Roland Mumm

List of Publications by Year
in descending order

66 papers	4,771 citations	87888 38 h-index	102487 66 g-index
69 all docs	69 docs citations	69 times ranked	5813 citing authors

#	Article	IF	Citations
1	Analyses of metabolic activity in peanuts under hermetic storage at different relative humidity levels. Food Chemistry, 2022, 373, 131020.	8.2	16
2	Comparative compositions of metabolites and dietary fibre components in doughs and breads produced from bread wheat, emmer and spelt and using yeast and sourdough processes. Food Chemistry, 2022, 374, 131710.	8.2	22
3	Metabolomics reveals the within-plant spatial effects of shading on tea plants. Tree Physiology, 2021, 41, 317-330.	3.1	17
4	Metabolomics of Photosynthetically Active Tissues in White Grapes: Effects of Light Microclimate and Stress Mitigation Strategies. Metabolites, 2021, 11, 205.	2.9	10
5	Maltodextrin improves physical properties and volatile compound retention of spray-dried asparagus concentrate. LWT - Food Science and Technology, 2021, 142, 111058.	5.2	25
6	Stir bar sorptive extraction of aroma compounds in soy sauce: Revealing the chemical diversity. Food Research International, 2021, 144, 110348.	6.2	8
7	Systematic selection of competing metabolomics methods in a metabolite-sensory relationship study. Metabolomics, 2021, 17, 77.	3.0	3
8	The effect of partial replacement of maltodextrin with vegetable fibres in spray-dried white asparagus powder on its physical and aroma properties. Food Chemistry, 2021, 356, 129567.	8.2	12
9	Metabolomics Reveals Heterogeneity in the Chemical Composition of Green and White Spears of Asparagus (A. officinalis). Metabolites, 2021, 11, 708.	2.9	12
10	Green and White Asparagus (Asparagus officinalis): A Source of Developmental, Chemical and Urinary Intrigue. Metabolites, 2020, 10, 17.	2.9	54
11	Natural variation in specialised metabolites production in the leafy vegetable spider plant (Gynandropsis gynandra L. (Briq.)) in Africa and Asia. Phytochemistry, 2020, 178, 112468.	2.9	9
12	Chemical and Sensory Characteristics of Soy Sauce: A Review. Journal of Agricultural and Food Chemistry, 2020, 68, 11612-11630.	5.2	104
13	Reciprocal cybrids reveal how organellar genomes affect plant phenotypes. Nature Plants, 2020, 6, 13-21.	9.3	40
14	Comparative Metabolomics and Molecular Phylogenetics of Melon (Cucumis melo, Cucurbitaceae) Biodiversity. Metabolites, 2020, 10, 121.	2.9	35
15	Comparison of volatile trapping techniques for the comprehensive analysis of food flavourings by Gas Chromatography-Mass Spectrometry. Journal of Chromatography A, 2020, 1624, 461191.	3.7	35
16	Defense of pyrethrum flowers: repelling herbivores and recruiting carnivores by producing aphid alarm pheromone. New Phytologist, 2019, 223, 1607-1620.	7.3	29
17	Characterization of Male-Produced Aggregation Pheromone of the Bean Flower Thrips Megalurothrips sjostedti (Thysanoptera: Thripidae). Journal of Chemical Ecology, 2019, 45, 348-355.	1.8	21
18	Mass spectrometry-based metabolomics of volatiles as a new tool for understanding aroma and flavour chemistry in processed food products. Metabolomics, 2019, 15, 41.	3.0	125

