Birgit Arnholdt-Schmitt

List of Publications by Year
in descending order

56 papers	1,643 citations	331259 21 h-index	315357 38 g-index
60 all docs	60 docs citations	60 times ranked	1425 citing authors

#	Article	IF	Citations
1	From Plant Survival Under Severe Stress to Anti-Viral Human Defense â€“ A Perspective That Calls for Common Efforts. Frontiers in Immunology, 2021, 12, 673723.	2.2	11
2	ROS/RNS Balancing, Aerobic Fermentation Regulation and Cell Cycle Control â€“ a Complex Early Trait (â€˜CoV-MAC-TEDâ€™) for Combating SARS-CoV-2-Induced Cell Reprogramming. Frontiers in Immunology, 2021, 12, 673692.	2.2	12
3	Genome-wide identification of ascorbate-glutathione cycle gene families in soybean (Glycine max) reveals gene duplication events and specificity of gene members linked to development and stress conditions. International Journal of Biological Macromolecules, 2021, 187, 528-543.	3.6	12
4	Adaptive Reprogramming During Early Seed Germination Requires Temporarily Enhanced Fermentation-A Critical Role for Alternative Oxidase Regulation That Concerns Also Microbiota Effectiveness. Frontiers in Plant Science, 2021, 12, 686274.	1.7	10
5	Major Complex Trait for Early De Novo Programming â€˜CoV-MAC-TEDâ€™ Detected in Human Nasal Epithelial Cells Infected by Two SARS-CoV-2 Variants Is Promising to Help in Designing Therapeutic Strategies. Vaccines, 2021, 9, 1399.	2.1	5
6	Alternative Oxidase (AOX) Senses Stress Levels to Coordinate Auxin-Induced Reprogramming From Seed Germination to Somatic Embryogenesisâ€"A Role Relevant for Seed Vigor Prediction and Plant Robustness. Frontiers in Plant Science, 2019, 10, 1134.	1.7	26
7	Differential expression of recently duplicated PTOX genes in Glycine max during plant development and stress conditions. Journal of Bioenergetics and Biomembranes, 2019, 51, 355-370.	1.0	3
8	Polymorphisms in plastoquinol oxidase (PTOX) from Arabidopsis accessions indicate SNP-induced structural variants associated with altitude and rainfall. Journal of Bioenergetics and Biomembranes, 2019, 51, 151-164.	1.0	3
9	Predicting Biomass Production from Plant Robustness and Germination Efficiency by Calorespirometry. , 2018, , 81-94.		7
10	AOX1-Subfamily Gene Members in Olea europaea cv. â€œGalega Vulgarâ€â€"Gene Characterization and Expression of Transcripts during IBA-Induced in Vitro Adventitious Rooting. International Journal of Molecular Sciences, 2018, 19, 597.	1.8	23
11	In silico identification of alternative oxidase 2 (AOX2) in monocots: A new evolutionary scenario. Journal of Plant Physiology, 2017, 210, 58-63.	1.6	18
12	A Driving Bioinformatics Approach to Explore Co-regulation of AOX Gene Family Members During Growth and Development. Methods in Molecular Biology, 2017, 1670, 219-224.	0.4	2
13	Respiration Traits as Novel Markers for Plant Robustness Under the Threat of Climate Change: A Protocol for Validation. Methods in Molecular Biology, 2017, 1670, 183-191.	0.4	4
14	Calorespirometry: A Novel Tool in Functional Hologenomics to Select â€œGreenâ€•Holobionts for Biomass Production. Methods in Molecular Biology, 2017, 1670, 193-201.	0.4	2
15	A Step-by-Step Protocol for Classifying AOX Proteins in Flowering Plants. Methods in Molecular Biology, 2017, 1670, 225-234.	0.4	6
16	Studying Individual Plant AOX Gene Functionality in Early Growth Regulation: A New Approach. Methods in Molecular Biology, 2017, 1670, 235-244.	0.4	8
17	Laser Capture Microdissection for Amplification of Alternative Oxidase (AOX) Genes in Target Tissues in Daucus carota L.. Methods in Molecular Biology, 2017, 1670, 245-252.	0.4	4
18	A Functional Approach towards Understanding the Role of the Mitochondrial Respiratory Chain in an Endomycorrhizal Symbiosis. Frontiers in Plant Science, 2017, 8, 417.	1.7	29

