

Ute Wittstock

List of Publications by Year in descending order

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Version: 2024-02-01

50
papers

5,367
citations

136950

32
h-index

206112

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 <i>Phaedon cochleariae</i> . <i>Insect Biochemistry and Molecular Biology</i> , 2020, 124, 103431.	2.7	12
2	Glucosinolate Content in Dormant and Germinating <i>Arabidopsis thaliana</i> Seeds Is Affected by Non-Functional Alleles of Classical Myrosinase and Nitrile-Specifier Protein Genes. <i>Frontiers in Plant Science</i> , 2019, 10, 1549.	3.6	15
3	Synthesis and Biochemical Evaluation of an Artificial, Fluorescent Glucosinolate (GSL). <i>ChemBioChem</i> , 2019, 20, 2341-2345.	2.6	11
4	Structural diversification during glucosinolate breakdown: mechanisms of thiocyanate, epithionitrile and simple nitrile formation. <i>Plant Journal</i> , 2019, 99, 329-343.	5.7	40
5	Sequential regiospecific <i>gem</i> -diprenylation of tetrahydroxyxanthone by prenyltransferases from <i>Hypericum</i> sp.. <i>New Phytologist</i> , 2019, 222, 318-334.	7.3	20
6	Quantitative profiling of polyacetylenes in tissue cultures and plant parts of three species of the Asteraceae. <i>Plant Cell, Tissue and Organ Culture</i> , 2018, 134, 251-265.	2.3	2
7	Biotechnological production of hyperforin for pharmaceutical formulation. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2018, 126, 10-26.	4.3	22
8	Iron is a centrally bound cofactor of specifier proteins involved in glucosinolate breakdown. <i>PLoS ONE</i> , 2018, 13, e0205755.	2.5	34
9	Molecular identification and characterization of rhodanases from the insect herbivore <i>Pieris rapae</i> . <i>Scientific Reports</i> , 2018, 8, 10819.	3.3	9
10	\hat{I}^2 -Cyanoalanine Synthases and Their Possible Role in Pierid Host Plant Adaptation. <i>Insects</i> , 2017, 8, 62.	2.2	11
11	NSP-Dependent Simple Nitrile Formation Dominates upon Breakdown of Major Aliphatic Glucosinolates in Roots, Seeds, and Seedlings of <i>Arabidopsis thaliana</i> Columbia-0. <i>Frontiers in Plant Science</i> , 2016, 7, 1821.	3.6	64
12	Cyanide detoxification in an insect herbivore: Molecular identification of \hat{I}^2 -cyanoalanine synthases from <i>Pieris rapae</i> . <i>Insect Biochemistry and Molecular Biology</i> , 2016, 70, 99-110.	2.7	41
13	The crystal structure of the thiocyanate-forming protein from <i>Thlaspi arvense</i> , a kelch protein involved in glucosinolate breakdown. <i>Plant Molecular Biology</i> , 2015, 89, 67-81.	3.9	17
14	Molecular models and mutational analyses of plant specifier proteins suggest active site residues and reaction mechanism. <i>Plant Molecular Biology</i> , 2014, 84, 173-188.	3.9	30
15	Mixtures of plant secondary metabolites. , 2012, , 56-77.		50
16	Metabolism of glucosinolate-derived isothiocyanates to glutathione conjugates in generalist lepidopteran herbivores. <i>Insect Biochemistry and Molecular Biology</i> , 2012, 42, 174-182.	2.7	112
17	Evolution of specifier proteins in glucosinolate-containing plants. <i>BMC Evolutionary Biology</i> , 2012, 12, 127.	3.2	87
18	Turning the \hat{I}^2 -Mustard Oil Bomb \hat{I}^2 ™ into a \hat{I}^2 -Cyanide Bomb \hat{I}^2 ™: Aromatic Glucosinolate Metabolism in a Specialist Insect Herbivore. <i>PLoS ONE</i> , 2012, 7, e35545.	2.5	57

