Johnathan A Napier

List of Publications by Year
in descending order

196 papers	14,281 citations	17440 63 h-index	23533 111 g-index
205 all docs	205 docs citations	205 times ranked	13034 citing authors

#	Article	IF	Citations
1	Stressful â€œmemoriesâ€•of plants: Evidence and possible mechanisms. Plant Science, 2007, 173, 603-608.	3.6	807
2	Pan genome of the phytoplankton Emiliania underpins its global distribution. Nature, 2013, 499, 209-213.	27.8	448
3	Analysis of Detergent-Resistant Membranes in Arabidopsis. Evidence for Plasma Membrane Lipid Rafts. Plant Physiology, 2005, 137, 104-116.	4.8	445
4	Overexpression of Arabidopsis<i>ECERIFERUM1</i>Promotes Wax Very-Long-Chain Alkane Biosynthesis and Influences Plant Response to Biotic and Abiotic Stresses Â. Plant Physiology, 2011, 156, 29-45.	4.8	414
5	Production of very long chain polyunsaturated omega-3 and omega-6 fatty acids in plants. Nature Biotechnology, 2004, 22, 739-745.	17.5	389
6	Reconstitution of Plant Alkane Biosynthesis in Yeast Demonstrates That <i>Arabidopsis</i> ECERIFERUM1 and ECERIFERUM3 Are Core Components of a Very-Long-Chain Alkane Synthesis Complex. Plant Cell, 2012, 24, 3106-3118.	6.6	380
7	Omega-3 Long-Chain Polyunsaturated Fatty Acids, EPA and DHA: Bridging the Gap between Supply and Demand. Nutrients, 2019, 11, 89.	4.1	351
8	Biosynthesis of Very-Long-Chain Polyunsaturated Fatty Acids in Transgenic Oilseeds: Constraints on Their Accumulationwâƒž. Plant Cell, 2004, 16, 2734-2748.	6.6	284
9	Successful highâ€level accumulation of fish oil omegaâ€3 longâ€chain polyunsaturated fatty acids in a transgenic oilseed crop. Plant Journal, 2014, 77, 198-208.	5.7	276
10	Metabolic engineering of Phaeodactylum tricornutum for the enhanced accumulation of omega-3 long chain polyunsaturated fatty acids. Metabolic Engineering, 2014, 22, 3-9.	7.0	260
11	A metabolomic study of substantial equivalence of field-grown genetically modified wheat. Plant Biotechnology Journal, 2006, 4, 381-392.	8.3	252
12	Characterization of Lipid Rafts from Medicago truncatula Root Plasma Membranes: A Proteomic Study Reveals the Presence of a Raft-Associated Redox System. Plant Physiology, 2007, 144, 402-418.	4.8	234
13	The Production of Unusual Fatty Acids in Transgenic Plants. Annual Review of Plant Biology, 2007, 58, 295-319.	18.7	228
14	New frontiers in oilseed biotechnology: meeting the global demand for vegetable oils for food, feed, biofuel, and industrial applications. Current Opinion in Biotechnology, 2011, 22, 252-259.	6.6	223
15	The very-long-chain hydroxy fatty acyl-CoA dehydratase PASTICCINO2 is essential and limiting for plant development. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 14727-14731.	7.1	216
16	Seed Storage Proteins: Structures and Biosynthesis. Plant Cell, 1995, 7, 945.	6.6	214
17	An alternative to fish oils: Metabolic engineering of oil-seed crops to produce omega-3 long chain polyunsaturated fatty acids. Progress in Lipid Research, 2010, 49, 108-119.	11.6	213
18	Functional Characterization of the Arabidopsis<i>Î²</i>-Ketoacyl-Coenzyme A Reductase Candidates of the Fatty Acid Elongase Â Â. Plant Physiology, 2009, 150, 1174-1191.	4.8	201

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19	Very-Long-Chain Fatty Acids Are Involved in Polar Auxin Transport and Developmental Patterning in<i>Arabidopsis</i>Â. Plant Cell, 2010, 22, 364-375.	6.6	174
20	<i>cis</i> -Jasmone induces <i>Arabidopsis</i> genes that affect the chemical ecology of multitrophic interactions with aphids and their parasitoids. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 4553-4558.	7.1	169
21	Eicosapentaenoic acid: biosynthetic routes and the potential for synthesis in transgenic plants. Phytochemistry, 2004, 65, 147-158.	2.9	168
22	Plant sphingolipids: function follows form. Current Opinion in Plant Biology, 2013, 16, 350-357.	7.1	157
