

Thomas Georg Roitsch

List of Publications by Year in descending order

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137
papers

10,393
citations

41258

49
h-index

34900

98
g-index

141
all docs

141
docs citations

141
times ranked

9512
citing authors

#	ARTICLE	IF	CITATIONS
1	Function and regulation of plant invertases: sweet sensations. Trends in Plant Science, 2004, 9, 606-613.	4.3	761
2	Plant physiology meets phytopathology: plant primary metabolism and plant pathogen interactions. Journal of Experimental Botany, 2007, 58, 4019-4026.	2.4	635
3	Source-sink regulation by sugar and stress. Current Opinion in Plant Biology, 1999, 2, 198-206.	3.5	506
4	Extracellular invertase: key metabolic enzyme and PR protein. Journal of Experimental Botany, 2003, 54, 513-524.	2.4	362
5	Extracellular Invertase Is an Essential Component of Cytokinin-Mediated Delay of Senescence[W]. Plant Cell, 2004, 16, 1276-1287.	3.1	316
6	General Detoxification and Stress Responses Are Mediated by Oxidized Lipids through TGA Transcription Factors in <i>Arabidopsis</i> . Plant Cell, 2008, 20, 768-785.	3.1	308
7	Induction of male sterility in plants by metabolic engineering of the carbohydrate supply. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 6522-6527.	3.3	294
8	Complex regulation of gene expression, photosynthesis and sugar levels by pathogen infection in tomato. Physiologia Plantarum, 2004, 122, 419-428.	2.6	249
9	Metabolic regulation of leaf senescence: interactions of sugar signalling with biotic and abiotic stress responses. Plant Biology, 2008, 10, 50-62.	1.8	236
10	Induction of Apoplastic Invertase of <i>Chenopodium rubrum</i> by D-Glucose and a Glucose Analog and Tissue-Specific Expression Suggest a Role in Sink-Source Regulation. Plant Physiology, 1995, 108, 285-294.	2.3	221
11	Plant phenomics and the need for physiological phenotyping across scales to narrow the genotype-to-phenotype knowledge gap. Journal of Experimental Botany, 2015, 66, 5429-5440.	2.4	217
12	Regulation of source/sink relations by cytokinins. Plant Growth Regulation, 2000, 32, 359-367.	1.8	214
13	Regulation and Tissue-Specific Distribution of mRNAs for Three Extracellular Invertase Isoenzymes of Tomato Suggests an Important Function in Establishing and Maintaining Sink Metabolism. Plant Physiology, 1997, 115, 273-282.	2.3	213
14	Cyclopentenone isoprostanes induced by reactive oxygen species trigger defense gene activation and phytoalexin accumulation in plants. Plant Journal, 2003, 34, 363-375.	2.8	213
15	Co-ordinated induction of mRNAs for extracellular invertase and a glucose transporter in <i>Chenopodium rubrum</i> by cytokinins. Plant Journal, 1997, 11, 539-548.	2.8	212
16	Infection with virulent and avirulent <i>P. syringae</i> strains differentially affects photosynthesis and sink metabolism in <i>Arabidopsis</i> leaves. Planta, 2006, 225, 1-12.	1.6	205
17	Phosphorylation of the VirG protein of <i>Agrobacterium tumefaciens</i> by the autophosphorylated VirA protein: essential role in biological activity of VirG. Journal of Bacteriology, 1990, 172, 4945-4950.	1.0	190
18	The VirA protein of <i>Agrobacterium tumefaciens</i> is autophosphorylated and is essential for vir gene regulation. Journal of Bacteriology, 1990, 172, 525-530.	1.0	188