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19	Insect herbivore counteradaptations to the plant glucosinolate-myrosinase system. <i>Phytochemistry</i> , 2011, 72, 1566-1575.	2.9	242
20	A thiocyanate-forming protein generates multiple products upon allylglucosinolate breakdown in <i>Thlaspi arvense</i> . <i>Phytochemistry</i> , 2011, 72, 1699-1709.	2.9	42
21	The influence of metabolically engineered glucosinolates profiles in <i>Arabidopsis thaliana</i> on <i>Plutella xylostella</i> preference and performance. <i>Chemoecology</i> , 2010, 20, 1-9.	1.1	28
22	Differential Effects of Indole and Aliphatic Glucosinolates on Lepidopteran Herbivores. <i>Journal of Chemical Ecology</i> , 2010, 36, 905-913.	1.8	196
23	Glucosinolate Breakdown in <i>Arabidopsis</i> : Mechanism, Regulation and Biological Significance. <i>The Arabidopsis Book</i> , 2010, 8, e0134.	0.5	286
24	The Genetic Basis of Constitutive and Herbivore-Induced ESP-Independent Nitrile Formation in <i>Arabidopsis</i> . <i>Plant Physiology</i> , 2009, 149, 561-574.	4.8	148
25	Regulation and function of specifier proteins in plants. <i>Phytochemistry Reviews</i> , 2009, 8, 87-99.	6.5	72
26	Formation of Simple Nitriles upon Glucosinolate Hydrolysis Affects Direct and Indirect Defense Against the Specialist Herbivore, <i>Pieris rapae</i> . <i>Journal of Chemical Ecology</i> , 2008, 34, 1311-1321.	1.8	115
27	ESP and ESM1 mediate indol-3-acetonitrile production from indol-3-ylmethyl glucosinolate in <i>Arabidopsis</i> . <i>Phytochemistry</i> , 2008, 69, 663-671.	2.9	90
28	Sulfur-Containing Secondary Metabolites and Their Role in Plant Defense. <i>Advances in Photosynthesis and Respiration</i> , 2008, , 201-222.	1.0	17
29	The genetic basis of a plant-insect coevolutionary key innovation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 20427-20431.	7.1	325
30	Glycine Conjugates in a Lepidopteran Insect Herbivore-The Metabolism of Benzylglucosinolate in the Cabbage White Butterfly, <i>Pieris rapae</i> . <i>ChemBioChem</i> , 2007, 8, 1757-1757.	2.6	7
31	Tipping the Scales-Specifier Proteins in Glucosinolate Hydrolysis. <i>IUBMB Life</i> , 2007, 59, 744-751.	3.4	86
32	Cell- and tissue-specific localization and regulation of the epithiospecifier protein in <i>Arabidopsis thaliana</i> . <i>Plant Molecular Biology</i> , 2007, 64, 173-185.	3.9	59
33	Comparative biochemical characterization of nitrile-forming proteins from plants and insects that alter myrosinase-catalysed hydrolysis of glucosinolates. <i>FEBS Journal</i> , 2006, 273, 2432-2446.	4.7	129
34	Glucosinolate hydrolysis in <i>Lepidium sativum</i> -identification of the thiocyanate-forming protein. <i>Plant Molecular Biology</i> , 2006, 63, 49-61.	3.9	110
35	Altered Glucosinolate Hydrolysis in Genetically Engineered <i>Arabidopsis thaliana</i> and its Influence on the Larval Development of <i>Spodoptera littoralis</i> . <i>Journal of Chemical Ecology</i> , 2006, 32, 2333-2349.	1.8	139
36	Glycine Conjugates in a Lepidopteran Insect Herbivore-The Metabolism of Benzylglucosinolate in the Cabbage White Butterfly, <i>Pieris rapae</i> . <i>ChemBioChem</i> , 2006, 7, 1982-1989.	2.6	31

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37	Uptake and turn-over of glucosinolates sequestered in the sawfly <i>Athalia rosae</i> . <i>Insect Biochemistry and Molecular Biology</i> , 2005, 35, 1189-1198.	2.7	61
38	Successful herbivore attack due to metabolic diversion of a plant chemical defense. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 4859-4864.	7.1	440
39	Chapter five Glucosinolate hydrolysis and its impact on generalist and specialist insect herbivores. <i>Recent Advances in Phytochemistry</i> , 2003, , 101-125.	0.5	131
40	Chapter Thirteen The role of cytochromes P450 in biosynthesis and evolution of glucosinolates. <i>Recent Advances in Phytochemistry</i> , 2002, , 223-248.	0.5	10
41	Glucosinolate research in the Arabidopsis era. <i>Trends in Plant Science</i> , 2002, 7, 263-270.	8.8	555
42	Constitutive plant toxins and their role in defense against herbivores and pathogens. <i>Current Opinion in Plant Biology</i> , 2002, 5, 300-307.	7.1	450
43	Cytochrome P450 CYP79F1 from <i>Arabidopsis</i> Catalyzes the Conversion of Dihomomethionine and Trihomomethionine to the Corresponding Aldoximes in the Biosynthesis of Aliphatic Glucosinolates. <i>Journal of Biological Chemistry</i> , 2001, 276, 11078-11085.	3.4	162
44	Cytochrome P450 CYP79A2 from <i>Arabidopsis thaliana</i> L. Catalyzes the Conversion of L-Phenylalanine to Phenylacetaldoxime in the Biosynthesis of Benzylglucosinolate. <i>Journal of Biological Chemistry</i> , 2000, 275, 14659-14666.	3.4	247
45	Cytochrome P450 CYP79B2 from <i>Arabidopsis</i> Catalyzes the Conversion of Tryptophan to Indole-3-acetaldoxime, a Precursor of Indole Glucosinolates and Indole-3-acetic Acid. <i>Journal of Biological Chemistry</i> , 2000, 275, 33712-33717.	3.4	411
46	Effects of Cicutoxin and Related Polyacetylenes from <i>Cicuta virosa</i> on Neuronal Action Potentials: A Comparative Study on the Mechanism of the Convulsive Action. <i>Planta Medica</i> , 1997, 63, 120-124.	1.3	35
47	Cicutoxin from <i>Cicuta virosa</i> "A New and Potent Potassium Channel Blocker in T Lymphocytes. <i>Biochemical and Biophysical Research Communications</i> , 1996, 219, 332-336.	2.1	22
48	Effects of some Components of the Essential Oil of Chamomile, <i>Chamomilla recutita</i> , on Histamine Release from Rat Mast Cells. <i>Planta Medica</i> , 1996, 62, 60-61.	1.3	47
49	Polyacetylenes from Water Hemlock, <i>Cicuta virosa</i> . <i>Planta Medica</i> , 1995, 61, 439-445.	1.3	33
50	Herbivore Adaptations to Plant Cyanide Defenses. , 0, , .		7