23	Plant sphingolipids: Their importance in cellular organization and adaption. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2016, 1861, 1329-1335.	2.4	154
24	Isolation of a Î”5-Fatty Acid Desaturase Gene fromMortierella alpina. Journal of Biological Chemistry, 1998, 273, 19055-19059.	3.4	152
25	A Post-genomic Approach to Understanding Sphingolipid Metabolism in Arabidopsis thaliana. Annals of Botany, 2004, 93, 483-497.	2.9	148
26	The structure and biogenesis of plant oil bodies: the role of the ER membrane and the oleosin class of proteins. Plant Molecular Biology, 1996, 31, 945-956.	3.9	143
27	The first crop plant genetically engineered to release an insect pheromone for defence. Scientific Reports, 2015, 5, 11183.	3.3	133
28	Members of the Arabidopsis FAE1-like 3-Ketoacyl-CoA Synthase Gene Family Substitute for the Elop Proteins of Saccharomyces cerevisiae. Journal of Biological Chemistry, 2006, 281, 9018-9029.	3.4	119
29	Secondary structure of oleosins in oil bodies isolated from seeds of safflower (Carthamus) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50	3.7	117
30	Identification of a cDNA encoding a novel C18-Î”9polyunsaturated fatty acid-specific elongating activity from the docosahexaenoic acid (DHA)-producing microalga,Isochrysis galbana1. FEBS Letters, 2002, 510, 159-165.	2.8	116
31	Targeted Enhancement of Glutamate-to-Î³-Aminobutyrate Conversion in Arabidopsis Seeds Affects Carbon-Nitrogen Balance and Storage Reserves in a Development-Dependent Manner Â Â. Plant Physiology, 2011, 157, 1026-1042.	4.8	111
32	ELOVL2 controls the level of n-6 28:5 and 30:5 fatty acids in testis, a prerequisite for male fertility and sperm maturation in mice. Journal of Lipid Research, 2011, 52, 245-255.	4.2	111
33	Metabolic engineering of the omega-3 long chain polyunsaturated fatty acid biosynthetic pathway into transgenic plants. Journal of Experimental Botany, 2012, 63, 2397-2410.	4.8	109
34	Functional Characterization of a Higher Plant Sphingolipid Î”4-Desaturase: Defining the Role of Sphingosine and Sphingosine-1-Phosphate in Arabidopsis Â Â. Plant Physiology, 2009, 149, 487-498.	4.8	103
35	ECERIFERUM2-LIKE Proteins Have Unique Biochemical and Physiological Functions in Very-Long-Chain Fatty Acid Elongation Â. Plant Physiology, 2015, 167, 682-692.	4.8	101
36	Tailoring plant lipid composition: designer oilseeds come of age. Current Opinion in Plant Biology, 2010, 13, 329-336.	7.1	100

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37	Towards the Industrial Production of Omega-3 Long Chain Polyunsaturated Fatty Acids from a Genetically Modified Diatom Phaeodactylum tricornutum. PLoS ONE, 2015, 10, e0144054.	2.5	99
38	The <i><scp>A</scp>rabidopsis cer26</i> mutant, like the <i>cer2</i> mutant, is specifically affected in the very long chain fatty acid elongation process. Plant Journal, 2013, 73, 733-746.	5.7	98
39	Modulation of lipid biosynthesis by stress in diatoms. Philosophical Transactions of the Royal Society B: Biological Sciences, 2017, 372, 20160407.	4.0	97
40	The Localization and Expression of the Class II Starch Synthases of Wheat1. Plant Physiology, 1999, 120, 1147-1156.	4.8	96
41	A growing family of cytochrome b5-domain fusion proteins. Trends in Plant Science, 1999, 4, 2-4.	8.8	93
42	Understanding and manipulating plant lipid composition: Metabolic engineering leads the way. Current Opinion in Plant Biology, 2014, 19, 68-75.	7.1	93
43	Abnormal Glycosphingolipid Mannosylation Triggers Salicylic Acidâ€"Mediated Responses in<i>Arabidopsis</i>Â Â. Plant Cell, 2013, 25, 1881-1894.	6.6	92
44	Fatty acid desaturases from the microalga Thalassiosira pseudonana. FEBS Journal, 2005, 272, 3401-3412.	4.7	90
45	The transcriptome of cis-jasmone-induced resistance in Arabidopsis thaliana and its role in indirect defence. Planta, 2010, 232, 1163-1180.	3.2	90
