Klaus Winter

List of Publications by Citations

126 papers	7,837 citations	52 h-index	85 g-index
137 ext. papers	9,363 ext. citations	5.1 avg, IF	6.17 L-index

#	Paper	IF	Citations
126	Photoinhibition and zeaxanthin formation in intact leaves : a possible role of the xanthophyll cycle in the dissipation of excess light energy. *Plant Physiology*, **1987**, 84, 218-24	6.6	647
125	TRY plant trait database - enhanced coverage and open access. *Global Change Biology*, **2020**, 26, 119-188	11.4	399
124	Environmental and physiological determinants of carbon isotope discrimination in terrestrial plants. *New Phytologist*, **2013**, 200, 950-65	9.8	354
123	Adaptive radiation, correlated and contingent evolution, and net species diversification in Bromeliaceae. *Molecular Phylogenetics and Evolution*, **2014**, 71, 55-78	4.1	240
122	Multiple origins of crassulacean acid metabolism and the epiphytic habit in the Neotropical family Bromeliaceae. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 3703-8	11.5	218
121	Crassulacean acid metabolism in australian vascular epiphytes and some related species. *Oecologia*, **1983**, 57, 129-141	2.9	189
120	NaCl-induzierter crassulaceensäurestoffwechsel bei Mesembryanthemum crystallinum. *Zeitschrift für Pflanzenphysiologie*, **1972**, 67, 166-170		161
119	Intracellular Localization of Enzymes of Carbon Metabolism in Mesembryanthemum crystallinum Exhibiting C(3) Photosynthetic Characteristics or Performing Crassulacean Acid Metabolism. *Plant Physiology*, **1982**, 69, 300-7	6.6	144
118	Seasonal shift from C photosynthesis to Crassulacean Acid Metabolism in Mesembryanthemum crystallinum growing in its natural environment. *Oecologia*, **1978**, 34, 225-237	2.9	142
117	Activity of enzymes of carbon metabolism during the induction of Crassulacean acid metabolism in Mesembryanthemum crystallinum L. *Planta*, **1982**, 155, 8-16	4.7	139
116	Facultative crassulacean acid metabolism (CAM) plants: powerful tools for unravelling the functional elements of CAM photosynthesis. *Journal of Experimental Botany*, **2014**, 65, 3425-41	7	138
115	How closely do the delta(13)C values of Crassulacean Acid metabolism plants reflect the proportion of CO(2) fixed during day and night?. *Plant Physiology*, **2002**, 129, 1843-51	6.6	138
114	A roadmap for research on crassulacean acid metabolism (CAM) to enhance sustainable food and bioenergy production in a hotter, drier world. *New Phytologist*, **2015**, 207, 491-504	9.8	134
113	Evolution along the crassulacean acid metabolism continuum. *Functional Plant Biology*, **2010**, 37, 995	2.7	133
112	Crassulacean acid metabolism and epiphytism linked to adaptive radiations in the Orchidaceae. *Plant Physiology*, **2009**, 149, 1838-47	6.6	128
111	High susceptibility to photoinhibition of young leaves of tropical forest trees. *Planta*, **1995**, 197, 583	4.7	123
110	C plants of high biomass in arid regions of asia-occurrence of C photosynthesis in Chenopodiaceae and Polygonaceae from the Middle East and USSR. *Oecologia*, **1981**, 48, 100-106	2.9	106

109	Distribution of crassulacean acid metabolism in orchids of Panama: evidence of selection for weak and strong modes. *Functional Plant Biology*, **2005**, 32, 397-407	2.7	98
108	Tropical forest responses to increasing atmospheric CO: current knowledge and opportunities for future research. *Functional Plant Biology*, **2013**, 40, 531-551	2.7	97
107	On the nature of facultative and constitutive CAM: environmental and developmental control of CAM expression during early growth of Clusia, Kalanchë, and Opuntia. *Journal of Experimental Botany*, **2008**, 59, 1829-40	7	96
