Guan-Qun Chen

List of Publications by Year
in descending order

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86	2,608	186209	214721
papers	citations	28 h-index	47 g-index

87	87	87	2796
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Molecular mechanisms of the coordination between astaxanthin and fatty acid biosynthesis in Haematococcus pluvialis (Chlorophyceae). Plant Journal, 2015, 81, 95-107.	2.8	166
2	Growing Phototrophic Cells without Light. Biotechnology Letters, 2006, 28, 607-616.	1.1	157
3	Metabolic Interactions between the Lands Cycle and the Kennedy Pathway of Glycerolipid Synthesis in Arabidopsis Developing Seeds. Plant Cell, 2012, 24, 4652-4669.	3.1	139
4	SALTâ€INDUCED ALTERATIONS IN LIPID COMPOSITION OF DIATOM NITZSCHIA LAEVIS (BACILLARIOPHYCEAE) UNDER HETEROTROPHIC CULTURE CONDITION¹. Journal of Phycology, 2008, 44, 1309-1314.	1.0	100
5	Arabidopsis GPAT9 contributes to synthesis of intracellular glycerolipids but not surface lipids. Journal of Experimental Botany, 2016, 67, 4627-4638.	2.4	89
6	Cryopreservation affects ROS-induced oxidative stress and antioxidant response in Arabidopsis seedlings. Cryobiology, 2015, 70, 38-47.	0.3	88
7	Biology and Biochemistry of Plant Phospholipases. Critical Reviews in Plant Sciences, 2011, 30, 239-258.	2.7	78
8	ROS-induced oxidative stress and apoptosis-like event directly affect the cell viability of cryopreserved embryogenic callus in Agapanthus praecox. Plant Cell Reports, 2015, 34, 1499-1513.	2.8	78
9	Optimization of nitrogen source for enhanced production of squalene from thraustochytrid Aurantiochytrium sp.. New Biotechnology, 2010, 27, 382-389.	2.4	76
10	Fatty acid and lipid class composition of the eicosapentaenoic acid-producing microalga, Nitzschia laevis. Food Chemistry, 2007, 104, 1580-1585.	4.2	73
11	Properties and Biotechnological Applications of Acylâ€CoA:diacylglycerol Acyltransferase and Phospholipid:diacylglycerol Acyltransferase from Terrestrial Plants and Microalgae. Lipids, 2018, 53, 663-688.	0.7	72
12	The Role of Triacylglycerol in Plant Stress Response. Plants, 2020, 9, 472.	1.6	71
13	BnTIR: an online transcriptome platform for exploring RNAâ€seq libraries for oil crop Brassica napus. Plant Biotechnology Journal, 2021, 19, 1895-1897.	4.1	68
14	Variation of lipid class composition in Nitzschia laevis as a response to growth temperature change. Food Chemistry, 2008, 109, 88-94.	4.2	58
15	Screening and Characterization of Squalene-Producing Thraustochytrids from Hong Kong Mangroves. Journal of Agricultural and Food Chemistry, 2009, 57, 4267-4272.	2.4	54
16	Acylâ€Trafficking During Plant Oil Accumulation. Lipids, 2015, 50, 1057-1068.	0.7	52
17	Engineering increased triacylglycerol accumulation in Saccharomyces cerevisiae using a modified type 1 plant diacylglycerol acyltransferase. Applied Microbiology and Biotechnology, 2015, 99, 2243-2253.	1.7	50
18	A Small Phospholipase A2-Î± from Castor Catalyzes the Removal of Hydroxy Fatty Acids from Phosphatidylcholine in Transgenic Arabidopsis Seeds Â. Plant Physiology, 2015, 167, 1259-1270.	2.3	50

