Feng Chen

List of Publications by Year
in descending order

111 papers	11,287 citations	61984 43 h-index	30922 102 g-index
114 all docs	114 docs citations	114 times ranked	15903 citing authors

#	Article	IF	Citations
1	Terpenoid biosynthesis in Dendrobium officinale: Identification of (E)-Î²-caryophyllene synthase and the regulatory MYB genes. Industrial Crops and Products, 2022, 182, 114875.	5.2	10
2	Origin and early evolution of the plant terpene synthase family. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2100361119.	7.1	48
3	Dynamic regulation of volatile terpenoid production and emission from Chrysanthemum morifolium capitula. Plant Physiology and Biochemistry, 2022, 182, 11-21.	5.8	7
4	Exploring the Relationship between Trichome and Terpene Chemistry in Chrysanthemum. Plants, 2022, 11, 1410.	3.5	7
5	Mechanistic divergence between (4S,7R)-germacra-(1(10)E,5E)-dien-11-ol synthases from Dictyostelium purpureum and Streptomyces coelicolor. Organic and Biomolecular Chemistry, 2021, 19, 370-374.	2.8	5
6	The levels of bioactive ingredients in <scp>Citrus aurantium</scp> L. at different harvest periods and antioxidant effects on <scp>H₂O₂</scp>â€induced <scp>RINâ€m5F</scp> cells. Journal of the Science of Food and Agriculture, 2021, 101, 1479-1490.	3.5	8
7	Fungal-Type Terpene Synthases in Marchantia polymorpha Are Involved in Sesquiterpene Biosynthesis in Oil Body Cells. Plant and Cell Physiology, 2021, 62, 528-537.	3.1	11
8	Coordinated and High-Level Expression of Biosynthetic Pathway Genes Is Responsible for the Production of a Major Floral Scent Compound Methyl Benzoate in Hedychium coronarium. Frontiers in Plant Science, 2021, 12, 650582.	3.6	14
9	Non-canonical substrates for terpene synthases in bacteria are synthesized by a new family of methyltransferases. FEMS Microbiology Reviews, 2021, 45, .	8.6	3
10	A chromosome-level genome assembly of rugged rose (Rosa rugosa) provides insights into its evolution, ecology, and floral characteristics. Horticulture Research, 2021, 8, 141.	6.3	29
11	Systematic mining of fungal chimeric terpene synthases using an efficient precursor-providing yeast chassis. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	23
12	Concentration-dependent emission of floral scent terpenoids from diverse cultivars of Chrysanthemum morifolium and their wild relatives. Plant Science, 2021, 309, 110959.	3.6	16
13	Highâ€quality evergreen azalea genome reveals tandem duplicationâ€facilitated lowâ€altitude adaptability and floral scent evolution. Plant Biotechnology Journal, 2021, 19, 2544-2560.	8.3	35
14	Herbivory-Induced Emission of Volatile Terpenes in Chrysanthemum morifolium Functions as an Indirect Defense against Spodoptera litura Larvae by Attracting Natural Enemies. Journal of Agricultural and Food Chemistry, 2021, 69, 9743-9753.	5.2	16
15	Sesquiterpene biosynthesis in a leafy liverwort Radula lindenbergiana Gottsche ex C. Hartm. Phytochemistry, 2021, 190, 112847.	2.9	5
16	Biosynthesis and emission of methyl hexanoate, the major constituent of floral scent of a night-blooming water lily Victoria cruziana. Phytochemistry, 2021, 191, 112899.	2.9	4
17	Diversity and Biosynthesis of Volatile Terpenoid Secondary Metabolites in the Chrysanthemum Genus. Critical Reviews in Plant Sciences, 2021, 40, 422-445.	5.7	6
18	The water lily genome and the early evolution of flowering plants. Nature, 2020, 577, 79-84.	27.8	238