106	Increased xanthophyll cycle activity and reduced D1 protein inactivation related to photoinhibition in two plant systems acclimated to excess light. *Plant Science*, **1996**, 115, 237-250	5.3	92
105	Properties of phosphoenolpyruvate carboxylase in rapidly prepared, desalted leaf extracts of the Crassulacean acid metabolism plant Mesembryanthemum crystallinum L. *Planta*, **1982**, 154, 298-308	4.7	91
104	Photosynthetic pathways in Bromeliaceae: phylogenetic and ecological significance of CAM and C3based on carbon isotope ratios for 1893 species. *Botanical Journal of the Linnean Society*, **2015**, 178, 169-221	2.2	86
103	Crassulacean acid metabolism: a continuous or discrete trait?. *New Phytologist*, **2015**, 208, 73-8	9.8	83
102	The response of five tropical dicotyledon species to solar ultraviolet-B radiation. *American Journal of Botany*, **1995**, 82, 445-453	2.7	83
101	Transpiration efficiency of a tropical pioneer tree (Ficus insipida) in relation to soil fertility. *Journal of Experimental Botany*, **2007**, 58, 3549-66	7	82
100	Environment or development? Lifetime net CO2 exchange and control of the expression of Crassulacean acid metabolism in Mesembryanthemum crystallinum. *Plant Physiology*, **2007**, 143, 98-107	6.6	81
99	Carbon isotope composition and water-use efficiency in plants with crassulacean acid metabolism. *Functional Plant Biology*, **2005**, 32, 381-388	2.7	81
98	In□situ temperature response of photosynthesis of 42 tree and liana species in the canopy of two Panamanian lowland tropical forests with contrasting rainfall regimes. *New Phytologist*, **2017**, 214, 1103-1117	9.8	78
97	Thermal acclimation of leaf respiration of tropical trees and lianas: response to experimental canopy warming, and consequences for tropical forest carbon balance. *Global Change Biology*, **2014**, 20, 2915-26	11.4	77
96	The Kalancho□genome provides insights into convergent evolution and building blocks of crassulacean acid metabolism. *Nature Communications*, **2017**, 8, 1899	17.4	77
95	Daily Changes in CO(2) and Water Vapor Exchange, Chlorophyll Fluorescence, and Leaf Water Relations in the Halophyte Mesembryanthemum crystallinum during the Induction of Crassulacean Acid Metabolism in Response to High NaCl Salinity. *Plant Physiology*, **1991**, 95, 768-76	6.6	74
94	Hydrophobic trichome layers and epicuticular wax powders in Bromeliaceae. *American Journal of Botany*, **2001**, 88, 1371-1389	2.7	73
93	Sun-shade patterns of leaf carotenoid composition in 86 species of neotropical forest plants. *Functional Plant Biology*, **2009**, 36, 20-36	2.7	70
92	Xanthophyll-cycle pigments and photosynthetic capacity in tropical forest species: a comparative field study on canopy, gap and understory plants. *Oecologia*, **1995**, 104, 280-290	2.9	70

91	High-temperature tolerance of a tropical tree, Ficus insipida: methodological reassessment and climate change considerations. *Functional Plant Biology*, **2010**, 37, 890	2.7	69
90	Carbon isotope ratio and the extent of daily CAM use by Bromeliaceae. *New Phytologist*, **2002**, 156, 75-83	9.8	66
89	Influence of Nitrate and Ammonia on Photosynthetic Characteristics and Leaf Anatomy of Moricandia arvensis. *Plant Physiology*, **1982**, 70, 616-25	6.6	63
88	Photosynthetic CO2 uptake in seedlings of two tropical tree species exposed to oscillating elevated concentrations of CO2. *Planta*, **2003**, 218, 152-8	4.7	62
87	Effects of solar ultraviolet radiation on the potential efficiency of photosystem II in leaves of tropical plants. *Plant Physiology*, **1999**, 121, 1349-58	6.6	60
