

Fred Beisson

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2392299/publications.pdf>

Version: 2024-02-01

54
papers

9,010
citations

87843

38
h-index

161767

54
g-index

57
all docs

57
docs citations

57
times ranked

9157
citing authors

#	ARTICLE	IF	CITATIONS
1	Fatty acid photodecarboxylase is an ancient photoenzyme that forms hydrocarbons in the thylakoids of algae. <i>Plant Physiology</i> , 2021, 186, 1455-1472.	2.3	23
2	Mechanism and dynamics of fatty acid photodecarboxylase. <i>Science</i> , 2021, 372, .	6.0	93
3	CYP77B1 a fatty acid epoxygenase specific to flowering plants. <i>Plant Science</i> , 2021, 307, 110905.	1.7	5
4	Fatty Acid Photodecarboxylase Is an Interfacial Enzyme That Binds to Lipid-Water Interfaces to Access Its Insoluble Substrate. <i>Biochemistry</i> , 2021, 60, 3200-3212.	1.2	12
5	<i>Chlamydomonas</i> cell cycle mutant <i>crdc5</i> over-accumulates starch and oil. <i>Biochimie</i> , 2020, 169, 54-61.	1.3	13
6	Phospholipase pPLAII \pm Increases Germination Rate and Resistance to Turnip Crinkle Virus when Overexpressed. <i>Plant Physiology</i> , 2020, 184, 1482-1498.	2.3	11
7	Continuous photoproduction of hydrocarbon drop-in fuel by microbial cell factories. <i>Scientific Reports</i> , 2019, 9, 13713.	1.6	33
8	Branched-Chain Amino Acid Catabolism Impacts Triacylglycerol Homeostasis in <i>Chlamydomonas reinhardtii</i> . <i>Plant Physiology</i> , 2019, 179, 1502-1514.	2.3	26
9	The Phosphate Fast-Responsive Genes <i>PECP1</i> and <i>PPsPase1</i> Affect Phosphocholine and Phosphoethanolamine Content. <i>Plant Physiology</i> , 2018, 176, 2943-2962.	2.3	22
10	Interorganelle Communication: Peroxisomal MALATE DEHYDROGENASE2 Connects Lipid Catabolism to Photosynthesis through Redox Coupling in <i>Chlamydomonas</i> . <i>Plant Cell</i> , 2018, 30, 1824-1847.	3.1	51
11	<i>Chlamydomonas</i> carries out fatty acid β -oxidation in ancestral peroxisomes using a bona fide acyl-CoA oxidase. <i>Plant Journal</i> , 2017, 90, 358-371.	2.8	80
12	<i>Arabidopsis thaliana</i> EPOXIDE HYDROLASE1 (<i>AtEH1</i>) is a cytosolic epoxide hydrolase involved in the synthesis of polyhydroxylated cutin monomers. <i>New Phytologist</i> , 2017, 215, 173-186.	3.5	17
13	An algal photoenzyme converts fatty acids to hydrocarbons. <i>Science</i> , 2017, 357, 903-907.	6.0	317
14	Whole Genome Re-Sequencing Identifies a Quantitative Trait Locus Repressing Carbon Reserve Accumulation during Optimal Growth in <i>Chlamydomonas reinhardtii</i> . <i>Scientific Reports</i> , 2016, 6, 25209.	1.6	12
15	BODYGUARD is required for the biosynthesis of cutin in <i>Arabidopsis</i> . <i>New Phytologist</i> , 2016, 211, 614-626.	3.5	43
16	Saturating Light Induces Sustained Accumulation of Oil in Plastidal Lipid Droplets in <i>Chlamydomonas reinhardtii</i> . <i>Plant Physiology</i> , 2016, 171, 2406-2417.	2.3	54
17	Microalgae Synthesize Hydrocarbons from Long-Chain Fatty Acids via a Light-Dependent Pathway. <i>Plant Physiology</i> , 2016, 171, 2393-2405.	2.3	102
18	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. <i>Plant, Cell and Environment</i> , 2016, 39, 834-847.	2.8	124