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19	The reconstruction and biochemical characterization of ancestral genes furnish insights into the evolution of terpene synthase function in the Poaceae. Plant Molecular Biology, 2020, 104, 203-215.	3.9	11
20	Divergent Evolution of the Diterpene Biosynthesis Pathway in Tea Plants (Camellia sinensis) Caused by Single Amino Acid Variation of ent-Kaurene Synthase. Journal of Agricultural and Food Chemistry, 2020, 68, 9930-9939.	5.2	6
21	Evolution of isoprenyl diphosphate synthase-like terpene synthases in fungi. Scientific Reports, 2020, 10, 14944.	3.3	14
22	Diverse Terpenoids and Their Associated Antifungal Properties from Roots of Different Cultivars of Chrysanthemum Morifolium Ramat. Molecules, 2020, 25, 2083.	3.8	16
23	A strategy for large-scale comparison of evolutionary- and reaction-based classifications of enzyme function. Database: the Journal of Biological Databases and Curation, 2020, 2020, .	3.0	5
24	Combinatorial Evolution of a Terpene Synthase Gene Cluster Explains Terpene Variations in Oryza. Plant Physiology, 2020, 182, 480-492.	4.8	33
25	Composition and Biosynthesis of Scent Compounds from Sterile Flowers of an Ornamental Plant Clematis florida cv. â€˜Kaiserâ€™. Molecules, 2020, 25, 1711.	3.8	11
26	Origin and evolution of a gibberellinâ€deactivating enzyme GAMT. Plant Direct, 2020, 4, e00287.	1.9	5
27	Terpene Synthase Genes Originated from Bacteria through Horizontal Gene Transfer Contribute to Terpenoid Diversity in Fungi. Scientific Reports, 2019, 9, 9223.	3.3	31
28	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
29	Isolation and functional analysis of squalene synthase gene in tea plant Camellia sinensis. Plant Physiology and Biochemistry, 2019, 142, 53-58.	5.8	18
30	Biosynthesis of methyl (E)-cinnamate in the liverwort Conocephalum salebrosum and evolution of cinnamic acid methyltransferase. Phytochemistry, 2019, 164, 50-59.	2.9	7
31	Characterisation of three terpene synthases for Î²-barbatene, Î²-araneosene and nephthenol from social amoebae. Chemical Communications, 2019, 55, 13255-13258.	4.1	10
32	Characterization of Composition and Antifungal Properties of Leaf Secondary Metabolites from Thirteen Cultivars of Chrysanthemum morifolium Ramat. Molecules, 2019, 24, 4202.	3.8	22
33	Emission and biosynthesis of volatile terpenoids from the plasmodial slime mold Physarum polycephalum. Beilstein Journal of Organic Chemistry, 2019, 15, 2872-2880.	2.2	4
34	Terpene Biosynthesis in Red Algae Is Catalyzed by Microbial Type But Not Typical Plant Terpene Synthases. Plant Physiology, 2019, 179, 382-390.	4.8	40
35	InterPro in 2019: improving coverage, classification and access to protein sequence annotations. Nucleic Acids Research, 2019, 47, D351-D360.	14.5	1,291
36	A terpene synthase-cytochrome P450 cluster in Dictyostelium discoideum produces a novel trisnorsesquiterpene. ELife, 2019, 8, .	6.0	11

