

Lizelle A Piater

List of Publications by Year in descending order

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Version: 2024-02-01

71
papers

3,374
citations

218677

26
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149698

56
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71
docs citations

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times ranked

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#	ARTICLE	IF	CITATIONS
1	Comparative Metabolite Profiling of Wheat Cultivars (<i>Triticum aestivum</i>) Reveals Signatory Markers for Resistance and Susceptibility to Stripe Rust and Aluminium (Al ³⁺) Toxicity. <i>Metabolites</i> , 2022, 12, 98.	2.9	13
2	Rhizosphere Tripartite Interactions and PGPR-Mediated Metabolic Reprogramming towards ISR and Plant Priming: A Metabolomics Review. <i>Biology</i> , 2022, 11, 346.	2.8	33
3	Metabolomic Characterisation of Discriminatory Metabolites Involved in Halo Blight Disease in Oat Cultivars Caused by <i>Pseudomonas syringae</i> pv. <i>coronafaciens</i> . <i>Metabolites</i> , 2022, 12, 248.	2.9	6
4	Hordatines and Associated Precursors Dominate Metabolite Profiles of Barley (<i>Hordeum vulgare</i> L.) Seedlings: A Metabolomics Study of Five Cultivars. <i>Metabolites</i> , 2022, 12, 310.	2.9	4
5	Untargeted Metabolomics Profiling of Arabidopsis WT, <i>lbr-2-2</i> and <i>bak1-4</i> Mutants Following Treatment with Two LPS Chemotypes. <i>Metabolites</i> , 2022, 12, 379.	2.9	4
6	Plasma Membrane-Associated Proteins Identified in Arabidopsis Wild Type, <i>lbr2-2</i> and <i>bak1-4</i> Mutants Treated with LPSs from <i>Pseudomonas syringae</i> and <i>Xanthomonas campestris</i> . <i>Membranes</i> , 2022, 12, 606.	3.0	1
7	Molecular mechanisms associated with microbial biostimulant-mediated growth enhancement, priming and drought stress tolerance in maize plants. <i>Scientific Reports</i> , 2022, 12, .	3.3	24
8	Hydroxycinnamate Amides: Intriguing Conjugates of Plant Protective Metabolites. <i>Trends in Plant Science</i> , 2021, 26, 184-195.	8.8	51
9	Metabolomics for Biomarker Discovery: Key Signatory Metabolic Profiles for the Identification and Discrimination of Oat Cultivars. <i>Metabolites</i> , 2021, 11, 165.	2.9	20
10	A Metabolomic Landscape of Maize Plants Treated With a Microbial Biostimulant Under Well-Watered and Drought Conditions. <i>Frontiers in Plant Science</i> , 2021, 12, 676632.	3.6	36
11	Metabolomic Evaluation of Tissue-Specific Defense Responses in Tomato Plants Modulated by PGPR-Priming against <i>Phytophthora capsici</i> Infection. <i>Plants</i> , 2021, 10, 1530.	3.5	21
12	Plant Responses to Abiotic Stresses and Rhizobacterial Biostimulants: Metabolomics and Epigenetics Perspectives. <i>Metabolites</i> , 2021, 11, 457.	2.9	28
13	A Metabolomics Approach and Chemometric Tools for Differentiation of Barley Cultivars and Biomarker Discovery. <i>Metabolites</i> , 2021, 11, 578.	2.9	11
14	Altered metabolomic states elicited by Flg22 and FlgII-28 in <i>Solanum lycopersicum</i> : intracellular perturbations and metabolite defenses. <i>BMC Plant Biology</i> , 2021, 21, 429.	3.6	9
15	Soil Salinity, a Serious Environmental Issue and Plant Responses: A Metabolomics Perspective. <i>Metabolites</i> , 2021, 11, 724.	2.9	34
16	A Global Metabolic Map Defines the Effects of a Si-Based Biostimulant on Tomato Plants under Normal and Saline Conditions. <i>Metabolites</i> , 2021, 11, 820.	2.9	6
17	Metabolomic Evaluation of <i>Ralstonia solanacearum</i> Cold Shock Protein Peptide (<i>csp22</i>)-Induced Responses in <i>Solanum lycopersicum</i> . <i>Frontiers in Plant Science</i> , 2021, 12, 803104.	3.6	8
18	Identification of MAMP-Responsive Plasma Membrane-Associated Proteins in Arabidopsis thaliana Following Challenge with Different LPS Chemotypes from <i>Xanthomonas campestris</i> . <i>Pathogens</i> , 2020, 9, 787.	2.8	14

