Owen K Atkin

List of Publications by Year
in descending order

165 papers	17,583 citations	18436 62 h-index	15683 125 g-index
203 all docs	203 docs citations	203 times ranked	17621 citing authors

#	Article	IF	Citations
1	TRY â€“ a global database of plant traits. Global Change Biology, 2011, 17, 2905-2935.	4.2	2,002
2	Plant phenotypic plasticity in a changing climate. Trends in Plant Science, 2010, 15, 684-692.	4.3	1,571
3	Thermal acclimation and the dynamic response of plant respiration to temperature. Trends in Plant Science, 2003, 8, 343-351.	4.3	1,047
4	TRY plant trait database â€“ enhanced coverage and open access. Global Change Biology, 2020, 26, 119-188.	4.2	1,038
5	The hot and the cold: unravelling the variable response of plant respiration to temperature. Functional Plant Biology, 2005, 32, 87.	1.1	422
6	The crucial role of plant mitochondria in orchestrating drought tolerance. Annals of Botany, 2009, 103, 581-597.	1.4	399
7	Response of root respiration to changes in temperature and its relevance to global warming. New Phytologist, 2000, 147, 141-154.	3.5	358
8	Simulated resilience of tropical rainforests to CO2-induced climate change. Nature Geoscience, 2013, 6, 268-273.	5.4	358
9	Global variability in leaf respiration in relation to climate, plant functional types and leaf traits. New Phytologist, 2015, 206, 614-636.	3.5	350
10	Leaf Respiration of Snow Gum in the Light and Dark. Interactions between Temperature and Irradiance. Plant Physiology, 2000, 122, 915-924.	2.3	249
11	Thermal acclimation of leaf and root respiration: an investigation comparing inherently fast- and slow-growing plant species. Global Change Biology, 2003, 9, 895-910.	4.2	247
12	Trees tolerate an extreme heatwave via sustained transpirational cooling and increased leaf thermal tolerance. Global Change Biology, 2018, 24, 2390-2402.	4.2	242
13	Interdependence between chloroplasts and mitochondria in the light and the dark. Biochimica Et Biophysica Acta - Bioenergetics, 1998, 1366, 235-255.	0.5	240
14	The art of growing plants for experimental purposes: a practical guide for the plant biologist. Functional Plant Biology, 2012, 39, 821.	1.1	217
15	Thermal limits of leaf metabolism across biomes. Global Change Biology, 2017, 23, 209-223.	4.2	213
16	Acclimation of snow gum (Eucalyptus pauciflora) leaf respiration to seasonal and diurnal variations in temperature: the importance of changes in the capacity and temperature sensitivity of respiration. Plant, Cell and Environment, 2000, 23, 15-26.	2.8	212
17	Convergence in the temperature response of leaf respiration across biomes and plant functional types. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 3832-3837.	3.3	198
18	High thermal acclimation potential of both photosynthesis and respiration in two lowland Plantago species in contrast to an alpine congeneric. Global Change Biology, 2006, 12, 500-515.	4.2	195

#	Article	IF	Citations
19	Acclimation of photosynthesis and respiration is asynchronous in response to changes in temperature regardless of plant functional group. New Phytologist, 2007, 176, 375-389.	3.5	191
20	Phenotypic plasticity and growth temperature: understanding interspecific variability. Journal of Experimental Botany, 2006, 57, 267-281.	2.4	184
21	Respiratory energy requirements of roots vary with the potential growth rate of a plant species. Physiologia Plantarum, 1991, 83, 469-475.	2.6	183
22	Respiration as a percentage of daily photosynthesis in whole plants is homeostatic at moderate, but not high, growth temperatures. New Phytologist, 2007, 174, 367-380.	3.5	171
23	Growth temperature influences the underlying components of relative growth rate: an investigation using inherently fast- and slow-growing plant species. Plant, Cell and Environment, 2002, 25, 975-988.	2.8	168
