JÃ¶rg Degenhardt

List of Publications by Year
in descending order

50 papers	6,416 citations	117625 34 h-index	197818 49 g-index
52 all docs	52 docs citations	52 times ranked	5368 citing authors

#	Article	IF	Citations
1	Identification and functional characterization of a Î³-terpinene synthase in Nigella sativa L (black) Tj ETQq1 1 0.784314 rgBT /Overlock	2.9	2
2	Characterization of terpene biosynthesis in Melaleuca quinquenervia and ecological consequences of terpene accumulation during myrtle rust infection. Plant-Environment Interactions, 2021, 2, 177-193.	1.5	2
3	The biosynthesis of thymol, carvacrol, and thymohydroquinone in Lamiaceae proceeds via cytochrome P450s and a short-chain dehydrogenase. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	44
4	The Product Specificities of Maize Terpene Synthases TPS4 and TPS10 Are Determined Both by Active Site Amino Acids and Residues Adjacent to the Active Site. Plants, 2020, 9, 552.	3.5	8
5	High marker density GWAS provides novel insights into the genomic architecture of terpene oil yield in Eucalyptus. New Phytologist, 2019, 223, 1489-1504.	7.3	27
6	The terpenes of leaves, pollen, and nectar of thyme (Thymus vulgaris) inhibit growth of bee disease-associated microbes. Scientific Reports, 2018, 8, 14634.	3.3	28
7	A maize landrace that emits defense volatiles in response toÂherbivore eggs possesses a strongly inducible terpene synthase gene. Ecology and Evolution, 2017, 7, 2835-2845.	1.9	25
8	Use of genotyping-by-sequencing to determine the genetic structure in the medicinal plant chamomile, and to identify flowering time and alpha-bisabolol associated SNP-loci by genome-wide association mapping. BMC Genomics, 2017, 18, 599.	2.8	29
9	Four terpene synthases contribute to the generation of chemotypes in tea tree (Melaleuca) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T	3.6	17
10	Characterization of Biosynthetic Pathways for the Production of the Volatile Homoterpenes DMNT and TMTT in Zea mays. Plant Cell, 2016, 28, 2651-2665.	6.6	105
11	A Tandem Array of ent-Kaurene Synthases in Maize with Roles in Gibberellin and More Specialized Metabolism. Plant Physiology, 2016, 170, 742-751.	4.8	81
12	Substrate geometry controls the cyclization cascade in multiproduct terpene synthases from Zea mays. Organic and Biomolecular Chemistry, 2015, 13, 6021-6030.	2.8	5
13	Isotope sensitive branching and kinetic isotope effects to analyse multiproduct terpenoid synthases from Zea mays. Chemical Communications, 2015, 51, 3797-3800.	4.1	13
14	A small, differentially regulated family of farnesyl diphosphate synthases in maize (Zea mays) provides farnesyl diphosphate for the biosynthesis of herbivore-induced sesquiterpenes. Planta, 2015, 241, 1351-1361.	3.2	37
15	The Eucalyptus terpene synthase gene family. BMC Genomics, 2015, 16, 450.	2.8	125
16	Stereochemical mechanism of two sabinene hydrate synthases forming antipodal monoterpenes in thyme (Thymus vulgaris). Archives of Biochemistry and Biophysics, 2013, 529, 112-121.	3.0	15
17	Genetically engineered maize plants reveal distinct costs and benefits of constitutive volatile emissions in the field. Plant Biotechnology Journal, 2013, 11, 628-639.	8.3	90
18	Genomic characterization, molecular cloning and expression analysis of two terpene synthases from Thymus caespititius (Lamiaceae). Planta, 2013, 238, 191-204.	3.2	41

