

Derek Eamus

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8505381/publications.pdf>

Version: 2024-02-01

237
papers

16,343
citations

17440

63
h-index

19749

117
g-index

252
all docs

252
docs citations

252
times ranked

14375
citing authors

#	ARTICLE	IF	CITATIONS
1	Tree allometry and improved estimation of carbon stocks and balance in tropical forests. <i>Oecologia</i> , 2005, 145, 87-99.	2.0	2,346
2	Reconciling the optimal and empirical approaches to modelling stomatal conductance. <i>Global Change Biology</i> , 2011, 17, 2134-2144.	9.5	847
3	The FLUXNET2015 dataset and the ONEFlux processing pipeline for eddy covariance data. <i>Scientific Data</i> , 2020, 7, 225.	5.3	646
4	The Direct Effects of Increase in the Global Atmospheric CO ₂ Concentration on Natural and Commercial Temperate Trees and Forests. <i>Advances in Ecological Research</i> , 1989, 19, 1-55.	2.7	502
5	Ecosystem resilience despite large-scale altered hydroclimatic conditions. <i>Nature</i> , 2013, 494, 349-352.	27.8	450
6	Optimal stomatal behaviour around the world. <i>Nature Climate Change</i> , 2015, 5, 459-464.	18.8	397
7	The interaction of rising CO ₂ and temperatures with water use efficiency. <i>Plant, Cell and Environment</i> , 1991, 14, 843-852.	5.7	311
8	LEAF PHENOLOGY OF WOODY SPECIES IN A NORTH AUSTRALIAN TROPICAL SAVANNA. <i>Ecology</i> , 1997, 78, 2542-2558.	3.2	268
9	Ecophysiological traits of deciduous and evergreen woody species in the seasonally dry tropics. <i>Trends in Ecology and Evolution</i> , 1999, 14, 11-16.	8.7	219
10	Estimation of leaf area index in eucalypt forest using digital photography. <i>Agricultural and Forest Meteorology</i> , 2007, 143, 176-188.	4.8	219
11	A functional methodology for determining the groundwater regime needed to maintain the health of groundwater-dependent vegetation. <i>Australian Journal of Botany</i> , 2006, 54, 97.	0.6	181
12	Spatial patterns and temporal dynamics in savanna vegetation phenology across the North Australian Tropical Transect. <i>Remote Sensing of Environment</i> , 2013, 139, 97-115.	11.0	176
13	Ecophysiology of trees of seasonally dry tropics: Comparisons among phenologies. <i>Advances in Ecological Research</i> , 2001, 32, 113-197.	2.7	169
14	The critical amplifying role of increasing atmospheric moisture demand on tree mortality and associated regional die-off. <i>Frontiers in Plant Science</i> , 2013, 4, 266.	3.6	163
15	Global change-type drought-induced tree mortality: vapor pressure deficit is more important than temperature per se in causing decline in tree health. <i>Ecology and Evolution</i> , 2013, 3, 2711-2729.	1.9	160
16	Carbon balance of a tropical savanna of northern Australia. <i>Oecologia</i> , 2003, 137, 405-416.	2.0	159
17	An introduction to the Australian and New Zealand flux tower network "OzFlux". <i>Biogeosciences</i> , 2016, 13, 5895-5916.	3.3	159
18	Evapotranspiration from Eucalypt open-forest savanna of Northern Australia. <i>Functional Ecology</i> , 2000, 14, 183-194.	3.6	150