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19	Lipopolysaccharide perception in <i>Arabidopsis thaliana</i> : Diverse LPS chemotypes from <i>Burkholderia cepacia</i> , <i>Pseudomonas syringae</i> and <i>Xanthomonas campestris</i> trigger differential defence-related perturbations in the metabolome. <i>Plant Physiology and Biochemistry</i> , 2020, 156, 267-277.	5.8	11
20	Concurrent Metabolic Profiling and Quantification of Aromatic Amino Acids and Phytohormones in <i>Solanum lycopersicum</i> Plants Responding to <i>Phytophthora capsici</i> . <i>Metabolites</i> , 2020, 10, 466.	2.9	14
21	Lipopolysaccharides trigger synthesis of the allelochemical sorgoleone in cell cultures of <i>Sorghum bicolor</i> . <i>Plant Signaling and Behavior</i> , 2020, 15, 1796340.	2.4	2
22	Biostimulants for Plant Growth and Mitigation of Abiotic Stresses: A Metabolomics Perspective. <i>Metabolites</i> , 2020, 10, 505.	2.9	116
23	Metabolomics: A Tool for Cultivar Phenotyping and Investigation of Grain Crops. <i>Agronomy</i> , 2020, 10, 831.	3.0	40
24	Adaptive defence-related changes in the metabolome of <i>Sorghum bicolor</i> cells in response to lipopolysaccharides of the pathogen <i>Burkholderia andropogonis</i> . <i>Scientific Reports</i> , 2020, 10, 7626.	3.3	18
25	Prospects of Gene Knockouts in the Functional Study of MAMP-Triggered Immunity: A Review. <i>International Journal of Molecular Sciences</i> , 2020, 21, 2540.	4.1	10
26	Metabolic Profiling of PGPR-Treated Tomato Plants Reveal Priming-Related Adaptations of Secondary Metabolites and Aromatic Amino Acids. <i>Metabolites</i> , 2020, 10, 210.	2.9	44
27	The Disruptive 4IR in the Life Sciences: Metabolomics. <i>Lecture Notes in Electrical Engineering</i> , 2020, , 227-256.	0.4	4
28	Habituated <i>Moringa oleifera</i> callus retains metabolic responsiveness to external plant growth regulators. <i>Plant Cell, Tissue and Organ Culture</i> , 2019, 137, 249-264.	2.3	5
29	Time-resolved decoding of metabolic signatures of in vitro growth of the hemibiotrophic pathogen <i>Colletotrichum sublineolum</i> . <i>Scientific Reports</i> , 2019, 9, 3290.	3.3	12
30	Identification of Candidate Ergosterol-Responsive Proteins Associated with the Plasma Membrane of <i>Arabidopsis thaliana</i> . <i>International Journal of Molecular Sciences</i> , 2019, 20, 1302.	4.1	17
31	Untargeted Metabolomics Reveal Defensome-Related Metabolic Reprogramming in <i>Sorghum bicolor</i> against Infection by <i>Burkholderia andropogonis</i> . <i>Metabolites</i> , 2019, 9, 8.	2.9	41
32	Unravelling the Metabolic Reconfiguration of the Post-Challenge Primed State in <i>Sorghum bicolor</i> Responding to <i>Colletotrichum sublineolum</i> Infection. <i>Metabolites</i> , 2019, 9, 194.	2.9	22
33	Metabolomics-guided investigations of unintended effects of the expression of the hydroxycinnamoyl quinate hydroxycinnamoyltransferase (<i>hqt1</i>) gene from <i>Cynara cardunculus</i> var. <i>scolymus</i> in <i>Nicotiana tabacum</i> cell cultures. <i>Plant Physiology and Biochemistry</i> , 2018, 127, 287-298.	5.8	15
34	Differential extraction of phytochemicals from the multipurpose tree, <i>Moringa oleifera</i> , using green extraction solvents. <i>South African Journal of Botany</i> , 2018, 115, 81-89.	2.5	47
35	Mass spectrometry in untargeted liquid chromatography/mass spectrometry metabolomics: Electrospray ionisation parameters and global coverage of the metabolome. <i>Rapid Communications in Mass Spectrometry</i> , 2018, 32, 121-132.	1.5	18
36	The Chemistry of Plant-Microbe Interactions in the Rhizosphere and the Potential for Metabolomics to Reveal Signaling Related to Defense Priming and Induced Systemic Resistance. <i>Frontiers in Plant Science</i> , 2018, 9, 112.	3.6	338