24	Non-structural carbohydrates in woody plants compared among laboratories. Tree Physiology, 2015, 35, tpv073.	1.4	163
25	Impacts of drought on leaf respiration in darkness and light in <i>Eucalyptus saligna</i> exposed to industrialâ€age atmospheric CO₂ and growth temperature. New Phytologist, 2011, 190, 1003-1018.	3.5	162
26	Relationship between the inhibition of leaf respiration by light and enhancement of leaf dark respiration following light treatment. Functional Plant Biology, 1998, 25, 437.	1.1	161
27	A test of the â€˜oneâ€point methodâ€™ for estimating maximum carboxylation capacity from fieldâ€measured, lightâ€saturated photosynthesis. New Phytologist, 2016, 210, 1130-1144.	3.5	159
28	Leaf day respiration: low <scp>CO</scp>₂ flux but high significance for metabolism and carbon balance. New Phytologist, 2017, 216, 986-1001.	3.5	159
29	Mapping local and global variability in plant trait distributions. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E10937-E10946.	3.3	159
30	Using temperatureâ€dependent changes in leaf scaling relationships to quantitatively account for thermal acclimation of respiration in a coupled global climateâ€“vegetation model. Global Change Biology, 2008, 14, 2709-2726.	4.2	155
31	Irradiance, temperature and rainfall influence leaf dark respiration in woody plants: evidence from comparisons across 20 sites. New Phytologist, 2006, 169, 309-319.	3.5	150
32	Analysis of Respiratory Chain Regulation in Roots of Soybean Seedlings1. Plant Physiology, 1998, 117, 1083-1093.	2.3	132
33	Improved representation of plant functional types and physiology in the Joint UK Land Environment Simulator (JULES v4.2) using plant trait information. Geoscientific Model Development, 2016, 9, 2415-2440.	1.3	115
34	Heterogeneity of plant mitochondrial responses underpinning respiratory acclimation to the cold in Arabidopsis thaliana leaves. Plant, Cell and Environment, 2006, 29, 940-949.	2.8	112
35	Leaf Respiration in Light and Darkness (A Comparison of Slow- and Fast-Growing Poa Species). Plant Physiology, 1997, 113, 961-965.	2.3	109
36	Dynamic changes in the mitochondrial electron transport chain underpinning cold acclimation of leaf respiration. Plant, Cell and Environment, 2008, 31, 1156-1169.	2.8	107

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37	Highâ€resolution temperature responses of leaf respiration in snow gum (<i><scp>E</scp>ucalyptus) Tj ETQq1 1 0.784314 rgBT /Overl 2013, 36, 1268-1284.	2.8	107
38	Core principles which explain variation in respiration across biological scales. New Phytologist, 2019, 222, 670-686.	3.5	107
39	Solar radiation and functional traits explain the decline of forest primary productivity along a tropical elevation gradient. Ecology Letters, 2017, 20, 730-740.	3.0	100
40	Implications of improved representations of plant respiration in a changing climate. Nature Communications, 2017, 8, 1602.	5.8	100
41	Is Shade Beneficial for Mediterranean Shrubs Experiencing Periods of Extreme Drought and Late-winter Frosts?. Annals of Botany, 2008, 102, 923-933.	1.4	96
42	Reassessing the nitrogen relations of Arctic plants: a mini-review. Plant, Cell and Environment, 1996, 19, 695-704.	2.8	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. Plant Ecology and Diversity, 2009, 2, 243-254.	1.0	92
44	Respiratory Patterns in Roots in Relation to Their Functioning. , 2002, , 521-552.		91
45	Seasonal acclimation of leaf respiration in Eucalyptus saligna trees: impacts of elevated atmospheric CO2 and summer drought. Global Change Biology, 2011, 17, 1560-1576.	4.2	91
46	Bringing the Kok effect to light: A review on the integration of daytime respiration and net ecosystem exchange. Ecosphere, 2013, 4, 1-14.	1.0	90
47	Leafâ€level photosynthetic capacity in lowland Amazonian and highâ€elevation Andean tropical moist forests of Peru. New Phytologist, 2017, 214, 1002-1018.	3.5	89