#	ARTICLE	IF	CITATIONS
19	Abrupt shifts in phenology and vegetation productivity under climate extremes. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2015, 120, 2036-2052.	3.0	149
20	Groundwater-dependent ecosystems: the where, what and why of GDEs. <i>Australian Journal of Botany</i> , 2006, 54, 91.	0.6	147
21	Seasonal and Diurnal Patterns of Carbon Assimilation, Stomatal Conductance and Leaf Water Potential in <i>Eucalyptus tetrodonta</i> Saplings in a Wet - Dry Savanna in Northern Australia. <i>Australian Journal of Botany</i> , 1997, 45, 241.	0.6	130
22	Seasonal responses of xylem sap velocity to VPD and solar radiation during drought in a stand of native trees in temperate Australia. <i>Functional Plant Biology</i> , 2004, 31, 461.	2.1	120
23	Groundwater-dependent ecosystems: recent insights from satellite and field-based studies. <i>Hydrology and Earth System Sciences</i> , 2015, 19, 4229-4256.	4.9	116
24	Carbon and water fluxes in an arid-zone <i>Acacia</i> savanna woodland: An analyses of seasonal patterns and responses to rainfall events. <i>Agricultural and Forest Meteorology</i> , 2013, 182-183, 225-238.	4.8	115
25	Leaf attributes in the seasonally dry tropics: a comparison of four habitats in northern Australia. <i>Functional Ecology</i> , 2003, 17, 504-515.	3.6	113
26	Whole-tree chambers for elevated atmospheric CO ₂ experimentation and tree scale flux measurements in south-eastern Australia: The Hawkesbury Forest Experiment. <i>Agricultural and Forest Meteorology</i> , 2010, 150, 941-951.	4.8	108
27	Water balance of a tropical woodland ecosystem, Northern Australia: A combination of micro-meteorological, soil physical and groundwater chemical approaches. <i>Journal of Hydrology</i> , 1998, 210, 161-177.	5.4	102
28	The peaked response of transpiration rate to vapour pressure deficit in field conditions can be explained by the temperature optimum of photosynthesis. <i>Agricultural and Forest Meteorology</i> , 2014, 189-190, 2-10.	4.8	102
29	Seasonal changes in photosynthesis of eight savanna tree species. <i>Tree Physiology</i> , 1999, 19, 665-671.	3.1	101
30	Groundwater-dependent ecosystems in Australia: It's more than just water for rivers. <i>Ecological Management and Restoration</i> , 2003, 4, 110-113.	1.5	101
31	Use of satellite leaf area index estimating evapotranspiration and gross assimilation for Australian ecosystems. <i>Ecohydrology</i> , 2018, 11, e1974.	2.4	100
32	Composition, leaf area index and standing biomass of eucalypt open forests near Darwin in the Northern Territory, Australia. <i>Australian Journal of Botany</i> , 2000, 48, 629.	0.6	99
33	Rates of nocturnal transpiration in two evergreen temperate woodland species with differing water-use strategies. <i>Tree Physiology</i> , 2010, 30, 988-1000.	3.1	99
34	Dynamics of component carbon fluxes in a semi-arid <i>Acacia</i> woodland, central Australia. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2013, 118, 1168-1185.	3.0	94
35	Fly-ash: An exploitable resource for management of Australian agricultural soils. <i>Fuel</i> , 2006, 85, 2337-2344.	6.4	93
36	Convergence of tree water use within an arid-zone woodland. <i>Oecologia</i> , 2009, 160, 643-655.	2.0	93

#	ARTICLE	IF	CITATIONS
37	Seasonal Variation in Water Relations of Trees of Differing Leaf Phenology in a Wet - Dry Tropical Savanna near Darwin, Northern Australia. <i>Australian Journal of Botany</i> , 1997, 45, 225.	0.6	92
38	Groundwater use by vegetation in a tropical savanna riparian zone (Daly River, Australia). <i>Journal of Hydrology</i> , 2005, 310, 280-293.	5.4	92
39	An analysis of the sensitivity of sap flux to soil and plant variables assessed for an Australian woodland using a soil - plant - atmosphere model. <i>Functional Plant Biology</i> , 2008, 35, 509.	2.1	92
40	Stomatal and non-stomatal limitations of photosynthesis for four tree species under drought: A comparison of model formulations. <i>Agricultural and Forest Meteorology</i> , 2017, 247, 454-466.	4.8	91
41	Year patterns of climate impact on wheat yields. <i>International Journal of Climatology</i> , 2014, 34, 518-528.	3.5	88
42	Fire in Australian savannas: from leaf to landscape. <i>Global Change Biology</i> , 2015, 21, 62-81.	9.5	88
43	Monsoonal influences on evapotranspiration of savanna vegetation of northern Australia. <i>Oecologia</i> , 2001, 126, 434-443.	2.0	87
44	Tree growth rates in north Australian savanna habitats: seasonal patterns and correlations with leaf attributes. <i>Australian Journal of Botany</i> , 2004, 52, 303.	0.6	87
45	Soil moisture controls on phenology and productivity in a semi-arid critical zone. <i>Science of the Total Environment</i> , 2016, 568, 1227-1237.	8.0	87
46	Drought rapidly diminishes the large net CO ₂ uptake in 2011 over semi-arid Australia. <i>Scientific Reports</i> , 2016, 6, 37747.	3.3	83
47	Seasonal Patterns in Soil Moisture, Vapour Pressure Deficit, Tree Canopy Cover and Pre-dawn Water Potential in a Northern Australian Savanna. <i>Australian Journal of Botany</i> , 1997, 45, 211.	0.6	82
48	A cost-benefit analysis of leaves of four Australian savanna species. <i>Tree Physiology</i> , 1998, 18, 537-545.	3.1	82
49	Comparing the Penman-Monteith equation and a modified Jarvis-Stewart model with an artificial neural network to estimate stand-scale transpiration and canopy conductance. <i>Journal of Hydrology</i> , 2009, 373, 256-266.	5.4	82
50	Improving the responses of the Australian community land surface model (CABLE) to seasonal drought. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	79
51	Diurnal and Seasonal Comparisons of Assimilation, Phyllode Conductance and Water Potential of Three Acacia and One Eucalyptus Species in the Wet - Dry Tropics of Australia. <i>Australian Journal of Botany</i> , 1997, 45, 275.	0.6	77
52	The response of sap flow to pulses of rain in a temperate Australian woodland. <i>Plant and Soil</i> , 2008, 305, 121-130.	3.7	77
53	Root biomass and root fractal analyses of an open Eucalyptus forest in a savanna of north Australia. <i>Australian Journal of Botany</i> , 2002, 50, 31.	0.6	75
54	Effects of elevated atmospheric [CO ₂] on instantaneous transpiration efficiency at leaf and canopy scales in <i>Eucalyptus saligna</i> . <i>Global Change Biology</i> , 2012, 18, 585-595.	9.5	75