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37	Biochemical characterization of microbial type terpene synthases in two closely related species of hornworts, Anthoceros punctatus and Anthoceros agrestis. Phytochemistry, 2018, 149, 116-122.	2.9	20
38	The rice terpene synthase gene Os<scp>TPS</scp>19 functions as an (S)â€limonene synthase in planta, and its overexpression leads to enhanced resistance to the blast fungus Magnaporthe oryzae. Plant Biotechnology Journal, 2018, 16, 1778-1787.	8.3	79
39	QM/MM free energy simulations of the reaction catalysed by (4S)-limonene synthase involving linalyl diphosphate (LPP) substrate. Molecular Simulation, 2018, 44, 1158-1167.	2.0	9
40	Biochemical characterization in Norway spruce (Picea abies) of SABATH methyltransferases that methylate phytohormones. Phytochemistry, 2018, 149, 146-154.	2.9	17
41	MTPSLs: New Terpene Synthases in Nonseed Plants. Trends in Plant Science, 2018, 23, 121-128.	8.8	48
42	Terpenoids from Weedy Ricefield Flatsedge (Cyperus iria L.) Are Developmentally Regulated and Stress-Induced, and have Antifungal Properties. Molecules, 2018, 23, 3149.	3.8	9
43	Diversity and Functional Evolution of Terpene Synthases in Dictyostelid Social Amoebae. Scientific Reports, 2018, 8, 14361.	3.3	11
44	Terpenoid Secondary Metabolites in Bryophytes: Chemical Diversity, Biosynthesis and Biological Functions. Critical Reviews in Plant Sciences, 2018, 37, 210-231.	5.7	57
45	Atlas of the Radical SAM Superfamily: Divergent Evolution of Function Using a â€œPlug and Playâ€• Domain. Methods in Enzymology, 2018, 606, 1-71.	1.0	99
46	Biocuration in the structureâ€“function linkage database: the anatomy of a superfamily. Database: the Journal of Biological Databases and Curation, 2017, 2017, .	3.0	6
47	Insights into Land Plant Evolution Garnered from the Marchantia polymorpha Genome. Cell, 2017, 171, 287-304.e15.	28.9	973
48	Mechanisms of the Diterpene Cyclases Î²â€Pinacene Synthase from Dictyostelium discoideum and Hydropyrene Synthase from Streptomyces clavuligerus. Chemistry - A European Journal, 2017, 23, 10501-10505.	3.3	53
49	Biocuration in the structureâ€“function linkage database: the anatomy of a superfamily. Database: the Journal of Biological Databases and Curation, 2017, 2017, .	3.0	2
50	CYP79 P450 monooxygenases in gymnosperms: CYP79A118 is associated with the formation of taxiphyllin in Taxus baccata. Plant Molecular Biology, 2017, 95, 169-180.	3.9	31
51	An (E,E)â€Î±â€farnesene synthase gene of soybean has a role in defence against nematodes and is involved in synthesizing insectâ€induced volatiles. Plant Biotechnology Journal, 2017, 15, 510-519.	8.3	61
52	Terpencyclasen aus sozialen AmÃ¶ben. Angewandte Chemie, 2016, 128, 15646-15649.	2.0	33
53	Microbial-type terpene synthase genes occur widely in nonseed land plants, but not in seed plants. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 12328-12333.	7.1	70
54	Terpene synthase genes in eukaryotes beyond plants and fungi: Occurrence in social amoebae. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 12132-12137.	7.1	92

