

Alexander Erban

List of Publications by Year in descending order

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Version: 2024-02-01

91
papers

5,698
citations

87723

38
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82410

72
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97
docs citations

97
times ranked

8088
citing authors

#	ARTICLE	IF	CITATIONS
1	Riboswitch-mediated inducible expression of an astaxanthin biosynthetic operon in plastids. <i>Plant Physiology</i> , 2022, 188, 637-652.	2.3	20
2	Carbon flux through photosynthesis and central carbon metabolism show distinct patterns between algae, C3 and C4 plants. <i>Nature Plants</i> , 2022, 8, 78-91.	4.7	49
3	Acclimatisation of guard cell metabolism to long-term salinity. <i>Plant, Cell and Environment</i> , 2021, 44, 870-884.	2.8	11
4	Cell wall modification by the xyloglucan endotransglucosylase/hydrolase <sc>XTH19</sc> influences freezing tolerance after cold and sub-zero acclimation. <i>Plant, Cell and Environment</i> , 2021, 44, 915-930.	2.8	43
5	Global mapping of protein-metabolite interactions in <i>Saccharomyces cerevisiae</i> reveals that Ser-Leu dipeptide regulates phosphoglycerate kinase activity. <i>Communications Biology</i> , 2021, 4, 181.	2.0	32
6	The Impact of Metabolic Signaling-Rootstock Interactions in Different Grapevine Tissues and Phloem Exudates. <i>Metabolites</i> , 2021, 11, 349.	1.3	10
7	Transcriptional, hormonal, and metabolic changes in susceptible grape berries under powdery mildew infection. <i>Journal of Experimental Botany</i> , 2021, 72, 6544-6569.	2.4	24
8	Assessing Dynamic Changes of Taste-Related Primary Metabolism During Ripening of Durian Pulp Using Metabolomic and Transcriptomic Analyses. <i>Frontiers in Plant Science</i> , 2021, 12, 687799.	1.7	16
9	Characterization of the Heat-Stable Proteome during Seed Germination in <i>Arabidopsis</i> with Special Focus on LEA Proteins. <i>International Journal of Molecular Sciences</i> , 2021, 22, 8172.	1.8	12
10	Metabolic Profiling and Metabolite Correlation Network Analysis Reveal That <i>Fusarium solani</i> Induces Differential Metabolic Responses in <i>Lotus japonicus</i> and <i>Lotus tenuis</i> against Severe Phosphate Starvation. <i>Journal of Fungi (Basel, Switzerland)</i> , 2021, 7, 765.	1.5	7
11	Establishment of a GC-MS-based ¹³ C-positional isotopomer approach suitable for investigating metabolic fluxes in plant primary metabolism. <i>Plant Journal</i> , 2021, 108, 1213-1233.	2.8	18
12	Differentiation of the High Night Temperature Response in Leaf Segments of Rice Cultivars with Contrasting Tolerance. <i>International Journal of Molecular Sciences</i> , 2021, 22, 10451.	1.8	2
13	Aroma and quality of breads baked from old and modern wheat varieties and their prediction from genomic and flour-based metabolite profiles. <i>Food Research International</i> , 2020, 129, 108748.	2.9	13
14	Cysteine and Methionine Biosynthetic Enzymes Have Distinct Effects on Seed Nutritional Quality and on Molecular Phenotypes Associated With Accumulation of a Methionine-Rich Seed Storage Protein in Rice. <i>Frontiers in Plant Science</i> , 2020, 11, 1118.	1.7	8
15	Multi-omics reveals mechanisms of total resistance to extreme illumination of a desert alga. <i>Nature Plants</i> , 2020, 6, 1031-1043.	4.7	33
16	Season Affects Yield and Metabolic Profiles of Rice (<i>Oryza sativa</i>) under High Night Temperature Stress in the Field. <i>International Journal of Molecular Sciences</i> , 2020, 21, 3187.	1.8	21
17	Untargeted metabolomics as a hypothesis-generation tool in plant protection product discovery: Highlighting the potential of trehalose and glycerol metabolism of fungal conidiospores as novel targets. <i>Metabolomics</i> , 2020, 16, 79.	1.4	5
18	Comparative Metabolomics and Molecular Phylogenetics of Melon (<i>Cucumis melo</i> , Cucurbitaceae) Biodiversity. <i>Metabolites</i> , 2020, 10, 121.	1.3	35

