

Guan-Qun Chen

List of Publications by Year in descending order

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2,608

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186265

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214800

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87

times ranked

2796

citing authors

#	ARTICLE	IF	CITATIONS
1	Molecular mechanisms of the coordination between astaxanthin and fatty acid biosynthesis in <i>Haematococcus pluvialis</i> (Chlorophyceae). <i>Plant Journal</i> , 2015, 81, 95-107.	5.7	166
2	Growing Phototrophic Cells without Light. <i>Biotechnology Letters</i> , 2006, 28, 607-616.	2.2	157
3	Metabolic Interactions between the Lands Cycle and the Kennedy Pathway of Glycerolipid Synthesis in <i>Arabidopsis</i> Developing Seeds. <i>Plant Cell</i> , 2012, 24, 4652-4669.	6.6	139
4	SALT-INDUCED ALTERATIONS IN LIPID COMPOSITION OF DIATOM <i>NITZSCHIA LAEVIS</i> (BACILLARIOPHYCEAE) UNDER HETEROTROPHIC CULTURE CONDITION ¹ . <i>Journal of Phycology</i> , 2008, 44, 1309-1314.	2.3	100
5	<i>Arabidopsis</i> GPAT9 contributes to synthesis of intracellular glycerolipids but not surface lipids. <i>Journal of Experimental Botany</i> , 2016, 67, 4627-4638.	4.8	89
6	Cryopreservation affects ROS-induced oxidative stress and antioxidant response in <i>Arabidopsis</i> seedlings. <i>Cryobiology</i> , 2015, 70, 38-47.	0.7	88
7	Biology and Biochemistry of Plant Phospholipases. <i>Critical Reviews in Plant Sciences</i> , 2011, 30, 239-258.	5.7	78
8	ROS-induced oxidative stress and apoptosis-like event directly affect the cell viability of cryopreserved embryogenic callus in <i>Agapanthus praecox</i> . <i>Plant Cell Reports</i> , 2015, 34, 1499-1513.	5.6	78
9	Optimization of nitrogen source for enhanced production of squalene from <i>thraustochytrid</i> <i>Aurantiochytrium</i> sp.. <i>New Biotechnology</i> , 2010, 27, 382-389.	4.4	76
10	Fatty acid and lipid class composition of the eicosapentaenoic acid-producing microalga, <i>Nitzschia laevis</i> . <i>Food Chemistry</i> , 2007, 104, 1580-1585.	8.2	73
11	Properties and Biotechnological Applications of Acyl-CoA:diacylglycerol Acyltransferase and Phospholipid:diacylglycerol Acyltransferase from Terrestrial Plants and Microalgae. <i>Lipids</i> , 2018, 53, 663-688.	1.7	72
12	The Role of Triacylglycerol in Plant Stress Response. <i>Plants</i> , 2020, 9, 472.	3.5	71
13	BnTIR: an online transcriptome platform for exploring RNA-seq libraries for oil crop <i>Brassica napus</i> . <i>Plant Biotechnology Journal</i> , 2021, 19, 1895-1897.	8.3	68
14	Variation of lipid class composition in <i>Nitzschia laevis</i> as a response to growth temperature change. <i>Food Chemistry</i> , 2008, 109, 88-94.	8.2	58
15	Screening and Characterization of Squalene-Producing <i>Thraustochytrids</i> from Hong Kong Mangroves. <i>Journal of Agricultural and Food Chemistry</i> , 2009, 57, 4267-4272.	5.2	54
16	Acyl-Trafficking During Plant Oil Accumulation. <i>Lipids</i> , 2015, 50, 1057-1068.	1.7	52
17	Engineering increased triacylglycerol accumulation in <i>Saccharomyces cerevisiae</i> using a modified type 1 plant diacylglycerol acyltransferase. <i>Applied Microbiology and Biotechnology</i> , 2015, 99, 2243-2253.	3.6	50
18	A Small Phospholipase A2-1 from Castor Catalyzes the Removal of Hydroxy Fatty Acids from Phosphatidylcholine in Transgenic <i>Arabidopsis</i> Seeds. <i>Plant Physiology</i> , 2015, 167, 1259-1270.	4.8	50