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19	Natamycin Production by Streptomyces gilvosporeus Based on Statistical Optimization. Journal of Agricultural and Food Chemistry, 2008, 56, 5057-5061.	2.4	42
20	Transcriptomic profiling revealed the regulatory mechanism of Arabidopsis seedlings response to oxidative stress from cryopreservation. Plant Cell Reports, 2015, 34, 2161-2178.	2.8	41
21	Plant phospholipase A: advances in molecular biology, biochemistry, and cellular function. Biomolecular Concepts, 2013, 4, 527-532.	1.0	39
22	Transparent Testa16Plays Multiple Roles in Plant Development and Is Involved in Lipid Synthesis and Embryo Development in Canola Â Â. Plant Physiology, 2012, 160, 978-989.	2.3	38
23	Novel reactions in acyl editing of phosphatidylcholine by lysophosphatidylcholine transacylase (LPCT) and acyl-CoA:glycerophosphocholine acyltransferase (GPCAT) activities in microsomal preparations of plant tissues. Planta, 2015, 241, 347-358.	1.6	38
24	Substrate preferences of long-chain acyl-CoA synthetase and diacylglycerol acyltransferase contribute to enrichment of flax seed oil with Î±-linolenic acid. Biochemical Journal, 2018, 475, 1473-1489.	1.7	36
25	Highâ€performance variants of plant diacylglycerol acyltransferase 1 generated by directed evolution provide insights into structure function. Plant Journal, 2017, 92, 167-177.	2.8	35
26	In Vivo and in Vitro Evidence for Biochemical Coupling of Reactions Catalyzed by Lysophosphatidylcholine Acyltransferase and Diacylglycerol Acyltransferase. Journal of Biological Chemistry, 2015, 290, 18068-18078.	1.6	34
27	Combined transgenic expression of Punica granatum conjugase (FADX) and FAD2 desaturase in high linoleic acid Arabidopsis thaliana mutant leads to increased accumulation of punicic acid. Planta, 2014, 240, 575-583.	1.6	32
28	Bioactivity and biotechnological production of punicic acid. Applied Microbiology and Biotechnology, 2018, 102, 3537-3549.	1.7	32
29	<scp>B</scp>rassica napus <scp>TT16</scp> homologs with different genomic origins and expression levels encode proteins that regulate a broad range of endotheliumâ€associated genes at the transcriptional level. Plant Journal, 2013, 74, 663-677.	2.8	29
30	Diacylglycerol acyltransferase 1 is activated by phosphatidate and inhibited by SnRK1â€catalyzed phosphorylation. Plant Journal, 2018, 96, 287-299.	2.8	29
31	Acyl-CoA:diacylglycerol acyltransferase: Properties, physiological roles, metabolic engineering and intentional control. Progress in Lipid Research, 2022, 88, 101181.	5.3	27
32	Plant snâ€Glycerolâ€3â€Phosphate Acyltransferases: Biocatalysts Involved in the Biosynthesis of Intracellular and Extracellular Lipids. Lipids, 2018, 53, 469-480.	0.7	25
33	High-level expression, purification and characterization of a recombinant medium-temperature Î±-amylase from Bacillus subtilis. Biotechnology Letters, 2010, 32, 119-124.	1.1	24
34	A comparative analysis of lipid and carotenoid composition of the gonads of Anthocidaris crassispina, Diadema setosum and Salmacis sphaeroides. Food Chemistry, 2010, 120, 973-977.	4.2	24
35	The Potential of Genome Editing for Improving Seed Oil Content and Fatty Acid Composition in Oilseed Crops. Lipids, 2020, 55, 495-512.	0.7	24
36	Current progress in lipid-based biofuels: Feedstocks and production technologies. Bioresource Technology, 2022, 351, 127020.	4.8	23

