Alain Hehn

List of Publications by Year
in descending order

61 papers	3,206 citations	185998 28 h-index	155451 55 g-index
65 all docs	65 docs citations	65 times ranked	3892 citing authors

#	Article	IF	Citations
1	CYP98A3 from Arabidopsis thaliana Is a 3â€²-Hydroxylase of Phenolic Esters, a Missing Link in the Phenylpropanoid Pathway. Journal of Biological Chemistry, 2001, 276, 36566-36574.	1.6	384
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	Cytochromes P450 for engineering herbicide tolerance. Trends in Plant Science, 2000, 5, 116-123.	4.3	289
4	Evolution of a Novel Phenolic Pathway for Pollen Development. Science, 2009, 325, 1688-1692.	6.0	148
5	Crosstalk and differential response to abiotic and biotic stressors reflected at the transcriptional level of effector genes from secondary metabolism. Plant Molecular Biology, 2004, 54, 817-835.	2.0	111
6	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
7	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
8	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
9	The isolation and mapping of a novel hydroxycinnamoyltransferase in the globe artichoke chlorogenic acid pathway. BMC Plant Biology, 2009, 9, 30.	1.6	91
10	A coumarinâ€specific prenyltransferase catalyzes the crucial biosynthetic reaction for furanocoumarin formation in parsley. Plant Journal, 2014, 77, 627-638.	2.8	88
11	A 2â€oxoglutarateâ€dependent dioxygenase from Ruta graveolens L. exhibits pâ€coumaroyl CoA 2â€²â€hydroxylase activity (C2â€²H): a missing step in the synthesis of umbelliferone in plants. Plant Journal, 2012, 70, 460-470.	2.8	87
12	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
13	Increasing Expression of P450 and P450-Reductase Proteins from Monocots in Heterologous Systems. Archives of Biochemistry and Biophysics, 2000, 379, 161-169.	1.4	82
14	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
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	Molecular evolution of parsnip (Pastinaca sativa) membraneâ€bound prenyltransferases for linear and/or angular furanocoumarin biosynthesis. New Phytologist, 2016, 211, 332-344.	3.5	59
18	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

#	Article	IF	Citations
19	Cloning, characterization and regulation of a family of phi class glutathione transferases from wheat. Plant Molecular Biology, 2003, 52, 591-603.	2.0	53
20	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
21	Proteome analysis of digestive fluids inNepenthespitchers. Annals of Botany, 2016, 117, 479-495.	1.4	42
22	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
23	Hairy root and tissue cultures of Leucojum aestivum L.â€"relationships to galanthamine content. Phytochemistry Reviews, 2007, 6, 137-141.	3.1	39
24	Molecular Cloning and Characterization of a Geranyl Diphosphate-Specific Aromatic Prenyltransferase from Lemon Â. Plant Physiology, 2014, 166, 80-90.	2.3	38
25	Accumulation of cynaropicrin in globe artichoke and localization of enzymes involved in its biosynthesis. Plant Science, 2015, 239, 128-136.	1.7	36
26	Nepenthes: State of the art of an inspiring plant for biotechnologists. Journal of Biotechnology, 2018, 265, 109-115.	1.9	36
27	CYP98A22, a phenolic ester 3â€™-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
28	Production of phenylpropanoid compounds by recombinant microorganisms expressing plant-specific biosynthesis genes. Process Biochemistry, 2008, 43, 463-479.	1.8	31
29	Convergent evolution of the UbiA prenyltransferase family underlies the independent acquisition of furanocoumarins in plants. New Phytologist, 2020, 225, 2166-2182.	3.5	30
30	Evidence for in vitro and in vivo autocatalytic processingof the primary translation product of beet necrotic yellowvein virus RNA 1 by a papain-like proteinase. Archives of Virology, 1997, 142, 1051-1058.	0.9	29
31	Conservation and diversity of gene families explored using the CODEHOP strategy in higher plants. BMC Plant Biology, 2002, 2, 7.	1.6	28
32	Endophytic fungi associated with Sudanese medicinal plants show cytotoxic and antibiotic potential. FEMS Microbiology Letters, 2016, 363, fnw089.	0.7	28
33	Tropane alkaloid profiling of hydroponic Datura innoxia mill. Plants inoculated with Agrobacterium rhizogenes. Phytochemical Analysis, 2010, 21, 118-127.	1.2	26
34	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
35	Gastric intrinsic factor deficiency with combined GIF heterozygous mutations and FUT2 secretor variant. Biochimie, 2013, 95, 995-1001.	1.3	23
36	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

