

# Meike Burow

## List of Publications by Year in descending order

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70  
papers

5,040  
citations

94433

37  
h-index

95266

68  
g-index

76  
all docs

76  
docs citations

76  
times ranked

5272  
citing authors

#	ARTICLE	IF	CITATIONS
1	NRT/PTR transporters are essential for translocation of glucosinolate defence compounds to seeds. <i>Nature</i> , 2012, 488, 531-534.	27.8	429
2	Glucosinolate structural diversity, identification, chemical synthesis and metabolism in plants. <i>Phytochemistry</i> , 2020, 169, 112100.	2.9	315
3	Glucosinolate Breakdown in Arabidopsis: Mechanism, Regulation and Biological Significance. <i>The Arabidopsis Book</i> , 2010, 8, e0134.	0.5	286
4	DOF transcription factor AtDof1.1 (OBP2) is part of a regulatory network controlling glucosinolate biosynthesis in Arabidopsis. <i>Plant Journal</i> , 2006, 47, 10-24.	5.7	243
5	A Complex Interplay of Three R2R3 MYB Transcription Factors Determines the Profile of Aliphatic Glucosinolates in Arabidopsis. <i>Plant Physiology</i> , 2010, 153, 348-363.	4.8	226
6	Integration of Biosynthesis and Long-Distance Transport Establish Organ-Specific Glucosinolate Profiles in Vegetative Arabidopsis. <i>Plant Cell</i> , 2013, 25, 3133-3145.	6.6	170
7	The Metabolic Response of Arabidopsis Roots to Oxidative Stress is Distinct from that of Heterotrophic Cells in Culture and Highlights a Complex Relationship between the Levels of Transcripts, Metabolites, and Flux. <i>Molecular Plant</i> , 2009, 2, 390-406.	8.3	155
8	The Genetic Basis of Constitutive and Herbivore-Induced ESP-Independent Nitrile Formation in Arabidopsis. <i>Plant Physiology</i> , 2009, 149, 561-574.	4.8	148
9	Regulation of MYB and bHLH Transcription Factors: A Glance at the Protein Level. <i>Molecular Plant</i> , 2015, 8, 378-388.	8.3	141
10	Altered Glucosinolate Hydrolysis in Genetically Engineered Arabidopsis thaliana and its Influence on the Larval Development of Spodoptera littoralis. <i>Journal of Chemical Ecology</i> , 2006, 32, 2333-2349.	1.8	139
11	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
12	An NPF transporter exports a central monoterpene indole alkaloid intermediate from the vacuole. <i>Nature Plants</i> , 2017, 3, 16208.	9.3	123
13	Formation of Simple Nitriles upon Glucosinolate Hydrolysis Affects Direct and Indirect Defense Against the Specialist Herbivore, Pieris rapae. <i>Journal of Chemical Ecology</i> , 2008, 34, 1311-1321.	1.8	115
14	Glucosinolate hydrolysis in Lepidium sativum – identification of the thiocyanate-forming protein. <i>Plant Molecular Biology</i> , 2006, 63, 49-61.	3.9	110
15	How does a plant orchestrate defense in time and space? Using glucosinolates in Arabidopsis as case study. <i>Current Opinion in Plant Biology</i> , 2017, 38, 142-147.	7.1	109
16	R2R3 MYB Transcription Factors – Functions outside the DNA-Binding Domain. <i>Trends in Plant Science</i> , 2019, 24, 934-946.	8.8	109
17	ESP and ESM1 mediate indol-3-acetonitrile production from indol-3-ylmethyl glucosinolate in Arabidopsis. <i>Phytochemistry</i> , 2008, 69, 663-671.	2.9	90
18	Evolution of specifier proteins in glucosinolate-containing plants. <i>BMC Evolutionary Biology</i> , 2012, 12, 127.	3.2	87

