Frederic Bourgaud

List of Publications by Year in descending order

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Version: 2024-02-01

74 papers 4,010 citations

32 h-index 61 g-index

78 all docs 78 docs citations

78 times ranked 4691 citing authors

#	Article	IF	Citations
1	Production of plant secondary metabolites: a historical perspective. Plant Science, 2001, 161, 839-851.	1.7	888
2	Biosynthesis of coumarins in plants: a major pathway still to be unravelled for cytochrome P450 enzymes. Phytochemistry Reviews, 2006, 5, 293-308.	3.1	313
3	How Does Tomato Quality (Sugar, Acid, and Nutritional Quality) Vary with Ripening Stage, Temperature, and Irradiance?. Journal of Agricultural and Food Chemistry, 2008, 56, 1241-1250.	2.4	266
4	Effects of Low Nitrogen Supply on Tomato (Solanum lycopersicum) Fruit Yield and Quality with Special Emphasis on Sugars, Acids, Ascorbate, Carotenoids, and Phenolic Compounds. Journal of Agricultural and Food Chemistry, 2009, 57, 4112-4123.	2.4	169
5	Coumarin and Furanocoumarin Quantitation in Citrus Peel via Ultraperformance Liquid Chromatography Coupled with Mass Spectrometry (UPLC-MS). Journal of Agricultural and Food Chemistry, 2013, 61, 10677-10684.	2.4	104
6	The Distribution of Coumarins and Furanocoumarins in Citrus Species Closely Matches Citrus Phylogeny and Reflects the Organization of Biosynthetic Pathways. PLoS ONE, 2015, 10, e0142757.	1.1	104
7	Molecular Cloning and Functional Characterization of Psoralen Synthase, the First Committed Monooxygenase of Furanocoumarin Biosynthesis. Journal of Biological Chemistry, 2007, 282, 542-554.	1.6	91
8	The isolation and mapping of a novel hydroxycinnamoyltransferase in the globe artichoke chlorogenic acid pathway. BMC Plant Biology, 2009, 9, 30.	1.6	91
9	A coumarinâ€specific prenyltransferase catalyzes the crucial biosynthetic reaction for furanocoumarin formation in parsley. Plant Journal, 2014, 77, 627-638.	2.8	88
10	A 2â€oxoglutarateâ€dependent dioxygenase from <i>Ruta graveolens</i> L. exhibits <i>pâ€</i> coumaroyl CoA 2′â€hydroxylase activity (C2′H): a missing step in the synthesis of umbelliferone in plants. Plant Journal, 2012, 70, 460-470.	2.8	87
11	Scopoletin 8-hydroxylase: a novel enzyme involved in coumarin biosynthesis and iron-deficiency responses in Arabidopsis. Journal of Experimental Botany, 2018, 69, 1735-1748.	2.4	86
12	Isolation and functional characterization of a cDNA coding a hydroxycinnamoyltransferase involved in phenylpropanoid biosynthesis in Cynara cardunculus L. BMC Plant Biology, 2007, 7, 14.	1.6	78
13	The  trade-off' between synthesis of primary and secondary compounds in young tomato leaves is altered by nitrate nutrition: experimental evidence and model consistency. Journal of Experimental Botany, 2009, 60, 4301-4314.	2.4	78
14	Ruta graveolens L.: a promising species for the production of furanocoumarins. Plant Science, 2001, 161, 189-199.	1.7	74
15	Identification and characterisation of CYP75A31, a new flavonoid 3'5'-hydroxylase, isolated from Solanum lycopersicum. BMC Plant Biology, 2010, 10, 21.	1.6	73
16	Isolation and Functional Characterization of CYP71AJ4 Encoding for the First P450 Monooxygenase of Angular Furanocoumarin Biosynthesis. Journal of Biological Chemistry, 2009, 284, 4776-4785.	1.6	70
17	Influence of repeated short-term nitrogen limitations on leaf phenolics metabolism in tomato. Phytochemistry, 2012, 77, 119-128.	1.4	64
18	Molecular evolution of parsnip (<i>Pastinaca sativa</i>) membraneâ€bound prenyltransferases for linear and/or angular furanocoumarin biosynthesis. New Phytologist, 2016, 211, 332-344.	3.5	59

