

Owen K Atkin

List of Publications by Year in descending order

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Version: 2024-02-01

165
papers

17,583
citations

18482

62
h-index

15266

126
g-index

203
all docs

203
docs citations

203
times ranked

17621
citing authors

#	ARTICLE	IF	CITATIONS
1	TRY “ a global database of plant traits. <i>Global Change Biology</i> , 2011, 17, 2905-2935.	9.5	2,002
2	Plant phenotypic plasticity in a changing climate. <i>Trends in Plant Science</i> , 2010, 15, 684-692.	8.8	1,571
3	Thermal acclimation and the dynamic response of plant respiration to temperature. <i>Trends in Plant Science</i> , 2003, 8, 343-351.	8.8	1,047
4	TRY plant trait database “ enhanced coverage and open access. <i>Global Change Biology</i> , 2020, 26, 119-188.	9.5	1,038
5	The hot and the cold: unravelling the variable response of plant respiration to temperature. <i>Functional Plant Biology</i> , 2005, 32, 87.	2.1	422
6	The crucial role of plant mitochondria in orchestrating drought tolerance. <i>Annals of Botany</i> , 2009, 103, 581-597.	2.9	399
7	Response of root respiration to changes in temperature and its relevance to global warming. <i>New Phytologist</i> , 2000, 147, 141-154.	7.3	358
8	Simulated resilience of tropical rainforests to CO ₂ -induced climate change. <i>Nature Geoscience</i> , 2013, 6, 268-273.	12.9	358
9	Global variability in leaf respiration in relation to climate, plant functional types and leaf traits. <i>New Phytologist</i> , 2015, 206, 614-636.	7.3	350
10	Leaf Respiration of Snow Gum in the Light and Dark. Interactions between Temperature and Irradiance. <i>Plant Physiology</i> , 2000, 122, 915-924.	4.8	249
11	Thermal acclimation of leaf and root respiration: an investigation comparing inherently fast- and slow-growing plant species. <i>Global Change Biology</i> , 2003, 9, 895-910.	9.5	247
12	Trees tolerate an extreme heatwave via sustained transpirational cooling and increased leaf thermal tolerance. <i>Global Change Biology</i> , 2018, 24, 2390-2402.	9.5	242
13	Interdependence between chloroplasts and mitochondria in the light and the dark. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1998, 1366, 235-255.	1.0	240
14	The art of growing plants for experimental purposes: a practical guide for the plant biologist. <i>Functional Plant Biology</i> , 2012, 39, 821.	2.1	217
15	Thermal limits of leaf metabolism across biomes. <i>Global Change Biology</i> , 2017, 23, 209-223.	9.5	213
16	Acclimation of snow gum (<i>Eucalyptus pauciflora</i>) leaf respiration to seasonal and diurnal variations in temperature: the importance of changes in the capacity and temperature sensitivity of respiration. <i>Plant, Cell and Environment</i> , 2000, 23, 15-26.	5.7	212
17	Convergence in the temperature response of leaf respiration across biomes and plant functional types. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 3832-3837.	7.1	198
18	High thermal acclimation potential of both photosynthesis and respiration in two lowland <i>Plantago</i> species in contrast to an alpine congeneric. <i>Global Change Biology</i> , 2006, 12, 500-515.	9.5	195