46	The Saccharomyces cerevisiae YBR159w Gene Encodes the 3-Ketoreductase of the Microsomal Fatty Acid Elongase. Journal of Biological Chemistry, 2002, 277, 35440-35449.	3.4	89
47	The modification of plant oil composition via metabolic engineeringâ€"better nutrition by design. Plant Biotechnology Journal, 2013, 11, 157-168.	8.3	88
48	Reconstitution of EPA and DHA biosynthesis in Arabidopsis: Iterative metabolic engineering for the synthesis of nâ"3 LC-PUFAs in transgenic plants. Metabolic Engineering, 2013, 17, 30-41.	7.0	88
49	Rational metabolic engineering of transgenic plants for biosynthesis of omega-3 polyunsaturates. Current Opinion in Biotechnology, 2007, 18, 142-147.	6.6	86
50	The role of cytochrome b5 fusion desaturases in the synthesis of polyunsaturated fatty acids. Prostaglandins Leukotrienes and Essential Fatty Acids, 2003, 68, 135-143.	2.2	85
51	A Saccharomyces cerevisiae Gene Required for Heterologous Fatty Acid Elongase Activity Encodes a Microsomal Î²-Keto-reductase. Journal of Biological Chemistry, 2002, 277, 11481-11488.	3.4	84
52	Heterotrophic Production of Omega-3 Long-Chain Polyunsaturated Fatty Acids by Trophically Converted Marine Diatom Phaeodactylum tricornutum. Marine Drugs, 2016, 14, 53.	4.6	81
53	Sphingolipids: towards an integrated view of metabolism during the plant stress response. New Phytologist, 2020, 225, 659-670.	7.3	81
54	<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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55	Tailoring seed oil composition in the real world: optimising omega-3 long chain polyunsaturated fatty acid accumulation in transgenic Camelina sativa. Scientific Reports, 2017, 7, 6570.	3.3	79
56	Functional identification of a fatty acid Î”5desaturase gene fromCaenorhabditis elegans. FEBS Letters, 1998, 439, 215-218.	2.8	78
57	Plant desaturases: harvesting the fat of the land. Current Opinion in Plant Biology, 1999, 2, 123-127.	7.1	78
58	Plumbing the depths of PUFA biosynthesis: a novel polyketide synthase-like pathway from marine organisms. Trends in Plant Science, 2002, 7, 51-54.	8.8	74
59	Synthetic redesign of plant lipid metabolism. Plant Journal, 2016, 87, 76-86.	5.7	72
60	A Bifunctional Î”12,Î”15-Desaturase from Acanthamoeba castellanii Directs the Synthesis of Highly Unusual n-1 Series Unsaturated Fatty Acids. Journal of Biological Chemistry, 2006, 281, 36533-36541.	3.4	71
61	Identification of Primula fatty acid Î”6 -desaturases with n -3 substrate preferences 1. FEBS Letters, 2003, 542, 100-104.	2.8	70
62	Update on <scp>GM</scp> canola crops as novel sources of omegaâ€3 fish oils. Plant Biotechnology Journal, 2019, 17, 703-705.	8.3	70
63	Properties and exploitation of oleosins. Biotechnology Advances, 2007, 25, 203-206.	11.7	69
64	Very-long-chain fatty acids are required for cell plate formation during cytokinesis in<i>Arabidopsis thaliana</i>. Journal of Cell Science, 2011, 124, 3223-3234.	2.0	67
65	Transgenic plants as a sustainable, terrestrial source of fish oils. European Journal of Lipid Science and Technology, 2015, 117, 1317-1324.	1.5	67
66	Metabolic Engineering ofSaccharomyces cerevisiaefor Production of Eicosapentaenoic Acid, Using a Novel Î”5-Desaturase fromParamecium tetraurelia. Applied and Environmental Microbiology, 2011, 77, 1854-1861.	3.1	66
67	An oil containing EPA and DHA from transgenic Camelina sativa to replace marine fish oil in feeds for Atlantic salmon (Salmo salar L.): Effects on intestinal transcriptome, histology, tissue fatty acid profiles and plasma biochemistry. PLoS ONE, 2017, 12, e0175415.	2.5	66
68	Nutritional Evaluation of an EPA-DHA Oil from Transgenic Camelina sativa in Feeds for Post-Smolt Atlantic Salmon (Salmo salar L.). PLoS ONE, 2016, 11, e0159934.	2.5	66