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37	Ultraviolet-B radiation improves astaxanthin accumulation in green microalga Haematococcus pluvialis. Biotechnology Letters, 2010, 32, 1911-1914.	1.1	22
38	Purification and properties of recombinant Brassica napus diacylglycerol acyltransferase 1. FEBS Letters, 2015, 589, 773-778.	1.3	22
39	Multiple mechanisms contribute to increased neutral lipid accumulation in yeast producing recombinant variants of plant diacylglycerol acyltransferase 1. Journal of Biological Chemistry, 2017, 292, 17819-17831.	1.6	22
40	Characterization of Type-2 Diacylglycerol Acyltransferases in the Green Microalga Chromochloris zofingiensis. Journal of Agricultural and Food Chemistry, 2019, 67, 291-298.	2.4	22
41	Glycerol-3-phosphate acyltransferase 4 is essential for the normal development of reproductive organs and the embryo in Brassica napus. Journal of Experimental Botany, 2014, 65, 4201-4215.	2.4	21
42	A transferase interactome that may facilitate channeling of polyunsaturated fatty acid moieties from phosphatidylcholine to triacylglycerol. Journal of Biological Chemistry, 2019, 294, 14838-14844.	1.6	20
43	Inhibition of FvMYB10 transcriptional activity promotes color loss in strawberry fruit. Plant Science, 2020, 298, 110578.	1.7	20
44	Expression, Purification, and Characterization of Phosphatidylserine Synthase from Escherichia coli K₁₂ in Bacillus subtilis. Journal of Agricultural and Food Chemistry, 2009, 57, 122-126.	2.4	18
45	Identification and characterization of an LCATâ€like Arabidopsis thaliana gene encoding a novel phospholipase A. FEBS Letters, 2012, 586, 373-377.	1.3	18
46	Efficient expression of an alkaline pectate lyase gene from Bacillus subtilis and the characterization of the recombinant protein. Biotechnology Letters, 2012, 34, 109-115.	1.1	18
47	Glutathione improves survival of cryopreserved embryogenic calli of Agapanthus praecox subsp. orientalis. Acta Physiologiae Plantarum, 2016, 38, 1.	1.0	18
48	Identification of genes associated with ricinoleic acid accumulation in Hiptage benghalensis via transcriptome analysis. Biotechnology for Biofuels, 2019, 12, 16.	6.2	18
49	Characterization of fecal branched-chain fatty acid profiles and their associations with fecal microbiota in diarrheic and healthy dairy calves. Journal of Dairy Science, 2021, 104, 2290-2301.	1.4	18
50	Characterization of the diversification of phospholipid:diacylglycerol acyltransferases in the green lineage. Plant Journal, 2020, 103, 2025-2038.	2.8	17
51	Arabidopsis CTP:phosphocholine cytidylyltransferase 1 is phosphorylated and inhibited by sucrose nonfermenting 1â€“related protein kinase 1 (SnRK1). Journal of Biological Chemistry, 2019, 294, 15862-15874.	1.6	16
52	Modification of Oil Crops to Produce Fatty Acids for Industrial Applications. , 2017, , 187-236.		14
53	Metabolomic study of stress responses leading to plant resistance in mandarin fruit mediated by preventive applications of Bacillus subtilis cyclic lipopeptides. Postharvest Biology and Technology, 2019, 156, 110946.	2.9	14
54	Punicic acid production in Brassica napus. Metabolic Engineering, 2020, 62, 20-29.	3.6	14

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55	The CRISPR/Cas9-Mediated Modulation of SQUAMOSA PROMOTER-BINDING PROTEIN-LIKE 8 in Alfalfa Leads to Distinct Phenotypic Outcomes. Frontiers in Plant Science, 2021, 12, 774146.	1.7	14
56	Engineering Arabidopsis long-chain acyl-CoA synthetase 9 variants with enhanced enzyme activity. Biochemical Journal, 2019, 476, 151-164.	1.7	13
57	Castor patatin-like phospholipase A IIIÎ² facilitates removal of hydroxy fatty acids from phosphatidylcholine in transgenic Arabidopsis seeds. Plant Molecular Biology, 2019, 101, 521-536.	2.0	12
58	Kinetic improvement of an algal diacylglycerol acyltransferase 1 via fusion with an acylâ€CoA binding protein. Plant Journal, 2020, 102, 856-871.	2.8	12
59	Combining quantitative trait locus and co-expression analysis allowed identification of new candidates for oil accumulation in rapeseed. Journal of Experimental Botany, 2021, 72, 1649-1660.	2.4	12
60	Short communication: Odd-chain and branched-chain fatty acid concentrations in bovine colostrum and transition milk and their stability under heating and freezing treatments. Journal of Dairy Science, 2020, 103, 11483-11489.	1.4	12
61	CRISPR/Cas-Mediated Genome Editing for the Improvement of Oilseed Crop Productivity. Critical Reviews in Plant Sciences, 2020, 39, 195-221.	2.7	10
62	Change in the active component of processed Tetradium ruticarpum extracts leads to improvement in efficacy and toxicity attenuation. Journal of Ethnopharmacology, 2021, 264, 113292.	2.0	9
63	Evolutionary and biochemical characterization of a Chromochloris zofingiensis MBOAT with wax synthase and diacylglycerol acyltransferase activity. Journal of Experimental Botany, 2021, 72, 5584-5598.	2.4	9
64	Genetic architecture of seed glycerolipids in Asian cultivated rice. Plant, Cell and Environment, 0, , .	2.8	9
65	Characterization of a Typeâ€2 Diacylglycerol Acyltransferase from Haematococcus pluvialis Reveals Possible Allostery of the Recombinant Enzyme. Lipids, 2020, 55, 425-433.	0.7	7
66	Characterization of a PLDÎ¶2 Homology Gene from Developing Castor Bean Endosperm. Lipids, 2020, 55, 537-548.	0.7	7
67	Enhancement of total lipid production in vegetative tissues of alfalfa and sainfoin using chemical mutagenesis. Crop Science, 2020, 60, 2990-3003.	0.8	7
68	A Rapid Nile Red Fluorescenceâ€Based Method for Triacylglycerol Content in Microsporeâ€Derived Cell Suspension Cultures of Brassica napus. Lipids, 2014, 49, 1161-1168.	0.7	6
69	The Bsister MADS-box proteins have multiple regulatory functions in plant development. Biocatalysis and Agricultural Biotechnology, 2012, 1, 203-206.	1.5	5
70	Cloning and characterization of ApCystatin , a plant cystatin gene from Agapanthus praecox ssp. orientalis responds to abiotic stress. Protein Expression and Purification, 2018, 149, 66-74.	0.6	5
71	Improving the Production of Punicic Acid in Bakerâ€™s Yeast by Engineering Genes in Acyl Channeling Processes and Adjusting Precursor Supply. Journal of Agricultural and Food Chemistry, 2021, 69, 9616-9624.	2.4	5
72	A Fluorescenceâ€Based Assay for Quantitative Analysis of Phospholipid:Diacylglycerol Acyltransferase Activity. Lipids, 2019, 54, 571-579.	0.7	4

