Astrid Wingler

List of Publications by Year
in descending order

72 papers	6,572 citations	76326 40 h-index	88630 70 g-index
76 all docs	76 docs citations	76 times ranked	7004 citing authors

#	Article	IF	Citations
1	Sugars and the speed of lifeâ€"Metabolic signals that determine plant growth, development and death. Physiologia Plantarum, 2022, 174, e13656.	5.2	28
2	Crops for Carbon Farming. Frontiers in Plant Science, 2021, 12, 636709.	3.6	57
3	The Impact of Herbage Mass on Perennial Ryegrass Swards in Autumn on Autumn and over Winter Production and Characteristics. Agronomy, 2021, 11, 1140.	3.0	3
4	Phenotypic plasticity masks rangeâ€wide genetic differentiation for vegetative but not reproductive traits in a shortâ€lived plant. Ecology Letters, 2021, 24, 2378-2393.	6.4	21
5	Status of Phenological Research Using Sentinel-2 Data: A Review. Remote Sensing, 2020, 12, 2760.	4.0	96
6	Global gene flow releases invasive plants from environmental constraints on genetic diversity. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 4218-4227.	7.1	108
7	Linking integrative plant physiology with agronomy to sustain future plant production. Environmental and Experimental Botany, 2020, 178, 104125.	4.2	6
8	Interactions between sucrose and jasmonate signalling in the response to cold stress. BMC Plant Biology, 2020, 20, 176.	3.6	16
9	Effect of environmental factors on size and fecundity of field populations of<i>Impatiens glandulifera</i>. Plant Ecology and Diversity, 2020, 13, 413-424.	2.4	2
10	Floral uniformity through evolutionary time in a speciesâ€rich tree lineage. New Phytologist, 2019, 221, 1597-1608.	7.3	36
11	The Dynamic Plant: Capture, Transformation, and Management of Energy. Plant Physiology, 2018, 176, 961-966.	4.8	16
12	Transitioning to the Next Phase: The Role of Sugar Signaling throughout the Plant Life Cycle. Plant Physiology, 2018, 176, 1075-1084.	4.8	124
13	Autumn leaf phenology: discrepancies between <i>in situ</i> observations and satellite data at urban and rural sites. International Journal of Remote Sensing, 2018, 39, 8129-8150.	2.9	17
14	Myrteae phylogeny, calibration, biogeography and diversification patterns: Increased understanding in the most species rich tribe of Myrtaceae. Molecular Phylogenetics and Evolution, 2017, 109, 113-137.	2.7	110
15	Links between parallel evolution and systematic complexity in angiospermsâ€"A case study of floral development in Myrcia s.l. (Myrtaceae). Perspectives in Plant Ecology, Evolution and Systematics, 2017, 24, 11-24.	2.7	26
16	Classification of intra-specific variation in plant functional strategies reveals adaptation to climate. Annals of Botany, 2017, 119, 1343-1352.	2.9	35
17	Limitation of Grassland Productivity by Low Temperature and Seasonality of Growth. Frontiers in Plant Science, 2016, 7, 1130.	3.6	39
18	Systematic and evolutionary implications of stamen position in Myrteae (Myrtaceae). Botanical Journal of the Linnean Society, 2015, 179, 388-402.	1.6	25