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19	Acclimation of photosynthesis and respiration is asynchronous in response to changes in temperature regardless of plant functional group. <i>New Phytologist</i> , 2007, 176, 375-389.	7.3	191
20	Phenotypic plasticity and growth temperature: understanding interspecific variability. <i>Journal of Experimental Botany</i> , 2006, 57, 267-281.	4.8	184
21	Respiratory energy requirements of roots vary with the potential growth rate of a plant species. <i>Physiologia Plantarum</i> , 1991, 83, 469-475.	5.2	183
22	Respiration as a percentage of daily photosynthesis in whole plants is homeostatic at moderate, but not high, growth temperatures. <i>New Phytologist</i> , 2007, 174, 367-380.	7.3	171
23	Growth temperature influences the underlying components of relative growth rate: an investigation using inherently fast- and slow-growing plant species. <i>Plant, Cell and Environment</i> , 2002, 25, 975-988.	5.7	168
24	Non-structural carbohydrates in woody plants compared among laboratories. <i>Tree Physiology</i> , 2015, 35, tpv073.	3.1	163
25	Impacts of drought on leaf respiration in darkness and light in <i>Eucalyptus saligna</i> exposed to industrial-age atmospheric CO ₂ and growth temperature. <i>New Phytologist</i> , 2011, 190, 1003-1018.	7.3	162
26	Relationship between the inhibition of leaf respiration by light and enhancement of leaf dark respiration following light treatment. <i>Functional Plant Biology</i> , 1998, 25, 437.	2.1	161
27	A test of the "one-point method"™ for estimating maximum carboxylation capacity from field-measured, light-saturated photosynthesis. <i>New Phytologist</i> , 2016, 210, 1130-1144.	7.3	159
28	Leaf day respiration: low CO ₂ flux but high significance for metabolism and carbon balance. <i>New Phytologist</i> , 2017, 216, 986-1001.	7.3	159
29	Mapping local and global variability in plant trait distributions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E10937-E10946.	7.1	159
30	Using temperature-dependent changes in leaf scaling relationships to quantitatively account for thermal acclimation of respiration in a coupled global climate-vegetation model. <i>Global Change Biology</i> , 2008, 14, 2709-2726.	9.5	155
31	Irradiance, temperature and rainfall influence leaf dark respiration in woody plants: evidence from comparisons across 20 sites. <i>New Phytologist</i> , 2006, 169, 309-319.	7.3	150
32	Analysis of Respiratory Chain Regulation in Roots of Soybean Seedlings1. <i>Plant Physiology</i> , 1998, 117, 1083-1093.	4.8	132
33	Improved representation of plant functional types and physiology in the Joint UK Land Environment Simulator (JULES v4.2) using plant trait information. <i>Geoscientific Model Development</i> , 2016, 9, 2415-2440.	3.6	115
34	Heterogeneity of plant mitochondrial responses underpinning respiratory acclimation to the cold in <i>Arabidopsis thaliana</i> leaves. <i>Plant, Cell and Environment</i> , 2006, 29, 940-949.	5.7	112
35	Leaf Respiration in Light and Darkness (A Comparison of Slow- and Fast-Growing Poa Species). <i>Plant Physiology</i> , 1997, 113, 961-965.	4.8	109
36	Dynamic changes in the mitochondrial electron transport chain underpinning cold acclimation of leaf respiration. <i>Plant, Cell and Environment</i> , 2008, 31, 1156-1169.	5.7	107

