Belinda E Medlyn

List of Publications by Citations

180 papers	14,680 citations	61 h-index	118 g-index
195 ext. papers	18,307 ext. citations	8.9 avg, IF	6.42 L-index

#	Paper	IF	Citations
180	TRY a global database of plant traits. *Global Change Biology*, **2011**, 17, 2905-2935	11.4	1623
179	CO2 enhancement of forest productivity constrained by limited nitrogen availability. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 19368-73	11.5	670
178	Reconciling the optimal and empirical approaches to modelling stomatal conductance. *Global Change Biology*, **2011**, 17, 2134-2144	11.4	595
177	Temperature response of parameters of a biochemically based model of photosynthesis. II. A review of experimental data. *Plant, Cell and Environment*, **2002**, 25, 1167-1179	8.4	528
176	Triggers of tree mortality under drought. *Nature*, **2018**, 558, 531-539	50.4	524
175	Stomatal conductance of forest species after long-term exposure to elevated CO concentration: a synthesis. *New Phytologist*, **2001**, 149, 247-264	9.8	521
174	TRY plant trait database - enhanced coverage and open access. *Global Change Biology*, **2020**, 26, 119-188	11.4	399
173	Effects of elevated [CO2] on photosynthesis in European forest species: a meta-analysis of model parameters. *Plant, Cell and Environment*, **1999**, 22, 1475-1495	8.4	334
172	Evaluation of 11 terrestrial carbon-nitrogen cycle models against observations from two temperate Free-Air CO2 Enrichment studies. *New Phytologist*, **2014**, 202, 803-822	9.8	300
171	Forest water use and water use efficiency at elevated CO2 : a model-data intercomparison at two contrasting temperate forest FACE sites. *Global Change Biology*, **2013**, 19, 1759-79	11.4	271
170	Optimal stomatal behaviour around the world. *Nature Climate Change*, **2015**, 5, 459-464	21.4	264
169	A roadmap for improving the representation of photosynthesis in Earth system models. *New Phytologist*, **2017**, 213, 22-42	9.8	245
168	Global variability in leaf respiration in relation to climate, plant functional types and leaf traits. *New Phytologist*, **2015**, 206, 614-36	9.8	244
167	Acclimation of the respiration/photosynthesis ratio to temperature: insights from a model. *Global Change Biology*, **1999**, 5, 615-622	11.4	201
166	Where does the carbon go? A model-data intercomparison of vegetation carbon allocation and turnover processes at two temperate forest free-air CO2 enrichment sites. *New Phytologist*, **2014**, 203, 883-99	9.8	194
165	Using ecosystem experiments to improve vegetation models. *Nature Climate Change*, **2015**, 5, 528-534	21.4	191
164	How should we model plant responses to drought? An analysis of stomatal and non-stomatal responses to water stress. *Agricultural and Forest Meteorology*, **2013**, 182-183, 204-214	5.8	190

163	Forest resilience and tipping points at different spatio-temporal scales: approaches and challenges. *Journal of Ecology*, **2015**, 103, 5-15	6	166
162	Temperature response of parameters of a biochemically based model of photosynthesis. I. Seasonal changes in mature maritime pine (Pinus pinaster Ait.). *Plant, Cell and Environment*, **2002**, 25, 1155-1165	8.4	165
161	Physiological basis of the light use efficiency model. *Tree Physiology*, **1998**, 18, 167-176	4.2	145
160	On the validation of models of forest CO2 exchange using eddy covariance data: some perils and pitfalls. *Tree Physiology*, **2005**, 25, 839-57	4.2	144
159	Elevated CO2 does not increase eucalypt forest productivity on a low-phosphorus soil. *Nature Climate Change*, **2017**, 7, 279-282	21.4	136
158	Model-data synthesis for the next generation of forest free-air CO2 enrichment (FACE) experiments. *New Phytologist*, **2016**, 209, 17-28	9.8	128