#	ARTICLE	IF	CITATIONS
55	Stomatal responses to a range of variables in two tropical tree species grown with CO ₂ enrichment. <i>Journal of Experimental Botany</i> , 1994, 45, 539-546.	4.8	73
56	Sulphate and ammonium in mist impair the frost hardening of red spruce seedlings. <i>New Phytologist</i> , 1991, 118, 119-126.	7.3	72
57	Evapotranspiration seasonality across the Amazon Basin. <i>Earth System Dynamics</i> , 2017, 8, 439-454.	7.1	71
58	Estimation of leaf area index in eucalypt forest with vertical foliage, using cover and fullframe fisheye photography. <i>Forest Ecology and Management</i> , 2007, 242, 756-763.	3.2	70
59	The Australian SuperSite Network: A continental, long-term terrestrial ecosystem observatory. <i>Science of the Total Environment</i> , 2016, 568, 1263-1274.	8.0	70
60	How does ecosystem water balance affect net primary productivity of woody ecosystems?. <i>Functional Plant Biology</i> , 2003, 30, 187.	2.1	69
61	The SMAP Level 4 Carbon Product for Monitoring Ecosystem Land-Atmosphere CO ₂ Exchange. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2017, 55, 6517-6532.	6.3	69
62	Groundwater use by riparian vegetation in the wet - dry tropics of northern Australia. <i>Australian Journal of Botany</i> , 2006, 54, 145.	0.6	68
63	Comparing model predictions and experimental data for the response of stomatal conductance and guard cell turgor to manipulations of cuticular conductance, leaf-air vapour pressure difference and temperature: feedback mechanisms are able to account for all observations. <i>Plant, Cell and Environment</i> , 2008, 31, 269-277.	5.7	68
64	Differences in osmotic adjustment, foliar abscisic acid dynamics, and stomatal regulation between an isohydric and anisohydric woody angiosperm during drought. <i>Plant, Cell and Environment</i> , 2017, 40, 3122-3134.	5.7	67
65	Groundwater-dependent distribution of vegetation in Hailiutu River catchment, a semi-arid region in China. <i>Ecology</i> , 2013, 94, 142-149.	2.4	65
66	The importance of interacting climate modes on Australia's contribution to global carbon cycle extremes. <i>Scientific Reports</i> , 2016, 6, 23113.	3.3	65
67	An automated procedure for estimating the leaf area index (LAI) of woodland ecosystems using digital imagery, MATLAB programming and its application to an examination of the relationship between remotely sensed and field measurements of LAI. <i>Functional Plant Biology</i> , 2008, 35, 1070.	2.1	63
68	Leaf nitrogen determination using non-destructive techniques—A review. <i>Journal of Plant Nutrition</i> , 2017, 40, 928-953.	1.9	63
69	Valuation of groundwater-dependent ecosystems: a functional methodology incorporating ecosystem services. <i>Australian Journal of Botany</i> , 2006, 54, 221.	0.6	61
70	Application of Coal Fly Ash in Agriculture: A Strategic Perspective. <i>Critical Reviews in Environmental Science and Technology</i> , 2012, 42, 559-600.	12.8	61
71	Photosynthetic and stomatal conductance responses to acid mist of red spruce seedlings. <i>Plant, Cell and Environment</i> , 1990, 13, 349-357.	5.7	60
72	Seasonal Trends in Carbon Assimilation, Stomatal Conductance, Pre-dawn Leaf Water Potential and Growth in <i>Terminalia ferdinandiana</i> , a Deciduous Tree of Northern Australian Savannas. <i>Australian Journal of Botany</i> , 1997, 45, 53.	0.6	60