86	Capacity of protection against ultraviolet radiation in sun and shade leaves of tropical forest plants. *Functional Plant Biology*, **2003**, 30, 533-542	2.7	60
85	Annual carbon balance and nitrogen-use efficiency in tropical C and CAM epiphytes. *New Phytologist*, **1994**, 126, 481-492	9.8	58
84	The effects of salinity, crassulacean acid metabolism and plant age on the carbon isotope composition of Mesembryanthemum crystallinum L., a halophytic C(3)-CAM species. *Planta*, **2005**, 222, 201-9	4.7	56
83	Responses of legume versus nonlegume tropical tree seedlings to elevated CO2 concentration. *Plant Physiology*, **2011**, 157, 372-85	6.6	54
82	Induction of crassulacean acid metabolism in Mesembryanthemum crystallinum increases reproductive success under conditions of drought and salinity stress. *Oecologia*, **1992**, 92, 475-479	2.9	54
81	□ values of some succulent plants from Madagascar. *Oecologia*, **1979**, 40, 103-112	2.9	54
80	Light and dark CO fixation in Clusia uvitana and the effects of plant water status and CO availability. *Oecologia*, **1992**, 91, 47-51	2.9	53
79	Reversible Burst of Transcriptional Changes during Induction of Crassulacean Acid Metabolism in Talinum triangulare. *Plant Physiology*, **2016**, 170, 102-22	6.6	53
78	Ecophysiology of constitutive and facultative CAM photosynthesis. *Journal of Experimental Botany*, **2019**, 70, 6495-6508	7	52
77	Elevated night-time temperatures increase growth in seedlings of two tropical pioneer tree species. *New Phytologist*, **2013**, 197, 1185-1192	9.8	52
76	Growth response and acclimation of CO2 exchange characteristics to elevated temperatures in tropical tree seedlings. *Journal of Experimental Botany*, **2013**, 64, 3817-28	7	51
75	□13C values and crassulacean acid metabolism in Clusia species from Panama. *Trees - Structure and Function*, **2004**, 18, 658-668	2.6	50
74	A one-year study on carbon, water and nutrient relationships in a tropical C -CAM hemi-epiphyte, Clusia uvitana Pittier. *New Phytologist*, **1994**, 127, 45-60	9.8	49

73	Photosynthetic acclimation to warming in tropical forest tree seedlings. *Journal of Experimental Botany*, **2017**, 68, 2275-2284	7	48
72	Plant science. Photosynthesis, reorganized. *Science*, **2011**, 332, 311-2	33.3	48
71	Temperature response of CO exchange in three tropical tree species. *Functional Plant Biology*, **2016**, 43, 468-478	2.7	46
70	Photosynthesis, photoprotection, and growth of shade-tolerant tropical tree seedlings under full sunlight. *Photosynthesis Research*, **2012**, 113, 273-85	3.7	44
69	The incidence of crassulacean acid metabolism in Orchidaceae derived from carbon isotope ratios: a checklist of the flora of Panama and Costa Rica. *Botanical Journal of the Linnean Society*, **2010**, 163, 194-222	2.2	44
68	Diurnal changes in chlorophylla fluorescence and carotenoid composition inOpuntia ficus-indica, a CAM plant, and in three C species in Portugal during summer. *Oecologia*, **1992**, 91, 505-510	2.9	44
67	High rates of photosynthesis in the tropical pioneer tree, Ficus insipida Willd.. *Flora: Morphology, Distribution, Functional Ecology of Plants*, **1995**, 190, 265-272	1.9	43
66	Low inactivation of D1 protein of photosystem II in young canopy leaves of Anacardium excelsum under high-light stress. *Journal of Plant Physiology*, **1997**, 151, 286-292	3.6	42
65	Regulatory protein phosphorylation of phosphoenolpyruvate carboxylase in the facultative crassulacean-acid-metabolism plant Mesembryanthemum crystallinum L. *FEBS Journal*, **1992**, 209, 95-101		41
64	Crassulacean acid metabolism in the ZZ plant, Zamioculcas zamiifolia (Araceae). *American Journal of Botany*, **2007**, 94, 1670-6	2.7	40