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37	High-resolution temperature responses of leaf respiration in snow gum (<i>Eucalyptus</i>) Tj ETQq1 1 0.784314 rgBT /Overl 2013, 36, 1268-1284.	5.7	107
38	Core principles which explain variation in respiration across biological scales. <i>New Phytologist</i> , 2019, 222, 670-686.	7.3	107
39	Solar radiation and functional traits explain the decline of forest primary productivity along a tropical elevation gradient. <i>Ecology Letters</i> , 2017, 20, 730-740.	6.4	100
40	Implications of improved representations of plant respiration in a changing climate. <i>Nature Communications</i> , 2017, 8, 1602.	12.8	100
41	Is Shade Beneficial for Mediterranean Shrubs Experiencing Periods of Extreme Drought and Late-winter Frosts?. <i>Annals of Botany</i> , 2008, 102, 923-933.	2.9	96
42	Reassessing the nitrogen relations of Arctic plants: a mini-review. <i>Plant, Cell and Environment</i> , 1996, 19, 695-704.	5.7	94
43	Altitudinal variation in leaf mass per unit area, leaf tissue density and foliar nitrogen and phosphorus content along an Amazon-Andes gradient in Peru. <i>Plant Ecology and Diversity</i> , 2009, 2, 243-254.	2.4	92
44	Respiratory Patterns in Roots in Relation to Their Functioning. , 2002, , 521-552.		91
45	Seasonal acclimation of leaf respiration in <i>Eucalyptus saligna</i> trees: impacts of elevated atmospheric CO ₂ and summer drought. <i>Global Change Biology</i> , 2011, 17, 1560-1576.	9.5	91
46	Bringing the Kok effect to light: A review on the integration of daytime respiration and net ecosystem exchange. <i>Ecosphere</i> , 2013, 4, 1-14.	2.2	90
47	Leaf-level photosynthetic capacity in lowland Amazonian and high-elevation Andean tropical moist forests of Peru. <i>New Phytologist</i> , 2017, 214, 1002-1018.	7.3	89
48	Plasticity of photosynthetic heat tolerance in plants adapted to thermally contrasting biomes. <i>Plant, Cell and Environment</i> , 2018, 41, 1251-1262.	5.7	88
49	Effect of Temperature on Rates of Alternative and Cytochrome Pathway Respiration and Their Relationship with the Redox Poise of the Quinone Pool. <i>Plant Physiology</i> , 2002, 128, 212-222.	4.8	86
50	The response of fast- and slow-growing <i>Acacia</i> species to elevated atmospheric CO ₂ : an analysis of the underlying components of relative growth rate. <i>Oecologia</i> , 1999, 120, 544-554.	2.0	85
51	Regulation of root respiration in two species of <i>Plantago</i> that differ in relative growth rate: the effect of short- and long-term changes in temperature. <i>Plant, Cell and Environment</i> , 2002, 25, 1501-1513.	5.7	84
52	Canopy position affects the relationships between leaf respiration and associated traits in a tropical rainforest in Far North Queensland. <i>Tree Physiology</i> , 2014, 34, 564-584.	3.1	84
53	Strong thermal acclimation of photosynthesis in tropical and temperate wet-forest tree species: the importance of altered Rubisco content. <i>Global Change Biology</i> , 2017, 23, 2783-2800.	9.5	84
54	Response of Plant Respiration to Changes in Temperature: Mechanisms and Consequences of Variations in Q ₁₀ Values and Acclimation. , 2005, , 95-135.		80

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55	Variation in Leaf Respiration Rates at Night Correlates with Carbohydrate and Amino Acid Supply. <i>Plant Physiology</i> , 2017, 174, 2261-2273.	4.8	76
56	Addressing Research Bottlenecks to Crop Productivity. <i>Trends in Plant Science</i> , 2021, 26, 607-630.	8.8	76
57	Temporal heterogeneity of cold acclimation phenotypes in <i>Arabidopsis</i> leaves. <i>Plant, Cell and Environment</i> , 2010, 33, 244-258.	5.7	75
58	Global convergence in leaf respiration from estimates of thermal acclimation across time and space. <i>New Phytologist</i> , 2015, 207, 1026-1037.	7.3	74
59	AusTraits, a curated plant trait database for the Australian flora. <i>Scientific Data</i> , 2021, 8, 254.	5.3	73
60	The dependence of respiration on photosynthetic substrate supply and temperature: integrating leaf, soil and ecosystem measurements. <i>Global Change Biology</i> , 2006, 12, 1954-1968.	9.5	72
61	On the developmental dependence of leaf respiration: responses to short- and long-term changes in growth temperature. <i>American Journal of Botany</i> , 2006, 93, 1633-1639.	1.7	70
62	Light inhibition of leaf respiration in field-grown <i>Eucalyptus saligna</i> in whole-tree chambers under elevated atmospheric CO ₂ and summer drought. <i>Plant, Cell and Environment</i> , 2012, 35, 966-981.	5.7	68
63	Does growth irradiance affect temperature dependence and thermal acclimation of leaf respiration? Insights from a Mediterranean tree with long-lived leaves. <i>Plant, Cell and Environment</i> , 2007, 30, 820-833.	5.7	67
64	Drought-induced shoot dieback starts with massive root xylem embolism and variable depletion of nonstructural carbohydrates in seedlings of two tree species. <i>New Phytologist</i> , 2017, 213, 597-610.	7.3	67
65	The contribution of roots and shoots to whole plant nitrate reduction in fast- and slow-growing grass species. <i>Journal of Experimental Botany</i> , 2002, 53, 1635-1642.	4.8	66
66	Mycorrhizal respiration: implications for global scaling relationships. <i>Trends in Plant Science</i> , 2008, 13, 583-588.	8.8	65
67	Acclimation of leaf respiration consistent with optimal photosynthetic capacity. <i>Global Change Biology</i> , 2020, 26, 2573-2583.	9.5	64
68	Impact of temperature on the relationship between respiration and nitrogen concentration in roots: an analysis of scaling relationships, Q ₁₀ values and thermal acclimation ratios. <i>New Phytologist</i> , 2007, 173, 110-120.	7.3	63
69	Exploring high temperature responses of photosynthesis and respiration to improve heat tolerance in wheat. <i>Journal of Experimental Botany</i> , 2019, 70, 5051-5069.	4.8	63
70	Analysis of differences in photosynthetic nitrogen use efficiency of alpine and lowland <i>Poa</i> species. <i>Oecologia</i> , 1999, 120, 19-26.	2.0	57
71	Respiration in Photosynthetic Cells: Gas Exchange Components, Interactions with Photorespiration and the Operation of Mitochondria in the Light. , 2005, , 43-61.		57
72	Robustness of trait connections across environmental gradients and growth forms. <i>Global Ecology and Biogeography</i> , 2019, 28, 1806-1826.	5.8	56

