Yonghua Li-Beisson

List of Publications by Year
in descending order

77 papers	8,351 citations	94433 37 h-index	71685 76 g-index
89 all docs	89 docs citations	89 times ranked	7953 citing authors

#	Article	IF	Citations
1	Longâ€chain acylâ€CoA synthetases activate fatty acids for lipid synthesis, remodeling and energy production in Chlamydomonas. New Phytologist, 2022, 233, 823-837.	7.3	14
2	Physiological functions of malate shuttles in plants and algae. Trends in Plant Science, 2022, 27, 488-501.	8.8	21
3	The Chlamydomonas transcription factor MYB1 mediates lipid accumulation under nitrogen depletion. New Phytologist, 2022, 235, 595-610.	7.3	6
4	Editorial Feature: Meet the <i>PCP</i> Editorâ€"Yonghua Li-Beisson. Plant and Cell Physiology, 2022, 63, 151-153.	3.1	0
5	Alternative photosynthesis pathways drive the algal CO2-concentrating mechanism. Nature, 2022, 605, 366-371.	27.8	62
6	Guanosine tetraphosphate (<scp>ppGpp</scp>) accumulation inhibits chloroplast gene expression and promotes super grana formation in the moss <i>Physcomitrium</i> (<i>Physcomitrella</i>) <i>patens</i>. New Phytologist, 2022, 236, 86-98.	7.3	7
7	ppGpp influences protein protection, growth and photosynthesis in <i>Phaeodactylum tricornutum</i>. New Phytologist, 2021, 230, 1517-1532.	7.3	14
8	Fatty acid photodecarboxylase is an ancient photoenzyme that forms hydrocarbons in the thylakoids of algae. Plant Physiology, 2021, 186, 1455-1472.	4.8	23
9	Mechanism and dynamics of fatty acid photodecarboxylase. Science, 2021, 372, .	12.6	93
10	<scp>CO₂</scp> supply modulates lipid remodelling, photosynthetic and respiratory activities in <i>Chlorella</i> species. Plant, Cell and Environment, 2021, 44, 2987-3001.	5.7	11
11	The disassembly of lipid droplets in Chlamydomonas. New Phytologist, 2021, 231, 1359-1364.	7.3	19
12	Deciphering Differential Life Stage Radioinduced Reproductive Decline in Caenorhabditis elegans through Lipid Analysis. International Journal of Molecular Sciences, 2021, 22, 10277.	4.1	6
13	Chlamydomonas cell cycle mutant crcdc5 over-accumulates starch and oil. Biochimie, 2020, 169, 54-61.	2.6	13
14	Biogenesis and fate of lipid droplets. Biochimie, 2020, 169, 1-2.	2.6	5
15	The phosphatidylethanolamine-binding protein DTH1 mediates degradation of lipid droplets in <i>Chlamydomonas reinhardtii</i>. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 23131-23139.	7.1	14
16	Membrane Inlet Mass Spectrometry: A Powerful Tool for Algal Research. Frontiers in Plant Science, 2020, 11, 1302.	3.6	13
17	The NanDeSyn database for <i>Nannochloropsis</i> systems and synthetic biology. Plant Journal, 2020, 104, 1736-1745.	5.7	37
18	Membrane Inlet Mass Spectrometry at the Crossroads of Photosynthesis, Biofuel, and Climate Research. Plant Physiology, 2020, 183, 451-454.	4.8	4

