

Darwin W Reed

List of Publications by Year in descending order

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45
papers

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citations

186265

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233421

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docs citations

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times ranked

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#	ARTICLE	IF	CITATIONS
1	Artemisia annualL. (Asteraceae) trichome-specific cDNAs reveal CYP71AV1, a cytochrome P450 with a key role in the biosynthesis of the antimalarial sesquiterpene lactone artemisinin. FEBS Letters, 2006, 580, 1411-1416.	2.8	354
2	The Molecular Cloning of Artemisinic Aldehyde Δ^{11} (13) Reductase and Its Role in Glandular Trichome-dependent Biosynthesis of Artemisinin in Artemisia annua. Journal of Biological Chemistry, 2008, 283, 21501-21508.	3.4	280
3	Molecular cloning of an aldehyde dehydrogenase implicated in artemisinin biosynthesis in <i>Artemisia annua</i> This paper is one of a selection of papers published in a Special Issue from the National Research Council of Canada "Plant Biotechnology Institute.. Botany, 2009, 87, 635-642.	1.0	218
4	Transcriptome analysis based on next-generation sequencing of non-model plants producing specialized metabolites of biotechnological interest. Journal of Biotechnology, 2013, 166, 122-134.	3.8	196
5	Dissection of the phytohormonal regulation of trichome formation and biosynthesis of the antimalarial compound artemisinin in <i>Artemisia annua</i> plants. New Phytologist, 2011, 189, 176-189.	7.3	192
6	Artemisinin production in Artemisia annua: studies in planta and results of a novel delivery method for treating malaria and other neglected diseases. Phytochemistry Reviews, 2011, 10, 173-183.	6.5	163
7	High-Level Production of Δ^3 -Linolenic Acid in Brassica juncea Using a Δ^6 Desaturase from Pythium irregulare. Plant Physiology, 2002, 129, 354-362.	4.8	151
8	Functional genomics and the biosynthesis of artemisinin. Phytochemistry, 2007, 68, 1864-1871.	2.9	145
9	Saponin Biosynthesis in Saponaria vaccaria. cDNAs Encoding Δ^2 -Amyrin Synthase and a Triterpene Carboxylic Acid Glucosyltransferase. Plant Physiology, 2007, 143, 959-969.	4.8	121
10	Functional Genomic Analysis of Alkaloid Biosynthesis in Hyoscyamus niger Reveals a Cytochrome P450 Involved in Littorine Rearrangement. Chemistry and Biology, 2006, 13, 513-520.	6.0	114
11	In planta transformation of Arabidopsis thaliana. Molecular Genetics and Genomics, 1994, 245, 363-370.	2.4	92
12	Restoring enzyme activity in nonfunctional low erucic acid Brassica napus fatty acid elongase ϵ 1 by a single amino acid substitution. FEBS Journal, 2002, 269, 5625-5631.	0.2	86
13	Characterization of the Brassica napus Extraplastidial Linoleate Desaturase by Expression in Saccharomyces cerevisiae. Plant Physiology, 2000, 122, 715-720.	4.8	83
14	The Two-step Biosynthesis of Cyclic Peptides from Linear Precursors in a Member of the Plant Family Caryophyllaceae Involves Cyclization by a Serine Protease-like Enzyme. Journal of Biological Chemistry, 2013, 288, 12500-12510.	3.4	79
15	The production of artemisinin precursors in tobacco. Plant Biotechnology Journal, 2011, 9, 445-454.	8.3	73
16	Characterization of the Regiochemistry and Cryptoregiochemistry of a Caenorhabditis elegans Fatty Acid Desaturase (FAT-1) Expressed in Saccharomyces cerevisiae. Biochemistry, 2000, 39, 11948-11954.	2.5	69
17	Biosynthesis of Acyl Lipids Containing Very-Long Chain Fatty Acids in Microspore-Derived and Zygotic Embryos of Brassica napus L. cv Reston. Plant Physiology, 1992, 99, 1609-1618.	4.8	62
18	Response of flea beetles, Phyllotreta spp., to mustard oils and nitriles in field trapping experiments. Journal of Chemical Ecology, 1992, 18, 863-873.	1.8	58