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19	Multiplexed Profiling and Data Processing Methods to Identify Temperature-Regulated Primary Metabolites Using Gas Chromatography Coupled to Mass Spectrometry. <i>Methods in Molecular Biology</i> , 2020, 2156, 203-239.	0.4	16
20	Underground isoleucine biosynthesis pathways in <i>E. coli</i> . <i>ELife</i> , 2020, 9, .	2.8	19
21	Molecular signatures associated with increased freezing tolerance due to low temperature memory in <i>Arabidopsis</i> . <i>Plant, Cell and Environment</i> , 2019, 42, 854-873.	2.8	89
22	Iron-dependent metabolic responses of <i>Vicia faba</i> L. to salt stress. <i>Plant, Cell and Environment</i> , 2019, 42, 295-309.	2.8	22
23	Metabolic responses of rice source and sink organs during recovery from combined drought and heat stress in the field. <i>GigaScience</i> , 2019, 8, .	3.3	14
24	Effect of Senescence Phenotypes and Nitrate Availability on Wheat Leaf Metabolome during Grain Filling. <i>Agronomy</i> , 2019, 9, 305.	1.3	6
25	Discovery of food identity markers by metabolomics and machine learning technology. <i>Scientific Reports</i> , 2019, 9, 9697.	1.6	56
26	Unravelling the Metabolic and Hormonal Machinery During Key Steps of Somatic Embryogenesis: A Case Study in Coffee. <i>International Journal of Molecular Sciences</i> , 2019, 20, 4665.	1.8	18
27	The fungal endophyte <i>Fusarium solani</i> provokes differential effects on the fitness of two <i>Lotus</i> species. <i>Plant Physiology and Biochemistry</i> , 2019, 144, 100-109.	2.8	12
28	Metabolomics Identifies a Biomarker Revealing In Vivo Loss of Functional β^2 -Cell Mass Before Diabetes Onset. <i>Diabetes</i> , 2019, 68, 2272-2286.	0.3	28
29	Metabolic responses of rice cultivars with different tolerance to combined drought and heat stress under field conditions. <i>GigaScience</i> , 2019, 8, .	3.3	52
30	Both cold and sub-zero acclimation induce cell wall modification and changes in the extracellular proteome in <i>Arabidopsis thaliana</i> . <i>Scientific Reports</i> , 2019, 9, 2289.	1.6	51
31	Highly Resolved Systems Biology to Dissect the Etioplast-to-Chloroplast Transition in Tobacco Leaves. <i>Plant Physiology</i> , 2019, 180, 654-681.	2.3	51
32	Opposite fates of the purine metabolite allantoin under water and nitrogen limitations in bread wheat. <i>Plant Molecular Biology</i> , 2019, 99, 477-497.	2.0	41
33	Imbalanced Regulation of Fungal Nutrient Transports According to Phosphate Availability in a Symbiosome Formed by Poplar, Sorghum, and <i>Rhizophagus irregularis</i> . <i>Frontiers in Plant Science</i> , 2019, 10, 1617.	1.7	23
34	The iron-stress activated RNA 1 (<i>IsaR1</i>) coordinates osmotic acclimation and iron starvation responses in the cyanobacterium <i>Synechocystis</i> sp. PCC 6803. <i>Environmental Microbiology</i> , 2018, 20, 2757-2768.	1.8	15
35	Plant Temperature Acclimation and Growth Rely on Cytosolic Ribosome Biogenesis Factor Homologs. <i>Plant Physiology</i> , 2018, 176, 2251-2276.	2.3	39
36	Comprehensive Metabolomics Studies of Plant Developmental Senescence. <i>Methods in Molecular Biology</i> , 2018, 1744, 339-358.	0.4	19

