GarcÃ©s Rafael

List of Publications by Year
in descending order

135 papers	3,572 citations	159585 30 h-index	175258 52 g-index
137 all docs	137 docs citations	137 times ranked	2563 citing authors

#	Article	IF	Citations
1	Metabolism and accumulation of hydroxylated fatty acids by castor (Ricinus comunis) seed microsomes. Plant Physiology and Biochemistry, 2022, 170, 266-274.	5.8	1
2	The Sunflower WRINKLED1 Transcription Factor Regulates Fatty Acid Biosynthesis Genes through an AW Box Binding Sequence with a Particular Base Bias. Plants, 2022, 11, 972.	3.5	5
3	Characterization and impact of sunflower plastidial octanoyltransferases (Helianthus annuus L.) on oil composition. Journal of Plant Physiology, 2022, 274, 153730.	3.5	0
4	Genome-Wide Mapping of Histone H3 Lysine 4 Trimethylation (H3K4me3) and Its Involvement in Fatty Acid Biosynthesis in Sunflower Developing Seeds. Plants, 2021, 10, 706.	3.5	10
5	Sunflower (Helianthus annuus) fatty acid synthase complex: Î²-Ketoacyl-[acyl carrier protein] reductase genes. Plant Physiology and Biochemistry, 2021, 166, 689-699.	5.8	10
6	Lipid profiling and oil properties of Camelina sativa seeds engineered to enhance the production of saturated and omega-7 fatty acids. Industrial Crops and Products, 2021, 170, 113765.	5.2	8
7	High stearic sunflower oil: Latest advances and applications. OCL - Oilseeds and Fats, Crops and Lipids, 2021, 28, 35.	1.4	9
8	Characterization of Helianthus annuus Lipoic Acid Biosynthesis: The Mitochondrial Octanoyltransferase and Lipoyl Synthase Enzyme System. Frontiers in Plant Science, 2021, 12, 781917.	3.6	4
9	Characterization and function of a sunflower (Helianthus annuus L.) Class II acyl-CoA-binding protein. Plant Science, 2020, 300, 110630.	3.6	6
10	Characterization of the acyl-ACP thioesterases from Koelreuteria paniculata reveals a new type of FatB thioesterase. Heliyon, 2020, 6, e05237.	3.2	4
11	Functional Characterization of Lysophosphatidylcholine: Acyl-CoA Acyltransferase Genes From Sunflower (Helianthus annuus L.). Frontiers in Plant Science, 2020, 11, 403.	3.6	9
12	Impact of sunflower (Helianthus annuus L.) plastidial lipoyl synthases genes expression in glycerolipids composition of transgenic Arabidopsis plants. Scientific Reports, 2020, 10, 3749.	3.3	7
13	Agrobacterium-Mediated Transient Gene Expression in Developing Ricinus communis Seeds: A First Step in Making the Castor Oil Plant a Chemical Biofactory. Frontiers in Plant Science, 2019, 10, 1410.	3.6	6
14	Lipidomic Analysis of Plastidial Octanoyltransferase Mutants of Arabidopsis thaliana. Metabolites, 2019, 9, 209.	2.9	7
15	Functional characterization and structural modelling of Helianthus annuus (sunflower) ketoacyl-CoA synthases and their role in seed oil composition. Planta, 2019, 249, 1823-1836.	3.2	14
16	Characterization of different ozonized sunflower oils I. Chemical changes during ozonization. Grasas Y Aceites, 2019, 70, 329.	0.9	7
17	Characterization of different ozonized sunflower oils II. Triacylglycerol condensation and physical properties. Grasas Y Aceites, 2019, 70, 330.	0.9	1
18	Molecular and biochemical characterization of the sunflower (Helianthus annuus L.) cytosolic and plastidial enolases in relation to seed development. Plant Science, 2018, 272, 117-130.	3.6	12

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19	New Insights Into Sunflower (Helianthus annuus L.) FatA and FatB Thioesterases, Their Regulation, Structure and Distribution. Frontiers in Plant Science, 2018, 9, 1496.	3.6	18
20	Characterization of Sunflower Stearinâ€Based Confectionary Fats in Bulk and in Compound Coatings. JAOCS, Journal of the American Oil Chemists' Society, 2018, 95, 1139-1150.	1.9	9
