Jin-Gui Chen

List of Publications by Year
in descending order

133 papers	10,272 citations	29994 54 h-index	37111 96 g-index
138 all docs	138 docs citations	138 times ranked	8943 citing authors

#	Article	IF	Citations
1	Cell Surface- and Rho GTPase-Based Auxin Signaling Controls Cellular Interdigitation in Arabidopsis. Cell, 2010, 143, 99-110.	13.5	454
2	Different Signaling and Cell Death Roles of Heterotrimeric G Protein Î± and Î² Subunits in the Arabidopsis Oxidative Stress Response to Ozone. Plant Cell, 2005, 17, 957-970.	3.1	363
3	Modulation of Cell Proliferation by Heterotrimeric G Protein in Arabidopsis. Science, 2001, 292, 2066-2069.	6.0	356
4	Population genomics of Populus trichocarpa identifies signatures of selection and adaptive trait associations. Nature Genetics, 2014, 46, 1089-1096.	9.4	330
5	The Î²-Subunit of the Arabidopsis G Protein Negatively Regulates Auxin-Induced Cell Division and Affects Multiple Developmental Processes[W]. Plant Cell, 2003, 15, 393-409.	3.1	310
6	A Seven-Transmembrane RGS Protein That Modulates Plant Cell Proliferation. Science, 2003, 301, 1728-1731.	6.0	300
7	ABP1 is required for organized cell elongation and division in Arabidopsis embryogenesis. Genes and Development, 2001, 15, 902-911.	2.7	295
8	Regulation of Lignin Biosynthesis and Its Role in Growth-Defense Tradeoffs. Frontiers in Plant Science, 2018, 9, 1427.	1.7	231
9	Role of a Heterotrimeric G Protein in Regulation of Arabidopsis Seed Germination. Plant Physiology, 2002, 129, 897-907.	2.3	227
10	G-Protein Complex Mutants Are Hypersensitive to Abscisic Acid Regulation of Germination and Postgermination Development. Plant Physiology, 2006, 141, 243-256.	2.3	219
11	Heterotrimeric G protein signalling in the plant kingdom. Open Biology, 2013, 3, 120186.	1.5	218
12	Arabidopsis Ovate Family Protein 1 is a transcriptional repressor that suppresses cell elongation. Plant Journal, 2007, 50, 858-872.	2.8	209
13	GTPase acceleration as the rate-limiting step in <i>Arabidopsis</i> G protein-coupled sugar signaling. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 17317-17322.	3.3	195
14	Arabidopsis Gâ€protein interactome reveals connections to cell wall carbohydrates and morphogenesis. Molecular Systems Biology, 2011, 7, 532.	3.2	191
15	The Plastid Protein THYLAKOID FORMATION1 and the Plasma Membrane G-Protein GPA1 Interact in a Novel Sugar-Signaling Mechanism in Arabidopsis. Plant Cell, 2006, 18, 1226-1238.	3.1	187
16	Heterotrimeric G Protein Î³ Subunits Provide Functional Selectivity in GÎ²Î³ Dimer Signaling in Arabidopsis. Plant Cell, 2007, 19, 1235-1250.	3.1	176
17	Differential Roles of Arabidopsis Heterotrimeric G-Protein Subunits in Modulating Cell Division in Roots. Plant Physiology, 2006, 141, 887-897.	2.3	165
18	GCR1 Can Act Independently of Heterotrimeric G-Protein in Response to Brassinosteroids and Gibberellins in Arabidopsis Seed Germination. Plant Physiology, 2004, 135, 907-915.	2.3	160

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19	The KalanchoÃ« genome provides insights into convergent evolution and building blocks of crassulacean acid metabolism. Nature Communications, 2017, 8, 1899.	5.8	159
20	TRICHOMELESS1 regulates trichome patterning by suppressing<i>GLABRA1</i>in<i>Arabidopsis</i>. Development (Cambridge), 2007, 134, 3873-3882.	1.2	158
21	OVATE FAMILY PROTEIN4 (OFP4) interaction with KNAT7 regulates secondary cell wall formation in <i>Arabidopsis thaliana</i>. Plant Journal, 2011, 67, 328-341.	2.8	151