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37	Primed primary metabolism in systemic leaves: a functional systems analysis. <i>Scientific Reports</i> , 2018, 8, 216.	1.6	64
38	Metabolite and transcript markers for the prediction of potato drought tolerance. <i>Plant Biotechnology Journal</i> , 2018, 16, 939-950.	4.1	68
39	Natural Variation in Freezing Tolerance and Cold Acclimation Response in <i>Arabidopsis thaliana</i> and Related Species. <i>Advances in Experimental Medicine and Biology</i> , 2018, 1081, 81-98.	0.8	16
40	Acquisition of Volatile Compounds by Gas Chromatography–Mass Spectrometry (GC-MS). <i>Methods in Molecular Biology</i> , 2018, 1778, 225-239.	0.4	20
41	<i>NLR</i> Mutations Suppressing Immune Hybrid Incompatibility and Their Effects on Disease Resistance. <i>Plant Physiology</i> , 2018, 177, 1152-1169.	2.3	21
42	Transcriptome and metabolome analyses provide insights into root and root-released organic anion responses to phosphorus deficiency in oat. <i>Journal of Experimental Botany</i> , 2018, 69, 3759-3771.	2.4	42
43	Impact of seasonal warming on overwintering and spring phenology of blackcurrant. <i>Environmental and Experimental Botany</i> , 2017, 140, 96-109.	2.0	21
44	Isolation and characterization of three new PGPR and their effects on the growth of <i>Arabidopsis</i> and <i>Datura</i> plants. <i>Journal of Plant Interactions</i> , 2017, 12, 1-6.	1.0	45
45	Integrated analysis of rice transcriptomic and metabolomic responses to elevated night temperatures identifies sensitivity- and tolerance-related profiles. <i>Plant, Cell and Environment</i> , 2017, 40, 121-137.	2.8	54
46	Rapid transcriptional and metabolic regulation of the deacclimation process in cold acclimated <i>Arabidopsis thaliana</i> . <i>BMC Genomics</i> , 2017, 18, 731.	1.2	68
47	Characterization of the Wheat Leaf Metabolome during Grain Filling and under Varied N-Supply. <i>Frontiers in Plant Science</i> , 2017, 8, 2048.	1.7	42
48	A new synthetic biology approach allows transfer of an entire metabolic pathway from a medicinal plant to a biomass crop. <i>ELife</i> , 2016, 5, .	2.8	148
49	Global Metabolic Profiling of <i>Arabidopsis</i> Polyamine Oxidase 4 (AtPAO4) Loss-of-Function Mutants Exhibiting Delayed Dark-Induced Senescence. <i>Frontiers in Plant Science</i> , 2016, 7, 173.	1.7	41
50	Functional specialization of one copy of glutamine phosphoribosyl pyrophosphate amidotransferase in ureide production from symbiotically fixed nitrogen in <i>Phaseolus vulgaris</i> . <i>Plant, Cell and Environment</i> , 2016, 39, 1767-1779.	2.8	12
51	Increasing abscisic acid levels by immunomodulation in barley grains induces precocious maturation without changing grain composition. <i>Journal of Experimental Botany</i> , 2016, 67, 2675-2687.	2.4	10
52	The drought response of potato reference cultivars with contrasting tolerance. <i>Plant, Cell and Environment</i> , 2016, 39, 2370-2389.	2.8	66
53	Salt stress responses in a geographically diverse collection of <i>Eutrema/Thellungiella</i> spp. accessions. <i>Functional Plant Biology</i> , 2016, 43, 590.	1.1	17
54	Metabolite Profiling Reveals Sensitivity-Dependent Metabolic Shifts in Rice (<i>Oryza Sativa</i> L.) Cultivars under High Night Temperature Stress. <i>Procedia Environmental Sciences</i> , 2015, 29, 72.	1.3	4