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19	Cytokinins Mediate Resistance against <i>Pseudomonas syringae</i> in Tobacco through Increased Antimicrobial Phytoalexin Synthesis Independent of Salicylic Acid Signaling. <i>Plant Physiology</i> , 2011, 157, 815-830.	2.3	178
20	Visualization of dynamics of plant-pathogen interaction by novel combination of chlorophyll fluorescence imaging and statistical analysis: differential effects of virulent and avirulent strains of <i>P. syringae</i> and of oxylipins on <i>A. thaliana</i> . <i>Journal of Experimental Botany</i> , 2007, 58, 797-806.	2.4	165
21	Cytokinin production by <i>Pseudomonas fluorescens</i> G20-18 determines biocontrol activity against <i>Pseudomonas syringae</i> in <i>Arabidopsis</i> . <i>Scientific Reports</i> , 2016, 6, 23310.	1.6	148
22	Metabolizable and Non-Metabolizable Sugars Activate Different Signal Transduction Pathways in Tomato. <i>Plant Physiology</i> , 2002, 128, 1480-1489.	2.3	146
23	The regulatory VirG protein specifically binds to a cis-acting regulatory sequence involved in transcriptional activation of <i>Agrobacterium tumefaciens</i> virulence genes. <i>Journal of Bacteriology</i> , 1990, 172, 531-537.	1.0	138
24	Review: New sensors and data-driven approaches – A path to next generation phenomics. <i>Plant Science</i> , 2019, 282, 2-10.	1.7	129
25	Role of Cytokinins for Interactions of Plants With Microbial Pathogens and Pest Insects. <i>Frontiers in Plant Science</i> , 2019, 10, 1777.	1.7	126
26	Arbuscular mycorrhiza induces gene expression of the apoplastic invertase LIN6 in tomato (<i>Lycopersicon esculentum</i>) roots. <i>Journal of Experimental Botany</i> , 2006, 57, 4015-4023.	2.4	120
27	Post-Translational Derepression of Invertase Activity in Source Leaves via Down-Regulation of Invertase Inhibitor Expression Is Part of the Plant Defense Response. <i>Molecular Plant</i> , 2010, 3, 1037-1048.	3.9	105
28	Integration of multi-omics techniques and physiological phenotyping within a holistic phenomics approach to study senescence in model and crop plants. <i>Journal of Experimental Botany</i> , 2018, 69, 825-844.	2.4	104
29	<i>Hovenia dulcis</i> – An Asian Traditional Herb. <i>Planta Medica</i> , 2010, 76, 943-949.	0.7	91
30	Extracellular invertase is involved in the regulation of clubroot disease in <i>Arabidopsis thaliana</i> . <i>Molecular Plant Pathology</i> , 2011, 12, 247-262.	2.0	91
31	Simple and robust determination of the activity signature of key carbohydrate metabolism enzymes for physiological phenotyping in model and crop plants. <i>Journal of Experimental Botany</i> , 2015, 66, 5531-5542.	2.4	83
32	Phytoalexin transgenics in crop protection – Fairy tale with a happy end?. <i>Plant Science</i> , 2012, 195, 54-70.	1.7	79
33	Structural requirements for protein N-glycosylation. Influence of acceptor peptides on cotranslational glycosylation of yeast invertase and site-directed mutagenesis around a sequon sequence. <i>FEBS Journal</i> , 1989, 181, 525-529.	0.2	77
34	Extracellular invertase LIN6 of tomato: a pivotal enzyme for integration of metabolic, hormonal, and stress signals is regulated by a diurnal rhythm. <i>Journal of Experimental Botany</i> , 2009, 60, 1555-1567.	2.4	76
35	Ectopic overexpression of the cell wall invertase gene CIN1 leads to dehydration avoidance in tomato. <i>Journal of Experimental Botany</i> , 2015, 66, 863-878.	2.4	75
36	The different pH optima and substrate specificities of extracellular and vacuolar invertases from plants are determined by a single amino-acid substitution. <i>Plant Journal</i> , 1999, 20, 707-711.	2.8	74