157	Trees tolerate an extreme heatwave via sustained transpirational cooling and increased leaf thermal tolerance. *Global Change Biology*, **2018**, 24, 2390-2402	11.4	126
156	Why is plant-growth response to elevated CO amplified when water is limiting, but reduced when nitrogen is limiting? A growth-optimisation hypothesis. *Functional Plant Biology*, **2008**, 35, 521-534	2.7	121
155	Reliable, robust and realistic: the three R□ of next-generation land-surface modelling. *Atmospheric Chemistry and Physics*, **2015**, 15, 5987-6005	6.8	118
154	Volatile isoprenoid emissions from plastid to planet. *New Phytologist*, **2013**, 197, 49-57	9.8	116
153	On the minimum leaf conductance: its role in models of plant water use, and ecological and environmental controls. *New Phytologist*, **2019**, 221, 693-705	9.8	115
152	The fate of carbon in a mature forest under carbon dioxide enrichment. *Nature*, **2020**, 580, 227-231	50.4	109
151	A test of an optimal stomatal conductance scheme within the CABLE land surface model. *Geoscientific Model Development*, **2015**, 8, 431-452	6.3	108
150	Temperature responses of leaf net photosynthesis: the role of component processes. *Tree Physiology*, **2012**, 32, 219-31	4.2	108
149	A mechanistic analysis of light and carbon use efficiencies. *Plant, Cell and Environment*, **1998**, 21, 573-588	8.4	108
148	MAESPA: a model to study interactions between water limitation, environmental drivers and vegetation function at tree and stand levels, with an example application to [CO₂] □drought interactions. *Geoscientific Model Development*, **2012**, 5, 919-940	6.3	104
147	Modelling forest response to increasing CO2 concentration under nutrient-limited conditions. *Plant, Cell and Environment*, **1994**, 17, 1081-1099	8.4	102
146	Forest productivity under climate change: a checklist for evaluating model studies. *Wiley Interdisciplinary Reviews: Climate Change*, **2011**, 2, 332-355	8.4	99

145	Acclimation and adaptation components of the temperature dependence of plant photosynthesis at the global scale. *New Phytologist*, **2019**, 222, 768-784	9.8	99
144	Drought and resprouting plants. *New Phytologist*, **2015**, 206, 583-9	9.8	96
143	Whole-tree chambers for elevated atmospheric CO2 experimentation and tree scale flux measurements in south-eastern Australia: The Hawkesbury Forest Experiment. *Agricultural and Forest Meteorology*, **2010**, 150, 941-951	5.8	96
142	Integrating the evidence for a terrestrial carbon sink caused by increasing atmospheric CO. *New Phytologist*, **2021**, 229, 2413-2445	9.8	94
141	A test of the "one-point method" for estimating maximum carboxylation capacity from field-measured, light-saturated photosynthesis. *New Phytologist*, **2016**, 210, 1130-44	9.8	92
140	Amazon forest response to CO2 fertilization dependent on plant phosphorus acquisition. *Nature Geoscience*, **2019**, 12, 736-741	18.3	92
139	New insights into the covariation of stomatal, mesophyll and hydraulic conductances from optimization models incorporating nonstomatal limitations to photosynthesis. *New Phytologist*, **2018**, 217, 571-585	9.8	90
138	How do leaf and ecosystem measures of water-use efficiency compare?. *New Phytologist*, **2017**, 216, 758-770	9.8	89
137	Short-term water stress impacts on stomatal, mesophyll and biochemical limitations to photosynthesis differ consistently among tree species from contrasting climates. *Tree Physiology*, **2014**, 34, 1035-46	4.2	85
136	Co-optimal distribution of leaf nitrogen and hydraulic conductance in plant canopies. *Tree Physiology*, **2012**, 32, 510-9	4.2	85
135	The peaked response of transpiration rate to vapour pressure deficit in field conditions can be explained by the temperature optimum of photosynthesis. *Agricultural and Forest Meteorology*, **2014**, 189-190, 2-10	5.8	83