22	Crystal structure of auxin-binding protein 1 in complex with auxin. EMBO Journal, 2002, 21, 2877-2885.	3.5	138
23	RACK1 mediates multiple hormone responsiveness and developmental processes in Arabidopsis. Journal of Experimental Botany, 2006, 57, 2697-2708.	2.4	128
24	Arabidopsis mitogenâ€activated protein kinase MPK12 interacts with the MAPK phosphatase IBR5 and regulates auxin signaling. Plant Journal, 2009, 57, 975-985.	2.8	128
25	A Reevaluation of the Role of the Heterotrimeric G Protein in Coupling Light Responses in Arabidopsis. Plant Physiology, 2003, 131, 1623-1627.	2.3	124
26	AtRGS1 Function in Arabidopsis thaliana. Methods in Enzymology, 2004, 389, 338-350.	0.4	122
27	Comprehensive analysis of single-repeat R3 MYB proteins in epidermal cell patterning and their transcriptional regulation in Arabidopsis. BMC Plant Biology, 2008, 8, 81.	1.6	119
28	A Dual Role of Strigolactones in Phosphate Acquisition and Utilization in Plants. International Journal of Molecular Sciences, 2013, 14, 7681-7701.	1.8	117
29	The role of auxin-binding protein 1 in the expansion of tobacco leaf cells. Plant Journal, 2002, 28, 607-617.	2.8	112
30	<scp>Genomeâ€wide association studies</scp> and expressionâ€based quantitative trait loci analyses reveal roles of <scp>HCT</scp>2 in caffeoylquinic acid biosynthesis and its regulation by defenseâ€responsive transcription factors in <i>Populus</i>. New Phytologist, 2018, 220, 502-516.	3.5	112
31	Genetic characterization reveals no role for the reported ABA receptor, GCR2, in ABA control of seed germination and early seedling development in Arabidopsis. Plant Journal, 2007, 52, 1001-1013.	2.8	111
32	Functional characterization of TRICHOMELESS2, a new single-repeat R3 MYB transcription factor in the regulation of trichome patterning in Arabidopsis. BMC Plant Biology, 2011, 11, 176.	1.6	111
33	Involvement of Arabidopsis RACK1 in Protein Translation and Its Regulation by Abscisic Acid Â Â Â. Plant Physiology, 2011, 155, 370-383.	2.3	111
34	Recent Advances in the Transcriptional Regulation of Secondary Cell Wall Biosynthesis in the Woody Plants. Frontiers in Plant Science, 2018, 9, 1535.	1.7	110
35	Abscisic acid regulation of guard-cell K ⁺ and anion channels in GÎ²- and RGS-deficient <i>Arabidopsis</i> lines. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 8476-8481.	3.3	107
36	High-resolution genetic mapping of allelic variants associated with cell wall chemistry in Populus. BMC Genomics, 2015, 16, 24.	1.2	106

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37	Regulation of secondary cell wall biosynthesis by poplar R2R3 MYB transcription factor PtrMYB152 in Arabidopsis. Scientific Reports, 2014, 4, 5054.	1.6	106
38	Arabidopsis Ovate Family Proteins, a Novel Transcriptional Repressor Family, Control Multiple Aspects of Plant Growth and Development. PLoS ONE, 2011, 6, e23896.	1.1	104
39	AtMPK4 is required for maleâ€specific meiotic cytokinesis in Arabidopsis. Plant Journal, 2011, 67, 895-906.	2.8	103
40	Regulation of cell fate determination by single-repeat R3 MYB transcription factors in Arabidopsis. Frontiers in Plant Science, 2014, 5, 133.	1.7	102
41	RACK1 is a negative regulator of ABA responses in Arabidopsis. Journal of Experimental Botany, 2009, 60, 3819-3833.	2.4	100
42	<i>Pseudomonas fluorescens</i> Induces Strain-Dependent and Strain-Independent Host Plant Responses in Defense Networks, Primary Metabolism, Photosynthesis, and Fitness. Molecular Plant-Microbe Interactions, 2012, 25, 765-778.	1.4	100