48	Plasticity of photosynthetic heat tolerance in plants adapted to thermally contrasting biomes. Plant, Cell and Environment, 2018, 41, 1251-1262.	2.8	88
49	Effect of Temperature on Rates of Alternative and Cytochrome Pathway Respiration and Their Relationship with the Redox Poise of the Quinone Pool. Plant Physiology, 2002, 128, 212-222.	2.3	86
50	The response of fast- and slow-growing Acacia species to elevated atmospheric CO 2 : an analysis of the underlying components of relative growth rate. Oecologia, 1999, 120, 544-554.	0.9	85
51	Regulation of root respiration in two species of Plantago that differ in relative growth rate: the effect of short- and long-term changes in temperature. Plant, Cell and Environment, 2002, 25, 1501-1513.	2.8	84
52	Canopy position affects the relationships between leaf respiration and associated traits in a tropical rainforest in Far North Queensland. Tree Physiology, 2014, 34, 564-584.	1.4	84
53	Strong thermal acclimation of photosynthesis in tropical and temperate wetâ€forest tree species: the importance of altered Rubisco content. Global Change Biology, 2017, 23, 2783-2800.	4.2	84
54	Response of Plant Respiration to Changes in Temperature: Mechanisms and Consequences of Variations in Q10 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. Plant Physiology, 2017, 174, 2261-2273.	2.3	76
56	Addressing Research Bottlenecks to Crop Productivity. Trends in Plant Science, 2021, 26, 607-630.	4.3	76
57	Temporal heterogeneity of cold acclimation phenotypes in <i>Arabidopsis</i> leaves. Plant, Cell and Environment, 2010, 33, 244-258.	2.8	75
58	Global convergence in leaf respiration from estimates of thermal acclimation across time and space. New Phytologist, 2015, 207, 1026-1037.	3.5	74
59	AusTraits, a curated plant trait database for the Australian flora. Scientific Data, 2021, 8, 254.	2.4	73
60	The dependence of respiration on photosynthetic substrate supply and temperature: integrating leaf, soil and ecosystem measurements. Global Change Biology, 2006, 12, 1954-1968.	4.2	72
61	On the developmental dependence of leaf respiration: responses to shortâ€•and longâ€•term changes in growth temperature. American Journal of Botany, 2006, 93, 1633-1639.	0.8	70
62	Light inhibition of leaf respiration in fieldâ€grown <i>Eucalyptus saligna</i> in wholeâ€tree chambers under elevated atmospheric CO₂ and summer drought. Plant, Cell and Environment, 2012, 35, 966-981.	2.8	68
63	Does growth irradiance affect temperature dependence and thermal acclimation of leaf respiration? Insights from a Mediterranean tree with long-lived leaves. Plant, Cell and Environment, 2007, 30, 820-833.	2.8	67
64	Droughtâ€induced shoot dieback starts with massive root xylem embolism and variable depletion of nonstructural carbohydrates in seedlings of two tree species. New Phytologist, 2017, 213, 597-610.	3.5	67
65	The contribution of roots and shoots to whole plant nitrate reduction in fast- and slow-growing grass species. Journal of Experimental Botany, 2002, 53, 1635-1642.	2.4	66
66	Mycorrhizal respiration: implications for global scaling relationships. Trends in Plant Science, 2008, 13, 583-588.	4.3	65
67	Acclimation of leaf respiration consistent with optimal photosynthetic capacity. Global Change Biology, 2020, 26, 2573-2583.	4.2	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. New Phytologist, 2007, 173, 110-120.	3.5	63
69	Exploring high temperature responses of photosynthesis and respiration to improve heat tolerance in wheat. Journal of Experimental Botany, 2019, 70, 5051-5069.	2.4	63
70	Analysis of differences in photosynthetic nitrogen use efficiency of alpine and lowland Poa species. Oecologia, 1999, 120, 19-26.	0.9	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. Global Ecology and Biogeography, 2019, 28, 1806-1826.	2.7	56