69	Histidine-41 of the Cytochrome b5Domain of the Borage Î”6 Fatty Acid Desaturase Is Essential for Enzyme Activity. Plant Physiology, 1999, 121, 641-646.	4.8	65
70	The synthesis and accumulation of stearidonic acid in transgenic plants: a novel source of â€˜heartâ€healthyâ€™ omegaâ€3 fatty acids. Plant Biotechnology Journal, 2009, 7, 704-716.	8.3	65
71	Modifying the lipid content and composition of plant seeds: engineering the production of LC-PUFA. Applied Microbiology and Biotechnology, 2015, 99, 143-154.	3.6	65
72	Field trial evaluation of the accumulation of omega-3 long chain polyunsaturated fatty acids in transgenic Camelina sativa: Making fish oil substitutes in plants. Metabolic Engineering Communications, 2015, 2, 93-98.	3.6	64

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73	Characterization and modelling of the hydrophobic domain of a sunflower oleosin. Planta, 2002, 214, 546-551.	3.2	62
74	Mutagenesis and heterologous expression in yeast of a plant Î”6â€fatty acid desaturase. Journal of Experimental Botany, 2001, 52, 1581-1585.	4.8	61
75	The accumulation of triacylglycerols within the endoplasmic reticulum of developing seeds ofHelianthus annuus. Plant Journal, 1999, 17, 397-405.	5.7	59
76	Identification and functional characterisation of genes encoding the omega-3 polyunsaturated fatty acid biosynthetic pathway from the coccolithophore Emiliania huxleyi. Phytochemistry, 2011, 72, 594-600.	2.9	57
77	In vivo targeting of a sunflower oil body protein in yeast secretory (sec) mutants. Plant Journal, 2000, 23, 159-170.	5.7	54
78	<i>Arabidopsis</i> cytosolic acyl-CoA-binding proteins ACBP4, ACBP5 and ACBP6 have overlapping but distinct roles in seed development. Bioscience Reports, 2014, 34, e00165.	2.4	53
79	An alternative pathway for the effective production of the omegaâ€3 longâ€chain polyunsaturates EPA and ETA in transgenic oilseeds. Plant Biotechnology Journal, 2015, 13, 1264-1275.	8.3	53
80	Functional characterization of the Arabidopsis thaliana orthologue of Tsc13p, the enoyl reductase of the yeast microsomal fatty acid elongating system. Journal of Experimental Botany, 2004, 55, 543-545.	4.8	52
81	The production of very-long-chain PUFA biosynthesis in transgenic plants: towards a sustainable source of fish oils. Proceedings of the Nutrition Society, 2005, 64, 387-393.	1.0	52
82	Are GM and conventionally bred cereals really different?. Trends in Food Science and Technology, 2007, 18, 201-209.	15.1	52
83	Comparison of the expression patterns of genes coding for wheat gluten proteins and proteins involved in the secretory pathway in developing caryopses of wheat. Plant Molecular Biology, 1996, 30, 1067-1073.	3.9	51
84	Expression and in vitro targeting of a sunflower oleosin. Plant Molecular Biology, 1995, 29, 403-410.	3.9	50
85	Functional Identification of a Î”8-Sphingolipid Desaturase from Borago officinalis. Archives of Biochemistry and Biophysics, 2001, 388, 293-298.	3.0	50
86	Isolation and characterisation of cDNA clones representing the genes encoding the major tuber storage protein (dioscorin) of yam (Dioscorea cayenensis Lam.). Plant Molecular Biology, 1995, 28, 369-380.	3.9	49
87	A transatlantic perspective on 20 emerging issues in biological engineering. ELife, 2017, 6, .	6.0	49
88	Oil from transgenic<i>Camelina sativa</i>containing over 25 %<i>n</i>-3 long-chain PUFA as the major lipid source in feed for Atlantic salmon (<i>Salmo salar</i>). British Journal of Nutrition, 2018, 119, 1378-1392.	2.3	49
89	Modification of the Low Molecular Weight (LMW) Glutenin Composition of Transgenic Durum Wheat: Effects on Glutenin Polymer Size and Gluten Functionality. Molecular Breeding, 2005, 16, 113-126.	2.1	48
90	The challenges of delivering genetically modified crops with nutritional enhancement traits. Nature Plants, 2019, 5, 563-567.	9.3	48