43	Expression analysis of the AtMLO Gene Family Encoding Plant-Specific Seven-Transmembrane Domain Proteins. Plant Molecular Biology, 2006, 60, 583-597.	2.0	91
44	Highly Efficient Isolation of Populus Mesophyll Protoplasts and Its Application in Transient Expression Assays. PLoS ONE, 2012, 7, e44908.	1.1	89
45	Comment on "A G Proteinâ€“Coupled Receptor Is a Plasma Membrane Receptor for the Plant Hormone Abscisic Acid". Science, 2007, 318, 914-914.	6.0	85
46	Multitrait genomeâ€wide association analysis of <i>Populus trichocarpa</i> identifies key polymorphisms controlling morphological and physiological traits. New Phytologist, 2019, 223, 293-309.	3.5	85
47	Abscisic Acid Receptors: Past, Present and Future^F. Journal of Integrative Plant Biology, 2011, 53, 469-479.	4.1	82
48	Insights of biomass recalcitrance in natural <i>Populus trichocarpa</i> variants for biomass conversion. Green Chemistry, 2017, 19, 5467-5478.	4.6	82
49	Characterization of an activationâ€tagged mutant uncovers a role of <scp>GLABRA</scp>2 in anthocyanin biosynthesis in Arabidopsis. Plant Journal, 2015, 83, 300-311.	2.8	81
50	Construct design for CRISPR/Cas-based genome editing in plants. Trends in Plant Science, 2021, 26, 1133-1152.	4.3	76
51	RACK1 genes regulate plant development with unequal genetic redundancy in Arabidopsis. BMC Plant Biology, 2008, 8, 108.	1.6	74
52	Genome-wide analysis of lectin receptor-like kinases in Populus. BMC Genomics, 2016, 17, 699.	1.2	72
53	Arabidopsis Transient Expression Analysis Reveals that Activation of GLABRA2 May Require Concurrent Binding of GLABRA1 and GLABRA3 to the Promoter of GLABRA2. Plant and Cell Physiology, 2008, 49, 1792-1804.	1.5	68
54	Knockdown of a laccase in <i>Populus deltoides</i> confers altered cell wall chemistry and increased sugar release. Plant Biotechnology Journal, 2016, 14, 2010-2020.	4.1	64

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55	Association mapping, transcriptomics, and transient expression identify candidate genes mediating plantâ€“pathogen interactions in a tree. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 11573-11578.	3.3	61
56	Lectin Receptor-Like Kinases: The Sensor and Mediator at the Plant Cell Surface. Frontiers in Plant Science, 2020, 11, 596301.	1.7	61
57	NTL8 Regulates Trichome Formation in Arabidopsis by Directly Activating R3 MYB Genes <i>TRY</i> and <i>TCL1</i>. Plant Physiology, 2017, 174, 2363-2375.	2.3	56
58	A 5-Enolpyruvylshikimate 3-Phosphate Synthase Functions as a Transcriptional Repressor in <i>Populus</i>. Plant Cell, 2018, 30, 1645-1660.	3.1	56
59	The GCR2 Gene Family Is Not Required for ABA Control of Seed Germination and Early Seedling Development in Arabidopsis. PLoS ONE, 2008, 3, e2982.	1.1	55
60	Involvement of endogenous plant hormones in the effect of mixed nitrogen source on growth and tillering of wheat. Journal of Plant Nutrition, 1998, 21, 87-97.	0.9	54
61	The Sphagnome Project: enabling ecological and evolutionary insights through a genusâ€level sequencing project. New Phytologist, 2018, 217, 16-25.	3.5	54
62	Loss-of-Function Mutations in the Arabidopsis Heterotrimeric G-protein Î± Subunit Enhance the Developmental Defects of Brassinosteroid Signaling and Biosynthesis Mutants. Plant and Cell Physiology, 2008, 49, 1013-1024.	1.5	53
63	Distinct relationships between GLABRA2 and singleâ€repeat R3 MYB transcription factors in the regulation of trichome and root hair patterning in Arabidopsis. New Phytologist, 2010, 185, 387-400.	3.5	52
64	Phylogenetic Occurrence of the Phenylpropanoid Pathway and Lignin Biosynthesis in Plants. Frontiers in Plant Science, 2021, 12, 704697.	1.7	49