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19	Algal photosynthesis converts nitric oxide into nitrous oxide. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 2704-2709.	7.1	41
20	Plant unusual fatty acids: learning from the less common. Current Opinion in Plant Biology, 2020, 55, 66-73.	7.1	41
21	<i>Chlorella vulgaris</i> genome assembly and annotation reveals the molecular basis for metabolic acclimation to high light conditions. Plant Journal, 2019, 100, 1289-1305.	5.7	39
22	Continuous photoproduction of hydrocarbon drop-in fuel by microbial cell factories. Scientific Reports, 2019, 9, 13713.	3.3	33
23	Subcellular Energetics and Carbon Storage in Chlamydomonas. Cells, 2019, 8, 1154.	4.1	23
24	The lipid biochemistry of eukaryotic algae. Progress in Lipid Research, 2019, 74, 31-68.	11.6	258
25	Molecular Genetic Tools and Emerging Synthetic Biology Strategies to Increase Cellular Oil Content in Chlamydomonas reinhardtii. Plant and Cell Physiology, 2019, 60, 1184-1196.	3.1	41
26	Plant and Algal Lipids Set Sail for New Horizons. Plant and Cell Physiology, 2019, 60, 1161-1163.	3.1	2
27	The bZIP1 Transcription Factor Regulates Lipid Remodeling and Contributes to ER Stress Management in <i>Chlamydomonas reinhardtii</i>. Plant Cell, 2019, 31, 1127-1140.	6.6	34
28	Deletion of BSG1 in Chlamydomonas reinhardtii leads to abnormal starch granule size and morphology. Scientific Reports, 2019, 9, 1990.	3.3	16
29	Branched-Chain Amino Acid Catabolism Impacts Triacylglycerol Homeostasis in <i>Chlamydomonas reinhardtii</i>. Plant Physiology, 2019, 179, 1502-1514.	4.8	26
30	LIP4 Is Involved in Triacylglycerol Degradation in Chlamydomonas reinhardtii. Plant and Cell Physiology, 2019, 60, 1250-1259.	3.1	24
31	Centrifugation-induced production of triacylglycerols in Chlamydomonas reinhardtii. Bioresource Technology Reports, 2019, 5, 326-330.	2.7	3
32	The Phosphate Fast-Responsive Genes <i>PECP1</i> and <i>PPsPase1</i> Affect Phosphocholine and Phosphoethanolamine Content. Plant Physiology, 2018, 176, 2943-2962.	4.8	22
33	Lipid catabolism in microalgae. New Phytologist, 2018, 218, 1340-1348.	7.3	83
34	Interorganelle Communication: Peroxisomal MALATE DEHYDROGENASE2 Connects Lipid Catabolism to Photosynthesis through Redox Coupling in Chlamydomonas. Plant Cell, 2018, 30, 1824-1847.	6.6	51
35	Identification of Insertion Site by RESDA-PCR in Chlamydomonas Mutants Generated by AphVIII Random Insertional Mutagenesis. Bio-protocol, 2018, 8, e2718.	0.4	2
36	<i>Chlamydomonas</i> carries out fatty acid Î²â€oxidation in ancestral peroxisomes using a bona fide acylâ€CoA oxidase. Plant Journal, 2017, 90, 358-371.	5.7	80

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37	The Chlamydomonas mex1 mutant shows impaired starch mobilization without maltose accumulation. Journal of Experimental Botany, 2017, 68, 5177-5189.	4.8	16
38	An algal photoenzyme converts fatty acids to hydrocarbons. Science, 2017, 357, 903-907.	12.6	317
39	Seed-Specific Overexpression of the Pyruvate Transporter BASS2 Increases Oil Content in Arabidopsis Seeds. Frontiers in Plant Science, 2017, 8, 194.	3.6	27
40	Plant membrane-protein mediated intracellular traffic of fatty acids and acyl lipids. Current Opinion in Plant Biology, 2017, 40, 138-146.	7.1	36
41	Lipids: From Chemical Structures, Biosynthesis, and Analyses to Industrial Applications. Sub-Cellular Biochemistry, 2016, 86, 1-18.	2.4	28
42	Quantitative analysis of glycerol in dicarboxylic acid-rich cutins provides insights into Arabidopsis cutin structure. Phytochemistry, 2016, 130, 159-169.	2.9	17
43	Whole Genome Re-Sequencing Identifies a Quantitative Trait Locus Repressing Carbon Reserve Accumulation during Optimal Growth in Chlamydomonas reinhardtii. Scientific Reports, 2016, 6, 25209.	3.3	12
44	Saturating Light Induces Sustained Accumulation of Oil in Plastidal Lipid Droplets in <i>Chlamydomonas reinhardtii</i>. Plant Physiology, 2016, 171, 2406-2417.	4.8	54
45	Microalgae Synthesize Hydrocarbons from Long-Chain Fatty Acids via a Light-Dependent Pathway. Plant Physiology, 2016, 171, 2393-2405.	4.8	102
46	Identification of a <i>Chlamydomonas</i> plastidial 2â€lysophosphatidic acid acyltransferase and its use toÂengineer microalgae with increased oil content. Plant Biotechnology Journal, 2016, 14, 2158-2167.	8.3	72
47	Lipidomic and transcriptomic analyses of <i>Chlamydomonas reinhardtii</i> under heat stress unveil a direct route for the conversion of membrane lipids into storage lipids. Plant, Cell and Environment, 2016, 39, 834-847.	5.7	124
48	Fatty Acid and Lipid Transport in Plant Cells. Trends in Plant Science, 2016, 21, 145-158.	8.8	227
49	Hyper-accumulation of starch and oil in a Chlamydomonas mutant affected in a plant-specific DYRK kinase. Biotechnology for Biofuels, 2016, 9, 55.	6.2	50
50	Metabolism of acylâ€lipids in <i>Chlamydomonas reinhardtii</i>. Plant Journal, 2015, 82, 504-522.	5.7	230
51	The small molecule fenpropimorph rapidly converts chloroplast membrane lipids to triacylglycerols in Chlamydomonas reinhardtii. Frontiers in Microbiology, 2015, 6, 54.	3.5	18
52	Microalgal lipid droplets: composition, diversity, biogenesis and functions. Plant Cell Reports, 2015, 34, 545-555.	5.6	118
53	Development and validation of a screening procedure of microalgae for biodiesel production: Application to the genus of marine microalgae Nannochloropsis. Bioresource Technology, 2015, 177, 224-232.	9.6	57
54	Development of a forward genetic screen to isolate oil mutants in the green microalga Chlamydomonas reinhardtii. Biotechnology for Biofuels, 2013, 6, 178.	6.2	49