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91	Identification and Functional Characterization of Genes Encoding Omega-3 Polyunsaturated Fatty Acid Biosynthetic Activities from Unicellular Microalgae. Marine Drugs, 2013, 11, 5116-5129.	4.6	47
92	Overexpression of an endogenous type 2 diacylglycerol acyltransferase in the marine diatom Phaeodactylum tricornutum enhances lipid production and omega-3 long-chain polyunsaturated fatty acid content. Biotechnology for Biofuels, 2020, 13, 87.	6.2	47
93	Metabolic Engineering of Plantâ€derived (<i>E</i>)â€Î²â€farnesene Synthase Genes for a Novel Type of Aphidâ€resistant Genetically Modified Crop Plants^F. Journal of Integrative Plant Biology, 2012, 54, 282-299.	8.5	46
94	Genomic and functional characterization of polyunsaturated fatty acid biosynthesis in Caenorhabditis elegans. Lipids, 2001, 36, 761-766.	1.7	45
95	Misexpression of FATTY ACID ELONGATION1 in the Arabidopsis Epidermis Induces Cell Death and Suggests a Critical Role for Phospholipase A2 in This Process. Plant Cell, 2009, 21, 1252-1272.	6.6	44
96	Transgenic oilseed crops as an alternative to fish oils. Prostaglandins Leukotrienes and Essential Fatty Acids, 2011, 85, 253-260.	2.2	44
97	Targeting and membrane-insertion of a sunflower oleosin in vitro and in Saccharomyces cerevisiae : the central hydrophobic domain contains more than one signal sequence, and directs oleosin insertion into the endoplasmic reticulum membrane using a signal anchor sequence mechanism. Planta, 2002, 215, 293-303.	3.2	43
98	Enhancing the accumulation of omega-3 long chain polyunsaturated fatty acids in transgenic Arabidopsis thaliana via iterative metabolic engineering and genetic crossing. Transgenic Research, 2012, 21, 1233-1243.	2.4	42
99	Sphingolipid metabolism is strikingly different between pollen and leaf in Arabidopsis as revealed by compositional and gene expression profiling. Phytochemistry, 2015, 115, 121-129.	2.9	42
100	Synaptotagmins at the endoplasmic reticulumâ€"plasma membrane contact sites maintain diacylglycerol homeostasis during abiotic stress. Plant Cell, 2021, 33, 2431-2453.	6.6	41
101	Chimeras of Î”6-Fatty Acid and Î”8-Sphingolipid Desaturases. Biochemical and Biophysical Research Communications, 2000, 279, 779-785.	2.1	40
102	Tobacco cytochromeb 5: cDNA isolation, expression analysis andin vitro protein targeting. Plant Molecular Biology, 1994, 25, 527-537.	3.9	38
103	Developments in aspects of ecological phytochemistry: The role of cis-jasmone in inducible defence systems in plants. Phytochemistry, 2007, 68, 2937-2945.	2.9	38
104	The role of Î”6â€desaturase acylâ€carrier specificity in the efficient synthesis of longâ€chain polyunsaturated fatty acids in transgenic plants. Plant Biotechnology Journal, 2012, 10, 195-206.	8.3	38
105	Î”6-Unsaturated fatty acids in species and tissues of the Primulaceae. Phytochemistry, 1999, 52, 419-422.	2.9	37
106	The alternative pathway C20Î”8-desaturase from the non-photosynthetic organismAcanthamoeba castellaniiis an atypical cytochromeb5-fusion desaturase. FEBS Letters, 2006, 580, 1946-1952.	2.8	37
107	Molecular analysis of a durum wheat â€˜stay greenâ€™ mutant: Expression pattern of photosynthesis-related genes. Journal of Cereal Science, 2006, 43, 160-168.	3.7	37
108	The Zinc-Finger Protein SOP1 Is Required for a Subset of the Nuclear Exosome Functions in Arabidopsis. PLoS Genetics, 2016, 12, e1005817.	3.5	36

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109	Progress toward the production of long-chain polyunsaturated fatty acids in transgenic plants. Lipids, 2004, 39, 1067-1075.	1.7	35
110	The production of long chain polyunsaturated fatty acids in transgenic plants by reverse-engineering. Biochimie, 2004, 86, 785-792.	2.6	35