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55	Symbiosis dependent accumulation of primary metabolites in arbuscule-containing cells. <i>BMC Plant Biology</i> , 2015, 15, 234.	1.6	17
56	Integrative δ -omic analysis reveals distinctive cold responses in leaves and roots of strawberry, <i>Fragaria \times ananassa</i> "Korona". <i>Frontiers in Plant Science</i> , 2015, 6, 826.	1.7	17
57	Transcriptome and metabolome reprogramming in <i>Vitis vinifera</i> cv. Trincadeira berries upon infection with <i>Botrytis cinerea</i> . <i>Journal of Experimental Botany</i> , 2015, 66, 1769-1785.	2.4	144
58	Metabolic contribution to salt stress in two maize hybrids with contrasting resistance. <i>Plant Science</i> , 2015, 233, 107-115.	1.7	102
59	Identification of primary and secondary metabolites with phosphorus status-dependent abundance in <i>A. thaliana</i> , and of the transcription factor <i>PHR1</i> as a major regulator of metabolic changes during phosphorus limitation. <i>Plant, Cell and Environment</i> , 2015, 38, 172-187.	2.8	196
60	Metabolic and transcriptional transitions in barley glumes reveal a role as transitory resource buffers during endosperm filling. <i>Journal of Experimental Botany</i> , 2015, 66, 1397-1411.	2.4	35
61	Metabolic and transcriptomic signatures of rice floral organs reveal sugar starvation as a factor in reproductive failure under heat and drought stress. <i>Plant, Cell and Environment</i> , 2015, 38, 2171-2192.	2.8	164
62	High night temperature strongly impacts TCA cycle, amino acid and polyamine biosynthetic pathways in rice in a sensitivity-dependent manner. <i>Journal of Experimental Botany</i> , 2015, 66, 6385-6397.	2.4	86
63	Cytoskeletal Components Define Protein Location to Membrane Microdomains*. <i>Molecular and Cellular Proteomics</i> , 2015, 14, 2493-2509.	2.5	45
64	Sugar Starvation of Rice Anthers is a Factor in Reproductive Failure under Heat and Drought Stress, as shown by Metabolite and Transcript Profiling. <i>Procedia Environmental Sciences</i> , 2015, 29, 70-71.	1.3	0
65	Selective induction and subcellular distribution of ACONITASE 3 reveal the importance of cytosolic citrate metabolism during lipid mobilization in <i>Arabidopsis</i> . <i>Biochemical Journal</i> , 2014, 463, 309-317.	1.7	33
66	<i>Arabidopsis thaliana</i> Glyoxalase 2-1 Is Required during Abiotic Stress but Is Not Essential under Normal Plant Growth. <i>PLoS ONE</i> , 2014, 9, e95971.	1.1	39
67	Light modulated activity of root alkaline/neutral invertase involves the interaction with 14 β proteins. <i>Plant Journal</i> , 2014, 80, 785-796.	2.8	43
68	Consequences of induced brassinosteroid deficiency in <i>Arabidopsis</i> leaves. <i>BMC Plant Biology</i> , 2014, 14, 309.	1.6	17
69	Systems Analysis of the Response of Photosynthesis, Metabolism, and Growth to an Increase in Irradiance in the Photosynthetic Model Organism <i>Chlamydomonas reinhardtii</i> . <i>Plant Cell</i> , 2014, 26, 2310-2350.	3.1	123
70	Profiling Methods to Identify Cold-Regulated Primary Metabolites Using Gas Chromatography Coupled to Mass Spectrometry. <i>Methods in Molecular Biology</i> , 2014, 1166, 171-197.	0.4	42
71	Rationales and Approaches for Studying Metabolism in Eukaryotic Microalgae. <i>Metabolites</i> , 2014, 4, 184-217.	1.3	18
72	Mass appeal: metabolite identification in mass spectrometry-focused untargeted metabolomics. <i>Metabolomics</i> , 2013, 9, 44-66.	1.4	452