63	In situ temperature relationships of biochemical and stomatal controls of photosynthesis in four lowland tropical tree species. *Plant, Cell and Environment*, **2017**, 40, 3055-3068	8.4	39
62	Induction and reversal of crassulacean acid metabolism in Calandrinia polyandra: effects of soil moisture and nutrients. *Functional Plant Biology*, **2011**, 38, 576-582	2.7	38
61	Responses of communities of tropical tree species to elevated CO in a forest clearing. *Oecologia*, **1998**, 116, 207-218	2.9	38
60	Lutein epoxide cycle, light harvesting and photoprotection in species of the tropical tree genus Inga. *Plant, Cell and Environment*, **2008**, 31, 548-61	8.4	38
59	Do mature shade leaves of tropical tree seedlings acclimate to high sunlight and UV radiation?. *Functional Plant Biology*, **2004**, 31, 743-756	2.7	37
58	The effects of CO2 and nutrient fertilisation on the growth and temperature response of the mangrove Avicennia germinans. *Photosynthesis Research*, **2016**, 129, 159-70	3.7	35
57	Multiple isoforms of phosphoenolpyruvate carboxylase in the Orchidaceae (subtribe Oncidiinae): implications for the evolution of crassulacean acid metabolism. *Journal of Experimental Botany*, **2014**, 65, 3623-36	7	35
56	Sudden exposure to solar UV-B radiation reduces net CO(2) uptake and photosystem I efficiency in shade-acclimated tropical tree seedlings. *Plant Physiology*, **2003**, 131, 745-52	6.6	35

55	Drought-stress-induced up-regulation of CAM in seedlings of a tropical cactus, Opuntia elatior, operating predominantly in the C3 mode. *Journal of Experimental Botany*, **2011**, 62, 4037-42	7	34
54	Carbon isotope composition of canopy leaves in a tropical forest in Panama throughout a seasonal cycle. *Trees - Structure and Function*, **2005**, 19, 545-551	2.6	34
53	Degrees of crassulacean acid metabolism in tropical epiphytic and lithophytic ferns. *Functional Plant Biology*, **1999**, 26, 749	2.7	34
52	Mineral Ion composition and occurrence of CAM-like diurnal malate fluctuations in plants of coastal and desert habitats of israel and the Sinai. *Oecologia*, **1976**, 25, 125-143	2.9	33
51	Thermal tolerance, net CO2 exchange and growth of a tropical tree species, Ficus insipida, cultivated at elevated daytime and nighttime temperatures. *Journal of Plant Physiology*, **2013**, 170, 822-7	3.6	32
50	Light-Stimulated Burst of Carbon Dioxide Uptake following Nocturnal Acidification in the Crassulacean Acid Metabolism Plant Kalanchoë diagremontiana. *Plant Physiology*, **1982**, 70, 1718-22	6.6	30
49	Evidence for the significance of crassulacean acid metabolism as an adaptive mechanism to water stress. *Plant Science Letters*, **1974**, 3, 279-281		30
48	Carbon Assimilation Pathways in Mesembryanthemum nodiflorum L. under Natural Conditions. *Zeitschrift Für Pflanzenphysiologie*, **1978**, 88, 153-162		28
47	High tolerance of tropical sapling growth and gas exchange to moderate warming. *Functional Ecology*, **2018**, 32, 599-611	5.6	27
46	Day/night variations in turgor pressure in individual cells of Mesembryanthemum crystallinum L. *Oecologia*, **1986**, 69, 171-175	2.9	26
45	Photosynthetic characteristics of chloroplasts isolated fromMesembryanthemum crystallinum L., a halophilic plant capable of Crassulacean acid metabolism. *Planta*, **1983**, 159, 66-76	4.7	26
44	Light-stimulated heat tolerance in leaves of two neotropical tree species, Ficus insipida and Calophyllum longifolium. *Functional Plant Biology*, **2014**, 42, 42-51	2.7	25