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19	Natamycin Production by <i>Streptomyces gilvosporeus</i> Based on Statistical Optimization. <i>Journal of Agricultural and Food Chemistry</i> , 2008, 56, 5057-5061.	5.2	42
20	Transcriptomic profiling revealed the regulatory mechanism of <i>Arabidopsis</i> seedlings response to oxidative stress from cryopreservation. <i>Plant Cell Reports</i> , 2015, 34, 2161-2178.	5.6	41
21	Plant phospholipase A: advances in molecular biology, biochemistry, and cellular function. <i>Biomolecular Concepts</i> , 2013, 4, 527-532.	2.2	39
22	<i>Transparent Testa16</i> Plays Multiple Roles in Plant Development and Is Involved in Lipid Synthesis and Embryo Development in Canola. <i>Plant Physiology</i> , 2012, 160, 978-989.	4.8	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. <i>Planta</i> , 2015, 241, 347-358.	3.2	38
24	Substrate preferences of long-chain acyl-CoA synthetase and diacylglycerol acyltransferase contribute to enrichment of flax seed oil with \pm -linolenic acid. <i>Biochemical Journal</i> , 2018, 475, 1473-1489.	3.7	36
25	High-performance variants of plant diacylglycerol acyltransferase 1 generated by directed evolution provide insights into structure function. <i>Plant Journal</i> , 2017, 92, 167-177.	5.7	35
26	In Vivo and in Vitro Evidence for Biochemical Coupling of Reactions Catalyzed by Lysophosphatidylcholine Acyltransferase and Diacylglycerol Acyltransferase. <i>Journal of Biological Chemistry</i> , 2015, 290, 18068-18078.	3.4	34
27	Combined transgenic expression of <i>Punica granatum</i> conjugase (FADX) and FAD2 desaturase in high linoleic acid <i>Arabidopsis thaliana</i> mutant leads to increased accumulation of punical acid. <i>Planta</i> , 2014, 240, 575-583.	3.2	32
28	Bioactivity and biotechnological production of punical acid. <i>Applied Microbiology and Biotechnology</i> , 2018, 102, 3537-3549.	3.6	32
29	<i>B. rapa</i> <i>TT16</i> homologs with different genomic origins and expression levels encode proteins that regulate a broad range of endoplasmic reticulum-associated genes at the transcriptional level. <i>Plant Journal</i> , 2013, 74, 663-677.	5.7	29
30	Diacylglycerol acyltransferase 1 is activated by phosphatidate and inhibited by SnRK1-catalyzed phosphorylation. <i>Plant Journal</i> , 2018, 96, 287-299.	5.7	29
31	Acyl-CoA:diacylglycerol acyltransferase: Properties, physiological roles, metabolic engineering and intentional control. <i>Progress in Lipid Research</i> , 2022, 88, 101181.	11.6	27
32	Plant <i>sn</i> -Glycerol-3-Phosphate Acyltransferases: Biocatalysts Involved in the Biosynthesis of Intracellular and Extracellular Lipids. <i>Lipids</i> , 2018, 53, 469-480.	1.7	25
33	High-level expression, purification and characterization of a recombinant medium-temperature α -amylase from <i>Bacillus subtilis</i> . <i>Biotechnology Letters</i> , 2010, 32, 119-124.	2.2	24
34	A comparative analysis of lipid and carotenoid composition of the gonads of <i>Anthocardia crassispina</i> , <i>Diadema setosum</i> and <i>Salmacis sphaeroides</i> . <i>Food Chemistry</i> , 2010, 120, 973-977.	8.2	24
35	The Potential of Genome Editing for Improving Seed Oil Content and Fatty Acid Composition in Oilseed Crops. <i>Lipids</i> , 2020, 55, 495-512.	1.7	24
36	Current progress in lipid-based biofuels: Feedstocks and production technologies. <i>Bioresource Technology</i> , 2022, 351, 127020.	9.6	23