134	Comprehensive ecosystem model-data synthesis using multiple data sets at two temperate forest free-air CO2 enrichment experiments: Model performance at ambient CO2 concentration. *Journal of Geophysical Research G: Biogeosciences*, **2014**, 119, 937-964	3.7	83
133	Conversion of canopy intercepted radiation to photosynthate: review of modelling approaches for regional scales. *Functional Plant Biology*, **2003**, 30, 153-169	2.7	83
132	Nocturnal stomatal conductance responses to rising [CO2], temperature and drought. *New Phytologist*, **2012**, 193, 929-938	9.8	80
131	Photosynthesis of temperate Eucalyptus globulus trees outside their native range has limited adjustment to elevated CO2 and climate warming. *Global Change Biology*, **2013**, 19, 3790-807	11.4	80
130	Global-scale environmental control of plant photosynthetic capacity **2015**, 25, 2349-65		78
129	Optimal stomatal conductance in relation to photosynthesis in climatically contrasting Eucalyptus species under drought. *Plant, Cell and Environment*, **2013**, 36, 262-74	8.4	77
128	Predicting long-term carbon sequestration in response to CO2 enrichment: How and why do current ecosystem models differ?. *Global Biogeochemical Cycles*, **2015**, 29, 476-495	5.9	77

127	Tree hydraulic traits are coordinated and strongly linked to climate-of-origin across a rainfall gradient. *Plant, Cell and Environment*, **2018**, 41, 646-660	8.4	75
126	Light interception efficiency explained by two simple variables: a test using a diversity of small- to medium-sized woody plants. *New Phytologist*, **2012**, 193, 397-408	9.8	74
125	Soil processes dominate the long-term response of forest net primary productivity to increased temperature and atmospheric CO2 concentration. *Canadian Journal of Forest Research*, **2000**, 30, 873-888	1.9	73
124	Towards physiologically meaningful water-use efficiency estimates from eddy covariance data. *Global Change Biology*, **2018**, 24, 694-710	11.4	72
123	Effects of elevated atmospheric [CO2] on instantaneous transpiration efficiency at leaf and canopy scales in Eucalyptus saligna. *Global Change Biology*, **2012**, 18, 585-595	11.4	68
122	Comparing the Penman□Monteith equation and a modified Jarvis□Stewart model with an artificial neural network to estimate stand-scale transpiration and canopy conductance. *Journal of Hydrology* , **2009**, 373, 256-266	6	67
121	A model of plant isoprene emission based on available reducing power captures responses to atmospheric CO□*New Phytologist*, **2014**, 203, 125-39	9.8	64
120	Transient dynamics of terrestrial carbon storage: mathematical foundation and its applications. *Biogeosciences*, **2017**, 14, 145-161	4.6	61
119	Using models to guide field experiments: a priori predictions for the CO2 response of a nutrient- and water-limited native Eucalypt woodland. *Global Change Biology*, **2016**, 22, 2834-51	11.4	60
118	Photosynthetic temperature responses of tree species in Rwanda: evidence of pronounced negative effects of high temperature in montane rainforest climax species. *New Phytologist*, **2015**, 206, 1000-1012	9.8	59
117	The response of ecosystem water-use efficiency to rising atmospheric CO concentrations: sensitivity and large-scale biogeochemical implications. *New Phytologist*, **2017**, 213, 1654-1666	9.8	57
116	Does physiological acclimation to climate warming stabilize the ratio of canopy respiration to photosynthesis?. *New Phytologist*, **2016**, 211, 850-63	9.8	57
115	The optimal stomatal response to atmospheric CO2 concentration: Alternative solutions, alternative interpretations. *Agricultural and Forest Meteorology*, **2013**, 182-183, 200-203	5.8	56
