Jin Liu

List of Publications by Year in descending order

90 papers	4,906 citations	76196 40 h-index	98622 67 g-index
93 all docs	93 docs citations	93 times ranked	4409 citing authors

#	Article	IF	Citations
1	Differential lipid and fatty acid profiles of photoautotrophic and heterotrophic Chlorella zofingiensis: Assessment of algal oils for biodiesel production. Bioresource Technology, 2011, 102, 106-110.	4.8	363
2	Chlorella zofingiensis as an Alternative Microalgal Producer of Astaxanthin: Biology and Industrial Potential. Marine Drugs, 2014, 12, 3487-3515.	2.2	239
3	Lipid Production from Nannochloropsis. Marine Drugs, 2016, 14, 61.	2.2	228
4	Bio-mitigation of carbon dioxide using microalgal systems: Advances and perspectives. Renewable and Sustainable Energy Reviews, 2017, 76, 1163-1175.	8.2	215
5	Genetic engineering of the Calvin cycle toward enhanced photosynthetic CO2 fixation in microalgae. Biotechnology for Biofuels, 2017, 10, 229.	6.2	137
6	Molasses-based growth and production of oil and astaxanthin by Chlorella zofingiensis. Bioresource Technology, 2012, 107, 393-398.	4.8	130
7	Metabolic engineering of tomato for high-yield production of astaxanthin. Metabolic Engineering, 2013, 17, 59-67.	3.6	129
8	Production potential of Chlorella zofingienesis as a feedstock for biodiesel. Bioresource Technology, 2010, 101, 8658-8663.	4.8	122
9	A comparative study between fungal pellet- and spore-assisted microalgae harvesting methods for algae bioflocculation. Bioresource Technology, 2018, 259, 181-190.	4.8	120
10	Genetic engineering of the green alga Chlorella zofingiensis: a modified norflurazon-resistant phytoene desaturase gene as a dominant selectable marker. Applied Microbiology and Biotechnology, 2014, 98, 5069-5079.	1.7	114
11	Simultaneous production of triacylglycerol and high-value carotenoids by the astaxanthin-producing oleaginous green microalga Chlorella zofingiensis. Bioresource Technology, 2016, 214, 319-327.	4.8	114
12	Characterization of type 2 diacylglycerol acyltransferases in Chlamydomonas reinhardtii reveals their distinct substrate specificities and functions in triacylglycerol biosynthesis. Plant Journal, 2016, 86, 3-19.	2.8	111
13	Producing Designer Oils in Industrial Microalgae by Rational Modulation of Co-evolving Type-2 Diacylglycerol Acyltransferases. Molecular Plant, 2017, 10, 1523-1539.	3.9	111
14	Development of a Unique Small Molecule Modulator of CXCR4. PLoS ONE, 2012, 7, e34038.	1.1	104
15	A type-I diacylglycerol acyltransferase modulates triacylglycerol biosynthesis and fatty acid composition in the oleaginous microalga, Nannochloropsis oceanica. Biotechnology for Biofuels, 2017, 10, 174.	6.2	103
16	Engineering of an endogenous phytoene desaturase gene as a dominant selectable marker for Chlamydomonas reinhardtii transformation and enhanced biosynthesis of carotenoids. Process Biochemistry, 2013, 48, 788-795.	1.8	98
17	Screening of Diatom Strains and Characterization of Cyclotella cryptica as A Potential Fucoxanthin Producer. Marine Drugs, 2016, 14, 125.	2.2	91
18	Functional characterization of various algal carotenoid ketolases reveals that ketolating zeaxanthin efficiently is essential for high production of astaxanthin in transgenic Arabidopsis. Journal of Experimental Botany, 2011, 62, 3659-3669.	2.4	85