21	New insights in the composition of wax and sterol esters in common and mutant sunflower oils revealed by ESI-MS/MS. Food Chemistry, 2018, 269, 70-79.	8.2	19
22	Characterization of Xanthoceras sorbifolium Bunge seeds: Lipids, proteins and saponins content. Industrial Crops and Products, 2017, 109, 192-198.	5.2	46
23	Temperature effect on triacylglycerol species in seed oil from high stearic sunflower lines with different genetic backgrounds. Journal of the Science of Food and Agriculture, 2016, 96, 4367-4376.	3.5	11
24	Molecular and biochemical characterization of the OLE-1 high-oleic castor seed (Ricinus communis L.) mutant. Planta, 2016, 244, 245-258.	3.2	17
25	Acyl carrier proteins from sunflower (Helianthus annuus L.) seeds and their influence on FatA and FatB acyl-ACP thioesterase activities. Planta, 2016, 244, 479-490.	3.2	21
26	Molecular cloning and characterization of the genes encoding a microsomal oleate Î”12 desaturase (CsFAD2) and linoleate Î”15 desaturase (CsFAD3) from Camelina sativa. Industrial Crops and Products, 2016, 89, 405-415.	5.2	27
27	Sunflower HaGPAT9-1 is the predominant GPAT during seed development. Plant Science, 2016, 252, 42-52.	3.6	30
28	Sunflower (Helianthus annuus) fatty acid synthase complex: Î²-hydroxyacyl-[acyl carrier protein] dehydratase genes. Planta, 2016, 243, 397-410.	3.2	18
29	Characterization of a small acyl-CoA-binding protein (ACBP) from Helianthus annuus L. and its binding affinities. Plant Physiology and Biochemistry, 2016, 102, 141-150.	5.8	24
30	Effect of the distribution of saturated fatty acids in the melting and crystallization profiles of high-oleic high-stearic oils. Grasas Y Aceites, 2016, 67, e149.	0.9	4
31	Food Uses of Sunflower Oils. , 2015, , 441-464.		16
32	Mutagenesis in Sunflower. , 2015, , 27-52.		16
33	Cloning, heterologous expression and biochemical characterization of plastidial sn-glycerol-3-phosphate acyltransferase from Helianthus annuus. Phytochemistry, 2015, 111, 27-36.	2.9	16
34	Sunflower (Helianthus annuus) fatty acid synthase complex: enoyl-[acyl carrier protein]-reductase genes. Planta, 2015, 241, 43-56.	3.2	17
35	Characterization of soluble acyl-ACP desaturases from Camelina sativa, Macadamia tetraphylla and Dolichandra unguis-cati. Journal of Plant Physiology, 2015, 178, 35-42.	3.5	19
36	Effect of solvents on the fractionation of high oleicâ€“high stearic sunflower oil. Food Chemistry, 2015, 172, 710-717.	8.2	14

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37	Sunflower (<i>Helianthus annuus</i>) longâ€chain acylâ€coenzyme A synthetases expressed at high levels in developing seeds. Physiologia Plantarum, 2014, 150, 363-373.	5.2	28
38	Effect of a mutagenized acyl-ACP thioesterase FATA allele from sunflower with improved activity in tobacco leaves and Arabidopsis seeds. Planta, 2014, 239, 667-677.	3.2	16
39	Acyl-ACP thioesterases from Camelina sativa: Cloning, enzymatic characterization and implication in seed oil fatty acid composition. Phytochemistry, 2014, 107, 7-15.	2.9	20
40	Biochemistry of high stearic sunflower, a new source of saturated fats. Progress in Lipid Research, 2014, 55, 30-42.	11.6	31
41	Comparing Sunflower Stearins with Cocoa Butter. , 2013, , 149-161.		0
42	Characterization of the morphological changes and fatty acid profile of developing Camelina sativa seeds. Industrial Crops and Products, 2013, 50, 673-679.	5.2	73
43	Effect of growth temperature on the high stearic and high stearic-high oleic sunflower traits. Crop and Pasture Science, 2013, 64, 18.	1.5	14
44	Changes in acyl-coenzyme A pools in sunflower seeds with modified fatty acid composition. Phytochemistry, 2013, 87, 39-50.	2.9	9