#	Article	IF	Citations
19	Stress-Induced Accumulation of DcAOX1 and DcAOX2a Transcripts Coincides with Critical Time Point for Structural Biomass Prediction in Carrot Primary Cultures (Daucus carota L.). Frontiers in Genetics, 2016, 7, 1.	1.1	120
20	Misannotation Awareness: A Tale of Two Gene-Groups. Frontiers in Plant Science, 2016, 7, 868.	1.7	40
21	Alternative Oxidase Gene Family in Hypericum perforatum L.: Characterization and Expression at the Post-germinative Phase. Frontiers in Plant Science, 2016, 7, 1043.	1.7	12
22	Isolation and characterization of plastid terminal oxidase gene from carrot and its relation to carotenoid accumulation. Plant Gene, 2016, 5, 13-21.	1.4	7
23	Carrot plastid terminal oxidase gene (DcPTOX) responds early to chilling and harbors intronic pre-miRNAs related to plant disease defense. Plant Gene, 2016, 7, 21-25.	1.4	7
24	Allelic variation on DcAOX1 gene in carrot (Daucus carota L.): An interesting simple sequence repeat in a highly variable intron. Plant Gene, 2016, 5, 49-55.	1.4	25
25	Do Mitochondria Play a Central Role in Stress-Induced Somatic Embryogenesis?. Methods in Molecular Biology, 2016, 1359, 87-100.	0.4	9
26	Wild Carrot Differentiation in Europe and Selection at DcAOX1 Gene?. PLoS ONE, 2016, 11, e0164872.	1.1	9
27	Intra and Inter-Spore Variability in Rhizophagus irregularis AOX Gene. PLoS ONE, 2015, 10, e0142339.	1.1	23
28	Phenotyping carrot (Daucus carota L.) for yield-determining temperature response by calorespirometry. Planta, 2015, 241, 525-538.	1.6	16
29	Selection of suitable reference genes for reverse transcription quantitative real-time PCR studies on different experimental systems from carrot (Daucus carota L.). Scientia Horticulturae, 2015, 186, 115-123.	1.7	22
30	Calorespirometry, oxygen isotope analysis and functional-marker-assisted selection ('CalOxy-FMAS') for genotype screening: A novel concept and tool kit for predicting stable plant growth performance and functional marker identification. Briefings in Functional Genomics, 2015, 15, 10-5.	1.3	14
31	Reference Genes Selection and Normalization of Oxidative Stress Responsive Genes upon Different Temperature Stress Conditions in Hypericum perforatum L. PLoS ONE, 2014, 9, e115206.	1.1	44
32	Functional marker development is challenged by the ubiquity of endophytes--a practical perspective. Briefings in Functional Genomics, 2014, 15, 16-21.	1.3	14
33	A classification scheme for alternative oxidases reveals the taxonomic distribution and evolutionary history of the enzyme in angiosperms. Mitochondrion, 2014, 19, 172-183.	1.6	55
34	Calorespirometry as a tool for studying temperature response in carrot (<i>Daucus carota</i> L.). Engineering in Life Sciences, 2013, 13, 541-548.	2.0	13
35	Functional Marker Development Across Species in Selected Traits. , 2013, , 467-515.		16
36	Involvement of alternative oxidase (AOX) in adventitious rooting of Olea europaea L. microshoots is linked to adaptive phenylpropanoid and lignin metabolism. Plant Cell Reports, 2012, 31, 1581-1590.	2.8	42