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55	Comparison of various microalgae liquid biofuel production pathways based on energetic, economic and environmental criteria. Bioresource Technology, 2013, 136, 205-212.	9.6	88
56	Acyl-Lipid Metabolism. The Arabidopsis Book, 2013, 11, e0161.	0.5	974
57	The Green Microalga Chlamydomonas reinhardtii Has a Single Â-3 Fatty Acid Desaturase That Localizes to the Chloroplast and Impacts Both Plastidic and Extraplastidic Membrane Lipids. Plant Physiology, 2013, 163, 914-928.	4.8	83
58	Third-generation biofuels: current and future research on microalgal lipid biotechnology. OCL - Oilseeds and Fats, Crops and Lipids, 2013, 20, D606.	1.4	29
59	Rapid Induction of Lipid Droplets in Chlamydomonas reinhardtii and Chlorella vulgaris by Brefeldin A. PLoS ONE, 2013, 8, e81978.	2.5	63
60	A Land-Plant-Specific Glycerol-3-Phosphate Acyltransferase Family in Arabidopsis: Substrate Specificity, <i>sn</i>-2 Preference, and Evolution Â Â. Plant Physiology, 2012, 160, 638-652.	4.8	188
61	Solving the puzzles of cutin and suberin polymer biosynthesis. Current Opinion in Plant Biology, 2012, 15, 329-337.	7.1	256
62	Oil accumulation in the model green alga Chlamydomonas reinhardtii: characterization, variability between common laboratory strains and relationship with starch reserves. BMC Biotechnology, 2011, 11, 7.	3.3	625
63	Proteomic profiling of oil bodies isolated from the unicellular green microalga <i>Chlamydomonas reinhardtii</i>: With focus on proteins involved in lipid metabolism. Proteomics, 2011, 11, 4266-4273.	2.2	201
64	Cloning and molecular characterization of a glycerol-3-phosphate O-acyltransferase (GPAT) gene from Echium (Boraginaceae) involved in the biosynthesis of cutin polyesters. Planta, 2010, 232, 987-997.	3.2	20
65	A distinct type of glycerol-3-phosphate acyltransferase with <i>sn</i> -2 preference and phosphatase activity producing 2-monoacylglycerol. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 12040-12045.	7.1	169
66	CELLULOSE SYNTHASE9 Serves a Nonredundant Role in Secondary Cell Wall Synthesis in Arabidopsis Epidermal Testa Cells Â Â Â. Plant Physiology, 2010, 153, 580-589.	4.8	86
67	Acyl-Lipid Metabolism. The Arabidopsis Book, 2010, 8, e0133.	0.5	287
68	Mutations in UDP-Glucose:Sterol Glucosyltransferase in Arabidopsis Cause Transparent Testa Phenotype and Suberization Defect in Seeds Â Â Â. Plant Physiology, 2009, 151, 78-87.	4.8	135
69	Nanoridges that characterize the surface morphology of flowers require the synthesis of cutin polyester. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 22008-22013.	7.1	228
70	Identification of an Arabidopsis Feruloyl-Coenzyme A Transferase Required for Suberin Synthesis Â Â. Plant Physiology, 2009, 151, 1317-1328.	4.8	193
71	The biosynthesis of cutin and suberin as an alternative source of enzymes for the production of bio-based chemicals and materials. Biochimie, 2009, 91, 685-691.	2.6	40
72	Building lipid barriers: biosynthesis of cutin and suberin. Trends in Plant Science, 2008, 13, 236-246.	8.8	779

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73	Identification of acyltransferases required for cutin biosynthesis and production of cutin with suberin-like monomers. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 18339-18344.	7.1	348
74	Monoacylglycerols Are Components of Root Waxes and Can Be Produced in the Aerial Cuticle by Ectopic Expression of a Suberin-Associated Acyltransferase. Plant Physiology, 2007, 144, 1267-1277.	4.8	99
75	The Acyltransferase GPAT5 Is Required for the Synthesis of Suberin in Seed Coat and Root of Arabidopsis. Plant Cell, 2007, 19, 351-368.	6.6	366
76	Oil content of Arabidopsis seeds: The influence of seed anatomy, light and plant-to-plant variation. Phytochemistry, 2006, 67, 904-915.	2.9	324
77	Cloning and characterization of a gene encoding a malic enzyme involved in anaerobic growth in Mucor circinelloides. Mycological Research, 2005, 109, 461-468.	2.5	11