45	Studies of isothermal crystallisation kinetics of sunflower hard stearin-based confectionery fats. Food Chemistry, 2013, 139, 184-195.	8.2	32
46	Alternatives to tropical fats based on highâ€stearic sunflower oils. Lipid Technology, 2012, 24, 63-65.	0.3	8
47	Evaluation of high oleic-high stearic sunflower hard stearins for cocoa butter equivalent formulation. Food Chemistry, 2012, 134, 1409-1417.	8.2	75
48	Molecular cloning and biochemical characterization of three phosphoglycerate kinase isoforms from developing sunflower (Helianthus annuus L.) seeds. Phytochemistry, 2012, 79, 27-38.	2.9	16
49	Reduced expression of FatA thioesterases in Arabidopsis affects the oil content and fatty acid composition of the seeds. Planta, 2012, 235, 629-639.	3.2	55
50	Characterization of Sphingolipids from Sunflower Seeds with Altered Fatty Acid Composition. Journal of Agricultural and Food Chemistry, 2011, 59, 12486-12492.	5.2	13
51	Proteome Analysis of Cold Acclimation in Sunflower. Journal of Proteome Research, 2011, 10, 2330-2346.	3.7	55
52	Cloning, biochemical characterization and expression of a sunflower (Helianthus annuus L.) hexokinase associated with seed storage compounds accumulation. Journal of Plant Physiology, 2011, 168, 299-308.	3.5	27
53	Sphingolipid base modifying enzymes in sunflower (Helianthus annuus): Cloning and characterization of a C4-hydroxylase gene and a new paralogous Î”8-desaturase gene. Journal of Plant Physiology, 2011, 168, 831-839.	3.5	9
54	Acyl-ACP thioesterases from macadamia (Macadamia tetraphylla) nuts: Cloning, characterization and their impact on oil composition. Plant Physiology and Biochemistry, 2011, 49, 82-87.	5.8	42

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55	Dry Fractionation and Crystallization Kinetics of Highâ€Oleic Highâ€Stearic Sunflower Oil. JAOCS, Journal of the American Oil Chemists' Society, 2011, 88, 1511.	1.9	33
56	Production of stearate-rich butters by solvent fractionation of high stearicâ€"high oleic sunflower oil. Food Chemistry, 2011, 124, 450-458.	8.2	50
57	Vegetable oil basestocks for lubricants. Grasas Y Aceites, 2011, 62, 21-28.	0.9	61
58	Prologe: Biodegradable lubricants from vegetable oils. Grasas Y Aceites, 2011, 62, 7.	0.9	0
59	Acyl-ACP thioesterases from castor (Ricinus communis L.): An enzymatic system appropriate for high rates of oil synthesis and accumulation. Phytochemistry, 2010, 71, 860-869.	2.9	53
60	Glycolytic enzymatic activities in developing seeds involved in the differences between standard and low oil content sunflowers (Helianthus annuus L.). Plant Physiology and Biochemistry, 2010, 48, 961-965.	5.8	23
61	The role of Î²-ketoacyl-acyl carrier protein synthase III in the condensation steps of fatty acid biosynthesis in sunflower. Planta, 2010, 231, 1277-1289.	3.2	27
62	Cloning, biochemical characterisation, tissue localisation and possible post-translational regulatory mechanism of the cytosolic phosphoglucose isomerase from developing sunflower seeds. Planta, 2010, 232, 845-859.	3.2	8
63	The sunflower plastidial Ï‰3-fatty acid desaturase (HaFAD7) contains the signalling determinants required for targeting to, and retention in, the endoplasmic reticulum membrane in yeast but requires co-expressed ferredoxin for activity. Phytochemistry, 2010, 71, 1050-1058.	2.9	9
64	Characterization and partial purification of acyl-CoA:glycerol 3-phosphate acyltransferase from sunflower (Helianthus annuus L.) developing seeds. Plant Physiology and Biochemistry, 2010, 48, 73-80.	5.8	13
65	Oleins as a source of estolides for biolubricant applications. Grasas Y Aceites, 2010, 61, 171-174.	0.9	28