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37	Tissue-specific induction of the mRNA for an extracellular invertase isoenzyme of tomato by brassinosteroids suggests a role for steroid hormones in assimilate partitioning. <i>Plant Journal</i> , 2000, 22, 515-522.	2.8	70
38	Local expression of the <i>ipt</i> gene in transgenic tobacco (<i>Nicotiana tabacum</i> L. cv. SR1) axillary buds establishes a role for cytokinins in tuberization and sink formation. <i>Journal of Experimental Botany</i> , 2002, 53, 621-629.	2.4	70
39	Metabolic Consequences of Infection of Grapevine (<i>Vitis vinifera</i> L.) cv. 'Modra frankinja' with Flavescence Dorée Phytoplasma. <i>Frontiers in Plant Science</i> , 2016, 7, 711.	1.7	69
40	A heat-activated MAP kinase in tomato: a possible regulator of the heat stress response. <i>FEBS Letters</i> , 2002, 531, 179-183.	1.3	67
41	Regulation of Arbuscular Mycorrhization by Carbon. The Symbiotic Interaction Cannot Be Improved by Increased Carbon Availability Accomplished by Root-Specifically Enhanced Invertase Activity. <i>Plant Physiology</i> , 2007, 143, 1827-1840.	2.3	67
42	Metabolic Control of Tobacco Pollination by Sugars and Invertases. <i>Plant Physiology</i> , 2017, 173, 984-997.	2.3	67
43	Regulation of Arbuscular Mycorrhization by Carbon. The Symbiotic Interaction Cannot Be Improved by Increased Carbon Availability Accomplished by Root-Specifically Enhanced Invertase Activity. <i>Plant Physiology</i> , 2007, 143, 1827-1840.	2.3	65
44	Rapid Determination of Cytokinins and Auxin in Cyanobacteria. <i>Current Microbiology</i> , 2010, 61, 361-369.	1.0	64
45	Physiological and molecular analysis of the interaction between aluminium toxicity and drought stress in common bean (<i>Phaseolus vulgaris</i>). <i>Journal of Experimental Botany</i> , 2012, 63, 3109-3125.	2.4	61
46	Hormonal and metabolic regulation of tomato fruit sink activity and yield under salinity. <i>Journal of Experimental Botany</i> , 2014, 65, 6081-6095.	2.4	61
47	Regulation of Sucrose Synthase Expression in <i>Chenopodium rubrum</i> : Characterization of Sugar Induced Expression in Photoautotrophic Suspension Cultures and Sink Tissue Specific Expression in Plants. <i>Journal of Plant Physiology</i> , 1995, 146, 231-238.	1.6	60
48	Glucose and Stress Independently Regulate Source and Sink Metabolism and Defense Mechanisms via Signal Transduction Pathways Involving Protein Phosphorylation. <i>Plant Cell</i> , 1997, 9, 1825.	3.1	59
49	<i>Bacillus licheniformis</i> FMCH001 Increases Water Use Efficiency via Growth Stimulation in Both Normal and Drought Conditions. <i>Frontiers in Plant Science</i> , 2020, 11, 297.	1.7	57
50	Development of a Mobile Multispectral Imaging Platform for Precise Field Phenotyping. <i>Agronomy</i> , 2014, 4, 322-336.	1.3	53
51	Cis- and trans-zeatin differentially modulate plant immunity. <i>Plant Signaling and Behavior</i> , 2013, 8, e24798.	1.2	52
52	A Rapid Phytohormone and Phytoalexin Screening Method for Physiological Phenotyping. <i>Molecular Plant</i> , 2014, 7, 1053-1056.	3.9	50
53	Anther-specific carbohydrate supply and restoration of metabolically engineered male sterility. <i>Journal of Experimental Botany</i> , 2010, 61, 2693-2706.	2.4	48
54	Compartment-Specific Antioxidative Defense in <i>Arabidopsis</i> Against Virulent and Avirulent <i>Pseudomonas syringae</i> . <i>Phytopathology</i> , 2012, 102, 662-673.	1.1	47