114	Stomatal and non-stomatal limitations of photosynthesis for four tree species under drought: A comparison of model formulations. *Agricultural and Forest Meteorology*, **2017**, 247, 454-466	5.8	56
113	Carbon balance of coniferous forests growing in contrasting climates: Model-based analysis. *Agricultural and Forest Meteorology*, **2005**, 131, 97-124	5.8	56
112	Conserved stomatal behaviour under elevated CO2 and varying water availability in a mature woodland. *Functional Ecology*, **2016**, 30, 700-709	5.6	56
111	A unifying conceptual model for the environmental responses of isoprene emissions from plants. *Annals of Botany*, **2013**, 112, 1223-38	4.1	54
110	Increased understanding of nutrient immobilization in soil organic matter is critical for predicting the carbon sink strength of forest ecosystems over the next 100 years. *Tree Physiology*, **2001**, 21, 831-9	4.2	54

109	Impact of the representation of stomatal conductance on model projections of heatwave intensity. *Scientific Reports*, **2016**, 6, 23418	4.9	53
108	Do land surface models need to include differential plant species responses to drought? Examining model predictions across a mesic-xeric gradient in Europe. *Biogeosciences*, **2015**, 12, 7503-7518	4.6	52
107	Satellite based estimates underestimate the effect of CO2 fertilization on net primary productivity. *Nature Climate Change*, **2016**, 6, 892-893	21.4	52
106	Plant root distributions and nitrogen uptake predicted by a hypothesis of optimal root foraging. *Ecology and Evolution*, **2012**, 2, 1235-50	2.8	51
105	Observed and modelled historical trends in the water-use efficiency of plants and ecosystems. *Global Change Biology*, **2019**, 25, 2242-2257	11.4	49
104	Stomatal optimization based on xylem hydraulics (SOX) improves land surface model simulation of vegetation responses to climate. *New Phytologist*, **2020**, 226, 1622-1637	9.8	48
103	Identifying areas at risk of drought-induced tree mortality across South-Eastern Australia. *Global Change Biology*, **2020**, 26, 5716-5733	11.4	45
102	Oscillatory behavior of two nonlinear microbial models of soil carbon decomposition. *Biogeosciences*, **2014**, 11, 1817-1831	4.6	44
101	Rooting depth explains [CO2] x drought interaction in Eucalyptus saligna. *Tree Physiology*, **2011**, 31, 922-31	4.1	44
100	The effect of nitrogen deposition on forest carbon sequestration: a model-based analysis. *Global Change Biology*, **2010**, 16, 1470-1486	11.4	43
99	Multiple measurements constrain estimates of net carbon exchange by a Eucalyptus forest. *Agricultural and Forest Meteorology*, **2009**, 149, 535-558	5.8	43
98	Increased light-use efficiency sustains net primary productivity of shaded coffee plants in agroforestry system. *Plant, Cell and Environment*, **2017**, 40, 1592-1608	8.4	41
97	Carbon dioxide stimulation of photosynthesis in Liquidambar styraciflua is not sustained during a 12-year field experiment. *AoB PLANTS*, **2014**, 7,	2.9	41
96	Developing an empirical model of canopy water flux describing the common response of transpiration to solar radiation and VPD across five contrasting woodlands and forests. *Hydrological Processes*, **2013**, 27, 1133-1146	3.3	41
95	Soil [N] modulates soil C cycling in CO2-fumigated tree stands: a meta-analysis. *Plant, Cell and Environment*, **2010**, 33, 2001-11	8.4	41
94	Modelling forest-growth response to increasing CO2 concentration in relation to various factors affecting nutrient supply. *Global Change Biology*, **1998**, 4, 23-41	11.4	41
93	Drought response strategies and hydraulic traits contribute to mechanistic understanding of plant dry-down to hydraulic failure. *Tree Physiology*, **2019**, 39, 910-924	4.2	40