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19	Tipping the Scales—Specifier Proteins in Glucosinolate Hydrolysis. IUBMB Life, 2007, 59, 744-751.	3.4	86
20	An evolutionarily young defense metabolite influences the root growth of plants via the ancient TOR signaling pathway. ELife, 2017, 6, .	6.0	84
21	Regulatory networks of glucosinolates shape Arabidopsis thaliana fitness. Current Opinion in Plant Biology, 2010, 13, 347-352.	7.1	81
22	Transcriptome and Metabolite Changes during Hydrogen Cyanamide-Induced Floral Bud Break in Sweet Cherry. Frontiers in Plant Science, 2017, 8, 1233.	3.6	81
23	Regulation and function of specifier proteins in plants. Phytochemistry Reviews, 2009, 8, 87-99.	6.5	72
24	Localization of the glucosinolate biosynthetic enzymes reveals distinct spatial patterns for the biosynthesis of indole and aliphatic glucosinolates. Physiologia Plantarum, 2018, 163, 138-154.	5.2	69
25	Fusion of Ferredoxin and Cytochrome P450 Enables Direct Light-Driven Biosynthesis. ACS Chemical Biology, 2016, 11, 1862-1869.	3.4	67
26	Metabolic engineering of light-driven cytochrome P450 dependent pathways into Synechocystis sp. PCC 6803. Metabolic Engineering, 2016, 33, 1-11.	7.0	66
27	The Glucosinolate Biosynthetic Gene AOP2 Mediates Feed-back Regulation of Jasmonic Acid Signaling in Arabidopsis. Molecular Plant, 2015, 8, 1201-1212.	8.3	62
28	Genome Wide Association Mapping in Arabidopsis thaliana Identifies Novel Genes Involved in Linking Allyl Glucosinolate to Altered Biomass and Defense. Frontiers in Plant Science, 2016, 7, 1010.	3.6	62
29	Natural variation in cross-talk between glucosinolates and onset of flowering in Arabidopsis. Frontiers in Plant Science, 2015, 6, 697.	3.6	60
30	Cell- and tissue-specific localization and regulation of the epithiospecifier protein in Arabidopsis thaliana. Plant Molecular Biology, 2007, 64, 173-185.	3.9	59
31	The Defense Metabolite, Allyl Glucosinolate, Modulates Arabidopsis thaliana Biomass Dependent upon the Endogenous Glucosinolate Pathway. Frontiers in Plant Science, 2016, 7, 774.	3.6	56
32	Analysis and Quantification of Glucosinolates. Current Protocols in Plant Biology, 2016, 1, 385-409.	2.8	53
33	Mixtures of plant secondary metabolites. , 2012, , 56-77.		50
34	Arabidopsis sulfurtransferases: investigation of their function during senescence and in cyanide detoxification. Planta, 2003, 217, 1-10.	3.2	48
35	Reassess the <i>t</i> Test: Interact with All Your Data via ANOVA. Plant Cell, 2015, 27, 2088-2094.	6.6	48
36	Metabolic engineering of Synechocystis sp. PCC 6803 for the production of aromatic amino acids and derived phenylpropanoids. Metabolic Engineering, 2020, 57, 129-139.	7.0	46

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37	<i>Arabidopsis thaliana</i> transcription factors MYB28 and MYB29 shape ammonium stress responses by regulating Fe homeostasis. <i>New Phytologist</i> , 2021, 229, 1021-1035.	7.3	43
38	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
39	Arabinogalactan Glycosyltransferases Target to a Unique Subcellular Compartment That May Function in Unconventional Secretion in Plants. <i>Traffic</i> , 2014, 15, 1219-1234.	2.7	41
40	Coordination of Glucosinolate Biosynthesis and Turnover Under Different Nutrient Conditions. <i>Frontiers in Plant Science</i> , 2019, 10, 1560.	3.6	41
41	An <i>Arabidopsis</i> TIR-Lectin Two-Domain Protein Confers Defense Properties against <i>Tetranychus urticae</i> . <i>Plant Physiology</i> , 2019, 179, 1298-1314.	4.8	38
42	Nitrogen is essential macronutrient and signal controlling flowering time. <i>Physiologia Plantarum</i> , 2018, 162, 251-260.	5.2	36
43	How to discover a metabolic pathway? An update on gene identification in aliphatic glucosinolate biosynthesis, regulation and transport. <i>Biological Chemistry</i> , 2014, 395, 529-543.	2.5	35
44	<i>Arabidopsis gulliver1/superroot2</i> identifies a metabolic basis for auxin and brassinosteroid synergy. <i>Plant Journal</i> , 2014, 80, 797-808.	5.7	35
45	Tat proteins as novel thylakoid membrane anchors organize a biosynthetic pathway in chloroplasts and increase product yield 5-fold. <i>Metabolic Engineering</i> , 2017, 44, 108-116.	7.0	34
46	Diverse Allyl Glucosinolate Catabolites Independently Influence Root Growth and Development. <i>Plant Physiology</i> , 2020, 183, 1376-1390.	4.8	34
47	Insights into the community structure and lifestyle of the fungal root endophytes of tomato by combining amplicon sequencing and isolation approaches with phytohormone profiling. <i>FEMS Microbiology Ecology</i> , 2020, 96, .	2.7	31
48	Specificity of MYB interactions relies on motifs in ordered and disordered contexts. <i>Nucleic Acids Research</i> , 2019, 47, 9592-9608.	14.5	30
49	Dynamic Modeling of Indole Glucosinolate Hydrolysis and Its Impact on Auxin Signaling. <i>Frontiers in Plant Science</i> , 2018, 9, 550.	3.6	27
50	Comparison of the Relative Potential for Epigenetic and Genetic Variation To Contribute to Trait Stability. <i>G3: Genes, Genomes, Genetics</i> , 2018, 8, 1733-1746.	1.8	25
51	PROTEIN PHOSPHATASE 2A Controls <i>Botrytis cinerea</i> Resistance and Developmental Leaf Senescence. <i>Plant Physiology</i> , 2020, 182, 1161-1181.	4.8	25
52	Defining optimal electron transfer partners for light-driven cytochrome P450 reactions. <i>Metabolic Engineering</i> , 2019, 55, 33-43.	7.0	24
53	Unravelling Protein-Protein Interaction Networks Linked to Aliphatic and Indole Glucosinolate Biosynthetic Pathways in <i>Arabidopsis</i> . <i>Frontiers in Plant Science</i> , 2017, 8, 2028.	3.6	21
54	Sulfur-Containing Secondary Metabolites and Their Role in Plant Defense. <i>Advances in Photosynthesis and Respiration</i> , 2008, , 201-222.	1.0	17