66	Phospholipase DÎ± from sunflower (Helianthus annuus): cloning and functional characterization. Journal of Plant Physiology, 2010, 167, 503-511.	3.5	15
67	Estudio comparativo de la ozonizaciÃ³n de aceites de girasol modificados genÃ©ticamente y sin modificar. Quimica Nova, 2009, 32, 2467-2472.	0.3	7
68	Current advances in sunflower oil and its applications. Lipid Technology, 2009, 21, 79-82.	0.3	28
69	cDNA cloning, expression levels and gene mapping of photosynthetic and non-photosynthetic ferredoxin genes in sunflower (Helianthus annuus L.). Theoretical and Applied Genetics, 2009, 118, 891-901.	3.6	3
70	Characterization of glycolytic initial metabolites and enzyme activities in developing sunflower (Helianthus annuus L.) seeds. Phytochemistry, 2009, 70, 1117-1122.	2.9	20
71	Effect of the ferredoxin electron donor on sunflower (Helianthus annuus) desaturases. Plant Physiology and Biochemistry, 2009, 47, 657-662.	5.8	6
72	Influence of Specific Fatty Acids on the Asymmetric Distribution of Saturated Fatty Acids in Sunflower (Helianthus annuus L.) Triacylglycerols. Journal of Agricultural and Food Chemistry, 2009, 57, 1595-1599.	5.2	12

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73	Tropical vegetable fats and butters: properties and new alternatives. Oleagineux Corps Gras Lipides, 2009, 16, 254-258.	0.2	19
74	Lipid characterization of a wrinkled sunflower mutant. Phytochemistry, 2008, 69, 684-691.	2.9	5
75	The biochemical characterization of a high-stearic acid sunflower mutant reveals the coordinated regulation of stearoyl-acyl carrier protein desaturases. Plant Physiology and Biochemistry, 2008, 46, 109-116.	5.8	15
76	Dayâ€"Night Variation in Fatty Acids and Lipids Biosynthesis in Sunflower Seeds. Crop Science, 2008, 48, 1952-1957.	1.8	11
77	Estudio analitico de especies oxigenadas en el aceite de teobroma ozonizado. Quimica Nova, 2008, 31, 610-613.	0.3	2
78	Characterization of the glycerolipid composition of a high-palmitoleic acid sunflower mutant. European Journal of Lipid Science and Technology, 2007, 109, 591-599.	1.5	13
79	Lipid Characterization of a High-Stearic Sunflower Mutant Displaying a Seed Stearic Acid Gradient. Journal of Agricultural and Food Chemistry, 2006, 54, 3612-3616.	5.2	5
80	Increase of the Stearic Acid Content in High-Oleic Sunflower (Helianthus annuus) Seeds. Journal of Agricultural and Food Chemistry, 2006, 54, 9383-9388.	5.2	22
81	Inhibitors of fatty acid biosynthesis in sunflower seeds. Journal of Plant Physiology, 2006, 163, 885-894.	3.5	7
82	Comparative study of ozonized olive oil and ozonized sunflower oil. Journal of the Brazilian Chemical Society, 2006, 17, 403-407.	0.6	59
83	Functional characterization ofÂaÂplastidial omega-3 desaturase from sunflower (HelianthusÂannuus) inÂcyanobacteria. Plant Physiology and Biochemistry, 2006, 44, 517-525.	5.8	18
84	Phospholipid molecular profiles in the seed kernel from different sunflower (Helianthus annuus) mutants. Lipids, 2006, 41, 805-811.	1.7	12
85	Accumulation of phospholipids and glycolipids in seed kernels of different sunflower mutants (Helianthus annuus). JAOCS, Journal of the American Oil Chemists' Society, 2006, 83, 539-545.	1.9	19
86	Cloning, characterization and structural model of a FatA-type thioesterase from sunflower seeds (Helianthus annuus L.). Planta, 2005, 221, 868-880.	3.2	61
87	Lipid characterization of seed oils from high-palmitic, low-palmitoleic, and very high-stearic acid sunflower lines. Lipids, 2005, 40, 369-374.	1.7	26
88	Spectroscopic Characterization of Ozonated Sunflower Oil. Ozone: Science and Engineering, 2005, 27, 247-253.	2.5	25