65	Dual Auxin Signaling Pathways Control Cell Elongation and Division. Journal of Plant Growth Regulation, 2001, 20, 255-264.	2.8	48
66	OsRACK1 Is Involved in Abscisic Acid- and H2O2-Mediated Signaling to Regulate Seed Germination in Rice (Oryza sativa, L.). PLoS ONE, 2014, 9, e97120.	1.1	47
67	The Small Ethylene Response Factor ERF96 is Involved in the Regulation of the Abscisic Acid Response in Arabidopsis. Frontiers in Plant Science, 2015, 6, 1064.	1.7	45
68	Transcriptional Regulation of Drought Response in Arabidopsis and Woody Plants. Frontiers in Plant Science, 2020, 11, 572137.	1.7	43
69	Mediation of plantâ€“mycorrhizal interaction by a lectin receptor-like kinase. Nature Plants, 2019, 5, 676-680.	4.7	42
70	Fluctuation in levels of endogenous plant hormones in ovules of normal and mutant cotton during flowering and their relation to fiber development. Journal of Plant Growth Regulation, 1996, 15, 173-177.	2.8	41
71	Evidence for a Contribution of ALA Synthesis to Plastid-To-Nucleus Signaling. Frontiers in Plant Science, 2012, 3, 236.	1.7	41
72	Arabidopsis Receptor of Activated C Kinase1 Phosphorylation by WITH NO LYSINE8 KINASE. Plant Physiology, 2015, 167, 507-516.	2.3	38

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73	Heterotrimeric G-proteins in plant development. Frontiers in Bioscience - Landmark, 2008, Volume, 3321.	3.0	38
74	Involvement of PACLOBUTRAZOL RESISTANCE6/KIDARI, an Atypical bHLH Transcription Factor, in Auxin Responses in Arabidopsis. Frontiers in Plant Science, 2017, 8, 1813.	1.7	36
75	Levels of Cytokinins in the Ovules of Cotton Mutants with Altered Fiber Development. Journal of Plant Growth Regulation, 1997, 16, 181-185.	2.8	35
76	Negative Regulation of Systemic Acquired Resistance by Replication Factor C Subunit3 in Arabidopsis. Plant Physiology, 2009, 150, 2009-2017.	2.3	35
77	Transcriptional and Post-transcriptional Regulation of Lignin Biosynthesis Pathway Genes in Populus. Frontiers in Plant Science, 2020, 11, 652.	1.7	34
78	Prime Editing Technology and Its Prospects for Future Applications in Plant Biology Research. Biodesign Research, 2020, 2020, .	0.8	34
79	Ovate family protein1 interaction with BLH3 regulates transition timing from vegetative to reproductive phase in Arabidopsis. Biochemical and Biophysical Research Communications, 2016, 470, 492-497.	1.0	31
80	The grapevine kinome: annotation, classification and expression patterns in developmental processes and stress responses. Horticulture Research, 2018, 5, 19.	2.9	30
81	Recent Advances in the Roles of HSFs and HSPs in Heat Stress Response in Woody Plants. Frontiers in Plant Science, 2021, 12, 704905.	1.7	29
82	PdWND3A, a wood-associated NAC domain-containing protein, affects lignin biosynthesis and composition in Populus. BMC Plant Biology, 2019, 19, 486.	1.6	28
83	R2R3 MYB transcription factor PtrMYB192 regulates flowering time in Arabidopsis by activating FLOWERING LOCUS C. Journal of Plant Biology, 2013, 56, 243-250.	0.9	27
84	Defining the genetic components of callus formation: A GWAS approach. PLoS ONE, 2018, 13, e0202519.	1.1	27
85	Overexpression of a serine hydroxymethyltransferase increases biomass production and reduces recalcitrance in the bioenergy crop <i>Populus</i>. Sustainable Energy and Fuels, 2019, 3, 195-207.	2.5	27
86	Characterization of DWARF14 Genes in Populus. Scientific Reports, 2016, 6, 21593.	1.6	26
87	Overexpression of a Domain of Unknown Function 231-containing protein increases O-xylan acetylation and cellulose biosynthesis in Populus. Biotechnology for Biofuels, 2017, 10, 311.	6.2	26