#	ARTICLE	IF	CITATIONS
73	Reproductive Phenology of Woody Species in a North Australian Tropical Savanna1. <i>Biotropica</i> , 1999, 31, 626-636.	1.6	60
74	Seasonal patterns of soil carbon dioxide efflux from a wet-dry tropical savanna of northern Australia. <i>Australian Journal of Botany</i> , 2002, 50, 43.	0.6	60
75	Is productivity of mesic savannas light limited or water limited? Results of a simulation study. <i>Global Change Biology</i> , 2011, 17, 3130-3149.	9.5	60
76	Persistent effects of ozone on needle water loss and wettability in Norway spruce. <i>Environmental Pollution</i> , 1990, 63, 345-363.	7.5	59
77	Seasonal differences in leaf attributes in Australian tropical tree species: family and habitat comparisons. <i>Functional Ecology</i> , 2004, 18, 707-718.	3.6	59
78	Assessing the ability of MODIS EVI to estimate terrestrial ecosystem gross primary production of multiple land cover types. <i>Ecological Indicators</i> , 2017, 72, 153-164.	6.3	59
79	Long term trends of stand transpiration in a remnant forest during wet and dry years. <i>Journal of Hydrology</i> , 2008, 349, 200-213.	5.4	58
80	Rooting depth explains [CO ₂] x drought interaction in <i>Eucalyptus saligna</i> . <i>Tree Physiology</i> , 2011, 31, 922-931.	3.1	57
81	Parameterization of an ecosystem light-use-efficiency model for predicting savanna GPP using MODIS EVI. <i>Remote Sensing of Environment</i> , 2014, 154, 253-271.	11.0	56
82	Persistent stimulation of CO ₂ assimilation and stomatal conductance by summer ozone fumigation in Norway spruce. <i>Environmental Pollution</i> , 1990, 63, 365-379.	7.5	55
83	Changes in photosynthesis during leaf expansion in <i>Corymbia gummifera</i> . <i>Australian Journal of Botany</i> , 2003, 51, 111.	0.6	55
84	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. <i>Hydrological Processes</i> , 2013, 27, 1133-1146.	2.6	54
85	Productivity and evapotranspiration of two contrasting semiarid ecosystems following the 2011 global carbon land sink anomaly. <i>Agricultural and Forest Meteorology</i> , 2016, 220, 151-159.	4.8	54
86	Seasonal patterns of fine-root productivity and turnover in a tropical savanna of northern Australia. <i>Journal of Tropical Ecology</i> , 2004, 20, 221-224.	1.1	53
87	Radiation- and water-use associated with growth and yields of wheat and chickpea in sole and mixed crops. <i>European Journal of Agronomy</i> , 2007, 26, 275-282.	4.1	53
88	A modified Jarvis-Stewart model for predicting stand-scale transpiration of an Australian native forest. <i>Plant and Soil</i> , 2008, 305, 35-47.	3.7	52
89	Impacts of future climate change on water resource availability of eastern Australia: A case study of the Manning River basin. <i>Journal of Hydrology</i> , 2019, 573, 49-59.	5.4	52
90	The influence of ozone, acid mist and soil nutrient status on Norway spruce [<i>Picea abies</i> (L.) Karst.]. II. Photosynthesis, dark respiration and soluble carbohydrates of trees during late autumn. <i>New Phytologist</i> , 1990, 115, 149-156.	7.3	51

#	ARTICLE	IF	CITATIONS
91	Independent effects of the environment on the leaf gas exchange of three banana (<i>Musa</i> sp.) cultivars of different genomic constitution. <i>Scientia Horticulturae</i> , 1998, 75, 41-57.	3.6	50
92	A Cost-Benefit Analysis of Leaves of Eight Australian Savanna Tree Species of Differing Leaf Life-Span. <i>Photosynthetica</i> , 2000, 36, 575-586.	1.7	49
93	Evapotranspiration partitioning, stomatal conductance, and components of the water balance: A special case of a desert ecosystem in China. <i>Journal of Hydrology</i> , 2016, 538, 374-386.	5.4	49
94	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
95	Recognition of key regions for restoration of phytoplankton communities in the Huai River basin, China. <i>Journal of Hydrology</i> , 2012, 420-421, 292-300.	5.4	47
96	Convergence in hydraulic architecture, water relations and primary productivity amongst habitats and across seasons in Sydney. <i>Functional Plant Biology</i> , 2004, 31, 429.	2.1	45
97	Tree rings of <i>Pinus nigra</i> from the Vienna basin region (Austria) show evidence of change in climatic sensitivity in the late 20th century. <i>Canadian Journal of Forest Research</i> , 2008, 38, 744-759.	1.7	45
98	Coordination of leaf area, sapwood area and canopy conductance leads to species convergence of tree water use in a remnant evergreen woodland. <i>Australian Journal of Botany</i> , 2008, 56, 97.	0.6	45
99	Root biomass distribution and soil properties of an open woodland on a duplex soil. <i>Plant and Soil</i> , 2010, 327, 377-388.	3.7	45
100	Interactive effects of elevated CO ₂ and drought on nocturnal water fluxes in <i>Eucalyptus saligna</i> . <i>Tree Physiology</i> , 2011, 31, 932-944.	3.1	45
101	Photosynthetic responses to temperature, light flux-density, CO ₂ concentration and vapour pressure deficit in <i>Eucalyptus tetrodonta</i> grown under CO ₂ enrichment. <i>Environmental Pollution</i> , 1995, 90, 41-49.	7.5	44
102	Optimization theory of stomatal behaviour: II. Stomatal responses of several tree species of north Australia to changes in light, soil and atmospheric water content and temperature. <i>Journal of Experimental Botany</i> , 1999, 50, 393-400.	4.8	44
103	The Influence of CO ₂ Enrichment on Growth, Nutrient Content and Biomass Allocation of <i>Maranthes corymbosa</i> . <i>Australian Journal of Botany</i> , 1993, 41, 195.	0.6	43
104	ABA Levels and Effects in Chilled and Hardened <i>Phaseolus vulgaris</i> . <i>Journal of Experimental Botany</i> , 1983, 34, 1000-1006.	4.8	42
105	Assimilation, Stomatal Conductance, Specific Leaf Area and Chlorophyll Responses to Elevated CO ₂ of <i>Maranthes corymbosa</i> , a Tropical Monsoon Rain Forest Species. <i>Functional Plant Biology</i> , 1993, 20, 741.	2.1	41
106	Ecosystem services: an ecophysiological examination. <i>Australian Journal of Botany</i> , 2005, 53, 1.	0.6	41
107	Daily, seasonal and annual patterns of transpiration from a stand of remnant vegetation dominated by a coniferous <i>Callitris</i> species and a broad-leaved <i>Eucalyptus</i> species. <i>Physiologia Plantarum</i> , 2006, 127, 413-422.	5.2	41
108	Coordinating leaf functional traits with branch hydraulic conductivity: resource substitution and implications for carbon gain. <i>Tree Physiology</i> , 2008, 28, 1169-1177.	3.1	40