89	Very Long Chain Fatty Acid Synthesis in Sunflower Kernels. Journal of Agricultural and Food Chemistry, 2005, 53, 2710-2716.	5.2	29
90	Oils from Improved High Stearic Acid Sunflower Seeds. Journal of Agricultural and Food Chemistry, 2005, 53, 5326-5330.	5.2	61

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91	The sources of carbon and reducing power for fatty acid synthesis in the heterotrophic plastids of developing sunflower (Helianthus annuus L.) embryos. Journal of Experimental Botany, 2005, 56, 1297-1303.	4.8	46
92	Biochemical characterization of a high-palmitoleic acid Helianthus annuus mutant. Plant Physiology and Biochemistry, 2004, 42, 373-381.	5.8	31
93	The determination of the asymmetrical stereochemical distribution of fatty acids in triacylglycerols. Analytical Biochemistry, 2004, 334, 175-182.	2.4	34
94	Temperature-related non-homogeneous fatty acid desaturation in sunflower (Helianthus annuus L.) seeds. Planta, 2003, 216, 834-840.	3.2	14
95	Sequential one-step extraction and analysis of triacylglycerols and fatty acids in plant tissues. Analytical Biochemistry, 2003, 317, 247-254.	2.4	32
96	Cloning and expression of fatty acids biosynthesis key enzymes from sunflower (Helianthus annuus L.) in Escherichia coli. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2003, 786, 221-228.	2.3	23
97	Study of the Asymmetric Distribution of Saturated Fatty Acids in Sunflower Oil Triacylglycerols. , 2003, , 31-34.		0
98	Inheritance of Medium Stearic Acid Content in the Seed Oil of a Sunflower Mutant CASâ€4. Crop Science, 2002, 42, 1806-1811.	1.8	7
99	Dynamic channelling during de novo fatty acid biosynthesis in Helianthus annuus seeds. Plant Physiology and Biochemistry, 2002, 40, 383-391.	5.8	10
100	Inheritance of high palmitic acid content in the sunflower mutant CAS-12 and its relationship with high oleic content. Plant Breeding, 2002, 121, 49-56.	1.9	18
101	Temperature effect on a high stearic acid sunflower mutant. Phytochemistry, 2002, 59, 33-37.	2.9	51
102	Metabolic control analysis of de novo sunflower fatty acid biosynthesis. Biochemical Society Transactions, 2000, 28, 669-671.	3.4	2
103	Enzymatic studies of high stearic acid sunflower seed mutants. Plant Physiology and Biochemistry, 2000, 38, 377-382.	5.8	32
104	Epistatic interaction among loci controlling the palmitic and the stearic acid levels in the seed oil of sunflower. Theoretical and Applied Genetics, 2000, 100, 105-111.	3.6	11
105	Acyl-acyl carrier protein thioesterase activity from sunflower (Helianthus annuus L.) seeds. Planta, 2000, 211, 673-678.	3.2	27
106	Genetic Relationships between Loci Controlling the High Stearic and the High Oleic Acid Traits in Sunflower. Crop Science, 2000, 40, 990-995.	1.8	5
107	GENETIC CHARACTERIZATION OF SUNFLOWER MUTANTS WITH HIGH CONTENT OF SATURATED FATTY ACIDS IN SEED OIL / CARACTERIZACION GENETICA DE MUTANTES DE GIRASOL CON ALTO CONTENIDO EN ACIDOS GRASOS SATURADOS / CARACTÃ‰RISATION GÃ‰NÃ‰TIQUE DES MUTANTS DE TOURNESOL Ã€ HAUT CONTENU Dâ€™ACIDES GRAS SATURÃ‰S DANS Lâ€™HUILE. Helia, 2000, 23, 77-84.	0.4	0
108	Metabolism of Triacylglycerol Species during Seed Germination in Fatty Acid Sunflower (Helianthusannuus) Mutants. Journal of Agricultural and Food Chemistry, 2000, 48, 770-774.	5.2	16

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109	Identification of Triacylglycerol Species from High-Saturated Sunflower (Helianthus annuus) Mutants. Journal of Agricultural and Food Chemistry, 2000, 48, 764-769.	5.2	56
110	Inheritance of high palmitic acid content in the seed oil of sunflower mutant CAS-5. Theoretical and Applied Genetics, 1999, 98, 496-501.	3.6	26