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37	Metabolomics in Plant Priming Research: The Way Forward?. International Journal of Molecular Sciences, 2018, 19, 1759.	4.1	83
38	Metabolomic Analysis of Defense-Related Reprogramming in Sorghum bicolor in Response to Colletotrichum sublineolum Infection Reveals a Functional Metabolic Web of Phenylpropanoid and Flavonoid Pathways. Frontiers in Plant Science, 2018, 9, 1840.	3.6	83
39	Subcritical Water Extraction of Biological Materials. Separation and Purification Reviews, 2017, 46, 21-34.	5.5	101
40	Proteomic analysis of Arabidopsis plasma membranes reveals lipopolysaccharide-responsive changes. Biochemical and Biophysical Research Communications, 2017, 486, 1137-1142.	2.1	5
41	Untargeted metabolomics analysis reveals dynamic changes in azelaic acid- and salicylic acid derivatives in LPS-treated Nicotiana tabacum cells. Biochemical and Biophysical Research Communications, 2017, 482, 1498-1503.	2.1	7
42	Identification of lipopolysaccharide-interacting plasma membrane-type proteins in Arabidopsis thaliana. Plant Physiology and Biochemistry, 2017, 111, 155-165.	5.8	23
43	Gamma radiation treatment activates glucomoringin synthesis in Moringa oleifera. Revista Brasileira De Farmacognosia, 2017, 27, 569-575.	1.4	6
44	A Conversation on Data Mining Strategies in LC-MS Untargeted Metabolomics: Pre-Processing and Pre-Treatment Steps. Metabolites, 2016, 6, 40.	2.9	62
45	The Lipopolysaccharide-Induced Metabolome Signature in Arabidopsis thaliana Reveals Dynamic Reprogramming of Phytoalexin and Phytoanticipin Pathways. PLoS ONE, 2016, 11, e0163572.	2.5	30
46	Phenylpropanoid Defences in Nicotiana tabacum Cells: Overlapping Metabolomes Indicate Common Aspects to Priming Responses Induced by Lipopolysaccharides, Chitosan and Flagellin-22. PLoS ONE, 2016, 11, e0151350.	2.5	46
47	Profiling of Altered Metabolomic States in Nicotiana tabacum Cells Induced by Priming Agents. Frontiers in Plant Science, 2016, 7, 1527.	3.6	44
48	Simultaneous analysis of defense-related phytohormones in Arabidopsis thaliana responding to fungal infection. Applications in Plant Sciences, 2016, 4, 1600013.	2.1	19
49	Cloning of the cnr operon into a strain of Bacillaceae bacterium for the development of a suitable biosorbent. World Journal of Microbiology and Biotechnology, 2016, 32, 114.	3.6	1
50	Distribution patterns of flavonoids from three Momordica species by ultra-high performance liquid chromatography quadrupole time of flight mass spectrometry: a metabolomic profiling approach. Revista Brasileira De Farmacognosia, 2016, 26, 507-513.	1.4	29
51	Perturbation of pharmacologically relevant polyphenolic compounds in Moringa oleifera against photo-oxidative damages imposed by gamma radiation. Journal of Photochemistry and Photobiology B: Biology, 2016, 156, 79-86.	3.8	44
52	Isonitrosoacetophenone Drives Transcriptional Reprogramming in Nicotiana tabacum Cells in Support of Innate Immunity and Defense. PLoS ONE, 2015, 10, e0117377.	2.5	9
53	Comparative conventional- and quantum dot-labeling strategies for LPS binding site detection in Arabidopsis thaliana mesophyll protoplasts. Frontiers in Plant Science, 2015, 6, 335.	3.6	11
54	Secondary metabolite perturbations in Phaseolus vulgaris leaves due to gamma radiation. Plant Physiology and Biochemistry, 2015, 97, 287-295.	5.8	27

