JoaquÃ-n J Salas

List of Publications by Year
in descending order

133 papers	4,113 citations	136950 32 h-index	149698 56 g-index
134 all docs	134 docs citations	134 times ranked	4323 citing authors

#	Article	IF	Citations
1	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. Plant Physiology, 2003, 132, 681-697.	4.8	350
2	Disruption of the FATB Gene in Arabidopsis Demonstrates an Essential Role of Saturated Fatty Acids in Plant Growth. Plant Cell, 2003, 15, 1020-1033.	6.6	276
3	Characterization of substrate specificity of plant FatA and FatB acyl-ACP thioesterases. Archives of Biochemistry and Biophysics, 2002, 403, 25-34.	3.0	228
4	Content of carotenoids, tocopherols, sterols, triterpenic and aliphatic alcohols, and volatile compounds in six walnuts (Juglans regia L.) varieties. Food Chemistry, 2015, 173, 972-978.	8.2	144
5	Lipoxygenase activity in olive (Olea europaea) fruit. JAOCS, Journal of the American Oil Chemists' Society, 1999, 76, 1163-1168.	1.9	82
6	The Decrease of Virgin Olive Oil Flavor Produced by High Malaxation Temperature Is Due to Inactivation of Hydroperoxide Lyase. Journal of Agricultural and Food Chemistry, 1999, 47, 809-812.	5.2	82
7	Autophagic flux is required for the synthesis of triacylglycerols and ribosomal protein turnover in Chlamydomonas. Journal of Experimental Botany, 2018, 69, 1355-1367.	4.8	82
8	Evaluation of high oleic-high stearic sunflower hard stearins for cocoa butter equivalent formulation. Food Chemistry, 2012, 134, 1409-1417.	8.2	75
9	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
10	Cloning, characterization and structural model of a FatA-type thioesterase from sunflower seeds (Helianthus annuus L.). Planta, 2005, 221, 868-880.	3.2	61
11	Oils from Improved High Stearic Acid Sunflower Seeds. Journal of Agricultural and Food Chemistry, 2005, 53, 5326-5330.	5.2	61
12	Vegetable oil basestocks for lubricants. Grasas Y Aceites, 2011, 62, 21-28.	0.9	61
13	Changes in chloroplast lipid contents and chloroplast ultrastructure in Sulla carnosa and Sulla coronaria leaves under salt stress. Journal of Plant Physiology, 2016, 198, 32-38.	3.5	61
14	Characterization of polar and nonpolar seed lipid classes from highly saturated fatty acid sunflower mutants. Lipids, 1997, 32, 833-837.	1.7	59
15	Identification of Triacylglycerol Species from High-Saturated Sunflower (Helianthus annuus) Mutants. Journal of Agricultural and Food Chemistry, 2000, 48, 764-769.	5.2	56
16	Characterization of Alcohol Acyltransferase from Olive Fruit. Journal of Agricultural and Food Chemistry, 2004, 52, 3155-3158.	5.2	56
17	Impact of the Suppression of Lipoxygenase and Hydroperoxide Lyase on the Quality of the Green Odor in Green Leaves. Journal of Agricultural and Food Chemistry, 2005, 53, 1648-1655.	5.2	56
18	Alcohol dehydrogenases from olive (Olea europaea) fruit. Phytochemistry, 1998, 48, 35-40.	2.9	55

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19	Proteome Analysis of Cold Acclimation in Sunflower. Journal of Proteome Research, 2011, 10, 2330-2346.	3.7	55
20	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
21	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
22	Temperature effect on a high stearic acid sunflower mutant. Phytochemistry, 2002, 59, 33-37.	2.9	51
23	Production of stearate-rich butters by solvent fractionation of high stearicâ€"high oleic sunflower oil. Food Chemistry, 2011, 124, 450-458.	8.2	50
24	Shifting sowing of camelina from spring to autumn enhances the oil quality for bio-based applications in response to temperature and seed carbon stock. Industrial Crops and Products, 2019, 137, 66-73.	5.2	48
25	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
26	Characterization of Xanthoceras sorbifolium Bunge seeds: Lipids, proteins and saponins content. Industrial Crops and Products, 2017, 109, 192-198.	5.2	46
27	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
28	Metabolic control analysis reveals an important role for diacylglycerol acyltransferase in olive but not in oil palm lipid accumulation. FEBS Journal, 2005, 272, 5764-5770.	4.7	45
29	Lipoxygenase pathway in olive callus cultures (Olea europaea). Phytochemistry, 2000, 53, 13-19.	2.9	43
30	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
31	Use of metabolic control analysis to give quantitative information on control of lipid biosynthesis in the important oil crop, <i>Elaeis guineensis</i> (oilpalm). New Phytologist, 2009, 184, 330-339.	7.3	38
32	Pantothenate Rescues Iron Accumulation in Pantothenate Kinase-Associated Neurodegeneration Depending on the Type of Mutation. Molecular Neurobiology, 2019, 56, 3638-3656.	4.0	36
33	The determination of the asymmetrical stereochemical distribution of fatty acids in triacylglycerols. Analytical Biochemistry, 2004, 334, 175-182.	2.4	34
34	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
35	Enzymatic studies of high stearic acid sunflower seed mutants. Plant Physiology and Biochemistry, 2000, 38, 377-382.	5.8	32
36	Sequential one-step extraction and analysis of triacylglycerols and fatty acids in plant tissues. Analytical Biochemistry, 2003, 317, 247-254.	2.4	32

