Dorothea Tholl

List of Publications by Year in descending order

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46 papers	7,728 citations	101543 36 h-index	233421 45 g-index
46 all docs	46 docs citations	46 times ranked	8443 citing authors

#	Article	IF	Citations
1	The family of terpene synthases in plants: a midâ€size family of genes for specialized metabolism that is highly diversified throughout the kingdom. Plant Journal, 2011, 66, 212-229.	5.7	1,068
2	Terpene synthases and the regulation, diversity and biological roles of terpene metabolism. Current Opinion in Plant Biology, 2006, 9, 297-304.	7.1	684
3	Practical approaches to plant volatile analysis. Plant Journal, 2006, 45, 540-560.	5.7	494
4	Methyl Jasmonate Induces Traumatic Resin Ducts, Terpenoid Resin Biosynthesis, and Terpenoid Accumulation in Developing Xylem of Norway Spruce Stems. Plant Physiology, 2002, 129, 1003-1018.	4.8	462
5	Biosynthesis and Biological Functions of Terpenoids in Plants. Advances in Biochemical Engineering/Biotechnology, 2015, 148, 63-106.	1.1	446
6	The major volatile organic compound emitted from Arabidopsis thaliana flowers, the sesquiterpene (E)â€Î²â€caryophyllene, is a defense against a bacterial pathogen. New Phytologist, 2012, 193, 997-1008.	7.3	408
7	Biosynthesis and Emission of Terpenoid Volatiles from Arabidopsis Flowers. Plant Cell, 2003, 15, 481-494.	6.6	381
8	Two sesquiterpene synthases are responsible for the complex mixture of sesquiterpenes emitted from Arabidopsis flowers. Plant Journal, 2005, 42, 757-771.	5.7	314
9	An Arabidopsis thaliana gene for methylsalicylate biosynthesis, identified by a biochemical genomics approach, has a role in defense. Plant Journal, 2003, 36, 577-588.	5.7	278
10	Volatile Organic Compound Mediated Interactions at the Plant-Microbe Interface. Journal of Chemical Ecology, 2013, 39, 810-825.	1.8	209
11	Characterization of a Root-Specific Arabidopsis Terpene Synthase Responsible for the Formation of the Volatile Monoterpene 1,8-Cineole. Plant Physiology, 2004, 135, 1956-1966.	4.8	207
12	A Regulatory Network for Coordinated Flower Maturation. PLoS Genetics, 2012, 8, e1002506.	3.5	204
13	Cyclophilin 20-3 relays a 12-oxo-phytodienoic acid signal during stress responsive regulation of cellular redox homeostasis. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 9559-9564.	7.1	193
14	Small molecules belowâ€ground: the role of specialized metabolites in the rhizosphere. Plant Journal, 2017, 90, 788-807.	5.7	193
15	The Arabidopsis vacuolar sugar transporter <scp>SWEET</scp>2 limits carbon sequestration from roots and restricts Pythium infection. Plant Journal, 2015, 83, 1046-1058.	5.7	184
16	Terpene Specialized Metabolism inArabidopsis thaliana. The Arabidopsis Book, 2011, 9, e0143.	0.5	170
17	Formation of Monoterpenes in Antirrhinum majus and Clarkia breweri Flowers Involves Heterodimeric Geranyl Diphosphate Synthases. Plant Cell, 2004, 16, 977-992.	6.6	162
18	Herbivore-induced and floral homoterpene volatiles are biosynthesized by a single P450 enzyme (CYP82G1) in Arabidopsis. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 21205-21210.	7.1	152