88	Functional Genomics of Drought Tolerance in Bioenergy Crops. Critical Reviews in Plant Sciences, 2014, 33, 205-224.	2.7	25
89	Strigolactone-Regulated Proteins Revealed by iTRAQ-Based Quantitative Proteomics in <i>Arabidopsis</i>. Journal of Proteome Research, 2014, 13, 1359-1372.	1.8	24
90	Overexpression of an Agave Phosphoenolpyruvate Carboxylase Improves Plant Growth and Stress Tolerance. Cells, 2021, 10, 582.	1.8	24

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91	Dissection of the Relationship Between RACK1 and Heterotrimeric G-Proteins in Arabidopsis. Plant and Cell Physiology, 2009, 50, 1681-1694.	1.5	23
92	Characterization of MORE AXILLARY GROWTH Genes in Populus. PLoS ONE, 2014, 9, e102757.	1.1	23
93	Overexpression of a Domain of Unknown Function 266-containing protein results in high cellulose content, reduced recalcitrance, and enhanced plant growth in the bioenergy crop Populus. Biotechnology for Biofuels, 2017, 10, 74.	6.2	22
94	Agronomic performance of Populus deltoides trees engineered for biofuel production. Biotechnology for Biofuels, 2017, 10, 253.	6.2	22
95	Advances and perspectives in discovery and functional analysis of small secreted proteins in plants. Horticulture Research, 2021, 8, 130.	2.9	20
96	Expanding the application of a UV-visible reporter for transient gene expression and stable transformation in plants. Horticulture Research, 2021, 8, 234.	2.9	18
97	Phosphorylation of RACK1 in plants. Plant Signaling and Behavior, 2015, 10, e1022013.	1.2	17
98	Overexpression of a <i>Prefoldin Î²</i> subunit gene reduces biomass recalcitrance in the bioenergy crop <i>Populus</i>. Plant Biotechnology Journal, 2020, 18, 859-871.	4.1	17
99	Arabidopsis Câ€terminal binding protein ANGUSTIFOLIA modulates transcriptional coâ€regulation of <i>MYB46</i> and <i>WRKY33</i>. New Phytologist, 2020, 228, 1627-1639.	3.5	17
100	Arabidopsis scaffold protein RACK1A modulates rare sugar D-allose regulated gibberellin signaling. Plant Signaling and Behavior, 2012, 7, 1407-1410.	1.2	16
101	Biosystems Design to Accelerate C ₃ -to-CAM Progression. Biodesign Research, 2020, 2020, .	0.8	16
102	Plant Biosystems Design Research Roadmap 1.0. Biodesign Research, 2020, 2020, .	0.8	16
103	GCR2 is a new member of the eukaryotic lanthionine synthetase component C-like protein family. Plant Signaling and Behavior, 2008, 3, 307-310.	1.2	15
104	Eukaryotic initiation factor 6, an evolutionarily conserved regulator of ribosome biogenesis and protein translation. Plant Signaling and Behavior, 2011, 6, 766-771.	1.2	14
105	Towards engineering ectomycorrhization into switchgrass bioenergy crops via a lectin receptorâ€like kinase. Plant Biotechnology Journal, 2021, 19, 2454-2468.	4.1	14
106	Crystallization and preliminary X-ray analysis of the auxin receptor ABP1. Acta Crystallographica Section D: Biological Crystallography, 2000, 56, 1476-1478.	2.5	13
107	Finding New Cell Wall Regulatory Genes in Populus trichocarpa Using Multiple Lines of Evidence. Frontiers in Plant Science, 2019, 10, 1249.	1.7	13
108	Economic impact of yield and composition variation in bioenergy crops: <scp><i>Populus trichocarpa</i></scp>. Biofuels, Bioproducts and Biorefining, 2021, 15, 176-188.	1.9	13

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109	Fluctuation in levels of endogenous hormones after decapitation and 6-benzyl amino purine treatment in azalea, and their relationship to apical dominance. Scientia Horticulturae, 1997, 71, 49-58.	1.7	12