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37	A large decrease of cytosolic triosephosphate isomerase in transgenic potato roots affects the distribution of carbon in primary metabolism. Planta, 2012, 236, 1177-1190.	3.2	32
38	Studies of isothermal crystallisation kinetics of sunflower hard stearin-based confectionery fats. Food Chemistry, 2013, 139, 184-195.	8.2	32
39	Biochemical characterization of a high-palmitoleic acid Helianthus annuus mutant. Plant Physiology and Biochemistry, 2004, 42, 373-381.	5.8	31
40	Biochemistry of high stearic sunflower, a new source of saturated fats. Progress in Lipid Research, 2014, 55, 30-42.	11.6	31
41	Enzymatic characterisation of high-palmitic acid sunflower (Helianthus annuus L.) mutants. Planta, 1999, 207, 533-538.	3.2	30
42	Sunflower HaGPAT9-1 is the predominant GPAT during seed development. Plant Science, 2016, 252, 42-52.	3.6	30
43	Effects of varying media, temperature, and growth rates on the intracellular concentrations of yeast amino acids. Biotechnology Progress, 1995, 11, 386-392.	2.6	29
44	Very Long Chain Fatty Acid Synthesis in Sunflower Kernels. Journal of Agricultural and Food Chemistry, 2005, 53, 2710-2716.	5.2	29
45	Current advances in sunflower oil and its applications. Lipid Technology, 2009, 21, 79-82.	0.3	28
46	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
47	Tailoring the composition of novel wax esters in the seeds of transgenic <i>Camelina sativa</i> through systematic metabolic engineering. Plant Biotechnology Journal, 2017, 15, 837-849.	8.3	28
48	Acyl-acyl carrier protein thioesterase activity from sunflower (Helianthus annuus L.) seeds. Planta, 2000, 211, 673-678.	3.2	27
49	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
50	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
51	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
52	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
53	Selection of amino-acid overproducer yeast mutants. Current Genetics, 1992, 21, 191-196.	1.7	25
54	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

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55	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
56	Volatile Compound Biosynthesis by Green Leaves from anArabidopsis thalianaHydroperoxide Lyase Knockout Mutant. Journal of Agricultural and Food Chemistry, 2006, 54, 8199-8205.	5.2	23
57	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
58	Vitamin E prevents lipid peroxidation and iron accumulation in PLA2G6-Associated Neurodegeneration. Neurobiology of Disease, 2022, 165, 105649.	4.4	23
59	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
60	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
61	Characterization of glycolytic initial metabolites and enzyme activities in developing sunflower (Helianthus annuus L.) seeds. Phytochemistry, 2009, 70, 1117-1122.	2.9	20
62	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
63	Intracellular cholesterol accumulation and coenzyme Q10 deficiency in Familial Hypercholesterolemia. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2018, 1864, 3697-3713.	3.8	20
64	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
65	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
66	Tropical vegetable fats and butters: properties and new alternatives. Oleagineux Corps Gras Lipides, 2009, 16, 254-258.	0.2	19
67	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
68	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
69	Functional characterization ofÂaÂplastidial omega-3 desaturase from sunflower (HelianthusÂannuus) inÂcyanobacteria. Plant Physiology and Biochemistry, 2006, 44, 517-525.	5.8	18
70	Sunflower (Helianthus annuus) fatty acid synthase complex: Î²-hydroxyacyl-[acyl carrier protein] dehydratase genes. Planta, 2016, 243, 397-410.	3.2	18
71	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
72	Sunflower (Helianthus annuus) fatty acid synthase complex: enoyl-[acyl carrier protein]-reductase genes. Planta, 2015, 241, 43-56.	3.2	17

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73	Molecular and biochemical characterization of the OLE-1 high-oleic castor seed (Ricinus communis L.) mutant. Planta, 2016, 244, 245-258.	3.2	17
74	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
75	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
76	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
77	Food Uses of Sunflower Oils. , 2015, , 441-464.		16
78	Cloning, heterologous expression and biochemical characterization of plastidial sn-glycerol-3-phosphate acyltransferase from Helianthus annuus. Phytochemistry, 2015, 111, 27-36.	2.9	16
79	Separation of o-phthalaldehyde derivatives of amino acids of the internal pool of yeast by reverse-phase liquid chromatography. Biotechnology Letters, 1991, 5, 209-214.	0.5	15
80	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
81	Phospholipase DÎ± from sunflower (Helianthus annuus): cloning and functional characterization. Journal of Plant Physiology, 2010, 167, 503-511.	3.5	15
82	Temperature-related non-homogeneous fatty acid desaturation in sunflower (Helianthus annuus L.) seeds. Planta, 2003, 216, 834-840.	3.2	14
83	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
84	Effect of solvents on the fractionation of high oleicâ€“high stearic sunflower oil. Food Chemistry, 2015, 172, 710-717.	8.2	14
85	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
86	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
87	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
88	Characterization of Sphingolipids from Sunflower Seeds with Altered Fatty Acid Composition. Journal of Agricultural and Food Chemistry, 2011, 59, 12486-12492.	5.2	13
89	Minor components of olive oil facilitate the triglyceride clearance from postprandial lipoproteins in a polarity-dependent manner in healthy men. Nutrition Research, 2014, 34, 40-47.	2.9	13
90	Phospholipid molecular profiles in the seed kernel from different sunflower (Helianthus annuus) mutants. Lipids, 2006, 41, 805-811.	1.7	12