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73	Variation in the components of relative growth rate in 10 Acacia species from contrasting environments. Plant, Cell and Environment, 1998, 21, 1007-1017.	2.8	54
74	Predicting dark respiration rates of wheat leaves from hyperspectral reflectance. Plant, Cell and Environment, 2019, 42, 2133-2150.	2.8	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. Plant and Soil, 2013, 367, 163-182.	1.8	53
76	Thermal acclimation of leaf dark respiration of beech seedlings experiencing summer drought in high and low light environments. Tree Physiology, 2010, 30, 214-224.	1.4	49
77	Traditional plant functional groups explain variation in economic but not sizeâ€related traits across the tundra biome. Global Ecology and Biogeography, 2019, 28, 78-95.	2.7	49
78	A continentalâ€scale assessment of variability in leaf traits: Within species, across sites and between seasons. Functional Ecology, 2018, 32, 1492-1506.	1.7	48
79	Leaf respiration in darkness and in the light under pre-industrial, current and elevated atmospheric CO2 concentrations. Plant Science, 2014, 226, 120-130.	1.7	47
80	The combination of gas-phase fluorophore technology and automation to enable high-throughput analysis of plant respiration. Plant Methods, 2017, 13, 16.	1.9	46
81	Range size and growth temperature influence <i>Eucalyptus</i> species responses to an experimental heatwave. Global Change Biology, 2019, 25, 1665-1684.	4.2	44
82	Contrasting leaf trait scaling relationships in tropical and temperate wet forest species. Functional Ecology, 2013, 27, 522-534.	1.7	43
83	A critique of the use of inhibitors to estimate partitioning of electrons between mitochondrial respiratory pathways in plants. Physiologia Plantarum, 1995, 95, 523-532.	2.6	42
84	Xeml Lab: a tool that supports the design of experiments at a graphical interface and generates computerâ€readable metadata files, which capture information about genotypes, growth conditions, environmental perturbations and sampling strategy. Plant, Cell and Environment, 2009, 32, 1185-1200.	2.8	42
85	Responses of leaf respiration to heatwaves. Plant, Cell and Environment, 2021, 44, 2090-2101.	2.8	42
86	Does the direct effect of atmospheric CO2 concentration on leaf respiration vary with temperature? Responses in two species of Plantago that differ in relative growth rate. Physiologia Plantarum, 2002, 114, 57-64.	2.6	42
87	Homeostasis of respiration under drought and its important consequences for foliar carbon balance in a drier climate: insights from two contrasting Acacia species. Functional Plant Biology, 2010, 37, 323.	1.1	41
88	Nitrogen and phosphorus availabilities interact to modulate leaf trait scaling relationships across six plant functional types in a controlledâ€environment study. New Phytologist, 2017, 215, 992-1008.	3.5	41
89	Acclimation of light and dark respiration to experimental and seasonal warming are mediated by changes in leaf nitrogen in Eucalyptus globulus. Tree Physiology, 2017, 37, 1069-1083.	1.4	41
90	Tracking the origins of the Kok effect, 70 years after its discovery. New Phytologist, 2017, 214, 506-510.	3.5	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. Plant and Soil, 1994, 159, 187-197.	1.8	39
92	Leaf waxes of slow-growing alpine and fast-growing lowland Poa species: inherent differences and responses to UV-B radiation. Phytochemistry, 1999, 50, 571-580.	1.4	39
93	Temperature dependence of respiration in roots colonized by arbuscular mycorrhizal fungi. New Phytologist, 2009, 182, 188-199.	3.5	38
94	Is resource allocation and grain yield of rice altered by inoculation with arbuscular mycorrhizal fungi?. Journal of Plant Ecology, 2015, 8, 436-448.	1.2	38
95	The validity of optimal leaf traits modelled on environmental conditions. New Phytologist, 2019, 221, 1409-1423.	3.5	38