111	Genetic control of high stearic acid content in the seed oil of the sunflower mutant CAS-3. Theoretical and Applied Genetics, 1999, 99, 663-669.	3.6	39
112	Enzymatic characterisation of high-palmitic acid sunflower (Helianthus annuus L.) mutants. Planta, 1999, 207, 533-538.	3.2	30
113	Thermoxidative stability of triacylglycerols from mutant sunflower seeds. JAOCS, Journal of the American Oil Chemists' Society, 1999, 76, 1169-1174.	1.9	37
114	Lipid Characterization in Vegetative Tissues of High Saturated Fatty Acid Sunflower Mutants. Journal of Agricultural and Food Chemistry, 1999, 47, 78-82.	5.2	19
115	Oleate desaturation and acyl turnover in sunflower (Helianthus annuus L.) seed lipids during rapid temperature adaptation. Planta, 1998, 205, 595-600.	3.2	41
116	Fatty Acid Composition in Developing High Saturated Sunflower (Helianthus annuus) Seeds:Â Maturation Changes and Temperature Effect. Journal of Agricultural and Food Chemistry, 1998, 46, 3577-3582.	5.2	45
117	Sunflower mutant containing high levels of palmitic acid in high oleic background. Euphytica, 1997, 97, 113-116.	1.2	80
118	Characterization of polar and nonpolar seed lipid classes from highly saturated fatty acid sunflower mutants. Lipids, 1997, 32, 833-837.	1.7	59
119	Fatty Acid Composition of Different Tissues During High Stearic or High Palmitic Sunflower Mutants Germination. , 1997, , 322-324.		1
120	Mutant Sunflowers with High Concentration of Saturated Fatty Acids in the Oil. Crop Science, 1995, 35, 739-742.	1.8	117
121	Acyl Turnover in Triacylglycerols. Its Role in the Regulation by Temperature of the 18:1/18:2 Ratio in Sunflower Seeds. , 1995, , 378-380.		5
122	Oleate from triacylglycerols is desaturated in cold-induced developing sunflower (Helianthus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 222	3.2	30
123	Microsomal polypeptides in sunflower (Helianthus annum). Comparison between normal type before and after cold-induction, and a high oleic acid mutant. Physiologia Plantarum, 1994, 91, 97-103.	5.2	3
124	New sunflower mutants with altered seed fatty acid composition. Progress in Lipid Research, 1994, 33, 147-154.	11.6	9
125	Microsomal polypeptides in sunflower (Helianthus annuus). Comparison between normal type before and after cold-induction, and a high oleic acid mutant. Physiologia Plantarum, 1994, 91, 97-103.	5.2	0
126	One-Step Lipid Extraction and Fatty Acid Methyl Esters Preparation from Fresh Plant Tissues. Analytical Biochemistry, 1993, 211, 139-143.	2.4	515

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127	Temperature regulation of oleate desaturase in sunflower (Helianthus annuus L.) seeds. Planta, 1992, 186, 461-5.	3.2	55
128	In vitro oleate desaturase in developing sunflower seeds. Phytochemistry, 1991, 30, 2127-2130.	2.9	72
129	Oleate desaturation in seeds of two genotypes of sunflower. Phytochemistry, 1989, 28, 2593-2595.	2.9	40
130	Lipid characterization in seeds of a high oleic acid sunflower mutant. Phytochemistry, 1989, 28, 2597-2600.	2.9	47
131	Genetic analysis of the high oleic acid content in cultivated sunflower (Helianthus annuus L.). Euphytica, 1989, 41, 39-51.	1.2	78
132	Phycomyces: a new gene for a flavoprotein with covalently linked cofactor. Molecular Genetics and Genomics, 1986, 203, 341-345.	2.4	3
133	Alcohol dehydrogenase activity and carotenogenesis in Phycomyces. Experimental Mycology, 1985, 9, 356-358.	1.6	1
134	Light-dependent decrease in alcohol dehydrogenase activity ofPhycomyces. Experimental Mycology, 1985, 9, 94-98.	1.6	8
135	Examination of Phycomyces blakesleeanus for nitrate reductase as a possible blue light photoreceptor. Plant Science, 1985, 40, 173-177.	3.6	5