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73	Variation in the components of relative growth rate in 10 <i>Acacia</i> species from contrasting environments. <i>Plant, Cell and Environment</i> , 1998, 21, 1007-1017.	5.7	54
74	Predicting dark respiration rates of wheat leaves from hyperspectral reflectance. <i>Plant, Cell and Environment</i> , 2019, 42, 2133-2150.	5.7	54
75	Light inhibition of leaf respiration as soil fertility declines along a post-glacial chronosequence in New Zealand: an analysis using the Kok method. <i>Plant and Soil</i> , 2013, 367, 163-182.	3.7	53
76	Thermal acclimation of leaf dark respiration of beech seedlings experiencing summer drought in high and low light environments. <i>Tree Physiology</i> , 2010, 30, 214-224.	3.1	49
77	Traditional plant functional groups explain variation in economic but not size-related traits across the tundra biome. <i>Global Ecology and Biogeography</i> , 2019, 28, 78-95.	5.8	49
78	A continental-scale assessment of variability in leaf traits: Within species, across sites and between seasons. <i>Functional Ecology</i> , 2018, 32, 1492-1506.	3.6	48
79	Leaf respiration in darkness and in the light under pre-industrial, current and elevated atmospheric CO ₂ concentrations. <i>Plant Science</i> , 2014, 226, 120-130.	3.6	47
80	The combination of gas-phase fluorophore technology and automation to enable high-throughput analysis of plant respiration. <i>Plant Methods</i> , 2017, 13, 16.	4.3	46
81	Range size and growth temperature influence <i>Eucalyptus</i> species responses to an experimental heatwave. <i>Global Change Biology</i> , 2019, 25, 1665-1684.	9.5	44
82	Contrasting leaf trait scaling relationships in tropical and temperate wet forest species. <i>Functional Ecology</i> , 2013, 27, 522-534.	3.6	43
83	A critique of the use of inhibitors to estimate partitioning of electrons between mitochondrial respiratory pathways in plants. <i>Physiologia Plantarum</i> , 1995, 95, 523-532.	5.2	42
84	Xeml Lab: a tool that supports the design of experiments at a graphical interface and generates computer-readable metadata files, which capture information about genotypes, growth conditions, environmental perturbations and sampling strategy. <i>Plant, Cell and Environment</i> , 2009, 32, 1185-1200.	5.7	42
85	Responses of leaf respiration to heatwaves. <i>Plant, Cell and Environment</i> , 2021, 44, 2090-2101.	5.7	42
86	Does the direct effect of atmospheric CO ₂ concentration on leaf respiration vary with temperature? Responses in two species of <i>Plantago</i> that differ in relative growth rate. <i>Physiologia Plantarum</i> , 2002, 114, 57-64.	5.2	42
87	Homeostasis of respiration under drought and its important consequences for foliar carbon balance in a drier climate: insights from two contrasting <i>Acacia</i> species. <i>Functional Plant Biology</i> , 2010, 37, 323.	2.1	41
88	Nitrogen and phosphorus availabilities interact to modulate leaf trait scaling relationships across six plant functional types in a controlled-environment study. <i>New Phytologist</i> , 2017, 215, 992-1008.	7.3	41
89	Acclimation of light and dark respiration to experimental and seasonal warming are mediated by changes in leaf nitrogen in <i>Eucalyptus globulus</i> . <i>Tree Physiology</i> , 2017, 37, 1069-1083.	3.1	41
90	Tracking the origins of the Kok effect, 70 years after its discovery. <i>New Phytologist</i> , 2017, 214, 506-510.	7.3	40