96	A Comparison of the Respiratory Processes and Growth Rate of Selected Australian Alpine and Related Lowland Plant Species. Functional Plant Biology, 1990, 17, 517.	1.1	37
97	Transient shade and drought have divergent impacts on the temperature sensitivity of dark respiration in leaves of Geum urbanum. Functional Plant Biology, 2008, 35, 1135.	1.1	36
98	Trait convergence in photosynthetic nutrientâ€use efficiency along a 2â€million year dune chronosequence in a global biodiversity hotspot. Journal of Ecology, 2019, 107, 2006-2023.	1.9	36
99	Partitioning of Electrons between the Cytochrome and Alternative Pathways in Intact Roots. Plant Physiology, 1995, 108, 1179-1183.	2.3	35
100	The relationship between the relative growth rate and nitrogen economy of alpine and lowland Poa species. Plant, Cell and Environment, 1996, 19, 1324-1330.	2.8	35
101	Macromolecular rate theory (<scp>MMRT</scp>) provides a thermodynamics rationale to underpin the convergent temperature response in plant leaf respiration. Global Change Biology, 2018, 24, 1538-1547.	4.2	35
102	Drought increases heat tolerance of leaf respiration in Eucalyptus globulus saplings grown under both ambient and elevated atmospheric [CO_2] and temperature. Journal of Experimental Botany, 2014, 65, 6471-6485.	2.4	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. Functional Plant Biology, 2014, 41, 287.	1.1	34
104	Respiratory energy requirements of roots vary with the potential growth rate of a plant species. Physiologia Plantarum, 1991, 83, 469-475.	2.6	34
105	N_2 fixation by Acacia species increases under elevated atmospheric CO_2. Plant, Cell and Environment, 2002, 25, 567-579.	2.8	33
106	Differential physiological responses to environmental change promote woody shrub expansion. Ecology and Evolution, 2013, 3, 1149-1162.	0.8	33
107	Diurnal and seasonal variation in light and dark respiration in field-grown<i>Eucalyptus pauciflora</i>. Tree Physiology, 2015, 35, 840-849.	1.4	33
108	Variation in bulkâ€leaf ¹³C discrimination, leaf traits and waterâ€use efficiencyâ€“trait relationships along a continentalâ€scale climate gradient in Australia. Global Change Biology, 2018, 24, 1186-1200.	4.2	33

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109	Scaling leaf respiration with nitrogen and phosphorus in tropical forests across two continents. New Phytologist, 2017, 214, 1064-1077.	3.5	30
110	Mesophyll conductance does not contribute to greater photosynthetic rate per unit nitrogen in temperate compared with tropical evergreen wetâ€forest tree leaves. New Phytologist, 2018, 218, 492-505.	3.5	30
111	The impact of elevated atmospheric CO2 and nitrate supply on growth, biomass allocation, nitrogen partitioning and N2 fixation of Acacia melanoxylon. Functional Plant Biology, 1999, 26, 737.	1.1	28
112	Thermal acclimation of shoot respiration in an Arctic woody plant species subjected to 22Âyears of warming and altered nutrient supply. Global Change Biology, 2014, 20, 2618-2630.	4.2	28
113	Leafâ€•and cellâ€level carbon cycling responses to a nitrogen and phosphorus gradient in two Arctic tundra species. American Journal of Botany, 2012, 99, 1702-1714.	0.8	27
114	Thermal acclimation of leaf photosynthetic traits in an evergreen woodland, consistent with the coordination hypothesis. Biogeosciences, 2018, 15, 3461-3474.	1.3	27
115	Systemic low temperature signaling in Arabidopsis. Plant and Cell Physiology, 2010, 51, 1488-1498.	1.5	25
116	Leaf Respiration in Terrestrial Biosphere Models. Advances in Photosynthesis and Respiration, 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. Physiologia Plantarum, 2007, 129, 175-184.	2.6	24
118	Climateâ€dependent variations in leaf respiration in a dryâ€land, low productivity Mediterranean forest: the importance of acclimation in both highâ€light and shaded habitats. Functional Ecology, 2008, 22, 172-184.	1.7	24