#	Article	IF	Citations
19	Sesamol Enhances Cell Growth and the Biosynthesis and Accumulation of Docosahexaenoic Acid in the Microalga Crypthecodinium cohnii. Journal of Agricultural and Food Chemistry, 2015, 63, 5640-5645.	2.4	83
20	Physiological and biochemical changes reveal stress-associated photosynthetic carbon partitioning into triacylglycerol in the oleaginous marine alga Nannochloropsis oculata. Algal Research, 2016, 16, 28-35.	2.4	83
21	The synergistic energy and carbon metabolism under mixotrophic cultivation reveals the coordination between photosynthesis and aerobic respiration in Chlorella zofingiensis. Algal Research, 2017, 25, 109-116.	2.4	82
22	Chlorella species as hosts for genetic engineering and expression of heterologous proteins: Progress, challenge and perspective. Biotechnology Journal, 2016, 11, 1244-1261.	1.8	77
23	Utilization of cane molasses towards cost-saving astaxanthin production by a Chlorella zofingiensis mutant. Journal of Applied Phycology, 2013, 25, 1447-1456.	1.5	74
24	Screening and characterization of Isochrysis strains and optimization of culture conditions for docosahexaenoic acid production. Applied Microbiology and Biotechnology, 2013, 97, 4785-4798.	1.7	69
25	Novel insights into salinity-induced lipogenesis and carotenogenesis in the oleaginous astaxanthin-producing alga Chromochloris zofingiensis: a multi-omics study. Biotechnology for Biofuels, 2020, 13, 73.	6.2	62
26	ISOLATION AND CHARACTERIZATION OF THE PHYTOENE DESATURASE GENE AS A POTENTIAL SELECTIVE MARKER FOR GENETIC ENGINEERING OF THE ASTAXANTHINâ€PRODUCING GREEN ALGA CHLORELLA ZOFINGIENSIS (CHLOROPHYTA)¹. Journal of Phycology, 2008, 44, 684-690.	1.0	61
27	The crosstalk between astaxanthin, fatty acids and reactive oxygen species in heterotrophic Chlorella zofingiensis. Algal Research, 2016, 19, 178-183.	2.4	61
28	Inhibitory effects of microalgal extracts on the formation of advanced glycation endproducts (AGEs). Food Chemistry, 2010, 120, 261-267.	4.2	59
29	Biology and Industrial Applications of Chlorella: Advances and Prospects. Advances in Biochemical Engineering/Biotechnology, 2014, 153, 1-35.	0.6	58
30	Multiomics analysis reveals a distinct mechanism of oleaginousness in the emerging model alga Chromochloris zofingiensis. Plant Journal, 2019, 98, 1060-1077.	2.8	55
31	Stearoyl-acyl carrier protein desaturase gene from the oleaginous microalga Chlorella zofingiensis: cloning, characterization and transcriptional analysis. Planta, 2012, 236, 1665-1676.	1.6	51
32	Proteomics Analysis of Lipid Droplets from the Oleaginous Alga Chromochloris zofingiensis Reveals Novel Proteins for Lipid Metabolism. Genomics, Proteomics and Bioinformatics, 2019, 17, 260-272.	3.0	50
33	Astaxanthin Is Ketolated from Zeaxanthin Independent of Fatty Acid Synthesis in Chromochloris zofingiensis. Plant Physiology, 2020, 183, 883-897.	2.3	50
34	One amino acid substitution in phytoene desaturase makes Chlorella zofingiensis resistant to norflurazon and enhances the biosynthesis of astaxanthin. Planta, 2010, 232, 61-67.	1.6	49
35	Screening of Isochrysis strains for simultaneous production of docosahexaenoic acid and fucoxanthin. Algal Research, 2019, 41, 101545.	2.4	49
36	Antiaging Effects of Astaxanthin-Rich Alga Haematococcus pluvialis on Fruit Flies under Oxidative Stress. Journal of Agricultural and Food Chemistry, 2013, 61, 7800-7804.	2.4	48