#	ARTICLE	IF	CITATIONS
19	Metabolism of acyl lipids in <i>Chlamydomonas reinhardtii</i> . <i>Plant Journal</i> , 2015, 82, 504-522.	2.8	230
20	Microalgal lipid droplets: composition, diversity, biogenesis and functions. <i>Plant Cell Reports</i> , 2015, 34, 545-555.	2.8	118
21	<i>CYP77A19</i> and <i>CYP77A20</i> characterized from <i>Sclerotinia sclerotiorum</i> oxidize fatty acids <i>in vitro</i> and partially restore the wild phenotype in an <i>Arabidopsis thaliana</i> cutin mutant. <i>Plant, Cell and Environment</i> , 2014, 37, 2102-2115.	2.8	17
22	Histone H2B Monoubiquitination is Involved in the Regulation of Cutin and Wax Composition in <i>Arabidopsis thaliana</i> . <i>Plant and Cell Physiology</i> , 2014, 55, 455-466.	1.5	86
23	Development of a forward genetic screen to isolate oil mutants in the green microalga <i>Chlamydomonas reinhardtii</i> . <i>Biotechnology for Biofuels</i> , 2013, 6, 178.	6.2	49
24	Acyl-Lipid Metabolism. <i>The Arabidopsis Book</i> , 2013, 11, e0161.	0.5	974
25	The Green Microalga <i>Chlamydomonas reinhardtii</i> Has a Single Δ^3 Fatty Acid Desaturase That Localizes to the Chloroplast and Impacts Both Plastidic and Extrplastidic Membrane Lipids. <i>Plant Physiology</i> , 2013, 163, 914-928.	2.3	83
26	Knitting a polyester skin. <i>Nature Chemical Biology</i> , 2012, 8, 603-604.	3.9	9
27	A Land-Plant-Specific Glycerol-3-Phosphate Acyltransferase Family in <i>Arabidopsis</i> : Substrate Specificity, <i>sn</i> -2 Preference, and Evolution. <i>Plant Physiology</i> , 2012, 160, 638-652.	2.3	188
28	Solving the puzzles of cutin and suberin polymer biosynthesis. <i>Current Opinion in Plant Biology</i> , 2012, 15, 329-337.	3.5	256
29	Cytochrome P450 metabolizing fatty acids in plants: characterization and physiological roles. <i>FEBS Journal</i> , 2011, 278, 195-205.	2.2	128
30	Cytochromes P450. <i>The Arabidopsis Book</i> , 2011, 9, e0144.	0.5	294
31	Oil accumulation in the model green alga <i>Chlamydomonas reinhardtii</i> : characterization, variability between common laboratory strains and relationship with starch reserves. <i>BMC Biotechnology</i> , 2011, 11, 7.	1.7	625
32	Proteomic profiling of oil bodies isolated from the unicellular green microalga <i>Chlamydomonas reinhardtii</i> : With focus on proteins involved in lipid metabolism. <i>Proteomics</i> , 2011, 11, 4266-4273.	1.3	201
33	A distinct type of glycerol-3-phosphate acyltransferase with <i>sn</i> -2 preference and phosphatase activity producing 2-monoacylglycerol. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 12040-12045.	3.3	169
34	CELLULOSE SYNTHASE9 Serves a Nonredundant Role in Secondary Cell Wall Synthesis in <i>Arabidopsis</i> Epidermal Testa Cells. <i>Plant Physiology</i> , 2010, 153, 580-589.	2.3	86
35	Acyl-Lipid Metabolism. <i>The Arabidopsis Book</i> , 2010, 8, e0133.	0.5	287
36	Mutations in UDP-Glucose: Sterol Glucosyltransferase in <i>Arabidopsis</i> Cause Transparent Testa Phenotype and Suberization Defect in Seeds. <i>Plant Physiology</i> , 2009, 151, 78-87.	2.3	135

#	ARTICLE	IF	CITATIONS
37	Nanoridges that characterize the surface morphology of flowers require the synthesis of cutin polyester. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 22008-22013.	3.3	228
38	Identification of an Arabidopsis Feruloyl-Coenzyme A Transferase Required for Suberin Synthesis. <i>Plant Physiology</i> , 2009, 151, 1317-1328.	2.3	193
39	The biosynthesis of cutin and suberin as an alternative source of enzymes for the production of bio-based chemicals and materials. <i>Biochimie</i> , 2009, 91, 685-691.	1.3	40
40	Building lipid barriers: biosynthesis of cutin and suberin. <i>Trends in Plant Science</i> , 2008, 13, 236-246.	4.3	779
41	Identification of acyltransferases required for cutin biosynthesis and production of cutin with suberin-like monomers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 18339-18344.	3.3	348
42	Monoacylglycerols Are Components of Root Waxes and Can Be Produced in the Aerial Cuticle by Ectopic Expression of a Suberin-Associated Acyltransferase. <i>Plant Physiology</i> , 2007, 144, 1267-1277.	2.3	99
43	The Acyltransferase GPAT5 Is Required for the Synthesis of Suberin in Seed Coat and Root of Arabidopsis. <i>Plant Cell</i> , 2007, 19, 351-368.	3.1	366
44	Characterization of Arabidopsis ABCG11/WBC11, an ATP binding cassette (ABC) transporter that is required for cuticular lipid secretion. <i>Plant Journal</i> , 2007, 52, 485-498.	2.8	349
45	Oil content of Arabidopsis seeds: The influence of seed anatomy, light and plant-to-plant variation. <i>Phytochemistry</i> , 2006, 67, 904-915.	1.4	324
46	Cuticular Lipid Composition, Surface Structure, and Gene Expression in Arabidopsis Stem Epidermis. <i>Plant Physiology</i> , 2005, 139, 1649-1665.	2.3	309
47	Analysis of the aliphatic monomer composition of polyesters associated with Arabidopsis epidermis: occurrence of octadeca-cis-6, cis-9-diene-1,18-dioate as the major component. <i>Plant Journal</i> , 2004, 40, 920-930.	2.8	175
48	Arabidopsis Genes Involved in Acyl Lipid Metabolism. A 2003 Census of the Candidates, a Study of the Distribution of Expressed Sequence Tags in Organs, and a Web-Based Database. <i>Plant Physiology</i> , 2003, 132, 681-697.	2.3	350
49	Large scale purification of an almond oleosin using an organic solvent procedure. <i>Plant Physiology and Biochemistry</i> , 2001, 39, 623-630.	2.8	37
50	Use of the Tape Stripping Technique for Directly Quantifying Esterase Activities in Human Stratum Corneum. <i>Analytical Biochemistry</i> , 2001, 290, 179-185.	1.1	45
51	Interfacial catalysis by lipases. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2001, 11, 165-171.	1.8	62
52	Methods for lipase detection and assay: a critical review. <i>European Journal of Lipid Science and Technology</i> , 2000, 102, 133-153.	1.0	287
53	Assaying Arabidopsis lipase activity. <i>Biochemical Society Transactions</i> , 2000, 28, 773.	1.6	6
54	Use of naturally fluorescent triacylglycerols from <i>Parinari glaberrimum</i> to detect low lipase activities from Arabidopsis thaliana seedlings. <i>Journal of Lipid Research</i> , 1999, 40, 2313-21.	2.0	26