110	Sweet Sensor, Surprising Partners. Science's STKE: Signal Transduction Knowledge Environment, 2007, 2007, pe7-pe7.	4.1	12
111	Simultaneous knockdown of six non-family genes using a single synthetic RNAi fragment in Arabidopsis thaliana. Plant Methods, 2016, 12, 16.	1.9	12
112	Gibberellin-responding and non-responding dwarf mutants in foxtail millet. Plant Growth Regulation, 1998, 26, 19-24.	1.8	11
113	Altered Expression of Auxin-binding Protein 1 Affects Cell Expansion and Auxin Pool Size in Tobacco Cells. Journal of Plant Growth Regulation, 2006, 25, 69-78.	2.8	11
114	Light-responsive expression atlas reveals the effects of light quality and intensity in KalanchoÃ« fedtschenkoi, a plant with crassulacean acid metabolism. GigaScience, 2020, 9, .	3.3	11
115	Heterotrimeric G-protein signaling in Arabidopsis. Plant Signaling and Behavior, 2008, 3, 1042-1045.	1.2	9
116	Spatially and temporally restricted expression of PtrMYB021 regulates secondary cell wall formation in Arabidopsis. Journal of Plant Biology, 2016, 59, 16-23.	0.9	9
117	A Variable Polyglutamine Repeat Affects Subcellular Localization and Regulatory Activity of a <i>Populus</i> ANGUSTIFOLIA Protein. G3: Genes, Genomes, Genetics, 2018, 8, 2631-2641.	0.8	9
118	The Ancient Salicoid Genome Duplication Event: A Platform for Reconstruction of De Novo Gene Evolution in Populus trichocarpa. Genome Biology and Evolution, 2021, 13, .	1.1	9
119	Reconfiguring Plant Metabolism for Biodegradable Plastic Production. Biodesign Research, 2020, 2020, .	0.8	7
120	Plant-Based Biosensors for Detecting CRISPR-Mediated Genome Engineering. ACS Synthetic Biology, 2021, 10, 3600-3603.	1.9	7
121	Pores in Place. Science, 2009, 323, 592-593.	6.0	6
122	Metabolomic Patterns of Septoria Canker Resistant and Susceptible <i>Populus trichocarpa</i> Genotypes 24 Hours Postinoculation. Phytopathology, 2021, 111, 2052-2066.	1.1	6
123	Biological Parts for Plant Biodesign to Enhance Land-Based Carbon Dioxide Removal. Biodesign Research, 2021, 2021, .	0.8	5
124	Identification of functional single nucleotide polymorphism of Populus trichocarpa PtrEPSPâ€TF and determination of its transcriptional effect. Plant Direct, 2020, 4, e00178.	0.8	4
125	Host plant genetic control of associated fungal and insect species in a <i>Populus</i> hybrid cross. Ecology and Evolution, 2020, 10, 5119-5134.	0.8	4
126	Heterotrimeric G-Proteins and Cell Division in Plants. Signaling and Communication in Plants, 2010, , 155-176.	0.5	2

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127	Involvement of Abscisic Acid in Mesocotyl Growth in Etiolated Seedlings of a Foxtail Millet Dwarf Mutant. Journal of Plant Growth Regulation, 1998, 17, 147-151.	2.8	1
128	Innovative Biological Solutions to Challenges in Sustainable Biofuels Production. , 0, , .		1
129	Identification, Expression, and Interaction Analysis of Ovate Family Proteins in Populus trichocarpa Reveals a Role of PtOFP1 Regulating Drought Stress Response. Frontiers in Plant Science, 2021, 12, 650109.	1.7	1
130	Dual Pathways for Auxin Regulation of Cell Division and Expansion. Biotechnology in Agriculture and Forestry, 2004, , 181-191.	0.2	1
131	Analysis of Cell Division and Cell Elongation in the Hypocotyls of Arabidopsis Heterotrimeric G Protein Mutants. Methods in Molecular Biology, 2013, 1043, 37-43.	0.4	1
132	Heterotrimeric G-Protein-Coupled Signaling in Higher Plants. , 0, , 30-63.		0
133	Cover Image, Volume 15, Issue 1. Biofuels, Bioproducts and Biorefining, 2021, 15, i.	1.9	0