Roland Mumm

List of Publications by Year
in descending order

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Version: 2024-02-01

66 papers	4,771 citations	87723 38 h-index	102304 66 g-index
69 all docs	69 docs citations	69 times ranked	5813 citing authors

#	Article	IF	Citations
1	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.	0.4	275
2	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.	3.3	247
3	Foraging behavior of egg parasitoids exploiting chemical information. Behavioral Ecology, 2008, 19, 677-689.	1.0	237
4	Diversity of Global Rice Markets and the Science Required for Consumer-Targeted Rice Breeding. PLoS ONE, 2014, 9, e85106.	1.1	229
5	Composition of Human Skin Microbiota Affects Attractiveness to Malaria Mosquitoes. PLoS ONE, 2011, 6, e28991.	1.1	208
6	Direct and indirect chemical defence of pine against folivorous insects. Trends in Plant Science, 2006, 11, 351-358.	4.3	176
7	Diversity and functions of volatile organic compounds produced by Streptomyces from a disease-suppressive soil. Frontiers in Microbiology, 2015, 6, 1081.	1.5	174
8	Improved batch correction in untargeted MS-based metabolomics. Metabolomics, 2016, 12, 88.	1.4	167
9	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.	2.4	151
10	The Significance of Background Odour for an Egg Parasitoid to Detect Plants with Host Eggs. Chemical Senses, 2005, 30, 337-343.	1.1	131
11	Significance of terpenoids in induced indirect plant defence against herbivorous arthropods. Plant, Cell and Environment, 2008, 31, 575-585.	2.8	131
12	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.	3.3	129
13	Chemical analysis of volatiles emitted by Pinus sylvestris after induction by insect oviposition. Journal of Chemical Ecology, 2003, 29, 1235-1252.	0.9	125
14	Mass spectrometry-based metabolomics of volatiles as a new tool for understanding aroma and flavour chemistry in processed food products. Metabolomics, 2019, 15, 41.	1.4	125
15	Untargeted Metabolic Quantitative Trait Loci Analyses Reveal a Relationship between Primary Metabolism and Potato Tuber Quality Â Â. Plant Physiology, 2012, 158, 1306-1318.	2.3	119
16	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
17	Extensive metabolic crossâ€talk in melon fruit revealed by spatial and developmental combinatorial metabolomics. New Phytologist, 2011, 190, 683-696.	3.5	111
18	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.	3.3	109

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19	Chemical and Sensory Characteristics of Soy Sauce: A Review. Journal of Agricultural and Food Chemistry, 2020, 68, 11612-11630.	2.4	104
20	Insect egg deposition induces defence responses in Pinus sylvestris: characterisation of the elicitor. Journal of Experimental Biology, 2005, 208, 1849-1854.	0.8	92
21	Orchestration of transcriptome, proteome and metabolome in the diatom Phaeodactylum tricornutum during nitrogen limitation. Algal Research, 2018, 35, 33-49.	2.4	90
22	Plant Phenotypic and Transcriptional Changes Induced by Volatiles from the Fungal Root Pathogen Rhizoctonia solani. Frontiers in Plant Science, 2017, 8, 1262.	1.7	78
23	The Herbivore-Induced Plant Volatile Methyl Salicylate Negatively Affects Attraction of the Parasitoid Diadegma semiclausum. Journal of Chemical Ecology, 2010, 36, 479-489.	0.9	77
24	Natural variation in herbivore-induced volatiles in Arabidopsis thaliana. Journal of Experimental Botany, 2010, 61, 3041-3056.	2.4	77
25	Metabolomic and elemental profiling of melon fruit quality as affected by genotype and environment. Metabolomics, 2013, 9, 57-77.	1.4	74
26	Identification and QTL mapping of whitefly resistance components in Solanum galapagense. Theoretical and Applied Genetics, 2013, 126, 1487-1501.	1.8	66
27	Metabolomics in melon: A new opportunity for aroma analysis. Phytochemistry, 2014, 99, 61-72.	1.4	66
28	Comprehensive metabolomics to evaluate the impact of industrial processing on the phytochemical composition of vegetable purees. Food Chemistry, 2015, 168, 348-355.	4.2	60
29	Metabolomics analysis of postharvest ripening heterogeneity of â€˜Hassâ€™ avocadoes. Postharvest Biology and Technology, 2014, 92, 172-179.	2.9	59
30	(+)â€Valencene production in Nicotiana benthamiana is increased by downâ€regulation of competing pathways. Biotechnology Journal, 2015, 10, 180-189.	1.8	54
31	Green and White Asparagus (Asparagus officinalis): A Source of Developmental, Chemical and Urinary Intrigue. Metabolites, 2020, 10, 17.	1.3	54
32	The composition of carcass volatile profiles in relation to storage time and climate conditions. Forensic Science International, 2012, 223, 64-71.	1.3	53
33	Choosy egg parasitoids: Specificity of ovipositionâ€induced pine volatiles exploited by an egg parasitoid of pine sawflies. Entomologia Experimentalis Et Applicata, 2005, 115, 217-225.	0.7	51
34	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.	0.9	48
35	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.	0.6	47
36	Analysis of volatiles from black pine (): significance of wounding and egg deposition by a herbivorous sawfly. Phytochemistry, 2004, 65, 3221-3230.	1.4	44