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91	The effect of root temperature on the induction of nitrate reductase activities and nitrogen uptake rates in arctic plant species. <i>Plant and Soil</i> , 1994, 159, 187-197.	3.7	39
92	Leaf waxes of slow-growing alpine and fast-growing lowland <i>Poa</i> species: inherent differences and responses to UV-B radiation. <i>Phytochemistry</i> , 1999, 50, 571-580.	2.9	39
93	Temperature dependence of respiration in roots colonized by arbuscular mycorrhizal fungi. <i>New Phytologist</i> , 2009, 182, 188-199.	7.3	38
94	Is resource allocation and grain yield of rice altered by inoculation with arbuscular mycorrhizal fungi?. <i>Journal of Plant Ecology</i> , 2015, 8, 436-448.	2.3	38
95	The validity of optimal leaf traits modelled on environmental conditions. <i>New Phytologist</i> , 2019, 221, 1409-1423.	7.3	38
96	A Comparison of the Respiratory Processes and Growth Rate of Selected Australian Alpine and Related Lowland Plant Species. <i>Functional Plant Biology</i> , 1990, 17, 517.	2.1	37
97	Transient shade and drought have divergent impacts on the temperature sensitivity of dark respiration in leaves of <i>Geum urbanum</i> . <i>Functional Plant Biology</i> , 2008, 35, 1135.	2.1	36
98	Trait convergence in photosynthetic nutrient-use efficiency along a 2-million year dune chronosequence in a global biodiversity hotspot. <i>Journal of Ecology</i> , 2019, 107, 2006-2023.	4.0	36
99	Partitioning of Electrons between the Cytochrome and Alternative Pathways in Intact Roots. <i>Plant Physiology</i> , 1995, 108, 1179-1183.	4.8	35
100	The relationship between the relative growth rate and nitrogen economy of alpine and lowland <i>Poa</i> species. <i>Plant, Cell and Environment</i> , 1996, 19, 1324-1330.	5.7	35
101	Macromolecular rate theory (MMRT) provides a thermodynamics rationale to underpin the convergent temperature response in plant leaf respiration. <i>Global Change Biology</i> , 2018, 24, 1538-1547.	9.5	35
102	Drought increases heat tolerance of leaf respiration in <i>Eucalyptus globulus</i> saplings grown under both ambient and elevated atmospheric [CO ₂] and temperature. <i>Journal of Experimental Botany</i> , 2014, 65, 6471-6485.	4.8	34
103	Seasonality of foliar respiration in two dominant plant species from the Arctic tundra: response to long-term warming and short-term temperature variability. <i>Functional Plant Biology</i> , 2014, 41, 287.	2.1	34
104	Respiratory energy requirements of roots vary with the potential growth rate of a plant species. <i>Physiologia Plantarum</i> , 1991, 83, 469-475.	5.2	34
105	N ₂ fixation by <i>Acacia</i> species increases under elevated atmospheric CO ₂ . <i>Plant, Cell and Environment</i> , 2002, 25, 567-579.	5.7	33
106	Differential physiological responses to environmental change promote woody shrub expansion. <i>Ecology and Evolution</i> , 2013, 3, 1149-1162.	1.9	33
107	Diurnal and seasonal variation in light and dark respiration in field-grown <i>Eucalyptus pauciflora</i> . <i>Tree Physiology</i> , 2015, 35, 840-849.	3.1	33
108	Variation in bulk-leaf ¹³ C discrimination, leaf traits and water-use efficiency-trait relationships along a continental-scale climate gradient in Australia. <i>Global Change Biology</i> , 2018, 24, 1186-1200.	9.5	33