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55	Copper toxicity affects indolic glucosinolates and gene expression of key enzymes for their biosynthesis in Chinese cabbage. <i>Archives of Agronomy and Soil Science</i> , 2020, 66, 1288-1301.	2.6	17
56	Differential partitioning of thiols and glucosinolates between shoot and root in Chinese cabbage upon excess zinc exposure. <i>Journal of Plant Physiology</i> , 2020, 244, 153088.	3.5	17
57	Induction and Priming of Plant Defense by Root-Associated Insect-Pathogenic Fungi. <i>Journal of Chemical Ecology</i> , 2021, 47, 112-122.	1.8	17
58	Sulfur metabolism in <i>Allium cepa</i> is hardly affected by chloride and sulfate salinity. <i>Archives of Agronomy and Soil Science</i> , 2019, 65, 945-956.	2.6	16
59	Complex Environments Interact With Plant Development to Shape Glucosinolate Profiles. <i>Advances in Botanical Research</i> , 2016, 80, 15-30.	1.1	15
60	Investigation of the multifunctional gene AOP3 expands the regulatory network fine-tuning glucosinolate production in Arabidopsis. <i>Frontiers in Plant Science</i> , 2015, 6, 762.	3.6	14
61	IDDomainSpotter: Compositional bias reveals domains in long disordered protein regions—Insights from transcription factors. <i>Protein Science</i> , 2020, 29, 169-183.	7.6	14
62	Heterologous microProtein expression identifies LITTLE NINJA, a dominant regulator of jasmonic acid signaling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 26197-26205.	7.1	14
63	Metabolic Changes and Increased Levels of Bioactive Compounds in White Radish ( <i>Raphanus sativus</i> L.) Tj ETQq1 1,0784314 µgBT /O	3.0	11
64	Enzymatic Activity of the Arabidopsis Sulfurtransferase Resides in the C-Terminal Domain But Is Boosted by the N-Terminal Domain and the Linker Peptide in the Full- Length Enzyme. <i>Biological Chemistry</i> , 2002, 383, 1363-72.	2.5	9
65	<i>CB5C</i> affects the glucosinolate profile in <i>Arabidopsis thaliana</i> . <i>Plant Signaling and Behavior</i> , 2016, 11, e1160189.	2.4	9
66	Improving analytical methods for protein-protein interaction through implementation of chemically inducible dimerization. <i>Scientific Reports</i> , 2016, 6, 27766.	3.3	6
67	Characterization of Top Leader Elongation in Nordmann Fir ( <i>Abies nordmanniana</i> ). <i>Journal of Plant Growth Regulation</i> , 2019, 38, 1354-1361.	5.1	6
68	Evolution of A bHLH Interaction Motif. <i>International Journal of Molecular Sciences</i> , 2021, 22, 447.	4.1	5
69	Root-type ferredoxin-NADP oxidoreductase isoforms in <i>Arabidopsis thaliana</i> : Expression patterns, location and stress responses. <i>Plant, Cell and Environment</i> , 2021, 44, 548-558.	5.7	3
70	Cytosolic phosphofructokinases are important for sugar homeostasis in leaves of <i>Arabidopsis thaliana</i> . <i>Annals of Botany</i> , 2022, 129, 37-52.	2.9	3