111	Multifunctionalizing the marine diatom Phaeodactylum tricornutum for sustainable co-production of omega-3 long chain polyunsaturated fatty acids and recombinant phytase. Scientific Reports, 2019, 9, 11444.	3.3	35
112	Cloning and Characterization of Unusual Fatty Acid Desaturases from Anemone leveillei: Identification of an Acyl-Coenzyme A C20 Î”5-Desaturase Responsible for the Synthesis of Sciadonic Acid. Plant Physiology, 2007, 144, 455-467.	4.8	34
113	Import of the precursor of the chloroplast Rieske iron-sulphur protein by pea chloroplasts. Plant Molecular Biology, 1992, 20, 569-574.	3.9	33
114	Co-transcribed Genes for Long Chain Polyunsaturated Fatty Acid Biosynthesis in the Protozoon Perkinsus marinus Include a Plant-like FAE1 3-Ketoacyl Coenzyme A Synthase. Journal of Biological Chemistry, 2007, 282, 2996-3003.	3.4	33
115	Agriculture can help aquaculture become greener. Nature Food, 2020, 1, 680-683.	14.0	33
116	Gene Expression in Plant Lipid Metabolism in Arabidopsis Seedlings. PLoS ONE, 2014, 9, e107372.	2.5	31
117	Sunflower HaGPAT9-1 is the predominant GPAT during seed development. Plant Science, 2016, 252, 42-52.	3.6	30
118	Plant Volatiles Yielding New Ways to Exploit Plant Defence. , 0, , 161-173.		30
119	Trafficking of wheat gluten proteins in transgenic tobacco plants: Î³-gliadin does not contain an endoplasmic reticulum-retention signal. Planta, 1997, 203, 488-494.	3.2	29
120	Identification of Primula â€œfront-endâ€•desaturases with distinct nâˆ’6 or nâˆ’3 substrate preferences. Planta, 2006, 224, 1269-1277.	3.2	29
121	Emerging roles in plant defense forcis-jasmone-induced cytochrome P450 CYP81D11. Plant Signaling and Behavior, 2011, 6, 563-565.	2.4	29
122	High level accumulation of EPA and DHA in fieldâ€grown transgenic Camelina â€“ a multiâ€territory evaluation of TAG accumulation and heterogeneity. Plant Biotechnology Journal, 2020, 18, 2280-2291.	8.3	29
123	The Arabidopsis F-box/Kelch-Repeat Protein At2g44130 Is Upregulated in Giant Cells and Promotes Nematode Susceptibility. Molecular Plant-Microbe Interactions, 2013, 26, 36-43.	2.6	28
124	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
125	The overexpression of rice <scp>ACYL</scp>â€<scp>CoA</scp>â€<scp>BINDING PROTEIN</scp>2 increases grain size and bran oil content in transgenic rice. Plant Journal, 2019, 100, 1132-1147.	5.7	28
126	The seed oleosins: Structure, properties and biological role. Advances in Botanical Research, 2001, 35, 111-138.	1.1	26

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127	Molecular characterization of two isoforms of a farnesyl pyrophosphate synthase gene in wheat and their roles in sesquiterpene synthesis and inducible defence against aphid infestation. New Phytologist, 2015, 206, 1101-1115.	7.3	26
128	Synthesis of storage reserves in developing seeds of sunflower. Phytochemistry, 1998, 48, 429-432.	2.9	25
129	Draft Genome Sequence of Four Coccolithoviruses: Emiliania huxleyi Virus EhV-88, EhV-201, EhV-207, and EhV-208. Journal of Virology, 2012, 86, 2896-2897.	3.4	25
130	Rice ORMDL Controls Sphingolipid Homeostasis Affecting Fertility Resulting from Abnormal Pollen Development. PLoS ONE, 2014, 9, e106386.	2.5	25
131	Postprandial incorporation of EPA and DHA from transgenic Camelina sativa oil into blood lipids is equivalent to that from fish oil in healthy humans. British Journal of Nutrition, 2019, 121, 1235-1246.	2.3	25
132	Europeâ€™s first and last field trial of gene-edited plants?. ELife, 2018, 7, .	6.0	25
133	Progress towards the production of very long-chain polyunsaturated fatty acid in transgenic plants: plant metabolic engineering comes of age. Physiologia Plantarum, 2006, 126, 398-406.	5.2	24
134	Towards the development of a sustainable soya beanâ€based feedstock for aquaculture. Plant Biotechnology Journal, 2017, 15, 227-236.	8.3	24