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109	Scaling leaf respiration with nitrogen and phosphorus in tropical forests across two continents. <i>New Phytologist</i> , 2017, 214, 1064-1077.	7.3	30
110	Mesophyll conductance does not contribute to greater photosynthetic rate per unit nitrogen in temperate compared with tropical evergreen wetland forest tree leaves. <i>New Phytologist</i> , 2018, 218, 492-505.	7.3	30
111	The impact of elevated atmospheric CO ₂ and nitrate supply on growth, biomass allocation, nitrogen partitioning and N ₂ fixation of <i>Acacia melanoxylon</i> . <i>Functional Plant Biology</i> , 1999, 26, 737.	2.1	28
112	Thermal acclimation of shoot respiration in an Arctic woody plant species subjected to 22 years of warming and altered nutrient supply. <i>Global Change Biology</i> , 2014, 20, 2618-2630.	9.5	28
113	Leaf and cell level carbon cycling responses to a nitrogen and phosphorus gradient in two Arctic tundra species. <i>American Journal of Botany</i> , 2012, 99, 1702-1714.	1.7	27
114	Thermal acclimation of leaf photosynthetic traits in an evergreen woodland, consistent with the coordination hypothesis. <i>Biogeosciences</i> , 2018, 15, 3461-3474.	3.3	27
115	Systemic low temperature signaling in <i>Arabidopsis</i> . <i>Plant and Cell Physiology</i> , 2010, 51, 1488-1498.	3.1	25
116	Leaf Respiration in Terrestrial Biosphere Models. <i>Advances in Photosynthesis and Respiration</i> , 2017, , 107-142.	1.0	25
117	Temperature-dependent changes in respiration rates and redox poise of the ubiquinone pool in protoplasts and isolated mitochondria of potato leaves. <i>Physiologia Plantarum</i> , 2007, 129, 175-184.	5.2	24
118	Climate-dependent variations in leaf respiration in a dryland, low productivity Mediterranean forest: the importance of acclimation in both high light and shaded habitats. <i>Functional Ecology</i> , 2008, 22, 172-184.	3.6	24
119	Impact of growth temperature on scaling relationships linking photosynthetic metabolism to leaf functional traits. <i>Functional Ecology</i> , 2010, 24, 1181-1191.	3.6	24
120	Light induction of alternative pathway capacity in leaf slices of Belgium endive. <i>Plant, Cell and Environment</i> , 1993, 16, 231-235.	5.7	23
121	Molecular and physiological responses during thermal acclimation of leaf photosynthesis and respiration in rice. <i>Plant, Cell and Environment</i> , 2020, 43, 594-610.	5.7	23
122	The ability of several high arctic plant species to utilize nitrate nitrogen under field conditions. <i>Oecologia</i> , 1993, 96, 239-245.	2.0	22
123	Effect of temperature on rates of alternative and cytochrome pathway respiration and their relationship with the redox poise of the quinone pool. <i>Plant Physiology</i> , 2002, 128, 212-22.	4.8	21
124	Respiratory flexibility and efficiency are affected by simulated global change in Arctic plants. <i>New Phytologist</i> , 2013, 197, 1161-1172.	7.3	20
125	Leaf trait variation is similar among genotypes of <i>Eucalyptus camaldulensis</i> from differing climates and arises in plastic responses to the seasons rather than water availability. <i>New Phytologist</i> , 2020, 227, 780-793.	7.3	19
126	Acclimation of leaf photosynthesis and respiration to warming in field-grown wheat. <i>Plant, Cell and Environment</i> , 2021, 44, 2331-2346.	5.7	19