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37	Relation between HLA genes, human skin volatiles and attractiveness of humans to malaria mosquitoes. Infection, Genetics and Evolution, 2013, 18, 87-93.	1.0	41
38	Reciprocal cybrids reveal how organellar genomes affect plant phenotypes. Nature Plants, 2020, 6, 13-21.	4.7	40
39	Courtship Pheromones in Parasitic Wasps: Comparison of Bioactive and Inactive Hydrocarbon Profiles by Multivariate Statistical Methods. Journal of Chemical Ecology, 2007, 33, 825-838.	0.9	39
40	Resistance factors in pepper inhibit larval development of thrips (<scp>F</scp>rankliniella) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 622	0.7	38
41	Comparative Metabolomics and Molecular Phylogenetics of Melon (Cucumis melo, Cucurbitaceae) Biodiversity. Metabolites, 2020, 10, 121.	1.3	35
42	Comparison of volatile trapping techniques for the comprehensive analysis of food flavourings by Gas Chromatography-Mass Spectrometry. Journal of Chromatography A, 2020, 1624, 461191.	1.8	35
43	Metabolic responses of Eucalyptus species to different temperature regimes. Journal of Integrative Plant Biology, 2018, 60, 397-411.	4.1	34
44	Delving deeper into technological innovations to understand differences in rice quality. Rice, 2015, 8, 43.	1.7	30
45	Defense of pyrethrum flowers: repelling herbivores and recruiting carnivores by producing aphid alarm pheromone. New Phytologist, 2019, 223, 1607-1620.	3.5	29
46	Gomphrena claussenii, a novel metalâ€hypertolerant bioindicator species, sequesters cadmium, but not zinc, in vacuolar oxalate crystals. New Phytologist, 2015, 208, 763-775.	3.5	28
47	Maltodextrin improves physical properties and volatile compound retention of spray-dried asparagus concentrate. LWT - Food Science and Technology, 2021, 142, 111058.	2.5	25
48	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.	4.2	22
49	Characterization of Male-Produced Aggregation Pheromone of the Bean Flower Thrips Megalurothrips sjostedti (Thysanoptera: Thripidae). Journal of Chemical Ecology, 2019, 45, 348-355.	0.9	21
50	Comparison of the chemical composition of three species of smartweed (genus Persicaria) with a focus on drimane sesquiterpenoids. Phytochemistry, 2014, 108, 129-136.	1.4	19
51	Quantitative resistance against Bemisia tabaci in Solanum pennellii: Genetics and metabolomics. Journal of Integrative Plant Biology, 2016, 58, 397-412.	4.1	19
52	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.	2.4	17
53	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
54	Metabolomics reveals the within-plant spatial effects of shading on tea plants. Tree Physiology, 2021, 41, 317-330.	1.4	17

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55	Analyses of metabolic activity in peanuts under hermetic storage at different relative humidity levels. Food Chemistry, 2022, 373, 131020.	4.2	16
56	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.	4.2	12
57	Metabolomics Reveals Heterogeneity in the Chemical Composition of Green and White Spears of Asparagus (A. officinalis). Metabolites, 2021, 11, 708.	1.3	12
58	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.	0.9	10
59	Use of New Generation Single Nucleotide Polymorphism Genotyping for Rapid Development of Nearâ€Isogenic Lines in Rice. Crop Science, 2011, 51, 2067-2073.	0.8	10
60	Early biotic stress detection in tomato (Solanum lycopersicum) by BVOC emissions. Phytochemistry, 2017, 144, 180-188.	1.4	10
61	Metabolomics of Photosynthetically Active Tissues in White Grapes: Effects of Light Microclimate and Stress Mitigation Strategies. Metabolites, 2021, 11, 205.	1.3	10
62	Natural variation in specialised metabolites production in the leafy vegetable spider plant (Gynandropsis gynandra L. (Briq.)) in Africa and Asia. Phytochemistry, 2020, 178, 112468.	1.4	9
63	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.	1.6	8
64	Stir bar sorptive extraction of aroma compounds in soy sauce: Revealing the chemical diversity. Food Research International, 2021, 144, 110348.	2.9	8
65	Cross-platform comparative analyses of genetic variation in amino acid content in potato tubers. Metabolomics, 2014, 10, 1239-1257.	1.4	3
66	Systematic selection of competing metabolomics methods in a metabolite-sensory relationship study. Metabolomics, 2021, 17, 77.	1.4	3