#	Article	IF	Citations
37	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
38	Genetic transformation of the medicinal plant Ruta graveolens L. by an Agrobacterium tumefaciens-mediated method. Plant Science, 2005, 168, 883-888.	1.7	20
39	Defence mechanisms of Ficus: pyramiding strategies to cope with pests and pathogens. Planta, 2019, 249, 617-633.	1.6	20
40	In vitro plant regeneration and Agrobacterium-mediated genetic transformation of a carnivorous plant, Nepenthes mirabilis. Scientific Reports, 2020, 10, 17482.	1.6	20
41	A new P450 involved in the furanocoumarin pathway underlies a recent case of convergent evolution. New Phytologist, 2021, 231, 1923-1939.	3.5	19
42	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
43	Convergent evolution leading to the appearance of furanocoumarins in citrus plants. Plant Science, 2020, 292, 110392.	1.7	17
44	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
45	Parallel evolution of UbiA superfamily proteins into aromatic O -prenyltransferases in plants. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	15
46	Molecular Identification of Endophytic Bacteria in Leucojum aestivum In Vitro Culture, NMR-Based Metabolomics Study and LC-MS Analysis Leading to Potential Amaryllidaceae Alkaloid Production. International Journal of Molecular Sciences, 2021, 22, 1773.	1.8	14
47	Screening of Antimicrobial Activities and Lipopeptide Production of Endophytic Bacteria Isolated from Vetiver Roots. Microorganisms, 2022, 10, 209.	1.6	12
48	Partial recoding of P450 and P450 reductase cDNAs for improved expression in yeast and plants. Methods in Enzymology, 2002, 357, 343-351.	0.4	11
49	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
50	Assessing Carnivorous Plants for the Production of Recombinant Proteins. Frontiers in Plant Science, 2019, 10, 793.	1.7	10
51	Recent Advances in Molecular Genetics of Furanocoumarin Synthesis in Higher Plants. , 2014, , 363-375.		9
52	Identification and Quantification of Coumarins by UHPLC-MS in Arabidopsis thaliana Natural Populations. Molecules, 2021, 26, 1804.	1.7	9
53	Artificial defective interfering RNAs derived from RNA 2 of beet necrotic yellow vein virus. Archives of Virology, 1994, 135, 143-151.	0.9	8
54	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

#	Article	IF	Citations
55	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
56	Beet western yellows virus infects the carnivorous plant Nepenthes mirabilis. Archives of Virology, 2016, 161, 2273-2278.	0.9	6
57	Local removal of oxygen for NAD(P)+ detection in aerated solutions. Electrochimica Acta, 2020, 353, 136546.	2.6	5
58	Datura innoxia plants hydroponically-inoculated with Agrobacterium rhizogenes display an enhanced growth and alkaloid metabolism. Plant Science, 2018, 277, 166-176.	1.7	3
59	Untargeted Metabolomics Approach Reveals Diverse Responses of Pastinaca Sativa to Ozone and Wounding Stresses. Metabolites, 2019, 9, 153.	1.3	2
60	Agrobacterium-Mediated Transformation of Ruta graveolens L. Methods in Molecular Biology, 2009, 547, 235-248.	0.4	2
61	Extraction of Coumarins from Leaves, Petioles, Stems and Roots of Ruta graveolens and Nicotiana benthamiana. Bio-protocol, 2012, 2, .	0.2	0