# Lizelle A Piater

## List of Publications by Year in Descending Order



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|---|---|---|---|
| 65 papers | 2,242 citations | 21 h-index | 47 g-index |
| 71 ext. papers | 2,845 ext. citations | 4.6 avg, IF | 5.28 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 65 | Untargeted Metabolomics Profiling of Arabidopsis WT, lbr-2-2 and bak1-4 Mutants Following Treatment with Two LPS Chemotypes. *Metabolites*, **2022**, 12, 379 | 5.6 | 0 |
| 64 | Molecular mechanisms associated with microbial biostimulant-mediated growth enhancement, priming and drought stress tolerance in maize plants. *Scientific Reports*, **2022**, 12, | 4.9 | 6 |
| 63 | A Global Metabolic Map Defines the Effects of a Si-Based Biostimulant on Tomato Plants under Normal and Saline Conditions.. *Metabolites*, **2021**, 11, | 5.6 | 2 |
| 62 | Metabolomic Evaluation of Cold Shock Protein Peptide (csp22)-Induced Responses in .. *Frontiers in Plant Science*, **2021**, 12, 803104 | 6.2 | 0 |
| 61 | Soil Salinity, a Serious Environmental Issue and Plant Responses: A Metabolomics Perspective. *Metabolites*, **2021**, 11, | 5.6 | 2 |
| 60 | Metabolomics for Biomarker Discovery: Key Signatory Metabolic Profiles for the Identification and Discrimination of Oat Cultivars. *Metabolites*, **2021**, 11, | 5.6 | 3 |
| 59 | A Metabolomic Landscape of Maize Plants Treated With a Microbial Biostimulant Under Well-Watered and Drought Conditions. *Frontiers in Plant Science*, **2021**, 12, 676632 | 6.2 | 13 |
| 58 | Hydroxycinnamate Amides: Intriguing Conjugates of Plant Protective Metabolites. *Trends in Plant Science*, **2021**, 26, 184-195 | 13.1 | 14 |
| 57 | Metabolomic Evaluation of Tissue-Specific Defense Responses in Tomato Plants Modulated by PGPR-Priming against Infection. *Plants*, **2021**, 10, | 4.5 | 6 |
| 56 | Plant Responses to Abiotic Stresses and Rhizobacterial Biostimulants: Metabolomics and Epigenetics Perspectives. *Metabolites*, **2021**, 11, | 5.6 | 5 |
| 55 | Altered metabolomic states elicited by Flg22 and FlgII-28 in Solanum lycopersicum: intracellular perturbations and metabolite defenses. *BMC Plant Biology*, **2021**, 21, 429 | 5.3 | 1 |
| 54 | Metabolomics: A Tool for Cultivar Phenotyping and Investigation of Grain Crops. *Agronomy*, **2020**, 10, 831 | 3.6 | 21 |
| 53 | Adaptive defence-related changes in the metabolome of Sorghum bicolor cells in response to lipopolysaccharides of the pathogen Burkholderia andropogonis. *Scientific Reports*, **2020**, 10, 7626 | 4.9 | 10 |
| 52 | The Disruptive 4IR in the Life Sciences: Metabolomics. *Lecture Notes in Electrical Engineering*, **2020**, 227-256 | 0.2 | 1 |
| 51 | Metabolic Profiling of PGPR-Treated Tomato Plants Reveal Priming-Related Adaptations of Secondary Metabolites and Aromatic Amino Acids. *Metabolites*, **2020**, 10, | 5.6 | 12 |
| 50 | Identification of MAMP-Responsive Plasma Membrane-Associated Proteins in Following Challenge with Different LPS Chemotypes from. *Pathogens*, **2020**, 9, | 4.5 | 2 |
| 49 | Lipopolysaccharide perception in Arabidopsis thaliana: Diverse LPS chemotypes from Burkholderia cepacia, Pseudomonas syringae and Xanthomonas campestris trigger differential defence-related perturbations in the metabolome. *Plant Physiology and Biochemistry*, **2020**, 156, 267-277 | 5.4 | 6 |