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19	Cytochrome P450s from Cynara cardunculus L. CYP71AV9 and CYP71BL5, catalyze distinct hydroxylations in the sesquiterpene lactone biosynthetic pathway. Plant Science, 2014, 223, 59-68.	1.7	55
20	Establishment of hairy root cultures of Psoralea species. Plant Cell Reports, 1992, 11, 424-7.	2.8	48
21	Extraction of coumarins from plant material (Leguminosae). Phytochemical Analysis, 1994, 5, 127-132.	1.2	46
22	Evolution of substrate recognition sites (SRSs) in cytochromes P450 from Apiaceae exemplified by the CYP71AJ subfamily. BMC Evolutionary Biology, 2015, 15, 122.	3.2	43
23	Proteome analysis of digestive fluids in <i>Nepenthes</i> pitchers. Annals of Botany, 2016, 117, 479-495.	1.4	42
24	Cinnamic acid 4-hydroxylase mechanism-based inactivation by psoralen derivatives: cloning and characterization of a C4H from a psoralen producing plantâ€"Ruta graveolensâ€"exhibiting low sensitivity to psoralen inactivation. Archives of Biochemistry and Biophysics, 2004, 422, 71-80.	1.4	40
25	Hairy root and tissue cultures of Leucojum aestivum L.â€"relationships to galanthamine content. Phytochemistry Reviews, 2007, 6, 137-141.	3.1	39
26	Organâ€specific responses of tomato growth and phenolic metabolism to nitrate limitation. Plant Biology, 2012, 14, 760-769.	1.8	39
27	Mapping the genetic and tissular diversity of 64 phenolic compounds in Citrus species using a UPLC–MS approach. Annals of Botany, 2015, 115, 861-877.	1.4	39
28	Title is missing!. Plant Cell, Tissue and Organ Culture, 2000, 62, 11-19.	1.2	38
29	Molecular Cloning and Characterization of a Geranyl Diphosphate-Specific Aromatic Prenyltransferase from Lemon Â. Plant Physiology, 2014, 166, 80-90.	2.3	38
30	Accumulation of cynaropicrin in globe artichoke and localization of enzymes involved in its biosynthesis. Plant Science, 2015, 239, 128-136.	1.7	36
31	Nepenthes: State of the art of an inspiring plant for biotechnologists. Journal of Biotechnology, 2018, 265, 109-115.	1.9	36
32	Antioxidant and antiglycation properties of Hydnora johannis roots. South African Journal of Botany, 2013, 84, 124-127.	1.2	35
33	Production of flavonoids by Psoralea hairy root cultures. Plant Cell, Tissue and Organ Culture, 1999, 56, 96-103.	1.2	34
34	Establishment of a co-culture of Ammi majus L. and Ruta graveolens L. for the synthesis of furanocoumarins. Plant Science, 2003, 165, 1315-1319.	1.7	34
35	CYP98A22, a phenolic ester 3'-hydroxylase specialized in the synthesis of chlorogenic acid, as a new tool for enhancing the furanocoumarin concentration in Ruta graveolens. BMC Plant Biology, 2012, 12, 152.	1.6	33
36	Natural Products from Bryophytes: From Basic Biology to Biotechnological Applications. Critical Reviews in Plant Sciences, 2021, 40, 191-217.	2.7	33

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37	Production of daidzein by callus cultures of Psoralea species and comparison with plants. Plant Cell, Tissue and Organ Culture, 1998, 53, 35-40.	1.2	32
38	Production of phenylpropanoid compounds by recombinant microorganisms expressing plant-specific biosynthesis genes. Process Biochemistry, 2008, 43, 463-479.	1.8	31
39	Convergent evolution of the UbiA prenyltransferase family underlies the independent acquisition of furanocoumarins in plants. New Phytologist, 2020, 225, 2166-2182.	3.5	30
40	Tropane alkaloid profiling of hydroponic <i>Datura innoxia</i> mill. Plants inoculated with <i>Agrobacterium rhizogenes</i> . Phytochemical Analysis, 2010, 21, 118-127.	1.2	26
41	Hydroponic combined with natural or forced root permeabilization: a promising technique for plant secondary metabolite production. Plant Science, 2002, 163, 723-732.	1.7	25
42	The CYP71AZ P450 Subfamily: A Driving Factor for the Diversification of Coumarin Biosynthesis in Apiaceous Plants. Frontiers in Plant Science, 2018, 9, 820.	1.7	24
43	Coexpression of CPR from Various Origins Enhances Biotransformation Activity of Human CYPs in S. pombe. Applied Biochemistry and Biotechnology, 2013, 170, 1751-1766.	1.4	23
44	Testing of Outstanding Individuals of <i>Thlaspi Caerulescens </i> International Journal of Phytoremediation, 2006, 8, 339-357.	1.7	22
45	A bacterial artificial chromosome (<scp>BAC</scp>) genomic approach reveals partial clustering of the furanocoumarin pathway genes in parsnip. Plant Journal, 2017, 89, 1119-1132.	2.8	21
46	Genetic transformation of the medicinal plant Ruta graveolens L. by an Agrobacterium tumefaciens-mediated method. Plant Science, 2005, 168, 883-888.	1.7	20
47	In vitro plant regeneration and Agrobacterium-mediated genetic transformation of a carnivorous plant, Nepenthes mirabilis. Scientific Reports, 2020, 10, 17482.	1.6	20
48	Impact of Temporary Nitrogen Deprivation on Tomato Leaf Phenolics. International Journal of Molecular Sciences, 2011, 12, 7971-7981.	1.8	19
49	A simple SDSâ€PAGE protein pattern from pitcher secretions as a new tool to distinguish Nepenthes species (Nepenthaceae). American Journal of Botany, 2013, 100, 2478-2484.	0.8	17
50	Convergent evolution leading to the appearance of furanocoumarins in citrus plants. Plant Science, 2020, 292, 110392.	1.7	17
51	Quantification of Daidzein and Furanocoumarin Conjugates ofPsoralea cinerea L. (Leguminosae). Phytochemical Analysis, 1997, 8, 27-31.	1.2	15
52	Isolation of Artemisia capillaris membrane-bound di-prenyltransferase for phenylpropanoids and redesign of artepillin C in yeast. Communications Biology, 2019, 2, 384.	2.0	15
53	Parallel evolution of UbiA superfamily proteins into aromatic $\langle i \rangle O \langle i \rangle$ -prenyltransferases in plants. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	15
54	Anti-Inflammatory Activity of Bryophytes Extracts in LPS-Stimulated RAW264.7 Murine Macrophages. Molecules, 2022, 27, 1940.	1.7	14