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73	Search for Transcriptional and Metabolic Markers of Grape Pre-Ripening and Ripening and Insights into Specific Aroma Development in Three Portuguese Cultivars. <i>PLoS ONE</i> , 2013, 8, e60422.	1.1	69
74	Comprehensive Dissection of Spatiotemporal Metabolic Shifts in Primary, Secondary, and Lipid Metabolism during Developmental Senescence in Arabidopsis Å. <i>Plant Physiology</i> , 2013, 162, 1290-1310.	2.3	278
75	Dissecting Rice Polyamine Metabolism under Controlled Long-Term Drought Stress. <i>PLoS ONE</i> , 2013, 8, e60325.	1.1	120
76	Functional associations between the metabolome and manganese tolerance in <i>Vigna unguiculata</i> . <i>Journal of Experimental Botany</i> , 2012, 63, 329-340.	2.4	28
77	Comparative metabolomics of drought acclimation in model and forage legumes. <i>Plant, Cell and Environment</i> , 2012, 35, 136-149.	2.8	128
78	Metabolite profiling reveals novel multi-level cold responses in the diploid model <i>Fragaria vesca</i> (woodland strawberry). <i>Phytochemistry</i> , 2012, 77, 99-109.	1.4	39
79	Plant Metabolomics and Its Potential for Systems Biology Research. <i>Methods in Enzymology</i> , 2011, 500, 299-336.	0.4	78
80	Comparative ionomics and metabolomics in extremophile and glycophytic <i>Lotus</i> species under salt stress challenge the metabolic preadaptation hypothesis. <i>Plant, Cell and Environment</i> , 2011, 34, 605-617.	2.8	122
81	Extensive metabolic cross-talk in melon fruit revealed by spatial and developmental combinatorial metabolomics. <i>New Phytologist</i> , 2011, 190, 683-696.	3.5	111
82	Overexpression of Sinapine Esterase BnSCE3 in Oilseed Rape Seeds Triggers Global Changes in Seed Metabolism Å Å. <i>Plant Physiology</i> , 2011, 155, 1127-1145.	2.3	42
83	Metabolomic linkage reveals functional interaction between glucose-dependent insulinotropic polypeptide and ghrelin in humans. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2011, 301, E608-E617.	1.8	8
84	TagFinder: Preprocessing Software for the Fingerprinting and the Profiling of Gas Chromatography-Mass Spectrometry Based Metabolome Analyses. <i>Methods in Molecular Biology</i> , 2011, 860, 255-286.	0.4	75
85	Comparative Functional Genomics of Salt Stress in Related Model and Cultivated Plants Identifies and Overcomes Limitations to Translational Genomics. <i>PLoS ONE</i> , 2011, 6, e17094.	1.1	119
86	Inter-laboratory reproducibility of fast gas chromatography-electron impact-time of flight mass spectrometry (GC-El-TOF/MS) based plant metabolomics. <i>Metabolomics</i> , 2009, 5, 479-496.	1.4	120
87	Retention index thresholds for compound matching in GC-MS metabolite profiling. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2008, 871, 182-190.	1.2	157
88	TagFinder for the quantitative analysis of gas chromatography-mass spectrometry (GC-MS)-based metabolite profiling experiments. <i>Bioinformatics</i> , 2008, 24, 732-737.	1.8	522
89	Phosphorus Stress in Common Bean: Root Transcript and Metabolic Responses. <i>Plant Physiology</i> , 2007, 144, 752-767.	2.3	300
90	Nonsupervised Construction and Application of Mass Spectral and Retention Time Index Libraries From Time-of-Flight Gas Chromatography-Mass Spectrometry Metabolite Profiles. <i>Methods in Molecular Biology</i> , 2007, 358, 19-38.	0.4	116

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91	Plasma metabolomic markers of insulin resistance in humans.. Endocrine Abstracts, 0, , .	0.0	0