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|---|---|---|---|
| 48 | Concurrent Metabolic Profiling and Quantification of Aromatic Amino Acids and Phytohormones in Plants Responding to. *Metabolites*, **2020**, 10, | 5.6 | 6 |
| 47 | Lipopolysaccharides trigger synthesis of the allelochemical sorgoleone in cell cultures of. *Plant Signaling and Behavior*, **2020**, 15, 1796340 | 2.5 | 1 |
| 46 | Biostimulants for Plant Growth and Mitigation of Abiotic Stresses: A Metabolomics Perspective. *Metabolites*, **2020**, 10, | 5.6 | 39 |
| 45 | Prospects of Gene Knockouts in the Functional Study of MAMP-Triggered Immunity: A Review. *International Journal of Molecular Sciences*, **2020**, 21, | 6.3 | 4 |
| 44 | Habituated Moringa oleifera callus retains metabolic responsiveness to external plant growth regulators. *Plant Cell, Tissue and Organ Culture*, **2019**, 137, 249-264 | 2.7 | 1 |
| 43 | Time-resolved decoding of metabolic signatures of in vitro growth of the hemibiotrophic pathogen Colletotrichum sublineolum. *Scientific Reports*, **2019**, 9, 3290 | 4.9 | 7 |
| 42 | Identification of Candidate Ergosterol-Responsive Proteins Associated with the Plasma Membrane of. *International Journal of Molecular Sciences*, **2019**, 20, | 6.3 | 10 |
| 41 | Untargeted Metabolomics Reveal Defensome-Related Metabolic Reprogramming in against Infection by. *Metabolites*, **2019**, 9, | 5.6 | 24 |
| 40 | Unravelling the Metabolic Reconfiguration of the Post-Challenge Primed State in Responding to Infection. *Metabolites*, **2019**, 9, | 5.6 | 15 |
| 39 | Metabolomic Analysis of Defense-Related Reprogramming in in Response to Infection Reveals a Functional Metabolic Web of Phenylpropanoid and Flavonoid Pathways. *Frontiers in Plant Science*, **2018**, 9, 1840 | 6.2 | 38 |
| 38 | Metabolomics-guided investigations of unintended effects of the expression of the hydroxycinnamoyl quinate hydroxycinnamoyltransferase (hqt1) gene from Cynara cardunculus var. scolymus in Nicotiana tabacum cell cultures. *Plant Physiology and Biochemistry*, **2018**, 127, 287-298 | 5.4 | 5 |
| 37 | Differential extraction of phytochemicals from the multipurpose tree, Moringa oleifera, using green extraction solvents. *South African Journal of Botany*, **2018**, 115, 81-89 | 2.9 | 31 |
| 36 | Mass spectrometry in untargeted liquid chromatography/mass spectrometry metabolomics: Electrospray ionisation parameters and global coverage of the metabolome. *Rapid Communications in Mass Spectrometry*, **2018**, 32, 121-132 | 2.2 | 16 |
| 35 | 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. *Frontiers in Plant Science*, **2018**, 9, 112 | 6.2 | 202 |
| 34 | Metabolomics in Plant Priming Research: The Way Forward?. *International Journal of Molecular Sciences*, **2018**, 19, | 6.3 | 47 |
| 33 | Subcritical Water Extraction of Biological Materials. *Separation and Purification Reviews*, **2017**, 46, 21-34 | 7.3 | 59 |
| 32 | Proteomic analysis of Arabidopsis plasma membranes reveals lipopolysaccharide-responsive changes. *Biochemical and Biophysical Research Communications*, **2017**, 486, 1137-1142 | 3.4 | 4 |
| 31 | 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 | 3.4 | 6 |