#	ARTICLE	IF	CITATIONS
109	Assessments of Class F fly ashes for amelioration of soil acidity and their influence on growth and uptake of Mo and Se by canola. <i>Fuel</i> , 2010, 89, 3498-3504.	6.4	40
110	Water-use efficiency in a semi-arid woodland with high rainfall variability. <i>Global Change Biology</i> , 2020, 26, 496-508.	9.5	40
111	Mechanisms underlying the amelioration of O ₃ -induced damage by elevated atmospheric concentrations of CO ₂ . <i>Journal of Experimental Botany</i> , 2004, 55, 771-781.	4.8	39
112	Influence of season, drought and xylem ABA on stomatal responses to leaf-to-air vapour pressure difference of trees of the Australian wet-dry tropics. <i>Australian Journal of Botany</i> , 2000, 48, 143.	0.6	38
113	Seasonal patterns of xylem sap pH, xylem abscisic acid concentration, leaf water potential and stomatal conductance of six evergreen and deciduous Australian savanna tree species. <i>Australian Journal of Botany</i> , 2002, 50, 229.	0.6	38
114	The validity of optimal leaf traits modelled on environmental conditions. <i>New Phytologist</i> , 2019, 221, 1409-1423.	7.3	38
115	Seasonal changes in hydraulic conductance, xylem embolism and leaf area in <i>Eucalyptus tetrodonta</i> and <i>Eucalyptus miniata</i> saplings in a north Australian savanna. <i>Plant, Cell and Environment</i> , 2000, 23, 955-965.	5.7	36
116	The influence of depth-to-groundwater on structure and productivity of <i>Eucalyptus</i> woodlands. <i>Australian Journal of Botany</i> , 2014, 62, 428.	0.6	36
117	Bridging Thermal Infrared Sensing and Physically-Based Evapotranspiration Modeling: From Theoretical Implementation to Validation Across an Aridity Gradient in Australian Ecosystems. <i>Water Resources Research</i> , 2018, 54, 3409-3435.	4.2	36
118	Field comparison of methods for estimating groundwater discharge by evaporation and evapotranspiration in an arid-zone playa. <i>Journal of Hydrology</i> , 2015, 527, 1073-1083.	5.4	35
119	Is Climate Change a Possible Explanation for Woody Thickening in Arid and Semi-Arid Regions?. <i>Research Letters in Ecology</i> , 2007, 2007, 1-5.	0.6	34
120	Disentangling Climate and LAI Effects on Seasonal Variability in Water Use Efficiency Across Terrestrial Ecosystems in China. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2018, 123, 2429-2443.	3.0	34
121	TERN, Australia's land observatory: addressing the global challenge of forecasting ecosystem responses to climate variability and change. <i>Environmental Research Letters</i> , 2019, 14, 095004.	5.2	34
122	Functional Traits and Water Transport Strategies in Lowland Tropical Rainforest Trees. <i>PLoS ONE</i> , 2015, 10, e0130799.	2.5	34
123	Variation in bulk leaf $\delta^{13}C$ 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
124	Seasonal Changes in Leaf Water Characteristics of <i>Eucalyptus tetrodonta</i> and <i>Terminalia ferdinandiana</i> Saplings in a Northern Australian Savanna. <i>Australian Journal of Botany</i> , 1999, 47, 587.	0.6	32
125	Soil organic carbon content at a range of north Australian tropical savannas with contrasting site histories. <i>Plant and Soil</i> , 2005, 268, 161-171.	3.7	31
126	Reconciling the optimal and empirical approaches to modelling stomatal conductance. <i>Global Change Biology</i> , 2012, 18, 3476-3476.	9.5	31