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127	Thermal de-acclimation: how permanent are leaf phenotypes when cold-acclimated plants experience warming?. <i>Plant, Cell and Environment</i> , 2010, 33, no-no.	5.7	18
128	Respiratory alternative oxidase responds to both low- and high-temperature stress in <i>Quercus rubra</i> leaves along an urban-rural gradient in New York. <i>Functional Ecology</i> , 2011, 25, 1007-1017.	3.6	18
129	A molecular approach to drought-induced reduction in leaf CO ₂ exchange in drought-resistant <i>Quercus ilex</i> . <i>Physiologia Plantarum</i> , 2018, 162, 394-408.	5.2	18
130	Diel- and temperature-driven variation of leaf dark respiration rates and metabolite levels in rice. <i>New Phytologist</i> , 2020, 228, 56-69.	7.3	18
131	Calculation of the oxygen isotope discrimination factor for studying plant respiration. <i>Functional Plant Biology</i> , 1999, 26, 773.	2.1	18
132	Source of nitrogen associated with recovery of relative growth rate in <i>Arabidopsis thaliana</i> acclimated to sustained cold treatment. <i>Plant, Cell and Environment</i> , 2015, 38, 1023-1034.	5.7	17
133	Separating species and environmental determinants of leaf functional traits in temperate rainforest plants along a soil-development chronosequence. <i>Functional Plant Biology</i> , 2016, 43, 751.	2.1	17
134	Acclimation of leaf respiration temperature responses across thermally contrasting biomes. <i>New Phytologist</i> , 2021, 229, 1312-1325.	7.3	17
135	Unravelling mechanisms and impacts of day respiration in plant leaves: an introduction to a Virtual Issue. <i>New Phytologist</i> , 2021, 230, 5-10.	7.3	17
136	Relationship Between Soil Nitrogen and Floristic Variation in Late Snow Areas of the Koscinko Alpine Region [Australia]. <i>Australian Journal of Botany</i> , 1992, 40, 139.	0.6	17
137	Contrasting responses by respiration to elevated CO ₂ in intact tissue and isolated mitochondria. <i>Functional Plant Biology</i> , 2007, 34, 112.	2.1	16
138	Assessing the relationship between respiratory acclimation to the cold and photosystem II redox poise in <i>Arabidopsis thaliana</i> . <i>Plant, Cell and Environment</i> , 2007, 30, 1513-1522.	5.7	16
139	<i>New Phytologist</i> and the fate of carbon in terrestrial ecosystems. <i>New Phytologist</i> , 2015, 205, 1-3.	7.3	15
140	A field-compatible method for measuring alternative respiratory pathway activities <i>in vivo</i> using stable O ₂ isotopes. <i>Plant, Cell and Environment</i> , 2012, 35, 1518-1532.	5.7	13
141	Modulation of respiratory metabolism in response to nutrient changes along a soil chronosequence. <i>Plant, Cell and Environment</i> , 2013, 36, 1120-1134.	5.7	13
142	Respiration from roots and the mycorrhizosphere. , 2010, , 127-156.		11
143	Light inhibition of foliar respiration in response to soil water availability and seasonal changes in temperature in Mediterranean holm oak (<i>Quercus ilex</i>) forest. <i>Functional Plant Biology</i> , 2017, 44, 1178.	2.1	11
144	Wheat respiratory O ₂ consumption falls with night warming alongside greater respiratory CO ₂ loss and reduced biomass. <i>Journal of Experimental Botany</i> , 2022, 73, 915-926.	4.8	11

