Ute Wittstock

List of Publications by Year
in descending order

50 papers	5,367 citations	136740 32 h-index	205818 48 g-index
50 all docs	50 docs citations	50 times ranked	4265 citing authors

#	Article	IF	Citations
1	Novel glucosinolate metabolism in larvae of the leaf beetle Phaedon cochleariae. Insect Biochemistry and Molecular Biology, 2020, 124, 103431.	1.2	12
2	Glucosinolate Content in Dormant and Germinating Arabidopsis thaliana Seeds Is Affected by Non-Functional Alleles of Classical Myrosinase and Nitrile-Specifier Protein Genes. Frontiers in Plant Science, 2019, 10, 1549.	1.7	15
3	Synthesis and Biochemical Evaluation of an Artificial, Fluorescent Glucosinolate (GSL). ChemBioChem, 2019, 20, 2341-2345.	1.3	11
4	Structural diversification during glucosinolate breakdown: mechanisms of thiocyanate, epithionitrile and simple nitrile formation. Plant Journal, 2019, 99, 329-343.	2.8	40
5	Sequential regiospecific <i>gem</i>â€diprenylation of tetrahydroxyxanthone by prenyltransferases from <i>Hypericum</i> sp.. New Phytologist, 2019, 222, 318-334.	3.5	20
6	Quantitative profiling of polyacetylenes in tissue cultures and plant parts of three species of the Asteraceae. Plant Cell, Tissue and Organ Culture, 2018, 134, 251-265.	1.2	2
7	Biotechnological production of hyperforin for pharmaceutical formulation. European Journal of Pharmaceutics and Biopharmaceutics, 2018, 126, 10-26.	2.0	22
8	Iron is a centrally bound cofactor of specifier proteins involved in glucosinolate breakdown. PLoS ONE, 2018, 13, e0205755.	1.1	34
9	Molecular identification and characterization of rhodaneses from the insect herbivore Pieris rapae. Scientific Reports, 2018, 8, 10819.	1.6	9
10	Î²-Cyanoalanine Synthases and Their Possible Role in Pierid Host Plant Adaptation. Insects, 2017, 8, 62.	1.0	11
11	NSP-Dependent Simple Nitrile Formation Dominates upon Breakdown of Major Aliphatic Glucosinolates in Roots, Seeds, and Seedlings of Arabidopsis thaliana Columbia-0. Frontiers in Plant Science, 2016, 7, 1821.	1.7	64
12	Cyanide detoxification in an insect herbivore: Molecular identification of Î²-cyanoalanine synthases from Pieris rapae. Insect Biochemistry and Molecular Biology, 2016, 70, 99-110.	1.2	41
13	The crystal structure of the thiocyanate-forming protein from Thlaspi arvense, a kelch protein involved in glucosinolate breakdown. Plant Molecular Biology, 2015, 89, 67-81.	2.0	17
14	Molecular models and mutational analyses of plant specifier proteins suggest active site residues and reaction mechanism. Plant Molecular Biology, 2014, 84, 173-188.	2.0	30
15	Mixtures of plant secondary metabolites. , 2012, , 56-77.		50
16	Metabolism of glucosinolate-derived isothiocyanates to glutathione conjugates in generalist lepidopteran herbivores. Insect Biochemistry and Molecular Biology, 2012, 42, 174-182.	1.2	112
17	Evolution of specifier proteins in glucosinolate-containing plants. BMC Evolutionary Biology, 2012, 12, 127.	3.2	87
18	Turning the â€˜Mustard Oil Bombâ€™ into a â€˜Cyanide Bombâ€™: Aromatic Glucosinolate Metabolism in a Specialist Insect Herbivore. PLoS ONE, 2012, 7, e35545.	1.1	57