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91	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
92	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
93	Dayâ€"Night Variation in Fatty Acids and Lipids Biosynthesis in Sunflower Seeds. Crop Science, 2008, 48, 1952-1957.	1.8	11
94	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
95	Regulation of aspartate-derived amino acid biosynthesis in the yeastSaccharomyces cerevisiae. Current Microbiology, 1993, 26, 313-322.	2.2	10
96	Dynamic channelling during de novo fatty acid biosynthesis in Helianthus annuus seeds. Plant Physiology and Biochemistry, 2002, 40, 383-391.	5.8	10
97	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
98	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
99	Genetic analysis of apomictic wine yeasts. Current Genetics, 2004, 45, 187-196.	1.7	9
100	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
101	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
102	Changes in acyl-coenzyme A pools in sunflower seeds with modified fatty acid composition. Phytochemistry, 2013, 87, 39-50.	2.9	9
103	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
104	Functional Characterization of Lysophosphatidylcholine: Acyl-CoA Acyltransferase Genes From Sunflower (Helianthus annuus L.). Frontiers in Plant Science, 2020, 11, 403.	3.6	9
105	High stearic sunflower oil: Latest advances and applications. OCL - Oilseeds and Fats, Crops and Lipids, 2021, 28, 35.	1.4	9
106	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
107	Alternatives to tropical fats based on highâ€stearic sunflower oils. Lipid Technology, 2012, 24, 63-65.	0.3	8
108	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

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109	Lipid Metabolism in Olive: Biosynthesis of Triacylglycerols and Aroma Components. , 2013, , 97-127.		8
110	Inhibitors of fatty acid biosynthesis in sunflower seeds. Journal of Plant Physiology, 2006, 163, 885-894.	3.5	7
111	Lipidomic Analysis of Plastidial Octanoyltransferase Mutants of Arabidopsis thaliana. Metabolites, 2019, 9, 209.	2.9	7
112	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
113	Characterization of different ozonized sunflower oils I. Chemical changes during ozonization. Grasas Y Aceites, 2019, 70, 329.	0.9	7
114	Amino Acid Overproduction and Catabolic Pathway Regulation in Saccharomyces cerevisiae. Biotechnology Progress, 1994, 10, 372-376.	2.6	6
115	Effect of the ferredoxin electron donor on sunflower (Helianthus annuus) desaturases. Plant Physiology and Biochemistry, 2009, 47, 657-662.	5.8	6
116	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
117	Characterization and function of a sunflower (Helianthus annuus L.) Class II acyl-CoA-binding protein. Plant Science, 2020, 300, 110630.	3.6	6
118	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
119	Lipid characterization of a wrinkled sunflower mutant. Phytochemistry, 2008, 69, 684-691.	2.9	5
120	The Mitochondrial PHB Complex Determines Lipid Composition and Interacts With the Endoplasmic Reticulum to Regulate Ageing. Frontiers in Physiology, 2021, 12, 696275.	2.8	5
121	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
122	Characterization of the acyl-ACP thioesterases from Koelreuteria paniculata reveals a new type of FatB thioesterase. Heliyon, 2020, 6, e05237.	3.2	4
123	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
124	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
125	Systematic mutagenesis of the fission yeast Srp54 protein. Current Genetics, 1999, 35, 88-102.	1.7	3
126	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

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127	TheSAM2 gene product catalyzes the formation of S-adenosyl-ethionine from ethionine inSaccharomyces cerevisiae. Current Microbiology, 1994, 28, 339-343.	2.2	2
128	Characterization of different ozonized sunflower oils II. Triacylglycerol condensation and physical properties. Grasas Y Aceites, 2019, 70, 330.	0.9	1
129	High-oleic sunflower seed oil. , 2022, , 109-124.		1
130	Metabolism and accumulation of hydroxylated fatty acids by castor (Ricinus comunis) seed microsomes. Plant Physiology and Biochemistry, 2022, 170, 266-274.	5.8	1
131	Prologe: Biodegradable lubricants from vegetable oils. Grasas Y Aceites, 2011, 62, 7.	0.9	0
132	Comparing Sunflower Stearins with Cocoa Butter. , 2013, , 149-161.		0
133	Characterization and impact of sunflower plastidial octanoyltransferases (Helianthus annuus L.) on oil composition. Journal of Plant Physiology, 2022, 274, 153730.	3.5	0