#	Article	IF	Citations
37	Characterization of type I and type II diacylglycerol acyltransferases from the emerging model alga Chlorella zofingiensis reveals their functional complementarity and engineering potential. Biotechnology for Biofuels, 2019, 12, 28.	6.2	45
38	High light boosts salinity stress-induced biosynthesis of astaxanthin and lipids in the green alga Chromochloris zofingiensis. Algal Research, 2020, 50, 101976.	2.4	45
39	Enlargement of High Density Lipoprotein in Mice via Liver X Receptor Activation Requires Apolipoprotein E and Is Abolished by Cholesteryl Ester Transfer Protein Expression. Journal of Biological Chemistry, 2003, 278, 49072-49078.	1.6	43
40	Astaxanthin is responsible for antiglycoxidative properties of microalga Chlorella zofingiensis. Food Chemistry, 2011, 126, 1629-1635.	4.2	43
41	Protective actions of microalgae against endogenous and exogenous advanced glycation endproducts (AGEs) in human retinal pigment epithelial cells. Food and Function, 2011, 2, 251.	2.1	42
42	Screening and characterization of oleaginous Chlorella strains and exploration of photoautotrophic Chlorella protothecoides for oil production. Bioresource Technology, 2015, 184, 53-62.	4.8	42
43	Cloning and selection of carotenoid ketolase genes for the engineering of high-yield astaxanthin in plants. Planta, 2012, 236, 691-699.	1.6	41
44	Light attenuates lipid accumulation while enhancing cell proliferation and starch synthesis in the glucose-fed oleaginous microalga Chlorella zofingiensis. Scientific Reports, 2015, 5, 14936.	1.6	41
45	RNAi-mediated silencing of a pyruvate dehydrogenase kinase enhances triacylglycerol biosynthesis in the oleaginous marine alga Nannochloropsis salina. Scientific Reports, 2017, 7, 11485.	1.6	40
46	Histone tales: lysine methylation, a protagonist in Arabidopsis development. Journal of Experimental Botany, 2020, 71, 793-807.	2.4	40
47	The Nightshade Proteinase Inhibitor IIb Gene is Constitutively Expressed in Glandular Trichomes. Plant and Cell Physiology, 2006, 47, 1274-1284.	1.5	39
48	Highly-efficient enzymatic conversion of crude algal oils into biodiesel. Bioresource Technology, 2014, 172, 143-149.	4.8	39
49	Time-resolved carotenoid profiling and transcriptomic analysis reveal mechanism of carotenogenesis for astaxanthin synthesis in the oleaginous green alga Chromochloris zofingiensis. Biotechnology for Biofuels, 2019, 12, 287.	6.2	39
50	Characterization and subcellular localization of histone deacetylases and their roles in response to abiotic stresses in soybean. BMC Plant Biology, 2018, 18, 226.	1.6	38
51	Light Elicits Astaxanthin Biosynthesis and Accumulation in the Fermented Ultrahigh-Density Chlorella zofinginesis. Journal of Agricultural and Food Chemistry, 2019, 67, 5579-5586.	2.4	38
52	Nectin-like molecule 1 is a protein 4.1N associated protein and recruits protein 4.1N from cytoplasm to the plasma membrane. Biochimica Et Biophysica Acta - Biomembranes, 2005, 1669, 142-154.	1.4	35
53	Nafionâ€“polyfurfuryl alcohol nanocomposite membranes with low methanol permeation. Chemical Communications, 2004, , 728-729.	2.2	32
54	Development of a stable genetic system for Chlorella vulgarisâ€”A promising green alga for CO2 biomitigation. Algal Research, 2015, 12, 134-141.	2.4	31

#	Article	IF	Citations
55	The oleaginous astaxanthin-producing alga Chromochloris zofingiensis: potential from production to an emerging model for studying lipid metabolism and carotenogenesis. Biotechnology for Biofuels, 2021, 14, 119.	6.2	29
56	Comparative evaluation of immune response after laparoscopical and open total mesorectal excisions with anal sphincter preservation in patients with rectal cancer. World Journal of Gastroenterology, 2003, 9, 2690.	1.4	28
57	Novel Insights into Phosphorus Deprivation Boosted Lipid Synthesis in the Marine Alga Nannochloropsis oceanica without Compromising Biomass Production. Journal of Agricultural and Food Chemistry, 2020, 68, 11488-11502.	2.4	27
58	Light enhanced the accumulation of total fatty acids (TFA) and docosahexaenoic acid (DHA) in a newly isolated heterotrophic microalga Crypthecodinium sp. SUN. Bioresource Technology, 2017, 228, 227-234.	4.8	26
59	Petrogenesis of Permo-Triassic intrusive rocks in Northern Liaoning Province, NE China: implications for the closure of the eastern Paleo-Asian Ocean. International Geology Review, 2020, 62, 754-780.	1.1	22
60	Lipid production is more than doubled by manipulating a diacylglycerol acyltransferase in algae. GCB Bioenergy, 2021, 13, 185-200.	2.5	21
61	Microalgae as Feedstocks for Biodiesel Production. , 0, , .		19
62	DHA-rich marine microalga Schizochytrium mangrovei possesses anti-ageing effects on Drosophila melanogaster. Journal of Functional Foods, 2013, 5, 888-896.	1.6	18
63	A conserved MYB transcription factor is involved in regulating lipid metabolic pathways for oil biosynthesis in green algae. New Phytologist, 2022, 235, 576-594.	3.5	17
64	Single-tube colony PCR for DNA amplification and transformant screening of oleaginous microalgae. Journal of Applied Phycology, 2014, 26, 1719-1726.	1.5	16
65	Heterotrophic Production of Algal Oils. , 2014, , 111-142.		15
66	Functional Characterization of Long-Chain Acyl-CoA Synthetase Gene Family from the Oleaginous Alga Chromochloris zofingiensis. Journal of Agricultural and Food Chemistry, 2020, 68, 4473-4484.	2.4	15
67	Rapid Characterization of Fatty Acids in Oleaginous Microalgae by Near-Infrared Spectroscopy. International Journal of Molecular Sciences, 2015, 16, 7045-7056.	1.8	14
68	Screening of Isochrysis Strains and Utilization of a Two-Stage Outdoor Cultivation Strategy for Algal Biomass and Lipid Production. Applied Biochemistry and Biotechnology, 2018, 185, 1100-1117.	1.4	14
69	Î”6 Fatty Acid Elongase is Involved in Eicosapentaenoic Acid Biosynthesis Via the Ï‰6 Pathway in the Marine Alga Nannochloropsis oceanica. Journal of Agricultural and Food Chemistry, 2021, 69, 9837-9848.	2.4	14
70	Longâ€chain acylâ€CoA synthetases activate fatty acids for lipid synthesis, remodeling and energy production in Chlamydomonas. New Phytologist, 2022, 233, 823-837.	3.5	14
71	PDAT regulates PE as transient carbon sink alternative to triacylglycerol in Nannochloropsis. Plant Physiology, 2022, 189, 1345-1362.	2.3	14
72	Metabolic engineering of the oleaginous alga Nannochloropsis for enriching eicosapentaenoic acid in triacylglycerol by combined pulling and pushing strategies. Metabolic Engineering, 2022, 69, 163-174.	3.6	13

