glucans, galacto- and rhamnomannans, (1,3;1,4)-beta-D-glucans and chitin. *FEBS Journal*, **2009**, 276, 3698-709	5.7	29
103	The barley genome sequence assembly reveals three additional members of the CslF (1,3;1,4)-β-glucan synthase gene family. *PLoS ONE*, **2014**, 9, e90888	3.7	29
102	A customized gene expression microarray reveals that the brittle stem phenotype fs2 of barley is attributable to a retroelement in the HvCesA4 cellulose synthase gene. *Plant Physiology*, **2010**, 153, 1716-28	6.6	28
101	Breaking an impasse in pectin biosynthesis. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 5639-40	11.5	27
100	Characterisation of extracellular polysaccharides from suspension cultures of members of the poaceae. *Planta*, **2000**, 210, 261-8	4.7	27

99	Down-regulation of the glucan synthase-like 6 gene (HvGsl6) in barley leads to decreased callose accumulation and increased cell wall penetration by Blumeria graminis f. sp. hordei. *New Phytologist*, **2016**, 212, 434-43	9.8	25
98	(1,3;1,4)-β-Glucan Biosynthesis by the CSLF6 Enzyme: Position and Flexibility of Catalytic Residues Influence Product Fine Structure. *Biochemistry*, **2016**, 55, 2054-61	3.2	25
97	Blue Light Regulates Secondary Cell Wall Thickening via MYC2/MYC4 Activation of the -Directed Transcriptional Network in Arabidopsis. *Plant Cell*, **2018**, 30, 2512-2528	11.6	25
96	Differences in glycosyltransferase family 61 accompany variation in seed coat mucilage composition in Plantago spp. *Journal of Experimental Botany*, **2016**, 67, 6481-6495	7	24
95	Cell wall biomechanics: a tractable challenge in manipulating plant cell walls 'fit for purpose'! *Current Opinion in Biotechnology*, **2018**, 49, 163-171	11.4	23
94	The Dynamics of Transcript Abundance during Cellularization of Developing Barley Endosperm. *Plant Physiology*, **2016**, 170, 1549-65	6.6	23
93	Recent advances in Cannabis sativa genomics research. *New Phytologist*, **2021**, 230, 73-89	9.8	23
92	Distribution, structure and biosynthetic gene families of (1,3;1,4)-β-glucan in Sorghum bicolor. *Journal of Integrative Plant Biology*, **2015**, 57, 429-45	8.3	22
91	EXIMS: an improved data analysis pipeline based on a new peak picking method for EXploring Imaging Mass Spectrometry data. *Bioinformatics*, **2015**, 31, 3198-206	7.2	22
90	Isolation and structural elucidation by 2D NMR of planteose, a major oligosaccharide in the mucilage of chia (Salvia hispanica L.) seeds. *Carbohydrate Polymers*, **2017**, 175, 231-240	10.3	21
89	Functional Specialization of Cellulose Synthase Isoforms in a Moss Shows Parallels with Seed Plants. *Plant Physiology*, **2017**, 175, 210-222	6.6	21
88	Characterization of protein N-glycosylation by tandem mass spectrometry using complementary fragmentation techniques. *Frontiers in Plant Science*, **2015**, 6, 674	6.2	21
87	CARRAGEENANS FROM AUSTRALIAN REPRESENTATIVES OF THE FAMILY CYSTOCLONIACEAE (GIGARTINALES, RHODOPHYTA), WITH DESCRIPTION OF CALLIBLEPHARIS CELATOSPORA SP. NOV., AND TRANSFER OF AUSTROCLONIUM TO THE FAMILY ARESCHOUGIACEAE. *Journal of Phycology*, **1998**, 34, 515-535	3	21
86	Accumulation of volatile phenol glycoconjugates in grapes following grapevine exposure to smoke and potential mitigation of smoke taint by foliar application of kaolin. *Planta*, **2019**, 249, 941-952	4.7	21
85	Biosynthesis of lipophosphoglycan from Leishmania major: solubilization and characterization of a (beta 1-3)-galactosyltransferase. *Biochemical Journal*, **1996**, 317 (Pt 1), 247-55	3.8	20
84	Genetic and environmental factors contribute to variation in cell wall composition in mature desi chickpea (Cicer arietinum L.) cotyledons. *Plant, Cell and Environment*, **2018**, 41, 2195-2208	8.4	18
83	DEFECTIVE KERNEL1 (DEK1) Regulates Cell Walls in the Leaf Epidermis. *Plant Physiology*, **2016**, 172, 2206-2218	6.2	18
82	Isolation of tissues and preservation of RNA from intact, germinated barley grain. *Plant Journal*, **2017**, 91, 754-765	6.9	17

