Pedro JosÃ© Aphalo

List of Publications by Year
in descending order

90 papers	3,699 citations	109137 35 h-index	149479 56 g-index
98 all docs	98 docs citations	98 times ranked	3351 citing authors

#	Article	IF	Citations
1	Do stomata respond to relative humidity?. Plant, Cell and Environment, 1991, 14, 127-132.	2.8	210
2	Multiple Roles for UV RESISTANCE LOCUS8 in Regulating Gene Expression and Metabolite Accumulation in Arabidopsis under Solar Ultraviolet Radiation Â Â. Plant Physiology, 2013, 161, 744-759.	2.3	170
3	On the Importance of Information-Acquiring Systems in Plant-Plant Interactions. Functional Ecology, 1995, 9, 5.	1.7	166
4	Effects of solar UV-A and UV-B radiation on gene expression and phenolic accumulation in Betula pendula leaves. Tree Physiology, 2010, 30, 923-934.	1.4	138
5	A link between ectoparasite infection and susceptibility to bacterial disease in rainbow trout. International Journal for Parasitology, 2006, 36, 987-991.	1.3	103
6	Red : far-red light ratio and UV-B radiation: their effects on leaf phenolics and growth of silver birch seedlings. Plant, Cell and Environment, 2004, 27, 1005-1013.	2.8	100
7	Solar UV-B radiation affects leaf quality and insect herbivory in the southern beech tree Nothofagus antarctica. Oecologia, 2004, 138, 505-512.	0.9	98
8	Nutrient availability and the effect of increasing UV-B radiation on secondary plant compounds in Scots pine. Environmental and Experimental Botany, 2003, 49, 49-60.	2.0	96
9	The effects of long-term elevated UV-B on the growth and phenolics of field-grown silver birch (Betula pendula). Global Change Biology, 2001, 7, 839-848.	4.2	94
10	Host-plant preference of an insect herbivore mediated by UV-B and CO2 in relation to plant secondary metabolites. Biochemical Systematics and Ecology, 1998, 26, 1-12.	0.6	86
11	Sex-related differences in growth and carbon allocation to defence in Populus tremula as explained by current plant defence theories. Tree Physiology, 2014, 34, 471-487.	1.4	84
12	Secondary metabolites and nutrient concentrations in silver birch seedlings under five levels of daily UV-B exposure and two relative nutrient addition rates. New Phytologist, 2001, 150, 121-131.	3.5	83
13	Allocation of carbon to growth and secondary metabolites in birch seedlings under UV-B radiation and CO2 exposure. Physiologia Plantarum, 2000, 109, 260-267.	2.6	82
14	Epidermal <scp>UV</scp>â€<scp>A</scp> absorbance and wholeâ€leaf flavonoid composition in pea respond more to solar blue light than to solar <scp>UV</scp> radiation. Plant, Cell and Environment, 2015, 38, 941-952.	2.8	79
15	Growth and defense in deciduous trees and shrubs under UV-B. Environmental Pollution, 2005, 137, 404-414.	3.7	75
16	The effect of u.v.-B radiation on u.v.-absorbing secondary metabolites in birch seedlings grown under simulated forest soil conditions. New Phytologist, 1997, 137, 617-621.	3.5	73
17	Metabolite specific effects of solar UVâ€A and UVâ€B on alder and birch leaf phenolics. Global Change Biology, 2008, 14, 1294-1304.	4.2	73
18	Title is missing!. New Forests, 2003, 25, 93-108.	0.7	70