92	Implementation of an optimal stomatal conductance scheme in the Australian Community Climate Earth Systems Simulator (ACCESS1.3b). *Geoscientific Model Development*, **2015**, 8, 3877-3889	6.3	40

91	Comment on "Drought-induced reduction in global terrestrial net primary production from 2000 through 2009". *Science*, **2011**, 333, 1093; author reply 1093	33.3	40
90	Long-term water stress leads to acclimation of drought sensitivity of photosynthetic capacity in xeric but not riparian Eucalyptus species. *Annals of Botany*, **2016**, 117, 133-44	4.1	39
89	Linking leaf and tree water use with an individual-tree model. *Tree Physiology*, **2007**, 27, 1687-99	4.2	38
88	Decadal biomass increment in early secondary succession woody ecosystems is increased by CO enrichment. *Nature Communications*, **2019**, 10, 454	17.4	37
87	Ideas and perspectives: how coupled is the vegetation to the boundary layer?. *Biogeosciences*, **2017**, 14, 4435-4453	4.6	37
86	Comment on the article by R. H. Waring, J. J. Landsberg and M. Williams relating net primar production to gross primary production. *Tree Physiology*, **1999**, 19, 137-138	4.2	37
85	The Optimal Allocation of Nitrogen Within the C3 Photosynthetic System at Elevated CO2. *Functional Plant Biology*, **1996**, 23, 593	2.7	37
84	A comparative analysis of simulated and observed photosynthetic CO2 uptake in two coniferous forest canopies. *Tree Physiology*, **2006**, 26, 845-64	4.2	36
83	Design and use of a database of model parameters from elevated [CO2] experiments. *Ecological Modelling*, **1999**, 124, 69-83	3	36
82	Paired comparison of water, energy and carbon exchanges over two young maritime pine stands (Pinus pinaster Ait.): effects of thinning and weeding in the early stage of tree growth. *Tree Physiology*, **2011**, 31, 903-21	4.2	35
81	Does the growth response of woody plants to elevated CO2 increase with temperature? A model-oriented meta-analysis. *Global Change Biology*, **2015**, 21, 4303-19	11.4	34
80	Interactive effects of elevated CO2 and drought on nocturnal water fluxes in Eucalyptus saligna. *Tree Physiology*, **2011**, 31, 932-44	4.2	33
79	Soil processes dominate the long-term response of forest net primary productivity to increased temperature and atmospheric CO2 concentration. *Canadian Journal of Forest Research*, **2000**, 30, 873-888	1.9	33
78	Towards a more physiological representation of vegetation phosphorus processes in land surface models. *New Phytologist*, **2019**, 222, 1223-1229	9.8	32
77	Examining the evidence for decoupling between photosynthesis and transpiration during heat extremes. *Biogeosciences*, **2019**, 16, 903-916	4.6	32
76	Large sensitivity in land carbon storage due to geographical and temporal variation in the thermal response of photosynthetic capacity. *New Phytologist*, **2018**, 218, 1462-1477	9.8	32
75	Biochemical photosynthetic responses to temperature: how do interspecific differences compare with seasonal shifts?. *Tree Physiology*, **2013**, 33, 793-806	4.2	32
74	Drought–CO2 interactions in trees: a test of the low-intercellular CO2 concentration (Ci) mechanism. *New Phytologist*, **2016**, 209, 1600-12	9.8	32

73	Challenging terrestrial biosphere models with data from the long-term multifactor Prairie Heating and CO Enrichment experiment. *Global Change Biology*, **2017**, 23, 3623-3645	11.4	31
72	Near-optimal response of instantaneous transpiration efficiency to vapour pressure deficit, temperature and [CO2] in cotton (Gossypium hirsutum L.). *Agricultural and Forest Meteorology*, **2013**, 168, 168-176	5.8	31
71	Desiccation time during drought is highly predictable across species of Eucalyptus from contrasting climates. *New Phytologist*, **2019**, 224, 632-643	9.8	28