81	Morphology, Carbohydrate Distribution, Gene Expression, and Enzymatic Activities Related to Cell Wall Hydrolysis in Four Barley Varieties during Simulated Malting. *Frontiers in Plant Science*, **2017**, 8, 1872	6.2	17
80	Biochemical and molecular changes associated with heteroxylan biosynthesis in Neolamarckia cadamba (Rubiaceae) during xylogenesis. *Frontiers in Plant Science*, **2014**, 5, 602	6.2	17
79	Arabinogalactan-proteins of Zostera marina L. contain unique glycan structures and provide insight into adaption processes to saline environments. *Scientific Reports*, **2020**, 10, 8232	4.9	15
78	The reducing end sequence of wheat endosperm cell wall arabinoxylans. *Carbohydrate Research*, **2014**, 386, 23-32	2.9	15
77	An exo-β(1->3)-D-galactanase from Streptomyces sp. provides insights into type II arabinogalactan structure. *Carbohydrate Research*, **2012**, 352, 70-81	2.9	15
76	Structure of the N-Linked Oligosaccharides from Tridacnin, a Lectin Found in the Haemolymph of the Giant Clam Hippopus Hippopus. *FEBS Journal*, **1995**, 232, 873-880		15
75	A Genome-Wide Association Study for Culm Cellulose Content in Barley Reveals Candidate Genes Co-Expressed with Members of the CELLULOSE SYNTHASE A Gene Family. *PLoS ONE*, **2015**, 10, e0130890	3.7	15
74	A Novel (1,4)-β-Linked Glucoxylan Is Synthesized by Members of the Gene Family in Land Plants. *ACS Central Science*, **2019**, 5, 73-84	16.8	15
73	AGPs Through Time and Space **2018**, 767-804		15
72	Plant cell wall polysaccharide biosynthesis: real progress in the identification of participating genes. *Planta*, **2005**, 221, 309-12	4.7	14
71	A Genome Wide Association Study of arabinoxylan content in 2-row spring barley grain. *PLoS ONE*, **2017**, 12, e0182537	3.7	14
70	Mucin-Like Proteophosphoglycans from the Protozoan Parasite Leishmania.. *Trends in Glycoscience and Glycotechnology*, **1999**, 11, 53-71	0.1	14
69	A Golgi UDP-GlcNAc transporter delivers substrates for N-linked glycans and sphingolipids. *Nature Plants*, **2018**, 4, 792-801	11.5	14
68	Differential expression of the gene late in grain development may explain quantitative differences in (1,3;1,4)-β-glucan concentration in barley. *Molecular Breeding*, **2015**, 35, 20	3.4	13
67	Integrative Multi-omics Analyses of Barley Rootzones under Salinity Stress Reveal Two Distinctive Salt Tolerance Mechanisms. *Plant Communications*, **2020**, 1, 100031	9	13
66	Dissecting the Genetic Basis for Seed Coat Mucilage Heteroxylan Biosynthesis in Using Gamma Irradiation and Infrared Spectroscopy. *Frontiers in Plant Science*, **2017**, 8, 326	6.2	13
65	Regioselective acylation of several polyhydroxylated natural compounds by Candida antarctica lipase B. *Biocatalysis and Biotransformation*, **2005**, 23, 109-116	2.5	13
64	A Glycosyltransferase from Nicotiana alata Pollen Mediates Synthesis of a Linear (1,5)-α-L-Arabinan When Expressed in Arabidopsis. *Plant Physiology*, **2016**, 170, 1962-74	6.6	13