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19	A perspective on ecologically relevant plant-UV research and its practical application. Photochemical and Photobiological Sciences, 2019, 18, 970-988.	1.6	69
20	An Analysis of Ball's Empirical Model of Stomatal Conductance. Annals of Botany, 1993, 72, 321-327.	1.4	68
21	Diffuse solar radiation and canopy photosynthesis in a changing environment. Agricultural and Forest Meteorology, 2021, 311, 108684.	1.9	66
22	Perception of solar UV radiation by plants: photoreceptors and mechanisms. Plant Physiology, 2021, 186, 1382-1396.	2.3	60
23	Response of Photosynthesis, Stomatal Conductance and Water Use Efficiency to Elevated CO2 and Nutrient Supply in Acclimated Seedlings of Phaseolus vulgaris L.. Annals of Botany, 1992, 70, 257-264.	1.4	57
24	How do cryptochromes and UVR8 interact in natural and simulated sunlight?. Journal of Experimental Botany, 2019, 70, 4975-4990.	2.4	57
25	Flushing phenology and fitness of European beech (Fagus sylvatica L.) provenances from a trial in La Rioja, Spain, segregate according to their climate of origin. Agricultural and Forest Meteorology, 2013, 180, 76-85.	1.9	55
26	The photoreceptor UVR8 mediates the perception of both UVâ€B and UVâ€A wavelengths up to 350â€‰nm of sunlight with responsivity moderated by cryptochromes. Plant, Cell and Environment, 2020, 43, 1513-1527.	2.8	52
27	Elevated temperature altered the reaction norms of stomatal conductance in field-grown grapevine. Agricultural and Forest Meteorology, 2012, 165, 35-42.	1.9	50
28	Effects of far-red light on the growth, mycorrhizas and mineral nutrition of Scots pine seedlings. Plant and Soil, 1998, 201, 17-25.	1.8	47
29	How does solar ultravioletâ€<scp>B</scp> radiation improve drought tolerance of silver birch (<scp>B</scp>etula pendulaâ€…<scp>R</scp>oth.) seedlings?. Plant, Cell and Environment, 2015, 38, 953-967.	2.8	47
30	The boundary layer and the apparent responses of stomatal conductance to wind speed and to the mole fractions of CO2 and water vapour in the air. Plant, Cell and Environment, 1993, 16, 771-783.	2.8	46
31	Phytochrome effects on leaf growth and chlorophyll content in Petunia axilaris. Plant, Cell and Environment, 1987, 10, 509-514.	2.8	45
32	Clonal differences in growth and phenolics of willows exposed to elevated ultraviolet-B radiation. Basic and Applied Ecology, 2003, 4, 219-228.	1.2	42
33	Patterns in the spectral composition of sunlight and biologically meaningful spectral photon ratios as affected by atmospheric factors. Agricultural and Forest Meteorology, 2020, 291, 108041.	1.9	42
34	Effects of long-term, elevated ultraviolet-B radiation on phytochemicals in the bark of silver birch (Betula pendula). Tree Physiology, 2002, 22, 1257-1263.	1.4	41
35	Assessment of UV Biological Spectral Weighting Functions for Phenolic Metabolites and Growth Responses in Silver Birch Seedlings. Photochemistry and Photobiology, 2009, 85, 1346-1355.	1.3	39
36	Interactions between willows and insect herbivores under enhanced ultraviolet-B radiation. Oecologia, 2003, 137, 312-320.	0.9	38