70	Using plant, microbe, and soil fauna traits to improve the predictive power of biogeochemical models. *Methods in Ecology and Evolution*, **2019**, 10, 146-157	7.7	28
69	Large but decreasing effect of ozone on the European carbon sink. *Biogeosciences*, **2018**, 15, 4245-4269	4.6	28
68	A model of the long-term response of carbon allocation and productivity of forests to increased CO2concentration and nitrogen deposition. *Global Change Biology*, **1996**, 2, 367-376	11.4	27
67	Plant profit maximization improves predictions of European forest responses to drought. *New Phytologist*, **2020**, 226, 1638-1655	9.8	27
66	A common thermal niche among geographically diverse populations of the widely distributed tree species Eucalyptus tereticornis: No evidence for adaptation to climate-of-origin. *Global Change Biology*, **2017**, 23, 5069-5082	11.4	25
65	Gross primary production responses to warming, elevated CO , and irrigation: quantifying the drivers of ecosystem physiology in a semiarid grassland. *Global Change Biology*, **2017**, 23, 3092-3106	11.4	25
64	More than iso/anisohydry: Hydroscapes integrate plant water use and drought tolerance traits in 10 eucalypt species from contrasting climates. *Functional Ecology*, **2019**, 33, 1035-1049	5.6	25
63	Which are the most important parameters for modelling carbon assimilation in boreal Norway spruce under elevated [CO(2)] and temperature conditions?. *Tree Physiology*, **2013**, 33, 1156-76	4.2	24
62	Effects of elevated [CO2] on forest growth and carbon storage: a modelling analysis of the consequences of changes in litter quality/quantity and root exudation. *Plant and Soil*, **2000**, 224, 135-152	4.2	24
61	The validity of optimal leaf traits modelled on environmental conditions. *New Phytologist*, **2019**, 221, 1409-1423	9.8	24
60	Linking Forest Flammability and Plant Vulnerability to Drought. *Forests*, **2020**, 11, 779	2.8	23
59	Nitrogen and Phosphorus Retranslocation of Leaves and Stemwood in a Mature Forest Exposed to 5 Years of Elevated CO. *Frontiers in Plant Science*, **2019**, 10, 664	6.2	20
58	Reconciling the optimal and empirical approaches to modelling stomatal conductance. *Global Change Biology*, **2012**, 18, 3476-3476	11.4	20
57	Energy Conversion and Use in Forests: An Analysis of Forest Production in Terms of Radiation Utilisation Efficiency (e). *Forestry Sciences*, **1997**, 273-298		20
56	On the importance of including soil nutrient feedback effects for predicting ecosystem carbon exchange. *Functional Plant Biology*, **2003**, 30, 223-237	2.7	20

55	Interactive effects of atmospheric carbon dioxide and leaf nitrogen concentration on canopy light use efficiency: a modeling analysis. *Tree Physiology*, **1996**, 16, 201-209	4.2	20
54	Water-use efficiency in a semi-arid woodland with high rainfall variability. *Global Change Biology*, **2020**, 26, 496-508	11.4	20
53	Carbon budget of Pinus sylvestris saplings after four years of exposure to elevated atmospheric carbon dioxide concentration. *Tree Physiology*, **2005**, 25, 325-37	4.2	19
52	Upside-down fluxes Down Under: CO₂ net sink in winter and net source in summer in a temperate evergreen broadleaf forest. *Biogeosciences*, **2018**, 15, 3703-3716	4.6	19
51	New developments in the effort to model ecosystems under water stress. *New Phytologist*, **2016**, 212, 5-7	9.8	18
50	A trait-based ecosystem model suggests that long-term responsiveness to rising atmospheric CO2 concentration is greater in slow-growing than fast-growing plants. *Functional Ecology*, **2013**, 27, 1011-1022	5.6	18
49	Measuring and modelling energy partitioning in canopies of varying complexity using MAESPA model. *Agricultural and Forest Meteorology*, **2018**, 253-254, 203-217	5.8	17