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55	The Arabidopsis PLAT Domain Protein1 Is Critically Involved in Abiotic Stress Tolerance. PLoS ONE, 2014, 9, e112946.	1.1	47
56	Expression of a sugar-transporter gene family in a photoautotrophic suspension culture of <i>Chenopodium rubrum</i> L.. <i>Planta</i> , 1994, 193, 365-71.	1.6	46
57	Mutational analysis of the VirG protein, a transcriptional activator of <i>Agrobacterium tumefaciens</i> virulence genes. <i>Journal of Bacteriology</i> , 1990, 172, 6054-6060.	1.0	45
58	Simple semi-high throughput determination of activity signatures of key antioxidant enzymes for physiological phenotyping. <i>Plant Methods</i> , 2020, 16, 42.	1.9	45
59	Expression of the recombinant bacterial outer surface proteinâ€fA in tobacco chloroplasts leads to thylakoid localization and loss of photosynthesis. <i>FEBS Journal</i> , 2007, 274, 5749-5758.	2.2	44
60	Biochemical Evidence for the Activation of Distinct Subsets of Mitogen-Activated Protein Kinases by Voltage and Defense-Related Stimuli. <i>Plant Physiology</i> , 2002, 128, 271-281.	2.3	43
61	The developmental and organ specific expression of sucrose cleaving enzymes in sugar beet suggests a transition between apoplasmic and symplasmic phloem unloading in the tap roots. <i>Plant Physiology and Biochemistry</i> , 2006, 44, 656-665.	2.8	43
62	Interspecies compatibility of the anther specific cell wall invertase promoters from <i>Arabidopsis</i> and tobacco for generating male sterile plants. <i>Theoretical and Applied Genetics</i> , 2009, 118, 235-245.	1.8	43
63	Differential Effects of Carbohydrates on <i>Arabidopsis</i> Pollen Germination. <i>Plant and Cell Physiology</i> , 2017, 58, 691-701.	1.5	43
64	A role for PSK signaling in wounding and microbial interactions in <i>Arabidopsis</i> . <i>Physiologia Plantarum</i> , 2010, 139, no-no.	2.6	42
65	Nuclear targeted AtS40 modulates senescence associated gene expression in <i>Arabidopsis thaliana</i> during natural development and in darkness. <i>Plant Molecular Biology</i> , 2010, 73, 379-390.	2.0	40
66	Circadian and developmental regulation of vacuolar invertase expression in petioles of sugar beet plants. <i>Planta</i> , 2005, 222, 386-395.	1.6	38
67	The AOC promoter of tomato is regulated by developmental and environmental stimuli. <i>Phytochemistry</i> , 2008, 69, 1859-1869.	1.4	38
68	Homo- and heterodimers of tobacco bZIP proteins counteract as positive or negative regulators of transcription during pollen development. <i>Plant Journal</i> , 2010, 63, no-no.	2.8	38
69	Case study of combinatorial imaging: What protocol and what chlorophyll fluorescence image to use when visualizing infection of <i>Arabidopsis thaliana</i> by <i>Pseudomonas syringae</i> ?. <i>Photosynthesis Research</i> , 2007, 90, 243-253.	1.6	37
70	Activities of leaf and spike carbohydrate-metabolic and antioxidant enzymes are linked with yield performance in three spring wheat genotypes grown under well-watered and drought conditions. <i>BMC Plant Biology</i> , 2020, 20, 400.	1.6	37
71	A transnational and holistic breeding approach is needed for sustainable wheat production in the Baltic Sea region. <i>Physiologia Plantarum</i> , 2018, 164, 442-451.	2.6	36
72	Cell Wall Invertase: Bridging the Gap. <i>Botanica Acta</i> , 1996, 109, 90-93.	1.6	35