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55	Molecular Diversity of Terpene Synthases in the Liverwort Marchantia polymorpha. Plant Cell, 2016, 28, tpc.00062.2016.	6.6	48
56	Terpene Cyclases from Social Amoebae. Angewandte Chemie - International Edition, 2016, 55, 15420-15423.	13.8	73
57	Transgenic soybean overexpressing Gm<scp>SAMT</scp>1 exhibits resistance to multipleâ€<scp>HG</scp> types of soybean cyst nematode Heterodera glycines. Plant Biotechnology Journal, 2016, 14, 2100-2109.	8.3	23
58	VvMJE1 of the grapevine (Vitis vinifera) VvMES methylesterase family encodes for methyl jasmonate esterase and has a role in stress response. Plant Physiology and Biochemistry, 2016, 102, 125-132.	5.8	17
59	Catalytic Functions of the Isoprenyl Diphosphate Synthase Superfamily in Plants: A Growing Repertoire. Molecular Plant, 2016, 9, 189-191.	8.3	19
60	Volatile squalene from a nonseed plant Selaginella moellendorffii : Emission and biosynthesis. Plant Physiology and Biochemistry, 2015, 96, 1-8.	5.8	9
61	Colonization by arbuscular mycorrhizal and endophytic fungi enhanced terpene production in tomato plants and their defense against a herbivorous insect. Symbiosis, 2015, 65, 65-74.	2.3	117
62	Substrate-Assisted Catalysis in the Reaction Catalyzed by Salicylic Acid Binding Protein 2 (SABP2), a Potential Mechanism of Substrate Discrimination for Some Promiscuous Enzymes. Biochemistry, 2015, 54, 5366-5375.	2.5	19
63	Positive Darwinian selection is a driving force for the diversification of terpenoid biosynthesis in the genus Oryza. BMC Plant Biology, 2014, 14, 239.	3.6	33
64	Fungal mutualists enhanceÂgrowth and phytochemical content in Echinacea purpurea. Symbiosis, 2014, 63, 111-121.	2.3	21
65	The Structureâ€"Function Linkage Database. Nucleic Acids Research, 2014, 42, D521-D530.	14.5	210
66	Using the Structureâ€Function Linkage Database to Characterize Functional Domains in Enzymes. Current Protocols in Bioinformatics, 2014, 48, 2.10.1-16.	25.8	5
67	Terpene synthases and their contribution to herbivore-induced volatile emission in western balsam poplar (Populus trichocarpa). BMC Plant Biology, 2014, 14, 270.	3.6	86
68	Prediction and characterization of enzymatic activities guided by sequence similarity and genome neighborhood networks. ELife, 2014, 3, .	6.0	81
69	Molecular and biochemical characterization of the jasmonic acid methyltransferase gene from black cottonwood (Populus trichocarpa). Phytochemistry, 2013, 94, 74-81.	2.9	20
70	Studying Plant Secondary Metabolism in the Age of Genomics. Critical Reviews in Plant Sciences, 2013, 32, 369-382.	5.7	48
71	The Amborella Genome and the Evolution of Flowering Plants. Science, 2013, 342, 1241089.	12.6	743
72	Overexpression of a soybean salicylic acid methyltransferase gene confers resistance to soybean cyst nematode. Plant Biotechnology Journal, 2013, 11, 1135-1145.	8.3	61

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73	Analysis of Insect-Induced Volatiles from Rice. Methods in Molecular Biology, 2013, 956, 201-208.	0.9	4
74	Nonseed plant Selaginella moellendorffii has both seed plant and microbial types of terpene synthases. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 14711-14715.	7.1	103
75	Inference of Functional Properties from Large-scale Analysis of Enzyme Superfamilies. Journal of Biological Chemistry, 2012, 287, 35-42.	3.4	45
76	Genetic, Molecular and Genomic Basis of Rice Defense against Insects. Critical Reviews in Plant Sciences, 2012, 31, 74-91.	5.7	28
77	A SABATH Methyltransferase from the moss Physcomitrella patens catalyzes S-methylation of thiols and has a role in detoxification. Phytochemistry, 2012, 81, 31-41.	2.9	25
78	Dynamic evolution of herbivoreâ€induced sesquiterpene biosynthesis in sorghum and related grass crops. Plant Journal, 2012, 69, 70-80.	5.7	64
79	Biosynthesis and emission of insect herbivory-induced volatile indole in rice. Phytochemistry, 2012, 73, 15-22.	2.9	31
80	A single amino acid determines the site of deprotonation in the active center of sesquiterpene synthases SbTPS1 and SbTPS2 from Sorghum bicolor. Phytochemistry, 2012, 75, 6-13.	2.9	19
81	Diesel Trees. , 2012, , 619-629.		1
82	Molecular Cloning and Biochemical Characterization of an Endo-Î²-mannanase Gene from Soybean for Soybean Meal Improvement. Journal of Agricultural and Food Chemistry, 2011, 59, 4622-4628.	5.2	10
83	QM/MM Free Energy Simulations of Salicylic Acid Methyltransferase: Effects of Stabilization of TS-like Structures on Substrate Specificity. Journal of Physical Chemistry B, 2011, 115, 389-396.	2.6	12
84	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
85	Four terpene synthases produce major compounds of the gypsy moth feeding-induced volatile blend of Populus trichocarpa. Phytochemistry, 2011, 72, 897-908.	2.9	77
86	Biosynthesis and emission of insect-induced methyl salicylate and methyl benzoate from rice. Plant Physiology and Biochemistry, 2010, 48, 279-287.	5.8	65
87	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
88	Genomics of Fungal Disease Resistance in Tomato. Current Genomics, 2010, 11, 30-39.	1.6	73
89	Plant Volatiles-based Insect Pest Management in Organic Farming. Critical Reviews in Plant Sciences, 2010, 29, 123-133.	5.7	56
90	Belowground ABA boosts aboveground production of DIMBOA and primes induction of chlorogenic acid in maize. Plant Signaling and Behavior, 2009, 4, 639-641.	2.4	37