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73	Seed-specific down-regulation of Arabidopsis CELLULOSE SYNTHASE 1 or 9 reduces seed cellulose content and differentially affects carbon partitioning. Plant Cell Reports, 2020, 39, 953-969.	2.8	4
74	Physaria fendleri and Ricinus communis lecithin:cholesterol acyltransferaseâ€like phospholipases selectively cleave hydroxy acyl chains from phosphatidylcholine. Plant Journal, 2021, 105, 182-196.	2.8	4
75	The effect of AINTEGUMENTA-LIKE 7 over-expression on seed fatty acid biosynthesis, storage oil accumulation and the transcriptome in Arabidopsis thaliana. Plant Cell Reports, 2021, 40, 1647-1663.	2.8	4
76	Plant Carbohydrates and Production of Renewable Biofuel from Starch, Sugar, and Cellulose. , 2018, , 87-107.		3
77	Downregulation of key genes involved in carbon metabolism inMedicago truncatularesults in increased lipid accumulation in vegetative tissue. Crop Science, 2020, 60, 1798-1808.	0.8	3
78	ApSerpin-ZX from Agapanthus praecox, is a potential cryoprotective agent to plant cryopreservation. Cryobiology, 2021, 98, 103-111.	0.3	3
79	Biomass-Derived Building Block Chemicals. , 2018, , 177-200.		2
80	Feeding a Bioactive Oil Enriched in Stearidonic Acid during Early Life Influences Immune System Maturation in Neonatal Sprague-Dawley Rats. Journal of Nutrition, 2020, 150, 606-615.	1.3	2
81	Building a Case for Plant Bioproducts. , 2018, , 1-8.		1
82	Identification of Arabidopsis Phospholipase A Mutants With Increased Susceptibility to Plasmodiophora brassicae. Frontiers in Plant Science, 2022, 13, 799142.	1.7	1
83	Notice of Retraction: High-Level Expression of an Aspergillus niger Praline Specific Endopeptidase in Bacillus subtilis and Its Application in Prevention of Beer Haze. , 2011, , .		0
84	An Integrated Approach to Plant Bioproduct Production. , 2018, , 27-40.		0
85	Materials and Related Bioproducts from Plant Carbohydrates. , 2018, , 109-120.		0
86	Toxicity of Tetradium ruticarpum: Subacute Toxicity Assessment and Metabolomic Identification of Relevant Biomarkers. Frontiers in Pharmacology, 2022, 13, 803855.	1.6	0