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73	Novel mode of hormone induction of tandem tomato invertase genes in floral tissues. <i>Plant Molecular Biology</i> , 2003, 52, 191-201.	2.0	34
74	Gibberellin-dependent induction of tomato extracellular invertase Lin7 is required for pollen development. <i>Functional Plant Biology</i> , 2006, 33, 547.	1.1	33
75	Deficiency in riboflavin biosynthesis affects tetrapyrrole biosynthesis in etiolated <i>Arabidopsis</i> tissue. <i>Plant Molecular Biology</i> , 2012, 78, 77-93.	2.0	32
76	Calcium ions are involved in the delay of plant cell cycle progression by abiotic stresses. <i>FEBS Letters</i> , 2006, 580, 597-602.	1.3	31
77	<i>Burkholderia phytofirmans</i> PsJN Stimulate Growth and Yield of Quinoa under Salinity Stress. <i>Plants</i> , 2020, 9, 672.	1.6	30
78	Structure of a Berberine Bridge Enzyme-Like Enzyme with an Active Site Specific to the Plant Family Brassicaceae. <i>PLoS ONE</i> , 2016, 11, e0156892.	1.1	30
79	Differences between winter oilseed rape (<i>Brassica napus</i> L.) cultivars in nitrogen starvation-induced leaf senescence are governed by leaf-inherent rather than root-derived signals. <i>Journal of Experimental Botany</i> , 2015, 66, 3669-3681.	2.4	29
80	Abscisic Acid–Cytokinin Antagonism Modulates Resistance Against <i>Pseudomonas syringae</i> in Tobacco. <i>Phytopathology</i> , 2014, 104, 1283-1288.	1.1	28
81	Screening of Barley Resistance Against Powdery Mildew by Simultaneous High-Throughput Enzyme Activity Signature Profiling and Multispectral Imaging. <i>Frontiers in Plant Science</i> , 2018, 9, 1074.	1.7	27
82	The cytokinin-producing plant beneficial bacterium <i>Pseudomonas fluorescens</i> G20-18 primes tomato (<i>Solanum lycopersicum</i>) for enhanced drought stress responses. <i>Journal of Plant Physiology</i> , 2022, 270, 153629.	1.6	27
83	The hexokinase inhibitor glucosamine exerts a concentration dependent dual effect on protein kinase activity in vitro. <i>Journal of Plant Physiology</i> , 2000, 157, 13-16.	1.6	26
84	Synthesis of dissimilatory enzymes of serine type methylotrophs under different growth conditions. <i>Archives of Microbiology</i> , 1986, 144, 245-247.	1.0	24
85	Ethylene regulation of apoplastic invertase expression in autotrophic cells of <i>Chenopodium rubrum</i> . <i>Plant Growth Regulation</i> , 1996, 19, 219-222.	1.8	24
86	Root-Associated Microbial Communities of <i>Abies nordmanniana</i> : Insights Into Interactions of Microbial Communities With Antioxidative Enzymes and Plant Growth. <i>Frontiers in Microbiology</i> , 2019, 10, 1937.	1.5	24
87	Elevated carbon dioxide alleviates the negative impact of drought on wheat by modulating plant metabolism and physiology. <i>Agricultural Water Management</i> , 2021, 250, 106804.	2.4	23
88	Regulation and function of extracellular invertase from higher plants in relation to assimilate partitioning, stress responses and sugar signalling. <i>Functional Plant Biology</i> , 2000, 27, 815.	1.1	23
89	Overproduction of methanol dehydrogenase in glucose grown cells of a restricted RuMP type methylotroph. <i>Archives of Microbiology</i> , 1985, 142, 34-39.	1.0	21
90	Application of Photoautotrophic Suspension Cultures in Plant Science. <i>Photosynthetica</i> , 2002, 40, 481-492.	0.9	21

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91	Establishment of a Photoautotrophic Cell Suspension Culture of <i>Arabidopsis thaliana</i> for Photosynthetic, Metabolic, and Signaling Studies. <i>Molecular Plant</i> , 2012, 5, 524-527.	3.9	20
92	Expression of yeast invertase in oocytes from <i>Xenopus laevis</i> . Secretion of active enzyme differing in glycosylation. <i>FEBS Journal</i> , 1989, 181, 733-739.	0.2	18
93	Identification of amino acids essential for enzymatic activity of plant invertases. <i>Journal of Plant Physiology</i> , 2000, 157, 581-585.	1.6	17
94	Post-translational translocation of polypeptides across the mammalian endoplasmic reticulum membrane is size and ribosome dependent. <i>FEBS Journal</i> , 1988, 174, 699-705.	0.2	16
95	Differential effect of D-glucose on the level of mRNAs for three invertase isoenzymes of <i>Chenopodium rubrum</i> . <i>Journal of Plant Physiology</i> , 1997, 150, 514-519.	1.6	16
96	The <i>Arabidopsis</i> PLAT domain protein1 promotes abiotic stress tolerance and growth in tobacco. <i>Transgenic Research</i> , 2015, 24, 651-663.	1.3	16
97	Exogenous Classic Phytohormones Have Limited Regulatory Effects on Fructan and Primary Carbohydrate Metabolism in Perennial Ryegrass (<i>Lolium perenne</i> L.). <i>Frontiers in Plant Science</i> , 2015, 6, 1251.	1.7	16
98	Noninvasive Phenotyping of Plant-Pathogen Interaction: Consecutive In Situ Imaging of Fluorescing <i>Pseudomonas syringae</i> , Plant Phenolic Fluorescence, and Chlorophyll Fluorescence in <i>Arabidopsis</i> Leaves. <i>Frontiers in Plant Science</i> , 2019, 10, 1239.	1.7	16
99	Distribution of dissimilatory enzymes in methane and methanol oxidizing bacteria. <i>Archives of Microbiology</i> , 1985, 143, 233-236.	1.0	15
100	Cloning and characterization of a novel LpWRKY1 transcription factor in tomato. <i>Plant Physiology and Biochemistry</i> , 2008, 46, 533-540.	2.8	15
101	Metabolically engineered male sterility in rapeseed (<i>Brassica napus</i> L.). <i>Theoretical and Applied Genetics</i> , 2011, 122, 163-174.	1.8	14
102	Identification of Root-Associated Bacteria That Influence Plant Physiology, Increase Seed Germination, or Promote Growth of the Christmas Tree Species <i>Abies nordmanniana</i> . <i>Frontiers in Microbiology</i> , 2020, 11, 566613.	1.5	13
103	Early-stage sugar beet taproot development is characterized by three distinct physiological phases. <i>Plant Direct</i> , 2020, 4, e00221.	0.8	13
104	Metabolic control of seedling development by invertases. <i>Functional Plant Biology</i> , 2007, 34, 508.	1.1	13
105	Tomato mitogen activated protein kinases regulate the expression of extracellular invertase Lin6 in response to stress related stimuli. <i>Functional Plant Biology</i> , 2009, 36, 1088.	1.1	13
106	Amylopectin Chain Length Dynamics and Activity Signatures of Key Carbon Metabolic Enzymes Highlight Early Maturation as Culprit for Yield Reduction of Barley Endosperm Starch after Heat Stress. <i>Plant and Cell Physiology</i> , 2019, 60, 2692-2706.	1.5	12
107	Role of γ -tocopherol in cellular signaling: γ -tocopherol inhibits stress-induced mitogen-activated protein kinase activation. <i>Plant Biotechnology Reports</i> , 2011, 5, 19-25.	0.9	11
108	Tomato growth promotion by the fungal endophytes <i>Serendipita indica</i> and <i>Serendipita herbamans</i> is associated with sucrose de-novo synthesis in roots and differential local and systemic effects on carbohydrate metabolisms and gene expression. <i>Journal of Plant Physiology</i> , 2022, 276, 153755.	1.6	11