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55	Analyses of chlorogenic acids and related cinnamic acid derivatives from <i>Nicotiana tabacum</i> tissues with the aid of UPLC-QTOF-MS/MS based on the in-source collision-induced dissociation method. <i>Chemistry Central Journal</i> , 2014, 8, 66.	2.6	116
56	Priming agents of plant defence stimulate the accumulation of mono- and di-acylated quinic acids in cultured tobacco cells. <i>Physiological and Molecular Plant Pathology</i> , 2014, 88, 61-66.	2.5	41
57	Metabolomic insights into the bioconversion of isonitrosoacetophenone in <i>Arabidopsis thaliana</i> and its effects on defense-related pathways. <i>Plant Physiology and Biochemistry</i> , 2014, 84, 87-95.	5.8	8
58	Multivariate statistical models of metabolomic data reveals different metabolite distribution patterns in isonitrosoacetophenone-elicited <i>Nicotiana tabacum</i> and <i>Sorghum bicolor</i> cells. <i>SpringerPlus</i> , 2014, 3, 254.	1.2	45
59	Ergosterol, an orphan fungal microbe-associated molecular pattern (<sc>MAMP</sc>). <i>Molecular Plant Pathology</i> , 2014, 15, 747-761.	4.2	58
60	Multi-Platform Metabolomic Analyses of Ergosterol-Induced Dynamic Changes in <i>Nicotiana tabacum</i> Cells. <i>PLoS ONE</i> , 2014, 9, e87846.	2.5	53
61	Metabolomic analysis of isonitrosoacetophenone-induced perturbations in phenolic metabolism of <i>Nicotiana tabacum</i> cells. <i>Phytochemistry</i> , 2013, 94, 82-90.	2.9	13
62	The Short and Long of it: Shorter Chromatographic Analysis Suffice for Sample Classification During UHPLC-MS-Based Metabolic Fingerprinting. <i>Chromatographia</i> , 2013, 76, 279-285.	1.3	7
63	Plant metabolomics: A new frontier in phytochemical analysis. <i>South African Journal of Science</i> , 2013, 109, 11.	0.7	125
64	The NAC transcription factor gene ANAC072 is differentially expressed in <i>Arabidopsis thaliana</i> in response to microbe-associated molecular pattern (MAMP) molecules. <i>Physiological and Molecular Plant Pathology</i> , 2012, 80, 19-27.	2.5	10
65	Ergosterol-Induced Sesquiterpenoid Synthesis in Tobacco Cells. <i>Molecules</i> , 2012, 17, 1698-1715.	3.8	25
66	Collision energy alteration during mass spectrometric acquisition is essential to ensure unbiased metabolomic analysis. <i>Analytical and Bioanalytical Chemistry</i> , 2012, 404, 367-372.	3.7	26
67	Biotransformation of isonitrosoacetophenone (2-keto-2-phenyl-acetaldoxime) in tobacco cell suspensions. <i>Biotechnology Letters</i> , 2012, 34, 1351-1356.	2.2	5
68	A thioredoxin reductase-like protein from the thermophile, <i>Thermus scotoductus</i> fSA-01, displaying iron reductase activity. <i>FEMS Microbiology Letters</i> , 2010, 302, 182-188.	1.8	6
69	Reduction of vanadium(V) by <i>Enterobacter cloacae</i> EV-SA01 isolated from a South African deep gold mine. <i>Biotechnology Letters</i> , 2009, 31, 845-849.	2.2	36
70	Innate immunity in plants and animals: striking similarities and obvious differences. <i>Immunological Reviews</i> , 2004, 198, 249-266.	6.0	1,071
71	Subcritical Water Extraction and Its Prospects for Aflatoxins Extraction in Biological Materials. , 0, , .		2