#	ARTICLE	IF	CITATIONS
127	Morphological and moisture availability controls of the leaf area to sapwood area ratio: analysis of measurements on Australian trees. <i>Ecology and Evolution</i> , 2015, 5, 1263-1270.	1.9	31
128	A rate equation model of stomatal responses to vapour pressure deficit and drought. , 2002, 2, 8.		30
129	Applying a SPA model to examine the impact of climate change on GPP of open woodlands and the potential for woody thickening. <i>Ecohydrology</i> , 2011, 4, 379-393.	2.4	30
130	Modelling vegetation water-use and groundwater recharge as affected by climate variability in an arid-zone Acacia savanna woodland. <i>Journal of Hydrology</i> , 2014, 519, 1084-1096.	5.4	30
131	Impacts of elevated CO ₂ , climate change and their interactions on water budgets in four different catchments in Australia. <i>Journal of Hydrology</i> , 2014, 519, 1350-1361.	5.4	30
132	MODIS vegetation products as proxies of photosynthetic potential along a gradient of meteorologically and biologically driven ecosystem productivity. <i>Biogeosciences</i> , 2016, 13, 5587-5608.	3.3	30
133	Internal Structure and Hydraulic Conductivity of Basidiomycete Translocating Organs. <i>Journal of Experimental Botany</i> , 1985, 36, 1110-1116.	4.8	29
134	The Water Relations of <i>Allosyncarpia ternata</i> (Myrtaceae) at Contrasting Sites in the Monsoonal Tropics of Northern Australia. <i>Australian Journal of Botany</i> , 1997, 45, 259.	0.6	29
135	Intra-specific variation in leaf attributes of four savanna tree species across a rainfall gradient in tropical Australia. <i>Australian Journal of Botany</i> , 2005, 53, 323.	0.6	28
136	Root water compensation sustains transpiration rates in an Australian woodland. <i>Advances in Water Resources</i> , 2014, 74, 91-101.	3.8	28
137	Photosynthetic and stomatal conductance responses of Norway spruce and beech to ozone, acid mist and frost—a conceptual model. <i>Environmental Pollution</i> , 1991, 72, 23-44.	7.5	27
138	A comparison of tree water use in two contiguous vegetation communities of the seasonally dry tropics of northern Australia: the importance of site water budget to tree hydraulics. <i>Australian Journal of Botany</i> , 2007, 55, 700.	0.6	27
139	Intrinsic climate dependency of ecosystem light and water-use-efficiencies across Australian biomes. <i>Environmental Research Letters</i> , 2014, 9, 104002.	5.2	27
140	Stomatal Behaviour and Water Relations of Chilled <i>Phaseolus vulgaris</i> L. and <i>Pisum sativum</i> L.. <i>Journal of Experimental Botany</i> , 1983, 34, 434-441.	4.8	26
141	Tree responses to CO ₂ enrichment: CO ₂ and temperature interactions, biomass allocation and stand-scale modeling. <i>Tree Physiology</i> , 1996, 16, 43-47.	3.1	26
142	The Impact of CO ₂ Enrichment on Water Relations in <i>Maranthus corymbosa</i> and <i>Eucalyptus tetrodonta</i> . <i>Australian Journal of Botany</i> , 1995, 43, 273.	0.6	25
143	Groundwater Dependent Ecosystems: Classification, Identification Techniques and Threats. , 2016, , 313-346.		25
144	Embolism recovery strategies and nocturnal water loss across species influenced by biogeographic origin. <i>Ecology and Evolution</i> , 2019, 9, 5348-5361.	1.9	25