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37	Ultraviolet-B radiation improves astaxanthin accumulation in green microalga <i>Haematococcus pluvialis</i> . <i>Biotechnology Letters</i> , 2010, 32, 1911-1914.	2.2	22
38	Purification and properties of recombinant <i>Brassica napus</i> diacylglycerol acyltransferase 1. <i>FEBS Letters</i> , 2015, 589, 773-778.	2.8	22
39	Multiple mechanisms contribute to increased neutral lipid accumulation in yeast producing recombinant variants of plant diacylglycerol acyltransferase 1. <i>Journal of Biological Chemistry</i> , 2017, 292, 17819-17831.	3.4	22
40	Characterization of Type-2 Diacylglycerol Acyltransferases in the Green Microalga <i>Chromochloris zofingiensis</i> . <i>Journal of Agricultural and Food Chemistry</i> , 2019, 67, 291-298.	5.2	22
41	Glycerol-3-phosphate acyltransferase 4 is essential for the normal development of reproductive organs and the embryo in <i>Brassica napus</i> . <i>Journal of Experimental Botany</i> , 2014, 65, 4201-4215.	4.8	21
42	A transferase interactome that may facilitate channeling of polyunsaturated fatty acid moieties from phosphatidylcholine to triacylglycerol. <i>Journal of Biological Chemistry</i> , 2019, 294, 14838-14844.	3.4	20
43	Inhibition of FvMYB10 transcriptional activity promotes color loss in strawberry fruit. <i>Plant Science</i> , 2020, 298, 110578.	3.6	20
44	Expression, Purification, and Characterization of Phosphatidylserine Synthase from <i>Escherichia coli</i> K12 in <i>Bacillus subtilis</i> . <i>Journal of Agricultural and Food Chemistry</i> , 2009, 57, 122-126.	5.2	18
45	Identification and characterization of an LCAT-like <i>Arabidopsis thaliana</i> gene encoding a novel phospholipase A. <i>FEBS Letters</i> , 2012, 586, 373-377.	2.8	18
46	Efficient expression of an alkaline pectate lyase gene from <i>Bacillus subtilis</i> and the characterization of the recombinant protein. <i>Biotechnology Letters</i> , 2012, 34, 109-115.	2.2	18
47	Glutathione improves survival of cryopreserved embryogenic calli of <i>Agapanthus praecox</i> subsp. <i>orientalis</i> . <i>Acta Physiologiae Plantarum</i> , 2016, 38, 1.	2.1	18
48	Identification of genes associated with ricinoleic acid accumulation in <i>Hiptage benghalensis</i> via transcriptome analysis. <i>Biotechnology for Biofuels</i> , 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. <i>Journal of Dairy Science</i> , 2021, 104, 2290-2301.	3.4	18
50	Characterization of the diversification of phospholipid:diacylglycerol acyltransferases in the green lineage. <i>Plant Journal</i> , 2020, 103, 2025-2038.	5.7	17
51	<i>Arabidopsis</i> CTP:phosphocholine cytidyltransferase 1 is phosphorylated and inhibited by sucrose nonfermenting 1-related protein kinase 1 (SnRK1). <i>Journal of Biological Chemistry</i> , 2019, 294, 15862-15874.	3.4	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 <i>Bacillus subtilis</i> cyclic lipopeptides. <i>Postharvest Biology and Technology</i> , 2019, 156, 110946.	6.0	14
54	Punicic acid production in <i>Brassica napus</i> . <i>Metabolic Engineering</i> , 2020, 62, 20-29.	7.0	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. <i>Frontiers in Plant Science</i> , 2021, 12, 774146.	3.6	14
56	Engineering Arabidopsis long-chain acyl-CoA synthetase 9 variants with enhanced enzyme activity. <i>Biochemical Journal</i> , 2019, 476, 151-164.	3.7	13
57	Castor patatin-like phospholipase A III ² facilitates removal of hydroxy fatty acids from phosphatidylcholine in transgenic Arabidopsis seeds. <i>Plant Molecular Biology</i> , 2019, 101, 521-536.	3.9	12
58	Kinetic improvement of an algal diacylglycerol acyltransferase 1 via fusion with an acyl-CoA binding protein. <i>Plant Journal</i> , 2020, 102, 856-871.	5.7	12