119	Impact of growth temperature on scaling relationships linking photosynthetic metabolism to leaf functional traits. Functional Ecology, 2010, 24, 1181-1191.	1.7	24
120	Light induction of alternative pathway capacity in leaf slices of Belgium endive. Plant, Cell and Environment, 1993, 16, 231-235.	2.8	23
121	Molecular and physiological responses during thermal acclimation of leaf photosynthesis and respiration in rice. Plant, Cell and Environment, 2020, 43, 594-610.	2.8	23
122	The ability of several high arctic plant species to utilize nitrate nitrogen under field conditions. Oecologia, 1993, 96, 239-245.	0.9	22
123	Effect of temperature on rates of alternative and cytochrome pathway respiration and their relationship with the redox poise of the quinone pool. Plant Physiology, 2002, 128, 212-22.	2.3	21
124	Respiratory flexibility and efficiency are affected by simulated global change in Arctic plants. New Phytologist, 2013, 197, 1161-1172.	3.5	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. New Phytologist, 2020, 227, 780-793.	3.5	19
126	Acclimation of leaf photosynthesis and respiration to warming in fieldâ€grown wheat. Plant, Cell and Environment, 2021, 44, 2331-2346.	2.8	19

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127	Thermal de-acclimation: how permanent are leaf phenotypes when cold-acclimated plants experience warming?. Plant, Cell and Environment, 2010, 33, no-no.	2.8	18
128	Respiratory alternative oxidase responds to both low- and high-temperature stress in Quercus rubra leaves along an urban-rural gradient in New York. Functional Ecology, 2011, 25, 1007-1017.	1.7	18
129	A molecular approach to droughtâ€induced reduction in leaf CO 2 exchange in droughtâ€resistant Quercus ilex. Physiologia Plantarum, 2018, 162, 394-408.	2.6	18
130	Dielâ€and temperatureâ€driven variation of leaf dark respiration rates and metabolite levels in rice. New Phytologist, 2020, 228, 56-69.	3.5	18
131	Calculation of the oxygen isotope discrimination factor for studying plant respiration. Functional Plant Biology, 1999, 26, 773.	1.1	18
132	Source of nitrogen associated with recovery of relative growth rate in <scp><i>A</i></scp><i>rabidopsis thaliana</i> acclimated to sustained cold treatment. Plant, Cell and Environment, 2015, 38, 1023-1034.	2.8	17
133	Separating species and environmental determinants of leaf functional traits in temperate rainforest plants along a soil-development chronosequence. Functional Plant Biology, 2016, 43, 751.	1.1	17
134	Acclimation of leaf respiration temperature responses across thermally contrasting biomes. New Phytologist, 2021, 229, 1312-1325.	3.5	17
135	Unravelling mechanisms and impacts of day respiration in plant leaves: an introduction to a Virtual Issue. New Phytologist, 2021, 230, 5-10.	3.5	17
136	Relationship Between Soil Nitrogen and Floristic Variation in Late Snow Areas of the Koscinsko Alpine Region [Australia].. Australian Journal of Botany, 1992, 40, 139.	0.3	17
137	Contrasting responses by respiration to elevated CO2 in intact tissue and isolated mitochondria. Functional Plant Biology, 2007, 34, 112.	1.1	16
138	Assessing the relationship between respiratory acclimation to the cold and photosystem II redox poise in Arabidopsis thaliana. Plant, Cell and Environment, 2007, 30, 1513-1522.	2.8	16
139	<i>New Phytologist</i> and the â€˜fateâ€™ of carbon in terrestrial ecosystems. New Phytologist, 2015, 205, 1-3.	3.5	15
140	A fieldâ€compatible method for measuring alternative respiratory pathway activities <i>in vivo</i> using stable O₂ isotopes. Plant, Cell and Environment, 2012, 35, 1518-1532.	2.8	13