#	ARTICLE	IF	CITATIONS
145	A Model for the Interaction of Low Temperature, ABA, IAA, and CO ₂ in the Control of Stomatal Behaviour. <i>Journal of Experimental Botany</i> , 1984, 35, 91-98.	4.8	24
146	Effectiveness of time of sowing and cultivar choice for managing climate change: wheat crop phenology and water use efficiency. <i>International Journal of Biometeorology</i> , 2018, 62, 1049-1061.	3.0	24
147	Determination of Water, Solute and Turgor Potentials of Mycelium of Various Basidiomycete Fungi causing Wood Decay. <i>Journal of Experimental Botany</i> , 1984, 35, 1782-1786.	4.8	23
148	Water flux through mycelium of <i>Serpula lacrimans</i> . <i>Transactions of the British Mycological Society</i> , 1985, 84, 601-608.	0.6	23
149	Postharvest water relationships and tissue browning of rambutan fruit. <i>Scientia Horticulturae</i> , 1996, 66, 201-208.	3.6	23
150	Zooplankton in highly regulated rivers: Changing with water environment. <i>Ecological Engineering</i> , 2013, 58, 323-334.	3.6	23
151	Xylem traits and water-use efficiency of woody species co-occurring in the Ti Tree Basin arid zone. <i>Trees - Structure and Function</i> , 2016, 30, 295-303.	1.9	23
152	Aerodynamic Resistance and Penman's Monteith Evapotranspiration over a Seasonally Two-Layered Canopy in Semiarid Central Australia. <i>Journal of Hydrometeorology</i> , 2013, 14, 1562-1570.	1.9	22
153	Storage of organic carbon in the soils of Mexican temperate forests. <i>Forest Ecology and Management</i> , 2019, 446, 115-125.	3.2	22
154	The influence of abscisic acid on the water relations of leaf epidermal cells of <i>Rhoeo discolor</i> . <i>Plant Science Letters</i> , 1983, 31, 253-259.	1.8	20
155	A Pressure-Volume Analysis of <i>Solanum melongena</i> Leaves. <i>Journal of Experimental Botany</i> , 1990, 41, 661-668.	4.8	20
156	Optimization theory of stomatal behaviour: I. A critical evaluation of five methods of calculation. <i>Journal of Experimental Botany</i> , 1999, 50, 385-392.	4.8	20
157	Evaluating Global Land Surface Models in CMIP5: Analysis of Ecosystem Water- and Light-Use Efficiencies and Rainfall Partitioning. <i>Journal of Climate</i> , 2018, 31, 2995-3008.	3.2	20
158	An assessment of the water budget for contrasting vegetation covers associated with waste management. <i>Hydrological Processes</i> , 2010, 24, 1149-1158.	2.6	19
159	Structural and hydrological alterations of soil due to addition of coal fly ash. <i>Journal of Soils and Sediments</i> , 2011, 11, 423-431.	3.0	19
160	Mulga, a major tropical dry open forest of Australia: recent insights to carbon and water fluxes. <i>Environmental Research Letters</i> , 2016, 11, 125011.	5.2	19
161	Spatiotemporal partitioning of savanna plant functional type productivity along NATT. <i>Remote Sensing of Environment</i> , 2020, 246, 111855.	11.0	19
162	Co-ordination among leaf water relations and xylem vulnerability to embolism of <i>Eucalyptus</i> trees growing along a depth-to-groundwater gradient. <i>Tree Physiology</i> , 2015, 35, 732-743.	3.1	18

#	ARTICLE	IF	CITATIONS
163	Estimation of latent heat flux over savannah vegetation across the North Australian Tropical Transect from multiple sensors and global meteorological data. <i>Agricultural and Forest Meteorology</i> , 2017, 232, 689-703.	4.8	18
164	Growth and Elemental Accumulation by Canola on Soil Amended with Coal Fly Ash. <i>Journal of Environmental Quality</i> , 2008, 37, 1263-1270.	2.0	17
165	Modelling Seasonal and Inter-annual Variations in Carbon and Water Fluxes in an Arid-Zone Acacia Savanna Woodland, 1981â€“2012. <i>Ecosystems</i> , 2016, 19, 625-644.	3.4	17
166	Carbon and water fluxes in two adjacent Australian semi-arid ecosystems. <i>Agricultural and Forest Meteorology</i> , 2020, 281, 107853.	4.8	17
167	Stomatal behaviour and leaf water potential of chilled and water-stressed <i>Solanum melongena</i> , as influenced by growth history. <i>Plant, Cell and Environment</i> , 1987, 10, 649-654.	5.7	16
168	Hydraulic architecture and water relations of several species at diverse sites around Sydney. <i>Australian Journal of Botany</i> , 2004, 52, 509.	0.6	16
169	Diverse sensitivity of winter crops over the growing season to climate and land surface temperature across the rainfed cropland-belt of eastern Australia. <i>Agriculture, Ecosystems and Environment</i> , 2018, 254, 99-110.	5.3	16
170	The Responses of Leaf Water Potential and Leaf Diffusive Resistance to Abscisic Acid, Water Stress and Low Temperature in <i>Hibiscus esculentus</i> : The Effect of Water Stress and ABA Pre-Treatments. <i>Journal of Experimental Botany</i> , 1986, 37, 1854-1862.	4.8	15
171	The Influence of Prior Water Stress and Abscisic Acid Foliar Spraying on Stomatal Responses to CO ₂ , IAA, ABA, and Calcium in Leaves of <i>Solanum melongena</i> . <i>Journal of Experimental Botany</i> , 1989, 40, 573-579.	4.8	15
172	Topographical and seasonal trends in transpiration by two co-occurring <i>Eucalyptus</i> species during two contrasting years in a low rainfall environment. <i>Agricultural and Forest Meteorology</i> , 2010, 150, 1234-1244.	4.8	15
173	Distribution patterns of groundwaterâ€dependent vegetation species diversity and their relationship to groundwater attributes in northwestern China. <i>Ecohydrology</i> , 2013, 6, 191-200.	2.4	15
174	Divergence in plant water-use strategies in semiarid woody species. <i>Functional Plant Biology</i> , 2017, 44, 1134.	2.1	15
175	Contrasting ecophysiology of two widespread arid zone tree species with differing access to water resources. <i>Journal of Arid Environments</i> , 2018, 153, 1-10.	2.4	15
176	Carbon, water and energy fluxes in agricultural systems of Australia and New Zealand. <i>Agricultural and Forest Meteorology</i> , 2020, 287, 107934.	4.8	15
177	Boron contents and solubility in Australian fly ashes and its uptake by canola (<i>Brassica napus</i> L.) from the ash-amended soils. <i>Soil Research</i> , 2010, 48, 480.	1.1	14
178	Transpiration of <i>Eucalyptus</i> woodlands across a natural gradient of depth-to-groundwater. <i>Tree Physiology</i> , 2017, 37, 961-975.	3.1	14
179	Variation in photosynthetic traits related to access to water in semiarid Australian woody species. <i>Functional Plant Biology</i> , 2017, 44, 1087.	2.1	14
180	The Ecophysiology of <i>Allosyncarpia ternata</i> (Myrtaceae) in Northern Australia: Tree Physiognomy, Leaf Characteristics and Assimilation at Contrasting Sites. <i>Australian Journal of Botany</i> , 1995, 43, 367.	0.6	14