59	Combining quantitative trait locus and co-expression analysis allowed identification of new candidates for oil accumulation in rapeseed. <i>Journal of Experimental Botany</i> , 2021, 72, 1649-1660.	4.8	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. <i>Journal of Dairy Science</i> , 2020, 103, 11483-11489.	3.4	12
61	CRISPR/Cas-Mediated Genome Editing for the Improvement of Oilseed Crop Productivity. <i>Critical Reviews in Plant Sciences</i> , 2020, 39, 195-221.	5.7	10
62	Change in the active component of processed <i>Tetradium ruticarpum</i> extracts leads to improvement in efficacy and toxicity attenuation. <i>Journal of Ethnopharmacology</i> , 2021, 264, 113292.	4.1	9
63	Evolutionary and biochemical characterization of a <i>Chromochloris zofingiensis</i> MBOAT with wax synthase and diacylglycerol acyltransferase activity. <i>Journal of Experimental Botany</i> , 2021, 72, 5584-5598.	4.8	9
64	Genetic architecture of seed glycerolipids in Asian cultivated rice. <i>Plant, Cell and Environment</i> , 0, , .	5.7	9
65	Characterization of a Type-II Diacylglycerol Acyltransferase from <i>Haematococcus pluvialis</i> Reveals Possible Allostery of the Recombinant Enzyme. <i>Lipids</i> , 2020, 55, 425-433.	1.7	7
66	Characterization of a PLD ¹ 2 Homology Gene from Developing Castor Bean Endosperm. <i>Lipids</i> , 2020, 55, 537-548.	1.7	7
67	Enhancement of total lipid production in vegetative tissues of alfalfa and sainfoin using chemical mutagenesis. <i>Crop Science</i> , 2020, 60, 2990-3003.	1.8	7
68	A Rapid Nile Red Fluorescence-Based Method for Triacylglycerol Content in Microspore-Derived Cell Suspension Cultures of <i>Brassica napus</i> . <i>Lipids</i> , 2014, 49, 1161-1168.	1.7	6
69	The Bsister MADS-box proteins have multiple regulatory functions in plant development. <i>Biocatalysis and Agricultural Biotechnology</i> , 2012, 1, 203-206.	3.1	5
70	Cloning and characterization of ApCystatin , a plant cystatin gene from <i>Agapanthus praecox</i> ssp. <i>orientalis</i> responds to abiotic stress. <i>Protein Expression and Purification</i> , 2018, 149, 66-74.	1.3	5
71	Improving the Production of Punicic Acid in Baker's Yeast by Engineering Genes in Acyl Channeling Processes and Adjusting Precursor Supply. <i>Journal of Agricultural and Food Chemistry</i> , 2021, 69, 9616-9624.	5.2	5
72	A Fluorescence-Based Assay for Quantitative Analysis of Phospholipid:Diacylglycerol Acyltransferase Activity. <i>Lipids</i> , 2019, 54, 571-579.	1.7	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.	5.6	4
74	<i>Physaria fendleri</i> and <i>Ricinus communis</i> lecithin:cholesterol acyltransferase-like phospholipases selectively cleave hydroxy acyl chains from phosphatidylcholine. Plant Journal, 2021, 105, 182-196.	5.7	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.	5.6	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 in <i>Medicago truncatula</i> results in increased lipid accumulation in vegetative tissue. Crop Science, 2020, 60, 1798-1808.	1.8	3
78	ApSerp-ZX from <i>Agapanthus praecox</i> , is a potential cryoprotective agent to plant cryopreservation. Cryobiology, 2021, 98, 103-111.	0.7	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.	2.9	2
81	Building a Case for Plant Bioproducts. , 2018, , 1-8.		1
82	Identification of Arabidopsis Phospholipase A Mutants With Increased Susceptibility to <i>Plasmodiophora brassicae</i> . Frontiers in Plant Science, 2022, 13, 799142.	3.6	1
83	Notice of Retraction: High-Level Expression of an <i>Aspergillus niger</i> Praline Specific Endopeptidase in <i>Bacillus subtilis</i> 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 <i>Tetradium ruticarpum</i> : Subacute Toxicity Assessment and Metabolomic Identification of Relevant Biomarkers. Frontiers in Pharmacology, 2022, 13, 803855.	3.5	0