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37	Boron mobility in deciduous forest trees in relation to their polyols. New Phytologist, 2004, 163, 333-339.	3.5	36
38	Temporal variation in epidermal flavonoids due to altered solar UV radiation is moderated by the leaf position in Betula pendula. Physiologia Plantarum, 2011, 143, 261-270.	2.6	35
39	Editorial: Interactive effects of UV-B radiation in a complex environment. Plant Physiology and Biochemistry, 2019, 134, 1-8.	2.8	35
40	Do UVâ€A radiation and blue light during growth prime leaves to cope with acute high light in photoreceptor mutants of Arabidopsis thaliana?. Physiologia Plantarum, 2019, 165, 537-554.	2.6	34
41	Effects of ultraviolet-B radiation on growth, mycorrhizas and mineral nutrition of silver birch (Betula pendula Roth) seedlings grown in low-nutrient conditions. Global Change Biology, 2003, 9, 65-73.	4.2	32
42	Do current levels of UVâ€B radiation affect vegetation? The importance of longâ€term experiments. New Phytologist, 2003, 160, 273-276.	3.5	28
43	Speciesâ€specific effect of UVâ€B radiation on the temporal pattern of leaf growth. Physiologia Plantarum, 2012, 144, 146-160.	2.6	28
44	Boron Mobility in Two Coniferous Species. Annals of Botany, 2000, 86, 547-550.	1.4	26
45	Growth dynamics and mycorrhizas of Norway spruce (Picea abies) seedlings in relation to boron supply. Trees - Structure and Function, 2001, 15, 319-326.	0.9	26
46	Responses of flavonoid profile and associated gene expression to solar blue and UV radiation in two accessions of Vicia faba L. from contrasting UV environments. Photochemical and Photobiological Sciences, 2019, 18, 434-447.	1.6	26
47	Response of mature stands of Norway spruce (Picea abies) to boron fertilization. Forest Ecology and Management, 2003, 180, 401-412.	1.4	23
48	Effect of vegetational shade and its components on stomatal responses to red, blue and green light in two deciduous tree species with different shade tolerance. Environmental and Experimental Botany, 2016, 121, 94-101.	2.0	23
49	UV-screening and springtime recovery of photosynthetic capacity in leaves of Vaccinium vitis-idaea above and below the snow pack. Plant Physiology and Biochemistry, 2019, 134, 40-52.	2.8	23
50	Stomatal Responses to Light and Drought Stress in Variegated Leaves of Hedera helix. Plant Physiology, 1986, 81, 768-773.	2.3	22
51	Boron and other elements in sporophores of ectomycorrhizal and saprotrophic fungi. Mycorrhiza, 2011, 21, 155-165.	1.3	22
52	The Joensuu dasotrons: A new facility for studying shoot, root, and soil processes. Plant and Soil, 2001, 231, 137-149.	1.8	20
53	Temperature affected the formation of arbuscular mycorrhizas and ectomycorrhizas in Populus angustifolia seedlings more than a mild drought. Soil Biology and Biochemistry, 2020, 146, 107798.	4.2	20
54	Boron retranslocation in Scots pine and Norway spruce. Tree Physiology, 2004, 24, 1011-1017.	1.4	19

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55	Spacing of silver birch seedlings grown in containers of equal size affects their morphology and its variability. Tree Physiology, 2006, 26, 1227-1237.	1.4	19
56	Seedlings from marginal and core populations of European beech (Fagus sylvatica L.) respond differently to imposed drought and shade. Trees - Structure and Function, 2021, 35, 53-67.	0.9	19
57	Separation of Direct and Indirect Responses of Stomata to Light: Results from a Leaf Inversion Experiment at Constant Intercellular CO2Molar Fraction. Journal of Experimental Botany, 1993, 44, 791-800.	2.4	18
58	Does timing of boron application affect needle and bud structure in Scots pine and Norway spruce seedlings?. Trees - Structure and Function, 2007, 21, 661-670.	0.9	17
59	Solar ultraviolet radiation alters alder and birch litter chemistry that in turn affects decomposers and soil respiration. Oecologia, 2009, 161, 719-728.	0.9	17
60	UV responses of Lolium perenne raised along a latitudinal gradient across Europe: a filtration study. Physiologia Plantarum, 2012, 145, 604-618.	2.6	17
61	Does far-red light affect growth and mycorrhizas of Scots pine seedlings grown in forest soil?. Plant and Soil, 1999, 211, 259-268.	1.8	16
62	Effect of lateral far-red light supplementation on the growth and morphology of birch seedlings and its interaction with mineral nutrition. Trees - Structure and Function, 2001, 15, 297-303.	0.9	16
63	Recovery of Norway spruce (Picea abies) seedlings from repeated drought as affected by boron nutrition. Trees - Structure and Function, 2005, 19, 213-223.	0.9	16
64	Seasonal fluctuations in leaf phenolic composition under UV manipulations reflect contrasting strategies of alder and birch trees. Physiologia Plantarum, 2010, 140, no-no.	2.6	16
65	Responses of growth, photosynthesis, and leaf conductance to white light irradiance and endâ€ofâ€day red and farâ€red pulses in Fuchsia magellanica Lam.. New Phytologist, 1991, 117, 461-471.	3.5	15
66	Relationship between net photosynthesis and nitrogen in Scots pine: Seasonal variation in seedlings and shoots. Plant and Soil, 1995, 168-169, 263-270.	1.8	15
67	How Realistically Does Outdoor UVâ€B Supplementation with Lamps Reflect Ozone Depletion: An Assessment of Enhancement Errors. Photochemistry and Photobiology, 2011, 87, 174-183.	1.3	15
68	Ultraviolet radiation research: from the field to the laboratory and back. Plant, Cell and Environment, 2015, 38, 853-855.	2.8	15
69	Boron uptake by ectomycorrhizas of silver birch. Mycorrhiza, 2004, 14, 209-212.	1.3	13
70	Phytochrome Control of Chlorophyll Content in Mature Attached Leaves of Petunia axillaris. Annals of Botany, 1989, 63, 595-598.	1.4	12
71	Effects of elevated temperature, elevated CO2 and fertilization on quality and subsequent decomposition of silver birch leaf litter. Soil Biology and Biochemistry, 2009, 41, 2414-2421.	4.2	12
72	Explaining pre-emptive acclimation by linking information to plant phenotype. Journal of Experimental Botany, 2022, 73, 5213-5234.	2.4	12