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109	Effect of Different Sugars on Photosynthesis and Chlorophyll Fluorescence in Photoautotrophic Tomato Suspension Cell Cultures. <i>Photosynthetica</i> , 2001, 39, 611-614.	0.9	10
110	Accumulation of and Response to Auxins in Roots and Nodules of the Actinorhizal Plant <i>Datisca glomerata</i> Compared to the Model Legume <i>Medicago truncatula</i> . <i>Frontiers in Plant Science</i> , 2019, 10, 1085.	1.7	10
111	Photoprotection and optimization of sucrose usage contribute to faster recovery of photosynthesis after water deficit at high temperatures in wheat. <i>Physiologia Plantarum</i> , 2021, 172, 615-628.	2.6	10
112	Differential Response of Grapevine to Infection with <i>Candidatus Phytoplasma solani</i> ™ in Early and Late Growing Season through Complex Regulation of mRNA and Small RNA Transcriptomes. <i>International Journal of Molecular Sciences</i> , 2021, 22, 3531.	1.8	10
113	Functional phenomics for improved climate resilience in Nordic agriculture. <i>Journal of Experimental Botany</i> , 2022, 73, 5111-5127.	2.4	10
114	A Simple and Fast Kinetic Assay for the Determination of Fructan Exohydrolase Activity in Perennial Ryegrass (<i>Lolium perenne</i> L.). <i>Frontiers in Plant Science</i> , 2015, 6, 1154.	1.7	9
115	Identification of a bio-signature for barley resistance against <i>Pyrenophora teres</i> infection based on physiological, molecular and sensor-based phenotyping. <i>Plant Science</i> , 2021, 313, 111072.	1.7	9
116	The binding site of the transcriptional activator VirG from <i>Agrobacterium</i> comprises both conserved and specific nonconserved sequences. <i>FEBS Letters</i> , 1994, 338, 127-132.	1.3	8
117	Intracellular Protons are not Involved in Elicitor Dependent Regulation of mRNAs for Defence Related Enzymes in <i>Chenopodium rubrum</i> . <i>Journal of Plant Physiology</i> , 1999, 155, 527-532.	1.6	8
118	Mechanisms of Electrically Mediated Cytosolic Ca ²⁺ Transients in Aequorin-Transformed Tobacco Cells. <i>Biophysical Journal</i> , 2007, 93, 3324-3337.	0.2	8
119	Spatial and temporal dynamics of peroxidase and amine oxidase activity is linked to polyamines and lignin in wheat grains. <i>Biologia Plantarum</i> , 2010, 54, 525-529.	1.9	8
120	Plant Response to Stress: Source-Sink Regulation by Stress. , 2004, , 1010-1013.		8
121	Determination of the Activity Signature of Key Carbohydrate Metabolism Enzymes in Phenolic-rich Grapevine Tissues. <i>Acta Chimica Slovenica</i> , 2016, 63, 757-762.	0.2	8
122	Biochemical evidence for the activation of distinct subsets of mitogen-activated protein kinases by voltage and defense-related stimuli. <i>Plant Physiology</i> , 2002, 128, 271-81.	2.3	8
123	Enzyme activity profiling for physiological phenotyping within functional phenomics: plant growth and stress responses. <i>Journal of Experimental Botany</i> , 2022, 73, 5170-5198.	2.4	8
124	Requirements for efficient in vitro transcription and translation: a study using yeast invertase as a probe. <i>Biochimica Et Biophysica Acta Gene Regulatory Mechanisms</i> , 1989, 1009, 19-26.	2.4	6
125	Synthesis of distinctly different sets of antimicrobial activities by elicited plant cell suspension cultures. <i>Plant Cell, Tissue and Organ Culture</i> , 2011, 106, 105-113.	1.2	6
126	The vacuolar protein-targeting signal of yeast carboxypeptidase is functional in oocytes from <i>Xenopus laevis</i> . <i>FEBS Journal</i> , 1991, 195, 145-150.	0.2	5