43	Marked growth response of communities of two tropical tree species to elevated CO2 when soil nutrient limitation is removed. *Flora: Morphology, Distribution, Functional Ecology of Plants*, **2001**, 196, 47-58	1.9	24
42	Optional use of CAM photosynthesis in two C species, Portulaca cyclophylla and Portulaca digyna. *Journal of Plant Physiology*, **2017**, 214, 91-96	3.6	23
41	Facultative crassulacean acid metabolism (CAM) in four small C3 and C4 leaf-succulents. *Australian Journal of Botany*, **2017**, 65, 103	1.2	22
40	The Effects of Rising Temperature on the Ecophysiology of Tropical Forest Trees. *Tree Physiology*, **2016**, 385-412		22
39	Oxygen isotope composition of CAM and C3 Clusia species: non-steady-state dynamics control leaf water 18O enrichment in succulent leaves. *Plant, Cell and Environment*, **2008**, 31, 1644-62	8.4	21
38	Diversity, Phylogeny and Classification of Clusia **2007**, 95-116		21

37	Growth irradiance effects on photosynthesis and growth in two co-occurring shade-tolerant neotropical perennials of contrasting photosynthetic pathways. *American Journal of Botany*, **2005**, 92, 1811-9	2.7	21
36	Photosynthetic heat tolerance of shade and sun leaves of three tropical tree species. *Photosynthesis Research*, **2019**, 141, 119-130	3.7	20
35	Altered Gene Regulatory Networks Are Associated With the Transition From C to Crassulacean Acid Metabolism in (Oncidiinae: Orchidaceae). *Frontiers in Plant Science*, **2018**, 9, 2000	6.2	19
34	Research note: Large gene family of phosphoenolpyruvate carboxylase in the crassulacean acid metabolism plant Kalanchoe pinnata (Crassulaceae) characterised by partial cDNA sequence analysis. *Functional Plant Biology*, **2005**, 32, 467-472	2.7	19
33	Facultative crassulacean acid metabolism in a C3-C4 intermediate. *Journal of Experimental Botany*, **2019**, 70, 6571-6579	7	18
32	WHOLE-PLANT CONSEQUENCES OF CRASSULACEAN ACID METABOLISM FOR A TROPICAL FOREST UNDERSTORY PLANT. *Ecology*, **1999**, 80, 1584-1593	4.6	17
31	Australia lacks stem succulents but is it depauperate in plants with crassulacean acid metabolism (CAM)?. *Current Opinion in Plant Biology*, **2016**, 31, 109-17	9.9	15
30	Facultative CAM photosynthesis (crassulacean acid metabolism) in four species of Calandrinia, ephemeral succulents of arid Australia. *Photosynthesis Research*, **2017**, 134, 17-25	3.7	14
29	Canopy CO2 exchange of two neotropical tree species exhibiting constitutive and facultative CAM photosynthesis, Clusia rosea and Clusia cylindrica. *Journal of Experimental Botany*, **2009**, 60, 3167-77	7	13
28	Photoprotection, photosynthesis and growth of tropical tree seedlings under near-ambient and strongly reduced solar ultraviolet-B radiation. *Journal of Plant Physiology*, **2007**, 164, 1311-22	3.6	13
27	Limited photosynthetic plasticity in the leaf-succulent CAM plant Agave angustifolia grown at different temperatures. *Functional Plant Biology*, **2014**, 41, 843-849	2.7	12
26	Cryptic crassulacean acid metabolism (CAM) in Jatropha curcas. *Functional Plant Biology*, **2015**, 42, 711-717	2.7	12
25	Protection by light against heat stress in leaves of tropical crassulacean acid metabolism plants containing high acid levels. *Functional Plant Biology*, **2016**, 43, 1061-1069	2.7	11
24	Operating at the very low end of the crassulacean acid metabolism spectrum: Sesuvium portulacastrum (Aizoaceae). *Journal of Experimental Botany*, **2019**, 70, 6561-6570	7	10
23	Nocturnal versus diurnal CO2 uptake: how flexible is Agave angustifolia?. *Journal of Experimental Botany*, **2014**, 65, 3695-703	7	9
22	14CO2 dark fixation in the halophytic species Mesembryanthemum crystallinum. *Biochimica Et Biophysica Acta - General Subjects*, **1974**, 343, 465-8	4	9