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73	Decomposition and element concentrations of Norway spruce needle litter with differing B, N, or P status. Plant and Soil, 2010, 330, 225-238.	1.8	11
74	Water use strategies of seedlings of three Malagasy Adansonia species under drought. South African Journal of Botany, 2012, 81, 61-70.	1.2	11
75	Are solar UVâ€Bâ€•and UVâ€Aâ€dependent gene expression and metabolite accumulation in Arabidopsis mediated by the stress response regulator RADICALâ€INDUCED CELL DEATH1?. Plant, Cell and Environment, 2015, 38, 878-891.	2.8	11
76	Transmission of ultraviolet, visible and near-infrared solar radiation to plants within a seasonal snow pack. Photochemical and Photobiological Sciences, 2019, 18, 1963-1971.	1.6	11
77	Are arbuscular-mycorrhizal Alnus incana seedlings more resistant to drought than ectomycorrhizal and nonmycorrhizal ones?. Tree Physiology, 2020, 40, 782-795.	1.4	11
78	Contributions of cryptochromes and phototropins to stomatal opening through the day. Functional Plant Biology, 2020, 47, 226.	1.1	10
79	Decomposition and element concentrations of silver birch leaf litter as affected by boron status of litter and soil. Plant and Soil, 2010, 329, 195-208.	1.8	9
80	Morphological and ecophysiological root and leaf traits in ectomycorrhizal, arbuscular-mycorrhizal and non-mycorrhizal Alnus incana seedlings. Plant and Soil, 2019, 436, 283-297.	1.8	9
81	Does supplemental UV-B radiation affect gas exchange and RuBisCO activity ofBetula pendulaRoth. seedlings grown in forest soil under greenhouse conditions?. Plant Ecology and Diversity, 2009, 2, 37-43.	1.0	7
82	On how to disentangle the contribution of different organs and processes to the growth of whole plants. Journal of Experimental Botany, 2010, 61, 626-628.	2.4	7
83	Root and shoot phenology and root longevity of Norway spruce saplings grown at different soil temperatures. Canadian Journal of Forest Research, 2019, 49, 1441-1452.	0.8	7
84	Effect of CCC on the morphology and growth potential of containerised silver birch seedlings. New Forests, 1997, 14, 167-177.	0.7	6
85	The transgenerational effects of solar short-UV radiation differed in two accessions of Vicia faba L. from contrasting UV environments. Journal of Plant Physiology, 2020, 248, 153145.	1.6	6
86	The benefits of informed management of sunlight in production greenhouses and polytunnels. Plants People Planet, 2022, 4, 314-325.	1.6	5
87	The acclimation ofTilia cordatastomatal opening in response to light, and stomatal anatomy to vegetational shade and its components. Tree Physiology, 2017, 37, 209-219.	1.4	4
88	LED lights can be used to improve the water deficit tolerance of tomato seedlings grown in greenhouses. Acta Horticulturae, 2015, , 107-112.	0.1	4
89	Title is missing!. New Forests, 2002, 23, 71-80.	0.7	3
90	Gibberellic Acid (GA3) Applied to Flowering Heracleum sosnowskyi Decreases Seed Viability Even If Seed Development Is Not Inhibited. Plants, 2022, 11, 314.	1.6	1