#	Article	IF	Citations
37	Alternative oxidase (AOX) and phenolic metabolism in methyl jasmonate-treated hairy root cultures of Daucus carota L.. Journal of Plant Physiology, 2012, 169, 657-663.	1.6	35
38	Polymorphisms in intron 1 of carrot <i>AOX2b</i> â€“ a useful tool to develop a functional marker?. Plant Genetic Resources: Characterisation and Utilisation, 2011, 9, 177-180.	0.4	13
39	Induction of somatic embryogenesis as an example of stress-related plant reactions. Electronic Journal of Biotechnology, 2010, 13, .	1.2	153
40	The alternative oxidase family of <i>Vitis vinifera</i> reveals an attractive model to study the importance of genomic design. Physiologia Plantarum, 2009, 137, 553-565.	2.6	34
41	Alternative oxidase involvement in <i>Daucus carota</i> somatic embryogenesis. Physiologia Plantarum, 2009, 137, 498-508.	2.6	34
42	The gymnosperm <i>Pinus pinea</i> contains both <i>AOX</i> gene subfamilies, <i>AOX1</i> and <i>AOX2</i>. Physiologia Plantarum, 2009, 137, 566-577.	2.6	23
43	Differential expression and coâ€regulation of carrot <i>AOX</i> genes (<i>Daucus carota</i>). Physiologia Plantarum, 2009, 137, 578-591.	2.6	43
44	<i>Aox</i> gene structure, transcript variation and expression in plants. Physiologia Plantarum, 2009, 137, 342-353.	2.6	76
45	Temperature responses of substrate carbon conversion efficiencies and growth rates of plant tissues. Physiologia Plantarum, 2009, 137, 446-458.	2.6	31
46	Intron polymorphism pattern in <i>AOX1b</i> of wild St John's wort (<i>Hypericum perforatum</i>) allows discrimination between individual plants. Physiologia Plantarum, 2009, 137, 520-531.	2.6	32
47	Carrot alternative oxidase gene <i>AOX2a</i> demonstrates allelic and genotypic polymorphisms in intron 3. Physiologia Plantarum, 2009, 137, 592-608.	2.6	36
48	Physiologic responses and gene diversity indicate olive alternative oxidase as a potential source for markers involved in efficient adventitious root induction. Physiologia Plantarum, 2009, 137, 532-552.	2.6	61
49	Alternative oxidase (AOX) and stress toleranceâ€“approaching a scientific hypothesis. Physiologia Plantarum, 2009, 137, 314-315.	2.6	12
50	Daucus carota L. â€“ An old model for cell reprogramming gains new importance through a novel expansion pattern of alternative oxidase (AOX) genes. Plant Physiology and Biochemistry, 2009, 47, 753-759.	2.8	32
51	AOX â€“ a functional marker for efficient cell reprogramming under stress?. Trends in Plant Science, 2006, 11, 281-287.	4.3	183
52	Functional markers and a â€˜systemic strategyâ€™: convergency between plant breeding, plant nutrition and molecular biology. Plant Physiology and Biochemistry, 2005, 43, 817-820.	2.8	21
53	Efficient cell reprogramming as a target for functional-marker strategies? Towards new perspectives in applied plant-nutrition research. Journal of Plant Nutrition and Soil Science, 2005, 168, 617-624.	1.1	21
54	Stress-Induced Cell Reprogramming. A Role for Global Genome Regulation?: Figure 1.. Plant Physiology, 2004, 136, 2579-2586.	2.3	105

#	Article	IF	Citations
55	Characterization of genome variation in tissue cultures by RAPD fingerprinting â€" A methodological comment. Plant Biosystems, 2001, 135, 115-120.	0.8	10
56	Embryogenesis of photoautotrophic cell cultures of Daucus carota L.. Plant Cell, Tissue and Organ Culture, 1994, 38, 115-122.	1.2	6