63	Functional Characterization of a Glycosyltransferase from the Moss Involved in the Biosynthesis of a Novel Cell Wall Arabinoglucan. *Plant Cell*, **2018**, 30, 1293-1308	11.6	12
62	Abiotic Stress and Metabolomics **2018**, 61-85		12
61	Biochemical Compositional Analysis and Kinetic Modeling of Hydrothermal Carbonization of Australian Saltbush. *Energy & Fuels*, **2019**, 33, 12469-12479	4.1	12
60	CHEMISTRY, PROPERTIES, AND PHYLOGENETIC IMPLICATIONS OF THE METHYLATED CARRAGEENANS FROM RED ALGAE OF THE GENUS ARESCHOUGIA (ARESCHOUGIACEAE, GIGARTINALES, RHODOPHYTA). *Journal of Phycology*, **2001**, 37, 1127-1137	3	12
59	Disulphide bonding in a stylar self-incompatibility ribonuclease of Nicotiana alata. *FEBS Journal*, **1996**, 242, 75-80		12
58	Asparagus Spears as a Model to Study Heteroxylan Biosynthesis during Secondary Wall Development. *PLoS ONE*, **2015**, 10, e0123878	3.7	12
57	A tandem liquid chromatography–mass spectrometry (LC–MS) method for profiling small molecules in complex samples. *Metabolomics*, **2015**, 11, 1552-1562	4.7	11
56	Genetics and physiology of cell wall polysaccharides in the model C4 grass, Setaria viridis spp. *BMC Plant Biology*, **2015**, 15, 236	5.3	11
55	Transcriptional and biochemical analyses of gibberellin expression and content in germinated barley grain. *Journal of Experimental Botany*, **2020**, 71, 1870-1884	7	11
54	Targeted mutation of barley (1,3;1,4)-β-glucan synthases reveals complex relationships between the storage and cell wall polysaccharide content. *Plant Journal*, **2020**, 104, 1009-1022	6.9	11
53	Cell wall modification by the xyloglucan endotransglucosylase/hydrolase XTH19 influences freezing tolerance after cold and sub-zero acclimation. *Plant, Cell and Environment*, **2021**, 44, 915-930	8.4	11
52	Exploratory analysis of high-throughput metabolomic data. *Metabolomics*, **2013**, 9, 1311-1320	4.7	9
51	Abiotic Stress and Metabolomics **2011**, 61-85		9
50	Extraction and characterization of agar from Australian Pterocladia lucida. *Journal of Applied Phycology*, **2004**, 16, 41-48	3.2	9
49	Pyruvated carrageenans from Solieria robusta and its adelphoparasite Tikvahiella candida. *Hydrobiologia*, **1999**, 398/399, 401-409	2.4	9
48	Genetics, Transcriptional Profiles, and Catalytic Properties of the UDP-Arabinose Mutase Family from Barley. *Biochemistry*, **2016**, 55, 322-34	3.2	9
47	Cracking the "Sugar Code": A Snapshot of - and -Glycosylation Pathways and Functions in Plants Cells. *Frontiers in Plant Science*, **2021**, 12, 640919	6.2	9
46	Fasciclin-Like Arabinogalactan-Protein 16 (FLA16) Is Required for Stem Development in. *Frontiers in Plant Science*, **2020**, 11, 615392	6.2	8

45	Method for hull-less barley transformation and manipulation of grain mixed-linkage beta-glucan. *Journal of Integrative Plant Biology*, **2018**, 60, 382-396	8.3	8
44	A micro-scale method for determining relative metal-binding affinities of proteins. *Molecular Biotechnology*, **1997**, 8, 215-8	3	8
43	Biotransformation of podophyllotoxin by Hordeum vulgare cell suspension cultures. *Biocatalysis and Biotransformation*, **2007**, 25, 1-8	2.5	8
42	Barley grain (1,3;1,4)-β-glucan content: effects of transcript and sequence variation in genes encoding the corresponding synthase and endohydrolase enzymes. *Scientific Reports*, **2019**, 9, 17250	4.9	8
41	Low-Input Fermentations of Agave tequilana Leaf Juice Generate High Returns on Ethanol Yields. *Bioenergy Research*, **2016**, 9, 1142-1154	3.1	7
40	Biotransformation of ingenol-3-angelate in four plant cell suspension cultures. *Biocatalysis and Biotransformation*, **2009**, 27, 186-194	2.5	7
39	Phylogenetic analysis and functional characterisation of strictosidine synthase-like genes in Arabidopsis thaliana. *Functional Plant Biology*, **2010**, 36, 1098-1109	2.7	7
38	Effects of Yariv dyes, arabinogalactan-protein binding reagents, on the growth and viability of Brazilian pine suspension culture cells. *Trees - Structure and Function*, **2010**, 24, 391-398	2.6	7
37	MADS1 maintains barley spike morphology at high ambient temperatures. *Nature Plants*, **2021**, 7, 1093-1107	11.5	7
36	Molecular Mechanism of Xylogenesis in Moso Bamboo () Shoots during Cold Storage. *Polymers*, **2018**, 11,	4.5	7
35	Evolution of Sequence-Diverse Disordered Regions in a Protein Family: Order within the Chaos. *Molecular Biology and Evolution*, **2020**, 37, 2155-2172	8.3	6
34	The effect of zinc fertilisation and arbuscular mycorrhizal fungi on grain quality and yield of contrasting barley cultivars. *Functional Plant Biology*, **2020**, 47, 122-133	2.7	6
33	Natural Variation in Ovule Morphology Is Influenced by Multiple Tissues and Impacts Downstream Grain Development in Barley (L.). *Frontiers in Plant Science*, **2019**, 10, 1374	6.2	6
32	Hydrothermal Carbonization of Australian Saltbush. *Energy & Fuels*, **2019**, 33, 1157-1166	4.1	6
31	Genes and Enzymes of the GT31 Family: Towards Unravelling the Function(s) of the Plant Glycosyltransferase Family Members213-234		6
30	Effect of Processing on Viscosity and Molecular Weight of (1,3)(1,4)-β-Glucan in Western Australian Oat Cultivars. *Cereal Chemistry*, **2017**, 94, 625-632	2.4	5
29	Variation in barley (1→3, 1→4)-β-glucan endohydrolases reveals novel allozymes with increased thermostability. *Theoretical and Applied Genetics*, **2017**, 130, 1053-1063	6	5
28	A small-scale fractionation pipeline for rapid analysis of seed mucilage characteristics. *Plant Methods*, **2020**, 16, 20	5.8	5

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