#	Article	IF	Citations
19	Mixtures of plant secondary metabolites. , 2012, , 56-77.		50
20	Isolation and characterization of terpene synthases potentially involved in flavor development of ripening olive (Olea europaea) fruits. Journal of Plant Physiology, 2012, 169, 908-914.	3.5	24
21	The organ-specific expression of terpene synthase genes contributes to the terpene hydrocarbon composition of chamomile essential oils. BMC Plant Biology, 2012, 12, 84.	3.6	66
22	Dynamic evolution of herbivoreâ€induced sesquiterpene biosynthesis in sorghum and related grass crops. Plant Journal, 2012, 69, 70-80.	5.7	64
23	Two enzymes responsible for the formation of herbivoreâ€induced volatiles of maize, the methyltransferase AAMT1 and the terpene synthase TPS23, are regulated by a similar signal transduction pathway. Entomologia Experimentalis Et Applicata, 2012, 144, 86-92.	1.4	6
24	Attractiveness of Constitutive and Herbivore-Induced Sesquiterpene Blends of Maize to the Parasitic Wasp Cotesia marginiventris (Cresson). Journal of Chemical Ecology, 2011, 37, 582-591.	1.8	61
25	Terpene synthases of oregano (Origanum vulgare L.) and their roles in the pathway and regulation of terpene biosynthesis. Plant Molecular Biology, 2010, 73, 587-603.	3.9	141
26	Functional and evolutionary relationships between terpene synthases from Australian Myrtaceae. Phytochemistry, 2010, 71, 844-852.	2.9	59
27	The molecular basis of host plant selection in Melaleuca quinquenervia by a successful biological control agent. Phytochemistry, 2010, 71, 1237-1244.	2.9	38
28	Herbivore-Induced SABATH Methyltransferases of Maize That Methylate Anthranilic Acid Using S-Adenosyl-<scp>l</scp>-Methionine Â. Plant Physiology, 2010, 153, 1795-1807.	4.8	80
29	Restoring a maize root signal that attracts insect-killing nematodes to control a major pest. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 13213-13218.	7.1	298
30	Indirect Defense Responses to Herbivory in Grasses. Plant Physiology, 2009, 149, 96-102.	4.8	64
31	Changes in volatile composition during fruit development and ripening of â€˜Alphonsoâ€™ mango. Journal of the Science of Food and Agriculture, 2009, 89, 2071-2081.	3.5	52
32	Molecular and biochemical evolution of maize terpene synthase 10, an enzyme of indirect defense. Phytochemistry, 2009, 70, 1139-1145.	2.9	80
33	Monoterpene and sesquiterpene synthases and the origin of terpene skeletal diversity in plants. Phytochemistry, 2009, 70, 1621-1637.	2.9	891
34	The underestimated role of roots in defense against leaf attackers. Trends in Plant Science, 2009, 14, 653-659.	8.8	162
35	Identification and characterization of simple sequence repeat markers from a glandular Origanum vulgare expressed sequence tag. Molecular Ecology Resources, 2008, 8, 599-601.	4.8	37
36	Molecular and genomic basis of volatileâ€mediated indirect defense against insects in rice. Plant Journal, 2008, 55, 491-503.	5.7	163

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37	A Maize (E)-Î²-Caryophyllene Synthase Implicated in Indirect Defense Responses against Herbivores Is Not Expressed in Most American Maize Varieties. Plant Cell, 2008, 20, 482-494.	6.6	422
38	Protonation of a Neutral (S)-Î²-Bisabolene Intermediate Is Involved in (S)-Î²-Macrocarpene Formation by the Maize Sesquiterpene Synthases TPS6 and TPS11. Journal of Biological Chemistry, 2008, 283, 20779-20788.	3.4	89
39	Characterization of the Monoterpene Synthase Gene tps26, the Ortholog of a Gene Induced by Insect Herbivory in Maize Â Â. Plant Physiology, 2008, 146, 940-951.	4.8	36
40	Rational Conversion of Substrate and Product Specificity in a Salvia Monoterpene Synthase: Structural Insights into the Evolution of Terpene Synthase Function. Plant Cell, 2007, 19, 1994-2005.	6.6	204
41	Functional Expression and Characterization of Trichome-Specific (-)-Limonene Synthase and (+)-Î±-Pinene Synthase fromCannabis sativa. Natural Product Communications, 2007, 2, 1934578X0700200.	0.5	14
42	Two pockets in the active site of maize sesquiterpene synthase TPS4 carry out sequential parts of the reaction scheme resulting in multiple products. Archives of Biochemistry and Biophysics, 2006, 448, 83-92.	3.0	51
43	The products of a single maize sesquiterpene synthase form a volatile defense signal that attracts natural enemies of maize herbivores. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 1129-1134.	7.1	491
44	Recruitment of entomopathogenic nematodes by insect-damaged maize roots. Nature, 2005, 434, 732-737.	27.8	1,099
45	Costs of induced volatile production in maize. Oikos, 2004, 105, 168-180.	2.7	65
46	The sesquiterpene hydrocarbons of maize (Zea mays) form five groups with distinct developmental and organ-specific distributions. Phytochemistry, 2004, 65, 1895-1902.	2.9	119
47	The Variability of Sesquiterpenes Emitted from Two Zea mays Cultivars Is Controlled by Allelic Variation of Two Terpene Synthase Genes Encoding Stereoselective Multiple Product Enzymes. Plant Cell, 2004, 16, 1115-1131.	6.6	206
48	Attracting friends to feast on foes: engineering terpene emission to make crop plants more attractive to herbivore enemies. Current Opinion in Biotechnology, 2003, 14, 169-176.	6.6	245
49	The Maize Gene terpene synthase 1 Encodes a Sesquiterpene Synthase Catalyzing the Formation of (E)-Î²-Farnesene, (E)-Nerolidol, and (E,E)-Farnesol after Herbivore Damage. Plant Physiology, 2002, 130, 2049-2060.	4.8	226
50	Demonstration and characterization of (E)-nerolidol synthase from maize: a herbivore-inducible terpene synthase participating in (3 E)-4,8-dimethyl-1,3,7-nonatriene biosynthesis. Planta, 2000, 210, 815-822.	3.2	119