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19	Insect herbivore counteradaptations to the plant glucosinolateâ€“myrosinase system. Phytochemistry, 2011, 72, 1566-1575.	1.4	242
20	A thiocyanate-forming protein generates multiple products upon allylglucosinolate breakdown in Thlaspi arvense. Phytochemistry, 2011, 72, 1699-1709.	1.4	42
21	The influence of metabolically engineered glucosinolates profiles in Arabidopsis thaliana on Plutella xylostella preference and performance. Chemoecology, 2010, 20, 1-9.	0.6	28
22	Differential Effects of Indole and Aliphatic Glucosinolates on Lepidopteran Herbivores. Journal of Chemical Ecology, 2010, 36, 905-913.	0.9	196
23	Glucosinolate Breakdown in Arabidopsis: Mechanism, Regulation and Biological Significance. The Arabidopsis Book, 2010, 8, e0134.	0.5	286
24	The Genetic Basis of Constitutive and Herbivore-Induced ESP-Independent Nitrile Formation in Arabidopsis Â Â. Plant Physiology, 2009, 149, 561-574.	2.3	148
25	Regulation and function of specifier proteins in plants. Phytochemistry Reviews, 2009, 8, 87-99.	3.1	72
26	Formation of Simple Nitriles upon Glucosinolate Hydrolysis Affects Direct and Indirect Defense Against the Specialist Herbivore, Pieris rapae. Journal of Chemical Ecology, 2008, 34, 1311-1321.	0.9	115
27	ESP and ESM1 mediate indol-3-acetonitrile production from indol-3-ylmethyl glucosinolate in Arabidopsis. Phytochemistry, 2008, 69, 663-671.	1.4	90
28	Sulfur-Containing Secondary Metabolites and Their Role in Plant Defense. Advances in Photosynthesis and Respiration, 2008, , 201-222.	1.0	17
29	The genetic basis of a plantâ€“insect coevolutionary key innovation. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 20427-20431.	3.3	325
30	Glycine Conjugates in a Lepidopteran Insect Herbivoreâ€"The Metabolism of Benzylglucosinolate in the Cabbage White Butterfly,Pieris rapae. ChemBioChem, 2007, 8, 1757-1757.	1.3	7
31	Tipping the ScalesÂâ€ÂSpecifier Proteins in Glucosinolate Hydrolysis. IUBMB Life, 2007, 59, 744-751.	1.5	86
32	Cell- and tissue-specific localization and regulation of the epithiospecifier protein in Arabidopsis thaliana. Plant Molecular Biology, 2007, 64, 173-185.	2.0	59
33	Comparative biochemical characterization of nitrile-forming proteins from plants and insects that alter myrosinase-catalysed hydrolysis of glucosinolates. FEBS Journal, 2006, 273, 2432-2446.	2.2	129
34	Glucosinolate hydrolysis in Lepidium sativumâ€"â€"identification of the thiocyanate-forming protein. Plant Molecular Biology, 2006, 63, 49-61.	2.0	110
35	Altered Glucosinolate Hydrolysis in Genetically Engineered Arabidopsis thaliana and its Influence on the Larval Development of Spodoptera littoralis. Journal of Chemical Ecology, 2006, 32, 2333-2349.	0.9	139
36	Glycine Conjugates in a Lepidopteran Insect Herbivore-The Metabolism of Benzylglucosinolate in the Cabbage White Butterfly, Pieris rapae. ChemBioChem, 2006, 7, 1982-1989.	1.3	31

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37	Uptake and turn-over of glucosinolates sequestered in the sawfly Athalia rosae. Insect Biochemistry and Molecular Biology, 2005, 35, 1189-1198.	1.2	61
38	Successful herbivore attack due to metabolic diversion of a plant chemical defense. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 4859-4864.	3.3	440
39	Chapter five Glucosinolate hydrolysis and its impact on generalist and specialist insect herbivores. Recent Advances in Phytochemistry, 2003, , 101-125.	0.5	131
40	Chapter Thirteen The role of cytochromes P450 in biosynthesis and evolution of glucosinolates. Recent Advances in Phytochemistry, 2002, , 223-248.	0.5	10
41	Glucosinolate research in the Arabidopsis era. Trends in Plant Science, 2002, 7, 263-270.	4.3	555
42	Constitutive plant toxins and their role in defense against herbivores and pathogens. Current Opinion in Plant Biology, 2002, 5, 300-307.	3.5	450
43	Cytochrome P450 CYP79F1 from Arabidopsis Catalyzes the Conversion of Dihomomethionine and Trihomomethionine to the Corresponding Aldoximes in the Biosynthesis of Aliphatic Glucosinolates. Journal of Biological Chemistry, 2001, 276, 11078-11085.	1.6	162
44	Cytochrome P450 CYP79A2 from Arabidopsis thaliana L. Catalyzes the Conversion of l-Phenylalanine to Phenylacetaldoxime in the Biosynthesis of Benzylglucosinolate. Journal of Biological Chemistry, 2000, 275, 14659-14666.	1.6	247
45	Cytochrome P450 CYP79B2 from Arabidopsis Catalyzes the Conversion of Tryptophan to Indole-3-acetaldoxime, a Precursor of Indole Glucosinolates and Indole-3-acetic Acid. Journal of Biological Chemistry, 2000, 275, 33712-33717.	1.6	411
46	Effects of Cicutoxin and Related Polyacetylenes fromCicuta virosaon Neuronal Action Potentials: A Comparative Study on the Mechanism of the Convulsive Action. Planta Medica, 1997, 63, 120-124.	0.7	35
47	Cicutoxin fromCicuta virosaâ€" A New and Potent Potassium Channel Blocker in T Lymphocytes. Biochemical and Biophysical Research Communications, 1996, 219, 332-336.	1.0	22
48	Effects of some Components of the Essential Oil of Chamomile,Chamomilla recutita, on Histamine Release from Rat Mast Cells. Planta Medica, 1996, 62, 60-61.	0.7	47
49	Polyacetylenes from Water Hemlock,Cicuta virosa. Planta Medica, 1995, 61, 439-445.	0.7	33
50	Herbivore Adaptations to Plant Cyanide Defenses. , 0, , .		7