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91	SABATH methyltransferases from white spruce (Picea glauca): gene cloning, functional characterization and structural analysis. Tree Physiology, 2009, 29, 947-957.	3.1	20
92	Within-plant distribution and emission of sesquiterpenes from Copaifera officinalis. Plant Physiology and Biochemistry, 2009, 47, 1017-1023.	5.8	40
93	Two poplar methyl salicylate esterases display comparable biochemical properties but divergent expression patterns. Phytochemistry, 2009, 70, 32-39.	2.9	39
94	Genomics of Secondary Metabolism inPopulus: Interactions with Biotic and Abiotic Environments. Critical Reviews in Plant Sciences, 2009, 28, 375-392.	5.7	98
95	Molecular and genomic basis of volatileâ€mediated indirect defense against insects in rice. Plant Journal, 2008, 55, 491-503.	5.7	163
96	Emission of Volatile Chemicals from Flowering Dogwood (Cornus florida L.) Flowers. Journal of Agricultural and Food Chemistry, 2008, 56, 9570-9574.	5.2	16
97	Elucidation of the genomic basis of indirect plant defense against insects. Plant Signaling and Behavior, 2008, 3, 720-721.	2.4	5
98	Structural, Biochemical, and Phylogenetic Analyses Suggest That Indole-3-Acetic Acid Methyltransferase Is an Evolutionarily Ancient Member of the SABATH Family. Plant Physiology, 2008, 146, 323-324.	4.8	82
99	Molecular cloning and biochemical characterization of indole-3-acetic acid methyltransferase from poplar. Phytochemistry, 2007, 68, 1537-1544.	2.9	32
100	Leveraging Enzyme Structureâ˜Function Relationships for Functional Inference and Experimental Design:â€‰ The Structureâ˜Function Linkage Database. Biochemistry, 2006, 45, 2545-2555.	2.5	157
101	An Arabidopsis thaliana methyltransferase capable of methylating farnesoic acid. Archives of Biochemistry and Biophysics, 2006, 448, 123-132.	3.0	73
102	The Endo-Î²-Mannanase gene families in Arabidopsis, rice, and poplar. Functional and Integrative Genomics, 2006, 7, 1-16.	3.5	47
103	Statistical analysis of real-time PCR data. BMC Bioinformatics, 2006, 7, 85.	2.6	1,651
104	Two sesquiterpene synthases are responsible for the complex mixture of sesquiterpenes emitted from Arabidopsis flowers. Plant Journal, 2005, 42, 757-771.	5.7	314
105	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
106	Biochemical and Structural Characterization of Benzenoid Carboxyl Methyltransferases Involved in Floral Scent Production in Stephanotis floribunda and Nicotiana suaveolens. Plant Physiology, 2004, 135, 1946-1955.	4.8	65
107	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
108	Chapter eleven The SABATH family of MTS in Arabidopsis Thaliana and other plant species. Recent Advances in Phytochemistry, 2003, , 253-283.	0.5	54

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109	Biosynthesis and Emission of Terpenoid Volatiles from Arabidopsis Flowers. Plant Cell, 2003, 15, 481-494.	6.6	381
110	Characterization of an Acyltransferase Capable of Synthesizing Benzylbenzoate and Other Volatile Esters in Flowers and Damaged Leaves of Clarkia breweri Â. Plant Physiology, 2002, 130, 466-476.	4.8	185
111	Expression of an Expansin Is Associated with Endosperm Weakening during Tomato Seed Germination. Plant Physiology, 2000, 124, 1265-1274.	4.8	211