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19	Metabolic responses of Eucalyptus species to different temperature regimes. Journal of Integrative Plant Biology, 2018, 60, 397-411.	8.5	34
20	Orchestration of transcriptome, proteome and metabolome in the diatom Phaeodactylum tricornutum during nitrogen limitation. Algal Research, 2018, 35, 33-49.	4.6	90
21	Early biotic stress detection in tomato (Solanum lycopersicum) by BVOC emissions. Phytochemistry, 2017, 144, 180-188.	2.9	10
22	Plant Phenotypic and Transcriptional Changes Induced by Volatiles from the Fungal Root Pathogen Rhizoctonia solani. Frontiers in Plant Science, 2017, 8, 1262.	3.6	78
23	A Multidisciplinary Phenotyping and Genotyping Analysis of a Mapping Population Enables Quality to Be Combined with Yield in Rice. Frontiers in Molecular Biosciences, 2017, 4, 32.	3.5	8
24	Quantitative resistance against Bemisia tabaci in Solanum pennellii: Genetics and metabolomics. Journal of Integrative Plant Biology, 2016, 58, 397-412.	8.5	19
25	Improved batch correction in untargeted MS-based metabolomics. Metabolomics, 2016, 12, 88.	3.0	167
26	Gomphrena claussenii, a novel metalâ€hypertolerant bioindicator species, sequesters cadmium, but not zinc, in vacuolar oxalate crystals. New Phytologist, 2015, 208, 763-775.	7.3	28
27	Diversity and functions of volatile organic compounds produced by Streptomyces from a disease-suppressive soil. Frontiers in Microbiology, 2015, 6, 1081.	3.5	174
28	Delving deeper into technological innovations to understand differences in rice quality. Rice, 2015, 8, 43.	4.0	30
29	Comprehensive metabolomics to evaluate the impact of industrial processing on the phytochemical composition of vegetable purees. Food Chemistry, 2015, 168, 348-355.	8.2	60
30	(+)â€Valencene production in Nicotiana benthamiana is increased by downâ€regulation of competing pathways. Biotechnology Journal, 2015, 10, 180-189.	3.5	54
31	Diversity of Global Rice Markets and the Science Required for Consumer-Targeted Rice Breeding. PLoS ONE, 2014, 9, e85106.	2.5	229
32	Normal adult survival but reduced Bemisia tabaci oviposition rate on tomato lines carrying an introgression from S. habrochaites. BMC Genetics, 2014, 15, 142.	2.7	17
33	Metabolomics analysis of postharvest ripening heterogeneity of â€˜Hassâ€™ avocadoes. Postharvest Biology and Technology, 2014, 92, 172-179.	6.0	59
34	Metabolomics in melon: A new opportunity for aroma analysis. Phytochemistry, 2014, 99, 61-72.	2.9	66
35	Comparison of the chemical composition of three species of smartweed (genus Persicaria) with a focus on drimane sesquiterpenoids. Phytochemistry, 2014, 108, 129-136.	2.9	19
36	Cross-platform comparative analyses of genetic variation in amino acid content in potato tubers. Metabolomics, 2014, 10, 1239-1257.	3.0	3