141	Modulation of respiratory metabolism in response to nutrient changes along a soil chronosequence. Plant, Cell and Environment, 2013, 36, 1120-1134.	2.8	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 (Quercus ilex) forest. Functional Plant Biology, 2017, 44, 1178.	1.1	11
144	Wheat respiratory O2 consumption falls with night warming alongside greater respiratory CO2 loss and reduced biomass. Journal of Experimental Botany, 2022, 73, 915-926.	2.4	11

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145	The crucial roles of mitochondria in supporting C₄ photosynthesis. New Phytologist, 2022, 233, 1083-1096.	3.5	11
146	Does the direct effect of atmospheric CO2 concentration on leaf respiration vary with temperature? Responses in two species of Plantago that differ in relative growth rate. Physiologia Plantarum, 2002, 114, 57-64.	2.6	11
147	Phosphorus deficiency alters scaling relationships between leaf gas exchange and associated traits in a wide range of contrasting Eucalyptus species. Functional Plant Biology, 2018, 45, 813.	1.1	10
148	Photosynthetic characteristics of 10 Acacia species grown under ambient and elevated atmospheric CO2. Functional Plant Biology, 2000, 27, 13.	1.1	10
149	Wheat photosystem II heat tolerance responds dynamically to short- and long-term warming. Journal of Experimental Botany, 2022, 73, 3268-3282.	2.4	10
150	The effect of aluminum exposure on root respiration in an aluminum-sensitive and an aluminum-tolerant cultivar of Triticum aestivum. Physiologia Plantarum, 1993, 87, 447-452.	2.6	9
151	Reply to Adams et al.: Empirical versus process-based approaches to modeling temperature responses of leaf respiration. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E5996-E5997.	3.3	9
152	Functional trait variation related to gap dynamics in tropical moist forests: A vegetation modelling perspective. Perspectives in Plant Ecology, Evolution and Systematics, 2018, 35, 52-64.	1.1	9
153	Introduction to a <i>Virtual Special Issue</i> on plant respiration in variable environments. New Phytologist, 2011, 191, 1-4.	3.5	8
154	Phenotypic plasticity in rice: responses to fertilization and inoculation with arbuscular mycorrhizal fungi. Journal of Plant Ecology, 0, , rtv031.	1.2	8
155	Contributions of photosynthetic and nonâ€photosynthetic cell types to leaf respiration in <scp><i>V</i></scp><i>icia faba</i>â€…<scp>L</scp>. and their responses to growth temperature. Plant, Cell and Environment, 2015, 38, 2263-2276.	2.8	7
156	The effect of aluminum exposure on root respiration in an aluminum-sensitive and an aluminum-tolerant cultivar of Triticum aestivum. Physiologia Plantarum, 1993, 87, 447-452.	2.6	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. Functional Plant Biology, 2020, 47, 368.	1.1	6
159	Increasing Functional Diversity in a Global Land Surface Model Illustrates Uncertainties Related to Parameter Simplification. Journal of Geophysical Research G: Biogeosciences, 2022, 127, .	1.3	6
160	Dark respiration rates are not determined by differences in mitochondrial capacity, abundance and ultrastructure in C₄ leaves. Plant, Cell and Environment, 2022, 45, 1257-1269.	2.8	5
161	Updated respiration routines alter spatio-temporal patterns of carbon cycling in a global land surface model. Environmental Research Letters, 2021, 16, 104015.	2.2	3
162	<i>New Phytologist</i> and the Earth System. New Phytologist, 2013, 199, 305-307.	3.5	2

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163	<i>New Phytologist:</i> bridging theÂâ€˜plant function â€“ climate modelling divideâ€™. New Phytologist, 2016, 209, 1329-1332.	3.5	2
164	Oxygen uptake rates have contrasting responses to temperature in the root meristem and elongation zone. Physiologia Plantarum, 2022, 174, e13682.	2.6	2
165	Photosynthetic characteristics of 10 Acacia species grown under ambient and elevated atmospheric CO2. Australian Journal of Zoology, 2000, 48, .	0.6	1