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127	Noninvasive determination of toxic stress biomarkers by high-throughput screening of photoautotrophic cell suspension cultures with multicolor fluorescence imaging. <i>Plant Methods</i> , 2019, 15, 100.	1.9	5
128	Advancement of the cultivation and upscaling of photoautotrophic suspension cultures using <i>Chenopodium rubrum</i> as a case study. <i>Plant Cell, Tissue and Organ Culture</i> , 2018, 135, 37-51.	1.2	4
129	Physiological phenotyping of mammalian cell lines by enzymatic activity fingerprinting of key carbohydrate metabolic enzymes: a pilot and feasibility study. <i>BMC Research Notes</i> , 2019, 12, 682.	0.6	4
130	Inoculation of tomato (<i>Solanum lycopersicum</i>) roots with growth promoting <i>Pseudomonas</i> strains induces distinct local and systemic metabolic biosignatures. <i>Physiological and Molecular Plant Pathology</i> , 2022, 117, 101757.	1.3	4
131	New Cross-Talks between Pathways Involved in Grapevine Infection with <i>Candidatus Phytoplasma solani</i> Revealed by Temporal Network Modelling. <i>Plants</i> , 2021, 10, 646.	1.6	3
132	Stress Response Monitoring of Photoautotrophic Higher Plant Suspension Cultures by Fluorescence Imaging for High-Throughput Toxic Compound Screening. <i>Journal of Environmental Protection</i> , 2017, 08, 678-692.	0.3	3
133	Extracellular Glycolytic Activities in Root Endophytic Serendipitaceae and Their Regulation by Plant Sugars. <i>Microorganisms</i> , 2022, 10, 320.	1.6	3
134	Cloning of a CACTA transposon-like insertion in intron I of tomato invertase <i>Lin5</i> gene and identification of transposase-like sequences of Solanaceae species. <i>Journal of Plant Physiology</i> , 2006, 163, 562-569.	1.6	1
135	Trisubstituted Purines Are Useful Tools for Developing Potent Plant Mitogen-Activated Protein Kinase Inhibitors. <i>Bioscience, Biotechnology and Biochemistry</i> , 2010, 74, 553-557.	0.6	1
136	Modulating the Levels of Plant Hormone Cytokinins at the Host-Pathogen Interface. <i>Methods in Molecular Biology</i> , 2017, 1569, 141-150.	0.4	1
137	Silver Nanoparticles Affect <i>Arabidopsis thaliana</i> Leaf Tissue Integrity and Suppress <i>Pseudomonas syringae</i> Infection Symptoms in a Dose-Dependent Manner. <i>BioNanoScience</i> , 0, , .	1.5	1