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19	Identification and Regulation of TPS04/GES, anArabidopsisGeranyllinalool Synthase Catalyzing the First Step in the Formation of the Insect-Induced Volatile C16-Homoterpene TMTT. Plant Cell, 2008, 20, 1152-1168.	6.6	136
20	Variation of Herbivore-Induced Volatile Terpenes among Arabidopsis Ecotypes Depends on Allelic Differences and Subcellular Targeting of Two Terpene Synthases, TPS02 and TPS03 Â Â. Plant Physiology, 2010, 153, 1293-1310.	4.8	131
21	Formation of the Unusual Semivolatile Diterpene Rhizathalene by the Arabidopsis Class I Terpene Synthase TPS08 in the Root Stele Is Involved in Defense against Belowground Herbivory. Plant Cell, 2013, 25, 1108-1125.	6.6	123
22	cis- and trans-Regulation of miR163 and Target Genes Confers Natural Variation of Secondary Metabolites in Two Arabidopsis Species and Their Allopolyploids Â. Plant Cell, 2011, 23, 1729-1740.	6.6	121
23	The biochemistry of homoterpenes â€“ Common constituents of floral and herbivore-induced plant volatile bouquets. Phytochemistry, 2011, 72, 1635-1646.	2.9	104
24	Covariation and phenotypic integration in chemical communication displays: biosynthetic constraints and ecoâ€evolutionary implications. New Phytologist, 2018, 220, 739-749.	7.3	101
25	Chemical convergence between plants and insects: biosynthetic origins and functions of common secondary metabolites. New Phytologist, 2019, 223, 52-67.	7.3	90
26	Trends and applications in plant volatile sampling and analysis. Plant Journal, 2021, 106, 314-325.	5.7	83
27	In Planta Variation of Volatile Biosynthesis: An Alternative Biosynthetic Route to the Formation of the Pathogen-Induced Volatile Homoterpene DMNT via Triterpene Degradation in Arabidopsis Roots. Plant Cell, 2015, 27, 874-890.	6.6	64
28	Identification and Characterization of Terpene Synthases Potentially Involved in the Formation of Volatile Terpenes in Carrot (Daucus carota L.) Roots. Journal of Agricultural and Food Chemistry, 2015, 63, 4870-4878.	5.2	58
29	Role of aromatic aldehyde synthase in wounding/herbivory response and flower scent production in different Arabidopsis ecotypes. Plant Journal, 2011, 66, 591-602.	5.7	56
30	Partial Purification and Characterization of the Short-Chain Prenyltransferases, Geranyl Diphosphate Synthase and Farnesyl Diphosphate Synthase, from Abies grandis (Grand Fir). Archives of Biochemistry and Biophysics, 2001, 386, 233-242.	3.0	53
31	Functional Diversity of Diterpene Synthases in the Biofuel Crop Switchgrass. Plant Physiology, 2018, 178, 54-71.	4.8	44
32	Biosynthesis and Emission of Stress-Induced Volatile Terpenes in Roots and Leaves of Switchgrass (Panicum virgatum L.). Frontiers in Plant Science, 2019, 10, 1144.	3.6	44
33	Floral and insect-induced volatile formation in Arabidopsis lyrata ssp. petraea, a perennial, outcrossing relative of A. thaliana. Planta, 2009, 230, 1-11.	3.2	43
34	Formation of Norisoprenoid Flavor Compounds in Carrot (Daucus carota L.) Roots: Characterization of a Cyclic-Specific Carotenoid Cleavage Dioxygenase 1 Gene. Journal of Agricultural and Food Chemistry, 2013, 61, 12244-12252.	5.2	43
35	De novo formation of an aggregation pheromone precursor by an isoprenyl diphosphate synthase-related terpene synthase in the harlequin bug. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E8634-E8641.	7.1	43
36	Purification, Molecular Cloning and Expression in Escherichia coli of Homospermidine Synthase from Rhodopseudomonas viridis. FEBS Journal, 1996, 240, 373-379.	0.2	38

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37	An IDS-Type Sesquiterpene Synthase Produces the Pheromone Precursor (Z)-Î±-Bisabolene in Nezara viridula. Journal of Chemical Ecology, 2019, 45, 187-197.	1.8	30
38	Identification of a Dolabellane Type Diterpene Synthase and other Root-Expressed Diterpene Synthases in Arabidopsis. Frontiers in Plant Science, 2016, 7, 1761.	3.6	24
39	Formation and exudation of non-volatile products of the arabidiol triterpenoid degradation pathway in Arabidopsis roots. Plant Signaling and Behavior, 2017, 12, e1265722.	2.4	20
40	A Transcriptome Survey Spanning Life Stages and Sexes of the Harlequin Bug, Murgantia histrionica. Insects, 2017, 8, 55.	2.2	20
41	The flowering of a new scent pathway in rose. Science, 2015, 349, 28-29.	12.6	18
42	Homospermidine synthase of Rhodopseudomonas viridis: Substrate specificity and effects of the heterologously expressed enzyme on polyamine metabolism of Escherichia coli.. Journal of General and Applied Microbiology, 1996, 42, 411-419.	0.7	17
43	Small molecules: from structural diversity to signalling and regulatory roles. Plant Journal, 2014, 79, 541-543.	5.7	5
44	Carrot Volatile Terpene Metabolism: Terpene Diversity and Biosynthetic Genes. Compendium of Plant Genomes, 2019, , 279-293.	0.5	5
45	Exciting times in plant biotic interactions. Plant Cell, 2022, 34, 1421-1424.	6.6	3
46	Biosynthesis of terpene pheromones in hemiptera/stink bugs. , 2021, , 269-284.		2