48	Low phosphorus supply constrains plant responses to elevated CO : A meta-analysis. *Global Change Biology*, **2020**, 26, 5856-5873	11.4	17
47	Hydraulic failure and tree size linked with canopy die-back in eucalypt forest during extreme drought. *New Phytologist*, **2021**, 230, 1354-1365	9.8	17
46	Effects of mesophyll conductance on vegetation responses to elevated CO concentrations in a land surface model. *Global Change Biology*, **2019**, 25, 1820-1838	11.4	17
45	Optimal stomatal drought response shaped by competition for water and hydraulic risk can explain plant trait covariation. *New Phytologist*, **2020**, 225, 1206-1217	9.8	17
44	Bridging Drought Experiment and Modeling: Representing the Differential Sensitivities of Leaf Gas Exchange to Drought. *Frontiers in Plant Science*, **2018**, 9, 1965	6.2	16
43	Biome-specific climatic space defined by temperature and precipitation predictability. *Global Ecology and Biogeography*, **2017**, 26, 1270-1282	6.1	15
42	Optimal stomatal behaviour under stochastic rainfall. *Journal of Theoretical Biology*, **2016**, 394, 160-171	2.3	15
41	The temperature optima for tree seedling photosynthesis and growth depend on water inputs. *Global Change Biology*, **2019**, 26, 2544	11.4	15
40	A novel optimization approach incorporating non-stomatal limitations predicts stomatal behaviour in species from six plant functional types. *Journal of Experimental Botany*, **2019**, 70, 1639-1651	7	13
39	Visual and hydraulic techniques produce similar estimates of cavitation resistance in woody species. *New Phytologist*, **2020**, 228, 884-897	9.8	13
38	Xylem embolism measured retrospectively is linked to canopy dieback in natural populations of Eucalyptus piperita following drought. *Tree Physiology*, **2018**, 38, 1193-1199	4.2	13

37	GROSS PRIMARY PRODUCTIVITY IN DUKE FOREST: MODELING SYNTHESIS OF CO2 EXPERIMENT AND EDDY FLUX DATA **2001**, 11, 239-252		13
36	Applying the Concept of Ecohydrological Equilibrium to Predict Steady State Leaf Area Index. *Journal of Advances in Modeling Earth Systems*, **2018**, 10, 1740-1758	7.1	12
35	No evidence for triose phosphate limitation of light-saturated leaf photosynthesis under current atmospheric CO concentration. *Plant, Cell and Environment*, **2019**, 42, 3241-3252	8.4	11
34	Incorporating non-stomatal limitation improves the performance of leaf and canopy models at high vapour pressure deficit. *Tree Physiology*, **2019**, 39, 1961-1974	4.2	11
33	Reliable, robust and realistic: the three R of next-generation land surface modelling		11
32	Do land surface models need to include differential plant species responses to drought? Examining model predictions across a latitudinal gradient in Europe		11
31	A reporting format for leaf-level gas exchange data and metadata. *Ecological Informatics*, **2021**, 61, 101233	4.2	11
30	Reduced growth due to belowground sink limitation is not fully explained by reduced photosynthesis. *Tree Physiology*, **2017**, 37, 1042-1054	4.2	10
29	The multi-assumption architecture and testbed (MAAT v1.0): R code for generating ensembles with dynamic model structure and analysis of epistemic uncertainty from multiple sources. *Geoscientific Model Development*, **2018**, 11, 3159-3185	6.3	10
28	Low sensitivity of gross primary production to elevated CO₂ in a mature eucalypt woodland. *Biogeosciences*, **2020**, 17, 265-279	4.6	9
27	Elevated carbon dioxide is predicted to promote coexistence among competing species in a trait-based model. *Ecology and Evolution*, **2015**, 5, 4717-33	2.8	9
26	To what extent can rising [CO] ameliorate plant drought stress?. *New Phytologist*, **2021**, 231, 2118-2124	9.8	9