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19	Adaptation to altitude affects the senescence response to chilling in the perennial plant Arabis alpina. Journal of Experimental Botany, 2015, 66, 355-367.	4.8	36
20	Comparison of signaling interactions determining annual and perennial plant growth in response to low temperature. Frontiers in Plant Science, 2014, 5, 794.	3.6	56
21	How Do Sugars Regulate Plant Growth and Development? New Insight into the Role of Trehalose-6-Phosphate. Molecular Plant, 2013, 6, 261-274.	8.3	231
22	The Trehalose 6-Phosphate/SnRK1 Signaling Pathway Primes Growth Recovery following Relief of Sink Limitation Â Â. Plant Physiology, 2013, 162, 1720-1732.	4.8	162
23	Regulation of growth by the trehalose pathway. Plant Signaling and Behavior, 2013, 8, e26626.	2.4	24
24	The Role of Trehalose Metabolism in Chloroplast Development and Leaf Senescence. Advances in Photosynthesis and Respiration, 2013, , 551-565.	1.0	4
25	Trehalose 6-Phosphate Is Required for the Onset of Leaf Senescence Associated with High Carbon Availability Â Â. Plant Physiology, 2012, 158, 1241-1251.	4.8	180
26	Interactions Between Temperature and Sugars in the Regulation of Leaf Senescence in the Perennial Herb <i>Arabis alpina</i> L.^F. Journal of Integrative Plant Biology, 2012, 54, 595-605.	8.5	20
27	Overexpression of GCN2â€type protein kinase in wheat has profound effects on free amino acid concentration and gene expression. Plant Biotechnology Journal, 2012, 10, 328-340.	8.3	41
28	Interactions between flowering and senescence regulation and the influence of low temperature in Arabidopsis and crop plants. Annals of Applied Biology, 2011, 159, 320-338.	2.5	26
29	QTL analysis for sugarâ€regulated leaf senescence supports floweringâ€dependent and â€independent senescence pathways. New Phytologist, 2010, 185, 420-433.	7.3	49
30	Cytosolic pyruvate,orthophosphate dikinase functions in nitrogen remobilization during leaf senescence and limits individual seed growth and nitrogen content. Plant Journal, 2010, 62, 641-652.	5.7	129
31	Up-regulation of biosynthetic processes associated with growth by trehalose 6-phosphate. Plant Signaling and Behavior, 2010, 5, 386-392.	2.4	78
32	Sugars, senescence, and ageing in plants and heterotrophic organisms. Journal of Experimental Botany, 2009, 60, 1063-1066.	4.8	113
33	Inhibition of SNF1-Related Protein Kinase1 Activity and Regulation of Metabolic Pathways by Trehalose-6-Phosphate Â Â. Plant Physiology, 2009, 149, 1860-1871.	4.8	479
34	Metabolic regulation of leaf senescence: interactions of sugar signalling with biotic and abiotic stress responses. Plant Biology, 2008, 10, 50-62.	3.8	236
35	The wheat GCN2 signalling pathway: Does this kinase play an important role in stress signalling?. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2008, 150, S158.	1.8	0
36	The wheat GCN2 signalling pathway: Does this kinase play an important role in stress signalling?. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2008, 150, S191.	1.8	0

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37	Integration of leaf metabolism and physiology by the trehalose pathway. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2008, 150, S195.	1.8	2
38	Genetic Variation Suggests Interaction between Cold Acclimation and Metabolic Regulation of Leaf Senescence. Plant Physiology, 2007, 143, 434-446.	4.8	62
39	Transcriptional or postâ€transcriptional regulation â€" how does a plant know when to senesce?. New Phytologist, 2007, 175, 7-9.	7.3	7
40	Effect of sugar-induced senescence on gene expression and implications for the regulation of senescence in Arabidopsis. Planta, 2006, 224, 556-568.	3.2	215
41	The role of sugars in integrating environmental signals during the regulation of leaf senescence. Journal of Experimental Botany, 2006, 57, 391-399.	4.8	363
42	Natural variation in the regulation of leaf senescence and relation to other traits in Arabidopsis. Plant, Cell and Environment, 2005, 28, 223-231.	5.7	67
43	Mechanisms of the light-dependent induction of cell death in tobacco plants with delayed senescence. Journal of Experimental Botany, 2005, 56, 2897-2905.	4.8	34
44	Characterization of Markers to Determine the Extent and Variability of Leaf Senescence in Arabidopsis. A Metabolic Profiling Approach. Plant Physiology, 2005, 138, 898-908.	4.8	192
45	Spatial patterns and metabolic regulation of photosynthetic parameters during leaf senescence. New Phytologist, 2004, 161, 781-789.	7.3	173
46	Effect of reduced arginine decarboxylase activity on salt tolerance and on polyamine formation during salt stress in Arabidopsis thaliana. Physiologia Plantarum, 2004, 121, 101-107.	5.2	131
47	Interactions of abscisic acid and sugar signalling in the regulation of leaf senescence. Planta, 2004, 219, 765-72.	3.2	137
48	Induction of Trehalase in Arabidopsis Plants Infected With the Trehalose-Producing Pathogen Plasmodiophora brassicae. Molecular Plant-Microbe Interactions, 2002, 15, 693-700.	2.6	151
49	The function of trehalose biosynthesis in plants. Phytochemistry, 2002, 60, 437-440.	2.9	198
50	Trehalose and Trehalase in Arabidopsis. Plant Physiology, 2001, 125, 1086-1093.	4.8	159
51	Trehalose metabolism in Arabidopsis: occurrence of trehalose and molecular cloning and characterization of trehaloseâ€6â€phosphate synthase homologues. Journal of Experimental Botany, 2001, 52, 1817-1826.	4.8	121
52	Induction of ApL3 Expression by Trehalose Complements the Starch-Deficient Arabidopsis Mutantadg2-1 Lacking ApL1, the Large Subunit of ADP-Glucose Pyrophosphorylase. Plant Physiology, 2001, 126, 883-889.	4.8	61
53	Are Isocitrate Lyase and Phosphoenolpyruvate Carboxykinase Involved in Gluconeogenesis during Senescence of Barley Leaves and Cucumber Cotyledons?. Plant and Cell Physiology, 2000, 41, 960-967.	3.1	56
54	Photorespiration: metabolic pathways and their role in stress protection. Philosophical Transactions of the Royal Society B: Biological Sciences, 2000, 355, 1517-1529.	4.0	647

