Tony R Larson

List of Publications by Year
in descending order

75 papers	8,701 citations	57631 44 h-index	76769 74 g-index
79 all docs	79 docs citations	79 times ranked	10714 citing authors

#	Article	IF	Citations
1	Acyl-Lipid Metabolism. The Arabidopsis Book, 2013, 11, e0161.	0.5	974
2	CAMERA: An Integrated Strategy for Compound Spectra Extraction and Annotation of Liquid Chromatography/Mass Spectrometry Data Sets. Analytical Chemistry, 2012, 84, 283-289.	3.2	930
3	The Genetic Map of Artemisia annua L. Identifies Loci Affecting Yield of the Antimalarial Drug Artemisinin. Science, 2010, 327, 328-331.	6.0	325
4	A Papaver somniferum 10-Gene Cluster for Synthesis of the Anticancer Alkaloid Noscapine. Science, 2012, 336, 1704-1708.	6.0	301
5	Identification of the 2-Hydroxyglutarate and Isovaleryl-CoA Dehydrogenases as Alternative Electron Donors Linking Lysine Catabolism to the Electron Transport Chain of Arabidopsis Mitochondria Â. Plant Cell, 2010, 22, 1549-1563.	3.1	296
6	Metabolic engineering of hydroxy fatty acid production in plants: RcDGAT2 drives dramatic increases in ricinoleate levels in seed oil. Plant Biotechnology Journal, 2008, 6, 819-831.	4.1	292
7	Acyl-Lipid Metabolism. The Arabidopsis Book, 2010, 8, e0133.	0.5	287
8	Control of germination and lipid mobilization by COMATOSE, the Arabidopsis homologue of human ALDP. EMBO Journal, 2002, 21, 2912-2922.	3.5	280
9	Jasmonic Acid Levels Are Reduced in COMATOSE ATP-Binding Cassette Transporter Mutants. Implications for Transport of Jasmonate Precursors into Peroxisomes. Plant Physiology, 2005, 137, 835-840.	2.3	248
10	Reserve Mobilization in the Arabidopsis Endosperm Fuels Hypocotyl Elongation in the Dark, Is Independent of Abscisic Acid, and Requires PHOSPHOENOLPYRUVATE CARBOXYKINASE1. Plant Cell, 2004, 16, 2705-2718.	3.1	246
11	Long chain polyunsaturated fatty acid production and partitioning to triacylglycerols in four microalgae. Phytochemistry, 2002, 61, 15-24.	1.4	239
12	Requirement for 3-ketoacyl-CoA thiolase-2 in peroxisome development, fatty acid Î²-oxidation and breakdown of triacylglycerol in lipid bodies of Arabidopsis seedlings. Plant Journal, 2001, 28, 1-12.	2.8	233
13	The Critical Role of Arabidopsis Electron-Transfer Flavoprotein:Ubiquinone Oxidoreductase during Dark-Induced Starvation. Plant Cell, 2005, 17, 2587-2600.	3.1	211
14	12-Oxo-Phytodienoic Acid Accumulation during Seed Development Represses Seed Germination inArabidopsisÂ Â Â. Plant Cell, 2011, 23, 583-599.	3.1	207
15	A novel technique for the sensitive quantification of acyl CoA esters from plant tissues. Plant Journal, 2001, 25, 115-125.	2.8	192
16	Toxicity of unsaturated fatty acids to the biohydrogenating ruminal bacterium, Butyrivibrio fibrisolvens. BMC Microbiology, 2010, 10, 52.	1.3	189
17	Sucrose rescues seedling establishment but not germination of Arabidopsis mutants disrupted in peroxisomal fatty acid catabolism. Plant Journal, 2005, 43, 861-872.	2.8	157
18	Detoxification of the explosive 2,4,6â€trinitrotoluene in Arabidopsis: discovery of bifunctional Oâ€• and Câ€glucosyltransferases. Plant Journal, 2008, 56, 963-974.	2.8	142