25	Inferring the effects of sink strength on plant carbon balance processes from experimental measurements. *Biogeosciences*, **2018**, 15, 4003-4018	4.6	8
24	Drought Impacts on Australian Vegetation During the Millennium Drought Measured With Multisource Spaceborne Remote Sensing. *Journal of Geophysical Research G: Biogeosciences*, **2020**, 125, e2019JG005145	3.7	7
23	Mechanisms linking plant productivity and water status for a temperate Eucalyptus forest flux site: analysis over wet and dry years with a simple model. *Functional Plant Biology*, **2008**, 35, 493-508	2.7	7
22	Mechanisms of woody-plant mortality under rising drought, CO2 and vapour pressure deficit. *Nature Reviews Earth & Environment*,	30.2	7
21	Evaluating a land surface model at a water-limited site: implications for land surface contributions to droughts and heatwaves. *Hydrology and Earth System Sciences*, **2021**, 25, 447-471	5.5	6
20	The quasi-equilibrium framework revisited: analyzing long-term CO₂ enrichment responses in plant soil models. *Geoscientific Model Development*, **2019**, 12, 2069-2089	6.3	5

19	Drought by CO interactions in trees: a test of the water savings mechanism. *New Phytologist*, **2021**, 230, 1421-1434	9.8	5
18	A constraint on historic growth in global photosynthesis due to increasing CO. *Nature*, **2021**, 600, 253-258	50.4	5
17	Pastures and Climate Extremes: Impacts of warming and drought on the productivity and resilience of key pasture species in a field experiment		4
16	Increasing aridity will not offset CO fertilization in fast-growing eucalypts with access to deep soil water. *Global Change Biology*, **2021**, 27, 2970-2990	11.4	4
15	Triose phosphate utilization limitation: an unnecessary complexity in terrestrial biosphere model representation of photosynthesis. *New Phytologist*, **2021**, 230, 17-22	9.8	4
14	Leaf age-related and diurnal variation in gas exchange of kauri (Agathis australis). *New Zealand Journal of Botany*, **2017**, 55, 80-99	1	3
13	Gross Primary Productivity in Duke Forest: Modeling Synthesis of CO 2 Experiment and Eddy-Flux Data **2001**, 11, 239		3
12	Implementation of an optimal stomatal conductance model in the Australian Community Climate Earth Systems Simulator (ACCESS1.3b)		3
11	Patterns of post-drought recovery are strongly influenced by drought duration, frequency, post-drought wetness, and bioclimatic setting. *Global Change Biology*, **2021**, 27, 4630-4643	11.4	3
10	Drought tolerance traits do not vary across sites differing in water availability in Banksia serrata (Proteaceae). *Functional Plant Biology*, **2019**, 46, 624-633	2.7	2
9	Warming Reduces Net Carbon Gain and Productivity in Medicago sativa L. and Festuca arundinacea. *Agronomy*, **2020**, 10, 1601	3.6	2
8	Effects of CO2 on Plants at Different Timescales **2005**, 441-467		2
7	A test of an optimal stomatal conductance scheme within the CABLE Land Surface Model **2014**,		1
6	Adaptive plasticity in plant traits increases time to hydraulic failure under drought in a foundation tree		1
5	Adaptive plasticity in plant traits increases time to hydraulic failure under drought in a foundation tree. *Tree Physiology*, **2021**,	4.2	1
4	Drought-related leaf functional traits control spatial and temporal dynamics of live fuel moisture content. *Agricultural and Forest Meteorology*, **2022**, 319, 108941	5.8	1
3	Thirty-eight years of CO₂ fertilization has outpaced growing aridity to drive greening of Australian woody ecosystems. *Biogeosciences*, **2022**, 19, 491-515	4.6	0
2	Pastures and Climate Extremes: Impacts of Cool Season Warming and Drought on the Productivity of Key Pasture Species in a Field Experiment.. *Frontiers in Plant Science*, **2022**, 13, 836968	6.2	0

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