21	Elevated CO2 enhances growth in the rain forest understory plant, Piper cordulatum, at extremely low light intensities. *Flora: Morphology, Distribution, Functional Ecology of Plants*, **1998**, 193, 323-326	1.9	8
20	Experimenting with domestication: Understanding macro- and micro-phenotypes and developmental plasticity in teosinte in its ancestral pleistocene and early holocene environments. *Journal of Archaeological Science*, **2019**, 108, 104970	2.9	7

19	Photosynthetic quantum efficiency in south-eastern Amazonian trees may be already affected by climate change. *Plant, Cell and Environment*, **2021**, 44, 2428-2439	8.4	7
18	Karatophyllum bromelioides L.D. Gomez revisited: a probable fossil CAM bromeliad. *American Journal of Botany*, **2011**, 98, 1905-8	2.7	6
17	Leaf heat tolerance of 147 tropical forest species varies with elevation and leaf functional traits, but not with phylogeny. *Plant, Cell and Environment*, **2021**, 44, 2414-2427	8.4	6
16	Occurrence of crassulacean acid metabolism in Colombian orchids determined by leaf carbon isotope ratios. *Botanical Journal of the Linnean Society*, **2020**, 193, 431-477	2.2	5
15	Similar temperature dependence of photosynthetic parameters in sun and shade leaves of three tropical tree species. *Tree Physiology*, **2020**, 40, 637-651	4.2	5
14	CAM photosynthesis: the acid test. *New Phytologist*, **2021**, 233, 599	9.8	5
13	Evolution of crassulacean acid metabolism (CAM) as an escape from ecological niche conservatism in Malagasy Bulbophyllum (Orchidaceae). *New Phytologist*, **2021**, 231, 1236-1248	9.8	5
12	Low-level CAM photosynthesis in a succulent-leaved member of the Urticaceae, Pilea peperomioides. *Functional Plant Biology*, **2021**, 48, 683-690	2.7	4
11	Hydraulic traits of Neotropical canopy liana and tree species across a broad range of wood density: implications for predicting drought mortality with models. *Tree Physiology*, **2021**, 41, 24-34	4.2	4
10	Large differences in leaf cuticle conductance and its temperature response among 24 tropical tree species from across a rainfall gradient. *New Phytologist*, **2021**, 232, 1618-1631	9.8	4
9	Salinity responses of inland and coastal neotropical trees species. *Plant Ecology*, **2020**, 221, 695-708	1.7	3
8	Photosynthetic plasticity of a tropical tree species, Tabebuia rosea, in response to elevated temperature and [CO]. *Plant, Cell and Environment*, **2021**, 44, 2347-2364	8.4	2
7	Constitutive and facultative crassulacean acid metabolism (CAM) in Cuban oregano, Coleus amboinicus (Lamiaceae). *Functional Plant Biology*, **2021**, 48, 647-654	2.7	2
6	CAM photosynthesis in desert blooming Cistanthe of the Atacama, Chile. *Functional Plant Biology*, **2021**, 48, 691-702	2.7	2
5	Does the C plant Trianthema portulacastrum (Aizoaceae) exhibit weakly expressed crassulacean acid metabolism (CAM)?. *Functional Plant Biology*, **2021**, 48, 655-665	2.7	1
4	Crassulacean acid metabolism (CAM) supersedes the turgor loss point (TLP) as an important adaptation across a precipitation gradient, in the genus Clusia. *Functional Plant Biology*, **2021**, 48, 703-716	2.7	1
3	Leaf water Δ reflects water vapour exchange and uptake by C and CAM epiphytic bromeliads in Panama. *Functional Plant Biology*, **2021**, 48, 732-742	2.7	1
2	Diversity of CAM plant photosynthesis (crassulacean acid metabolism): a tribute to Barry Osmond. *Functional Plant Biology*, **2021**, 48, iii-ix	2.7	1

1	The Photosynthetic System in Tropical Plants Under High Irradiance and Temperature Stress. *Progress in Botany Fortschritte Der Botanik*, **2020**, 131-169	0.6