135	Genetic manipulation of Î³-linolenic acid (GLA) synthesis in a commercial variety of evening primrose (Oenothera sp.). Plant Biotechnology Journal, 2004, 2, 351-357.	8.3	23
136	A Transgenic Camelina sativa Seed Oil Effectively Replaces Fish Oil as a Dietary Source of Eicosapentaenoic Acid in Mice. Journal of Nutrition, 2016, 146, 227-235.	2.9	23
137	Impairment of DHA synthesis alters the expression of neuronal plasticity markers and the brain inflammatory status in mice. FASEB Journal, 2020, 34, 2024-2040.	0.5	23
138	Dietary supplementation with seed oil from transgenic<i>Camelina sativa</i>induces similar increments in plasma and erythrocyte DHA and EPA to fish oil in healthy humans. British Journal of Nutrition, 2020, 124, 922-930.	2.3	23
139	Functional characterisation of two cytochromeï¿½b5-fusion desaturases from Anemone leveillei: the unexpected identification of a fatty acid ?6-desaturase. Planta, 2003, 217, 983-992.	3.2	22
140	Dual Fatty Acid Elongase Complex Interactions in Arabidopsis. PLoS ONE, 2016, 11, e0160631.	2.5	22
141	Overexpression, Purification, and in Vitro Refolding of the 11S Globulin from Amaranth Seed inEscherichia coli. Journal of Agricultural and Food Chemistry, 2000, 48, 5249-5255.	5.2	21
142	Structure, Assembly and Targeting of Wheat Storage Proteins. Journal of Plant Physiology, 1995, 145, 620-625.	3.5	20
143	The targeting and accumulation of ectopically expressed oleosin in non-seed tissues of Arabidopsis thaliana. Planta, 2000, 210, 439-445.	3.2	20
144	A new class of lipid desaturase central to sphingolipid biosynthesis and signalling. Trends in Plant Science, 2002, 7, 475-478.	8.8	20

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145	Draft genome sequence of the coccolithovirus EhV-84. Standards in Genomic Sciences, 2011, 5, 1-11.	1.5	20
146	Draft Genome Sequence of the Coccolithovirus Emiliania huxleyi Virus 202. Journal of Virology, 2012, 86, 2380-2381.	3.4	20
147	Delivering sustainable crop protection systems via the seed: exploiting natural constitutive and inducible defence pathways. Philosophical Transactions of the Royal Society B: Biological Sciences, 2014, 369, 20120281.	4.0	20
148	The dihydroceramide desaturase is not essential for cell viability in Schizosaccharomyces pombe. FEBS Letters, 2003, 538, 192-196.	2.8	19
149	Bioengineering horizon scan 2020. ELife, 2020, 9, .	6.0	19
150	Characterization of a sunflower seed albumin which associates with oil bodies. Plant Science, 1996, 118, 119-125.	3.6	18
151	Viral trans-dominant manipulation of algal sphingolipids. Trends in Plant Science, 2010, 15, 651-655.	8.8	18
152	Intragenus competition between coccolithoviruses: an insight on how a select few can come to dominate many. Environmental Microbiology, 2016, 18, 133-145.	3.8	18
153	Plastidial acyl carrier protein Î”9â€desaturase modulates eicosapentaenoic acid biosynthesis and triacylglycerol accumulation in <i>Phaeodactylum tricornutum</i>. Plant Journal, 2021, 106, 1247-1259.	5.7	18
154	Cloning and molecular characterisation of a Î”8-sphingolipid-desaturase from Nicotiana tabacum closely related to Î”6-acyl-desaturases. Plant Molecular Biology, 2007, 64, 241-250.	3.9	17
155	Arabidopsis cytosolic acylâ€CoAâ€binding proteins function in determining seed oil composition. Plant Direct, 2019, 3, e00182.	1.9	17
156	The biogenesis of the plant seed oil body: Oleosin protein is synthesised by ER-bound ribosomes. Plant Physiology and Biochemistry, 1999, 37, 481-490.	5.8	16
157	The production ofn-3 long-chain polyunsaturated fatty acids in transgenic plants. European Journal of Lipid Science and Technology, 2006, 108, 965-972.	1.5	16
158	Draft Genome Sequence of the Coccolithovirus Emiliania huxleyi Virus 203. Journal of Virology, 2011, 85, 13468-13469.	3.4	15
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