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19	Perturbed cholesterol and vesicular trafficking associated with dengue blocking in Wolbachia-infected Aedes aegypti cells. Nature Communications, 2017, 8, 526.	5.8	139
20	A Cytosolic Acyltransferase Contributes to Triacylglycerol Synthesis in Sucrose-Rescued Arabidopsis Seed Oil Catabolism Mutants Â Â. Plant Physiology, 2012, 160, 215-225.	2.3	136
21	Morphinan biosynthesis in opium poppy requires a P450-oxidoreductase fusion protein. Science, 2015, 349, 309-312.	6.0	130
22	The mitochondrial electron transfer flavoprotein complex is essential for survival of Arabidopsis in extended darkness. Plant Journal, 2006, 47, 751-760.	2.8	128
23	Tissue-Specific Whole Transcriptome Sequencing in Castor, Directed at Understanding Triacylglycerol Lipid Biosynthetic Pathways. PLoS ONE, 2012, 7, e30100.	1.1	117
24	The Breakdown of Stored Triacylglycerols Is Required during Light-Induced Stomatal Opening. Current Biology, 2016, 26, 707-712.	1.8	111
25	Plant lipidâ€associated fibrillin proteins condition jasmonate production under photosynthetic stress. Plant Journal, 2010, 61, 436-445.	2.8	105
26	Arabidopsis Mutants in Short- and Medium-chain Acyl-CoA Oxidase Activities Accumulate Acyl-CoAs and Reveal That Fatty Acid Î²-Oxidation Is Essential for Embryo Development. Journal of Biological Chemistry, 2003, 278, 21370-21377.	1.6	98
27	Hydrophilic interaction chromatography/electrospray mass spectrometry analysis of carbohydrateâ€related metabolites from Arabidopsis thaliana leaf tissue. Rapid Communications in Mass Spectrometry, 2008, 22, 1399-1407.	0.7	95
28	Transcriptomic and Reverse Genetic Analysesof Branched-Chain Fatty Acid and Acyl Sugar Production inSolanum pennelliiandNicotiana benthamianaÂ Â. Plant Physiology, 2008, 148, 1830-1846.	2.3	95
29	TheArabidopsis thalianamultifunctional protein gene (MFP2) of peroxisomalÎ²-oxidation is essential for seedling establishment. Plant Journal, 2006, 45, 930-941.	2.8	92
30	Artemisia annua mutant impaired in artemisinin synthesis demonstrates importance of nonenzymatic conversion in terpenoid metabolism. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 15150-15155.	3.3	92
31	Fatty acid desaturases from the microalga Thalassiosira pseudonana. FEBS Journal, 2005, 272, 3401-3412.	2.2	90
32	Potassium deficiency induces the biosynthesis of oxylipins and glucosinolates in Arabidopsis thaliana. BMC Plant Biology, 2010, 10, 172.	1.6	87
33	Rational metabolic engineering of transgenic plants for biosynthesis of omega-3 polyunsaturates. Current Opinion in Biotechnology, 2007, 18, 142-147.	3.3	86
34	Quantification of sugars and sugar phosphates in Arabidopsis thaliana tissues using porous graphitic carbon liquid chromatography-electrospray ionization mass spectrometry. Journal of Chromatography A, 2007, 1172, 170-178.	1.8	85
35	Production of Bioactive Diterpenoids in the Euphorbiaceae Depends on Evolutionarily Conserved Gene Clusters Â Â. Plant Cell, 2014, 26, 3286-3298.	3.1	84
36	Novel Insights into Seed Fatty Acid Synthesis and Modification Pathways from Genetic Diversity and Quantitative Trait Loci Analysis of the Brassica C Genome. Plant Physiology, 2007, 144, 1827-1842.	2.3	78

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37	MOTHER-OF-FT-AND-TFL1 represses seed germination under far-red light by modulating phytohormone responses in Arabidopsis thaliana. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 8442-8447.	3.3	74
38	Acyl CoA profiles of transgenic plants that accumulate medium-chain fatty acids indicate inefficient storage lipid synthesis in developing oilseeds. Plant Journal, 2002, 32, 519-527.	2.8	73
39	Identification of a very long chain polyunsaturated fatty acid Î”4-desaturase from the microalga Pavlova lutheri 1. FEBS Letters, 2003, 553, 440-444.	1.3	73
40	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.	4.1	65
41	Reduced expression of FatA thioesterases in Arabidopsis affects the oil content and fatty acid composition of the seeds. Planta, 2012, 235, 629-639.	1.6	55
42	Low-oxygen response is triggered by an ATP-dependent shift in oleoyl-CoA in Arabidopsis. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E12101-E12110.	3.3	55
43	Engineering a Catabolic Pathway in Plants for the Degradation of 1,2-Dichloroethane. Plant Physiology, 2008, 147, 1192-1198.	2.3	50
44	CHANGES IN CELL COMPOSITION AND LIPID METABOLISM MEDIATED BY SODIUM AND NITROGEN AVAILABILITY IN THE MARINE DIATOM PHAEODACTYLUM TRICORNUTUM (BACILLARIOPHYCEAE)1. Journal of Phycology, 1996, 32, 388-393.	1.0	46
45	Identification of a fatty acid Î”11-desaturase from the microalga Thalassiosira pseudonana 1. FEBS Letters, 2004, 563, 28-34.	1.3	39
46	Analysis of a Range of Catabolic Mutants Provides Evidence That Phytanoyl-Coenzyme A Does Not Act as a Substrate of the Electron-Transfer Flavoprotein/Electron-Transfer Flavoprotein:Ubiquinone Oxidoreductase Complex in Arabidopsis during Dark-Induced Senescence Â Â. Plant Physiology, 2011, 157, 55-69.	2.3	39
47	The Coenzyme A Biosynthetic Enzyme Phosphopantetheine Adenylyltransferase Plays a Crucial Role in Plant Growth, Salt/Osmotic Stress Resistance, and Seed Lipid Storage. Plant Physiology, 2008, 148, 546-556.	2.3	38
48	Yield assessment of integumentâ€led seed growth following targeted repair of auxin response factor 2. Plant Biotechnology Journal, 2008, 6, 758-769.	4.1	33
49	Detailed Phytochemical Analysis of High- and Low Artemisinin-Producing Chemotypes of Artemisia annua. Frontiers in Plant Science, 2018, 9, 641.	1.7	33
50	An Arabidopsis Mutant Impaired in Coenzyme A Biosynthesis Is Sugar Dependent for Seedling Establishment. Plant Physiology, 2006, 140, 830-843.	2.3	32
51	A survey of artemisinic and dihydroartemisinic acid contents in glasshouse and global field-grown populations of the artemisinin-producing plant Artemisia annua L.. Industrial Crops and Products, 2013, 45, 1-6.	2.5	30
52	No Induction of ?-oxidation in leaves of Arabidopsis that over-produce lauric acid. Planta, 1999, 207, 385-392.	1.6	29
53	Targeted mutation of Î”12 and Î”15 desaturase genes in hemp produce major alterations in seed fatty acid composition including a high oleic hemp oil. Plant Biotechnology Journal, 2014, 12, 613-623.	4.1	29
54	A Cytochrome P450â€Mediated Intramolecular Carbonâ€“Carbon Ring Closure in the Biosynthesis of Multidrugâ€Resistanceâ€Reversing Lathyrane Diterpenoids. ChemBioChem, 2016, 17, 1593-1597.	1.3	28