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19	Identification and Analysis of a Gene from <i>Calendula officinalis</i> Encoding a Fatty Acid Conjugase. <i>Plant Physiology</i> , 2001, 125, 847-855.	4.8	54
20	The biosynthesis of Caryophyllaceae-like cyclic peptides in <i>Saponaria vaccaria</i> L. from DNA-encoded precursors. <i>Plant Journal</i> , 2011, 67, 682-690.	5.7	53
21	Primary Structure, Regioselectivity, and Evolution of the Membrane-bound Fatty Acid Desaturases of <i>Claviceps purpurea</i> *. <i>Journal of Biological Chemistry</i> , 2007, 282, 20191-20199.	3.4	50
22	Systemic Acquired Resistance in Canola Is Linked with Pathogenesis-Related Gene Expression and Requires Salicylic Acid. <i>Phytopathology</i> , 2007, 97, 794-802.	2.2	38
23	A glandular trichome-specific monoterpene alcohol dehydrogenase from <i>Artemisia annua</i> . <i>Phytochemistry</i> , 2010, 71, 1264-1269.	2.9	35
24	Probing carotenoid biosynthesis in developing seed coats of <i>Bixa orellana</i> (Bixaceae) through expressed sequence tag analysis. <i>Plant Science</i> , 2002, 163, 141-145.	3.6	32
25	Mechanistic Insights into the Cytochrome P450-Mediated Oxidation and Rearrangement of Littorine in Tropane Alkaloid Biosynthesis. <i>ChemBioChem</i> , 2009, 10, 2382-2393.	2.6	30
26	Molecular cloning of an ester-forming triterpenoid: UDP-glucose 28-O-glucosyltransferase involved in saponin biosynthesis from the medicinal plant <i>Centella asiatica</i> . <i>Plant Science</i> , 2017, 262, 9-17.	3.6	30
27	Mechanistic Study of an Improbable Reaction: Alkene Dehydrogenation by the β -12 Acetylenase of <i>Crepis alpina</i> . <i>Journal of the American Chemical Society</i> , 2003, 125, 10635-10640.	13.7	29
28	Structural Control of Chemoselectivity, Stereoselectivity, and Substrate Specificity in Membrane-Bound Fatty Acid Acetylenases and Desaturases. <i>Biochemistry</i> , 2009, 48, 12298-12304.	2.5	25
29	An example of intron junctional sliding in the gene families encoding squalene monooxygenase homologues in <i>Arabidopsis thaliana</i> and <i>Brassica napus</i> . <i>Plant Molecular Biology</i> , 1999, 39, 721-728.	3.9	24
30	Mechanism of 1,4-dehydrogenation catalyzed by a fatty acid (1,4)-desaturase of <i>Calendula officinalis</i> . <i>FEBS Journal</i> , 2002, 269, 5024-5029.	0.2	23
31	Attraction of northern false chinch bug <i>Nysius niger</i> (Heteroptera: Lygaeidae) to mustard oils. <i>Journal of Chemical Ecology</i> , 1991, 17, 931-941.	1.8	22
32	Stereospecific analysis and mass spectrometry of triacylglycerols from <i>Arabidopsis thaliana</i> (L.) Heynh. columbia seed. <i>JAOCs, Journal of the American Oil Chemists' Society</i> , 1995, 72, 305-308.	1.9	22
33	Molecular cloning and characterization of Dbr1, a 2-alkenal reductase from <i>Artemisia annua</i> . The nucleotide sequence reported in this article has been deposited in the GenBank database under accession No. AF1750460. This paper is one of a selection of papers published in a Special Issue from the National Research Council of Canada - Plant Biotechnology Institute. <i>Botany</i> , 2009, 87, 643-649.	1.0	21
34	Functional characterization of amyrin synthase involved in ursolic acid biosynthesis in <i>Catharanthus roseus</i> leaf epidermis. <i>Phytochemistry</i> , 2013, 91, 122-127.	2.9	19
35	Genetically engineered hairy root cultures of <i>Hyoscyamus senecionis</i> and <i>H. muticus</i> : ploidy as a promising parameter in the metabolic engineering of tropane alkaloids. <i>Plant Cell Reports</i> , 2017, 36, 1615-1626.	5.6	18
36	Domain Swapping Localizes the Structural Determinants of Regioselectivity in Membrane-bound Fatty Acid Desaturases of <i>Caenorhabditis elegans</i> . <i>Journal of Biological Chemistry</i> , 2004, 279, 39296-39302.	3.4	16

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37	An atypical pattern of accumulation of scopolamine and other tropane alkaloids and expression of alkaloid pathway genes in <i>Hyoscyamus senecionis</i> . <i>Plant Physiology and Biochemistry</i> , 2013, 70, 188-194.	5.8	16
38	Gaining insight into the role of serine 282 in <i>B. napus</i> FAE1 condensing enzyme. <i>FEBS Letters</i> , 2004, 562, 118-124.	2.8	15
39	Probing the mechanism of a cyanobacterial Δ^9 fatty acid desaturase from <i>Spirulina platensis</i> C1 (<i>Arthrospira</i> sp. PCC 9438). <i>Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology</i> , 2001, 129, 831-835.	1.6	13
40	Cryptoregiochemistry of a <i>Brassica napus</i> fatty acid desaturase (FAD3): a kinetic isotope effect study. <i>Journal of the Chemical Society, Perkin Transactions 1</i> , 2001, , 1116-1121.	1.3	11
41	A <i>Tropaeolum majus</i> FAD2 cDNA complements the <i>fad2</i> mutation in transgenic <i>Arabidopsis</i> plants. <i>Plant Science</i> , 2006, 171, 187-193.	3.6	10
42	Mechanistic characterization of Δ^3 desaturation in the green alga <i>Chlorella vulgaris</i> . <i>Phytochemistry</i> , 2003, 63, 739-744.	2.9	7
43	Production of Nutraceutical Fatty Acids in Oilseed Crops. , 2003, , 403-406.		7
44	Topological Study of Mechanistic Diversity in Conjugated Fatty Acid Biosynthesis. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 6686-6690.	13.8	6
45	From Plant Extract to a cDNA Encoding a Glucosyltransferase Candidate: Proteomics and Transcriptomics as Tools to Help Elucidate Saponin Biosynthesis in <i>Centella asiatica</i> . <i>Methods in Molecular Biology</i> , 2016, 1405, 43-48.	0.9	2