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145	The crucial roles of mitochondria in supporting C ₄ photosynthesis. <i>New Phytologist</i> , 2022, 233, 1083-1096.	7.3	11
146	Does the direct effect of atmospheric CO ₂ concentration on leaf respiration vary with temperature? Responses in two species of <i>Plantago</i> that differ in relative growth rate. <i>Physiologia Plantarum</i> , 2002, 114, 57-64.	5.2	11
147	Phosphorus deficiency alters scaling relationships between leaf gas exchange and associated traits in a wide range of contrasting <i>Eucalyptus</i> species. <i>Functional Plant Biology</i> , 2018, 45, 813.	2.1	10
148	Photosynthetic characteristics of 10 <i>Acacia</i> species grown under ambient and elevated atmospheric CO ₂ . <i>Functional Plant Biology</i> , 2000, 27, 13.	2.1	10
149	Wheat photosystem II heat tolerance responds dynamically to short- and long-term warming. <i>Journal of Experimental Botany</i> , 2022, 73, 3268-3282.	4.8	10
150	The effect of aluminum exposure on root respiration in an aluminum-sensitive and an aluminum-tolerant cultivar of <i>Triticum aestivum</i> . <i>Physiologia Plantarum</i> , 1993, 87, 447-452.	5.2	9
151	Reply to Adams et al.: Empirical versus process-based approaches to modeling temperature responses of leaf respiration. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, E5996-E5997.	7.1	9
152	Functional trait variation related to gap dynamics in tropical moist forests: A vegetation modelling perspective. <i>Perspectives in Plant Ecology, Evolution and Systematics</i> , 2018, 35, 52-64.	2.7	9
153	Introduction to a <i>Virtual Special Issue</i> on plant respiration in variable environments. <i>New Phytologist</i> , 2011, 191, 1-4.	7.3	8
154	Phenotypic plasticity in rice: responses to fertilization and inoculation with arbuscular mycorrhizal fungi. <i>Journal of Plant Ecology</i> , 0, , rtv031.	2.3	8
155	Contributions of photosynthetic and non-photosynthetic cell types to leaf respiration in <i>Vicia faba</i> and their responses to growth temperature. <i>Plant, Cell and Environment</i> , 2015, 38, 2263-2276.	5.7	7
156	The effect of aluminum exposure on root respiration in an aluminum-sensitive and an aluminum-tolerant cultivar of <i>Triticum aestivum</i> . <i>Physiologia Plantarum</i> , 1993, 87, 447-452.	5.2	6
157	The Impact of Heat Stress on the Proteome of Crop Species. , 2016, , 155-175.		6
158	Effect of N supply on the carbon economy of barley when accounting for plant size. <i>Functional Plant Biology</i> , 2020, 47, 368.	2.1	6
159	Increasing Functional Diversity in a Global Land Surface Model Illustrates Uncertainties Related to Parameter Simplification. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2022, 127, .	3.0	6
160	Dark respiration rates are not determined by differences in mitochondrial capacity, abundance and ultrastructure in C ₄ leaves. <i>Plant, Cell and Environment</i> , 2022, 45, 1257-1269.	5.7	5
161	Updated respiration routines alter spatio-temporal patterns of carbon cycling in a global land surface model. <i>Environmental Research Letters</i> , 2021, 16, 104015.	5.2	3
162	<i>New Phytologist</i> and the Earth System. <i>New Phytologist</i> , 2013, 199, 305-307.	7.3	2

#	ARTICLE	IF	CITATIONS
163	<i>New Phytologist</i> : bridging the “plant function” climate modelling divide™. <i>New Phytologist</i> , 2016, 209, 1329-1332.	7.3	2
164	Oxygen uptake rates have contrasting responses to temperature in the root meristem and elongation zone. <i>Physiologia Plantarum</i> , 2022, 174, e13682.	5.2	2
165	Photosynthetic characteristics of 10 <i>Acacia</i> species grown under ambient and elevated atmospheric CO ₂ . <i>Australian Journal of Zoology</i> , 2000, 48, .	1.0	1