#	Article	IF	Citations
73	A simple and reproducible non-radiolabeled in vitro assay for recombinant acyltransferases involved in triacylglycerol biosynthesis. Journal of Applied Phycology, 2017, 29, 323-333.	1.5	11
74	A bZIP transcription factor is involved in regulating lipid and pigment metabolisms in the green alga Chlamydomonas reinhardtii. Algal Research, 2021, 59, 102450.	2.4	11
75	Kinematics and structural evolution of the Anziling dome-and-keel architecture in east China: Evidence of Neoarchean vertical tectonism in the North China Craton. Bulletin of the Geological Society of America, 0, , .	1.6	11
76	In Situ Enzymatic Conversion of Nannochloropsis oceanica IMET1 Biomass into Fatty Acid Methyl Esters. Bioenergy Research, 2017, 10, 438-448.	2.2	10
77	Characterization of fatty acid desaturases reveals stress-induced synthesis of C18 unsaturated fatty acids enriched in triacylglycerol in the oleaginous alga Chromochloris zofingiensis. Biotechnology for Biofuels, 2021, 14, 184.	6.2	7
78	Algae for biofuels. , 2016, , 673-698.		6
79	Batch Cultivation for Astaxanthin Analysis Using the Green Microalga Chlorella zofingiensis Under Multitrophic Growth Conditions. Methods in Molecular Biology, 2018, 1852, 97-106.	0.4	5
80	Exploring an isolate of the oleaginous alga Micractinium inermum for lipid production: molecular characterization and physiochemical analysis under multiple growth conditions. Journal of Applied Phycology, 2019, 31, 1035-1046.	1.5	5
81	Physiochemical and gene expression analyses reveal differential responses of the marine oleaginous alga Nannochloropsis salina under different lipid-induction conditions. Journal of Applied Phycology, 2018, 30, 909-919.	1.5	4
82	Zircon Uâ€“Pb geochronology and Srâ€“Ndâ€“Pbâ€“Hf isotopic constraints on the timing and origin of the Early Cretaceous igneous rocks in the Yongxin gold deposit in the Lesser Xing'an Range, NE China. Geological Journal, 2020, 55, 2684-2703.	0.6	4
83	Biofuel from Microalgae. , 2011, , 127-133.		3
84	Physiological and Biochemical Changes Reveal Differential Patterns of Docosahexaenoic Acid Partitioning in Two Marine Algal Strains of Isochrysis. Marine Drugs, 2017, 15, 357.	2.2	3
85	A New Discovery of ~3.0 Ga Tonalitic Gneiss in Northern Liaoning Province, China. Acta Geologica Sinica, 2018, 92, 2043-2045.	0.8	1
86	A New Discovery of Cretaceous (â¼125 Ma) Migmatite in Liaodong Peninsula, North China Craton. Acta Geologica Sinica, 2019, 93, 1969-1970.	0.8	1
87	Newly identified Jurassicâ€“Cretaceous migmatites in the Liaodong Peninsula: unravelling a Mesozoic anatectic event related to the lithospheric thinning of the North China Craton. Geological Magazine, 2021, 158, 425-441.	0.9	1
88	Lipid metabolism and metabolic engineering of eukaryotic microalgae. Advances in Bioenergy, 2021, 6, 1-35.	0.5	1
89	Patterns of mouse reticulon 3 mRNA and protein expression in the mouse central nervous system. Science Bulletin, 2003, 48, 2044.	1.7	0
90	Metabolic engineering for enhanced astaxanthin biosynthesis in Chlorella zofingiensis (chlorophyta). Journal of Biotechnology, 2008, 136, S572.	1.9	0