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55	Trehalose Induces the ADP-Glucose Pyrophosphorylase Gene,ApL3, and Starch Synthesis in Arabidopsis. Plant Physiology, 2000, 124, 105-114.	4.8	168
56	Phosphoenolpyruvate Carboxykinase Is Involved in the Decarboxylation of Aspartate in the Bundle Sheath of Maize1. Plant Physiology, 1999, 120, 539-546.	4.8	136
57	The role of photorespiration during drought stress: an analysis utilizing barley mutants with reduced activities of photorespiratory enzymes. Plant, Cell and Environment, 1999, 22, 361-373.	5.7	222
58	Ammonium can stimulate nitrate and nitrite reductase in the absence of nitrate in Clematis vitalba. Plant, Cell and Environment, 1999, 22, 859-866.	5.7	46
59	Photorespiratory metabolism of glyoxylate and formate in glycine-accumulating mutants of barley and Amaranthus edulis. Planta, 1999, 207, 518-526.	3.2	63
60	Short communication. Serine: glyoxylate aminotransferase exerts no control on photosynthesis. Journal of Experimental Botany, 1999, 50, 719-722.	4.8	5
61	Regulation of Leaf Senescence by Cytokinin, Sugars, and Light. Plant Physiology, 1998, 116, 329-335.	4.8	235
62	Control of photosynthesis in barley plants with reduced activities of glycine decarboxylase. Planta, 1997, 202, 171-178.	3.2	50
63	Axenic mycorrhization of wild type and transgenic hybrid aspen expressing T-DNA indoleacetic acid-biosynthetic genes. Trees - Structure and Function, 1996, 11, 59.	1.9	51
64	Effects of varied soil nitrogen supply on Norway spruce (Picea abies [L.] Karst.). Plant and Soil, 1996, 186, 361-369.	3.7	69
65	Effects of varied soil nitrogen supply on Norway spruce (Picea abies [L.] Karst.). Plant and Soil, 1996, 184, 291-298.	3.7	42
66	Mycorrhiza formation on Norway spruce (Picea abies) roots affects the pathway of anaplerotic CO2 fixation. Physiologia Plantarum, 1996, 96, 699-705.	5.2	26
67	Mycorrhiza formation on Norway spruce (Picea abies) roots affects the pathway of anaplerotic CO2 fixation. Physiologia Plantarum, 1996, 96, 699-705.	5.2	1
68	Effects of varied soil nitrogen supply on Norway spruce (Picea abies [L.] Karst.). Hydrobiologia, 1996, 186, 361-369.	2.0	0
69	Influence of different nutrient regimes on the regulation of carbon metabolism in Norway spruce [Picea abies (L.) Karst.] seedlings. New Phytologist, 1994, 128, 323-330.	7.3	28
70	Determination of mannitol in ectomycorrhizal fungi and ectomycorrhizas by enzymatic micro-assays. Mycorrhiza, 1993, 3, 69-73.	2.8	7
71	The effect of autumn closing date on over winter tissue turnover in perennial ryegrass (Lolium) Tj ETQq1 1 0.784314 rgBT /Overlock	2.9	1
72	Effect of Exogenous Treatment with Nitric Oxide (NO) on Redox Homeostasis in Barley Seedlings (Hordeum vulgare L.) Under Copper Stress. Journal of Soil Science and Plant Nutrition, 0, , 1.	3.4	10