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| 30 | Identification of lipopolysaccharide-interacting plasma membrane-type proteins in Arabidopsis thaliana. *Plant Physiology and Biochemistry*, **2017**, 111, 155-165 | 5.4 | 15 |
| 29 | Gamma radiation treatment activates glucomoringin synthesis in Moringa oleifera. *Revista Brasileira De Farmacognosia*, **2017**, 27, 569-575 | 2 | 5 |
| 28 | Subcritical Water Extraction and Its Prospects for Aflatoxins Extraction in Biological Materials **2017**, | | 2 |
| 27 | 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 | 4.4 | 1 |
| 26 | 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 | 2 | 21 |
| 25 | 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 | 6.7 | 35 |
| 24 | A Conversation on Data Mining Strategies in LC-MS Untargeted Metabolomics: Pre-Processing and Pre-Treatment Steps. *Metabolites*, **2016**, 6, | 5.6 | 42 |
| 23 | The Lipopolysaccharide-Induced Metabolome Signature in Arabidopsis thaliana Reveals Dynamic Reprogramming of Phytoalexin and Phytoanticipin Pathways. *PLoS ONE*, **2016**, 11, e0163572 | 3.7 | 21 |
| 22 | 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 | 3.7 | 37 |
| 21 | Profiling of Altered Metabolomic States in Cells Induced by Priming Agents. *Frontiers in Plant Science*, **2016**, 7, 1527 | 6.2 | 32 |
| 20 | Simultaneous analysis of defense-related phytohormones in Arabidopsis thaliana responding to fungal infection. *Applications in Plant Sciences*, **2016**, 4, 1600013 | 2.3 | 11 |
| 19 | Secondary metabolite perturbations in Phaseolus vulgaris leaves due to gamma radiation. *Plant Physiology and Biochemistry*, **2015**, 97, 287-95 | 5.4 | 17 |
| 18 | Isonitrosoacetophenone drives transcriptional reprogramming in Nicotiana tabacum cells in support of innate immunity and defense. *PLoS ONE*, **2015**, 10, e0117377 | 3.7 | 5 |
| 17 | Comparative conventional- and quantum dot-labeling strategies for LPS binding site detection in Arabidopsis thaliana mesophyll protoplasts. *Frontiers in Plant Science*, **2015**, 6, 335 | 6.2 | 8 |
| 16 | Priming agents of plant defence stimulate the accumulation of mono- and di-acylated quinic acids in cultured tobacco cells. *Physiological and Molecular Plant Pathology*, **2014**, 88, 61-66 | 2.6 | 34 |
| 15 | Metabolomic insights into the bioconversion of isonitrosoacetophenone in Arabidopsis thaliana and its effects on defense-related pathways. *Plant Physiology and Biochemistry*, **2014**, 84, 87-95 | 5.4 | 5 |
| 14 | Multivariate statistical models of metabolomic data reveals different metabolite distribution patterns in isonitrosoacetophenone-elicited Nicotiana tabacum and Sorghum bicolor cells. *SpringerPlus*, **2014**, 3, 254 | | 34 |
| 13 | Ergosterol, an orphan fungal microbe-associated molecular pattern (MAMP). *Molecular Plant Pathology*, **2014**, 15, 747-61 | 5.7 | 39 |

# List of Publications

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|---|---|---|---|
| 12 | Analyses of chlorogenic acids and related cinnamic acid derivatives from Nicotiana tabacum tissues with the aid of UPLC-QTOF-MS/MS based on the in-source collision-induced dissociation method. *Chemistry Central Journal*, **2014**, 8, 66 | | 87 |
| 11 | Multi-platform metabolomic analyses of ergosterol-induced dynamic changes in Nicotiana tabacum cells. *PLoS ONE*, **2014**, 9, e87846 | 3.7 | 46 |
| 10 | Metabolomic analysis of isonitrosoacetophenone-induced perturbations in phenolic metabolism of Nicotiana tabacum cells. *Phytochemistry*, **2013**, 94, 82-90 | 4 | 12 |
| 9 | The Short and Long of it: Shorter Chromatographic Analysis Suffice for Sample Classification During UHPLC-MS-Based Metabolic Fingerprinting. *Chromatographia*, **2013**, 76, 279-285 | 2.1 | 6 |
| 8 | Plant metabolomics: A new frontier in phytochemical analysis. *South African Journal of Science*, **2013**, 1-11 | 1.3 | 89 |
| 7 | The NAC transcription factor gene ANAC072 is differentially expressed in Arabidopsis thaliana in response to microbe-associated molecular pattern (MAMP) molecules. *Physiological and Molecular Plant Pathology*, **2012**, 80, 19-27 | 2.6 | 7 |
| 6 | Ergosterol-induced sesquiterpenoid synthesis in tobacco cells. *Molecules*, **2012**, 17, 1698-715 | 4.8 | 22 |
| 5 | Collision energy alteration during mass spectrometric acquisition is essential to ensure unbiased metabolomic analysis. *Analytical and Bioanalytical Chemistry*, **2012**, 404, 367-72 | 4.4 | 23 |
| 4 | Biotransformation of isonitrosoacetophenone (2-keto-2-phenyl-acetaldoxime) in tobacco cell suspensions. *Biotechnology Letters*, **2012**, 34, 1351-6 | 3 | 5 |
| 3 | A thioredoxin reductase-like protein from the thermophile, Thermus scotoductus SA-01, displaying iron reductase activity. *FEMS Microbiology Letters*, **2010**, 302, 182-8 | 2.9 | 6 |
| 2 | Reduction of vanadium(V) by Enterobacter cloacae EV-SA01 isolated from a South African deep gold mine. *Biotechnology Letters*, **2009**, 31, 845-9 | 3 | 28 |
| 1 | Innate immunity in plants and animals: striking similarities and obvious differences. *Immunological Reviews*, **2004**, 198, 249-66 | 11.3 | 923 |