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55	Composition and functional comparison of vetiver root endophytic microbiota originating from different geographic locations that show antagonistic activity towards Fusarium graminearum. Microbiological Research, 2021, 243, 126650.	2.5	11
56	Study of two pharmaceutically useful Psoralea (Leguminosae) species: influence of inoculation on growth, grain and dry matter yield. Agronomy for Sustainable Development, 1990, 10, 1-8.	0.8	11
57	Assessing Carnivorous Plants for the Production of Recombinant Proteins. Frontiers in Plant Science, 2019, 10, 793.	1.7	10
58	Collagenase and Tyrosinase Inhibitory Effect of Isolated Constituents from the Moss Polytrichum formosum. Plants, 2021, 10, 1271.	1.6	10
59	Cultivation of rue (<i>Ruta graveolens</i> L., Rutaceae) for the production of furanocoumarins of therapeutic value. Canadian Journal of Botany, 2000, 78, 1326-1335.	1.2	9
60	Recent Advances in Molecular Genetics of Furanocoumarin Synthesis in Higher Plants. , 2014, , 363-375.		9
61	Identification and Quantification of Coumarins by UHPLC-MS in Arabidopsis thaliana Natural Populations. Molecules, 2021, 26, 1804.	1.7	9
62	A GDSL lipase-like from Ipomoea batatas catalyzes efficient production of 3,5-diCQA when expressed in Pichia pastoris. Communications Biology, 2020, 3, 673.	2.0	8
63	Cultivation of rue (<i>Ruta graveolens</i> L., Rutaceae) for the production of furanocoumarins of therapeutic value. Canadian Journal of Botany, 2000, 78, 1326-1335.	1.2	8
64	A Rapid and Efficient Method for Isolating High Quality DNA from Leaves of Carnivorous Plants from the Drosera Genus. Molecular Biotechnology, 2012, 51, 247-253.	1.3	7
65	From Bioreactor to Entire Plants. Advances in Botanical Research, 2013, 68, 205-232.	0.5	6
66	Beet western yellows virus infects the carnivorous plant Nepenthes mirabilis. Archives of Virology, 2016, 161, 2273-2278.	0.9	6
67	Plant Milking Technology—An Innovative and Sustainable Process to Produce Highly Active Extracts from Plant Roots. Molecules, 2020, 25, 4162.	1.7	5
68	A selective photobiological assay to detect and quantify psoralen inPsoralea plants (Leguminosae). Phytochemical Analysis, 1994, 5, 315-318.	1.2	4
69	Datura innoxia plants hydroponically-inoculated with Agrobacterium rhizogenes display an enhanced growth and alkaloid metabolism. Plant Science, 2018, 277, 166-176.	1.7	3
70	Agrobacterium-Mediated Transformation of Ruta graveolens L. Methods in Molecular Biology, 2009, 547, 235-248.	0.4	2
71	Evaluation of Vetiver Volatile Compound Production under Aeroponic-Grown Conditions for the Perfume Industry. Molecules, 2022, 27, 1942.	1.7	2
72	Development of an enzyme immunoassay to detect and quantify psoralen and bergapten in plants. Phytochemical Analysis, 1995, 6, 306-312.	1.2	1

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73	Les plantes, sources d'acides gras essentiels omégaÂ3. Oleagineux Corps Gras Lipides, 2004, 11, 106-111.	0.2	1
74	Extraction of Coumarins from Leaves, Petioles, Stems and Roots of Ruta graveolens and Nicotiana benthamiana. Bio-protocol, 2012, 2, .	0.2	0