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55	An inhibitor of oil body mobilization in Arabidopsis. New Phytologist, 2013, 200, 641-649.	3.5	25
56	Contrasting nutrientâ€“disease relationships: Potassium gradients in barley leaves have opposite effects on two fungal pathogens with different sensitivities to jasmonic acid. Plant, Cell and Environment, 2018, 41, 2357-2372.	2.8	25
57	Flavonoid Versus Artemisinin Anti-malarial Activity in Artemisia annua Whole-Leaf Extracts. Frontiers in Plant Science, 2019, 10, 984.	1.7	25
58	Technical Advance: A novel technique for the sensitive quantification of acyl CoA esters from plant tissues. Plant Journal, 2001, 25, 115-125.	2.8	24
59	Enhancement of Plant Metabolite Fingerprinting by Machine Learning Â. Plant Physiology, 2010, 153, 1506-1520.	2.3	24
60	Silencing amorpha-4,11-diene synthase Genes in Artemisia annua Leads to FPP Accumulation. Frontiers in Plant Science, 2018, 9, 547.	1.7	19
61	Pelagic Sargassum events in Jamaica: Provenance, morphotype abundance, and influence of sample processing on biochemical composition of the biomass. Science of the Total Environment, 2022, 817, 152761.	3.9	19
62	Evidence that ACN1 (acetate non-utilizing 1) prevents carbon leakage from peroxisomes during lipid mobilization in Arabidopsis seedlings. Biochemical Journal, 2011, 437, 505-513.	1.7	17
63	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.	1.6	16
64	A microbubble-sparged yeast propagationâ€“fermentation process for bioethanol production. Biotechnology for Biofuels, 2020, 13, 104.	6.2	15
65	PRMT7 regulates RNA-binding capacity and protein stability in Leishmania parasites. Nucleic Acids Research, 2020, 48, 5511-5526.	6.5	14
66	Rosiglitazone increases fatty acid Î”9-desaturation and decreases elongase activity index in human skeletal muscle in vivo. Metabolism: Clinical and Experimental, 2012, 61, 108-116.	1.5	12
67	cis-12-Oxo-phytodienoic acid represses Arabidopsis seed germination in shade conditions. Journal of Experimental Botany, 2019, 70, 5919-5927.	2.4	11
68	Systems Analyses Reveal the Resilience of Escherichia coli Physiology during Accumulation and Export of the Nonnative Organic Acid Citramalate. MSystems, 2019, 4, .	1.7	9
69	Gene discovery and virus-induced gene silencing reveal branched pathways to major classes of bioactive diterpenoids in Euphorbia peplus. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2203890119.	3.3	7
70	A functionally conserved STORR gene fusion in Papaver species that diverged 16.8 million years ago. Nature Communications, 2022, 13, .	5.8	7
71	Multi-omic based production strain improvement (MOBpsi) for bio-manufacturing of toxic chemicals. Metabolic Engineering, 2022, 72, 133-149.	3.6	6
72	Acyl-CoA elongase activity and gene from the marine microalga Pavlova lutheri (Haptophyceae). Journal of Applied Phycology, 2005, 17, 111-118.	1.5	3

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73	Techniques for the Measurement of Molecular Species of Acyl-CoA in Plants and Microalgae. Methods in Molecular Biology, 2021, 2295, 203-218.	0.4	2
74	Engineering Production of a Novel Diterpene Synthase Precursor in Nicotiana benthamiana. Frontiers in Plant Science, 2021, 12, 757186.	1.7	2
75	Futile Cycling Through Î²-Oxidation as a Barrier to Increased Yields of Novel Oils. , 2002, , 445-463.		0