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37	Identification and QTL mapping of whitefly resistance components in Solanum galapagense. Theoretical and Applied Genetics, 2013, 126, 1487-1501.	3.6	66
38	Metabolomic and elemental profiling of melon fruit quality as affected by genotype and environment. Metabolomics, 2013, 9, 57-77.	3.0	74
39	Differences in acidity of apples are probably mainly caused by a malic acid transporter gene on LG16. Tree Genetics and Genomes, 2013, 9, 475-487.	1.6	47
40	Relation between HLA genes, human skin volatiles and attractiveness of humans to malaria mosquitoes. Infection, Genetics and Evolution, 2013, 18, 87-93.	2.3	41
41	Untargeted Metabolic Quantitative Trait Loci Analyses Reveal a Relationship between Primary Metabolism and Potato Tuber Quality Â Â. Plant Physiology, 2012, 158, 1306-1318.	4.8	119
42	The composition of carcass volatile profiles in relation to storage time and climate conditions. Forensic Science International, 2012, 223, 64-71.	2.2	53
43	Resistance factors in pepper inhibit larval development of thrips (<i><scp>F</scp>rankliniella) Tj ETQq1 1 0.784314 rgBT /Overlock 10	1.4	38
44	Extensive metabolic crossâ€talk in melon fruit revealed by spatial and developmental combinatorial metabolomics. New Phytologist, 2011, 190, 683-696.	7.3	111
45	Risk of Egg Parasitoid Attraction Depends on Anti-aphrodisiac Titre in the Large Cabbage White Butterfly Pieris brassicae. Journal of Chemical Ecology, 2011, 37, 364-367.	1.8	10
46	Use of New Generation Single Nucleotide Polymorphism Genotyping for Rapid Development of Nearâ€Isogenic Lines in Rice. Crop Science, 2011, 51, 2067-2073.	1.8	10
47	Composition of Human Skin Microbiota Affects Attractiveness to Malaria Mosquitoes. PLoS ONE, 2011, 6, e28991.	2.5	208
48	The Herbivore-Induced Plant Volatile Methyl Salicylate Negatively Affects Attraction of the Parasitoid Diadegma semiclausum. Journal of Chemical Ecology, 2010, 36, 479-489.	1.8	77
49	Natural variation in herbivore-induced volatiles in Arabidopsis thaliana. Journal of Experimental Botany, 2010, 61, 3041-3056.	4.8	77
50	Variation in natural plant products and the attraction of bodyguards involved in indirect plant defenseThe present review is one in the special series of reviews on animalâ€“plant interactions.. Canadian Journal of Zoology, 2010, 88, 628-667.	1.0	275
51	Whiteflies interfere with indirect plant defense against spider mites in Lima bean. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 21202-21207.	7.1	247
52	Jasmonic acid-induced volatiles of Brassica oleracea attract parasitoids: effects of time and dose, and comparison with induction by herbivores. Journal of Experimental Botany, 2009, 60, 2575-2587.	4.8	151
53	Comparing induction at an early and late step in signal transduction mediating indirect defence in Brassica oleracea. Journal of Experimental Botany, 2009, 60, 2589-2599.	4.8	17
54	Anti-aphrodisiac Compounds of Male Butterflies Increase the Risk of Egg Parasitoid Attack by Inducing Plant Synomone Production. Journal of Chemical Ecology, 2009, 35, 1373-1381.	1.8	48

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55	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.	1.8	115
56	Significance of terpenoids in induced indirect plant defence against herbivorous arthropods. Plant, Cell and Environment, 2008, 31, 575-585.	5.7	131
57	Foraging behavior of egg parasitoids exploiting chemical information. Behavioral Ecology, 2008, 19, 677-689.	2.2	237
58	Male-derived butterfly anti-aphrodisiac mediates induced indirect plant defense. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 10033-10038.	7.1	109
59	Isoprene interferes with the attraction of bodyguards by herbaceous plants. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 17430-17435.	7.1	129
60	Courtship Pheromones in Parasitic Wasps: Comparison of Bioactive and Inactive Hydrocarbon Profiles by Multivariate Statistical Methods. Journal of Chemical Ecology, 2007, 33, 825-838.	1.8	39
61	Direct and indirect chemical defence of pine against folivorous insects. Trends in Plant Science, 2006, 11, 351-358.	8.8	176
62	Choosy egg parasitoids: Specificity of oviposition‚Äêinduced pine volatiles exploited by an egg parasitoid of pine sawflies. Entomologia Experimentalis Et Applicata, 2005, 115, 217-225.	1.4	51
63	The Significance of Background Odour for an Egg Parasitoid to Detect Plants with Host Eggs. Chemical Senses, 2005, 30, 337-343.	2.0	131
64	Insect egg deposition induces defence responses in Pinus sylvestris: characterisation of the elicitor. Journal of Experimental Biology, 2005, 208, 1849-1854.	1.7	92
65	Analysis of volatiles from black pine (): significance of wounding and egg deposition by a herbivorous sawfly. Phytochemistry, 2004, 65, 3221-3230.	2.9	44
66	Chemical analysis of volatiles emitted by Pinus svlvestris after induction by insect oviposition. Journal of Chemical Ecology, 2003, 29, 1235-1252.	1.8	125