#	ARTICLE	IF	CITATIONS
181	Bridge to the future: Important lessons from 20 years of ecosystem observations made by the OzFlux network. <i>Global Change Biology</i> , 2022, 28, 3489-3514.	9.5	14
182	Turgor and fungal growth: Studies on water relations of mycelia of <i>Serpula lacrimans</i> and <i>Phallus impudicus</i> . <i>Transactions of the British Mycological Society</i> , 1986, 86, 527-535.	0.6	13
183	Field Measurements of Net Photosynthesis and Related Parameters in Four Provenances of <i>Acacia auriculiformis</i> . <i>Australian Journal of Botany</i> , 1994, 42, 457.	0.6	13
184	Fine Root Biomass and Its Relationship to Evapotranspiration in Woody and Grassy Vegetation Covers for Ecological Restoration of Waste Storage and Mining Landscapes. <i>Ecosystems</i> , 2012, 15, 113-127.	3.4	13
185	Scenario development for estimating potential climate change impacts on crop production in the North China Plain. <i>International Journal of Climatology</i> , 2013, 33, 3124-3140.	3.5	13
186	Variability in groundwater depth and composition and their impacts on vegetation succession in the lower Heihe River Basin, north-western China. <i>Marine and Freshwater Research</i> , 2014, 65, 206.	1.3	13
187	The impact of constituent ions of acid mist on assimilation and stomatal conductance of Norway spruce prior and post mid-winter freezing. <i>Environmental Pollution</i> , 1993, 79, 135-142.	7.5	12
188	A simple field validation of daily transpiration derived from sapflow using a porometer and minimal meteorological data. <i>Plant and Soil</i> , 2008, 305, 15-24.	3.7	12
189	Towards a spatial understanding of water use of several land cover classes: an examination of relationships amongst pre-dawn leaf water potential, vegetation water use, aridity and MODIS LAI. <i>Ecohydrology</i> , 2010, 3, 1-10.	2.4	12
190	Climate constraints on growth and recruitment patterns of <i>Abies faxoniana</i> over altitudinal gradients in the Wanglang Natural Reserve, eastern Tibetan Plateau. <i>Australian Journal of Botany</i> , 2012, 60, 602.	0.6	12
191	Quantifying the effects of elevated CO ₂ on water budgets by combining FACE data with an ecohydrological model. <i>Ecohydrology</i> , 2014, 7, 1574-1588.	2.4	12
192	Partitioning of turbulent flux reveals contrasting cooling potential for woody vegetation and grassland during heat waves. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2015, 141, 2528-2537.	2.7	12
193	Responses of LAI to rainfall explain contrasting sensitivities to carbon uptake between forest and non-forest ecosystems in Australia. <i>Scientific Reports</i> , 2017, 7, 11720.	3.3	12
194	Further Evidence in Support of an Interactive Model in Stomatal Control. <i>Journal of Experimental Botany</i> , 1986, 37, 657-665.	4.8	11
195	Water relations of leaves of barley infected with brown rust. <i>Physiological and Molecular Plant Pathology</i> , 1991, 38, 393-405.	2.5	11
196	The use of pre-dawn leaf water potential and MODIS LAI to explore seasonal trends in the phenology of Australian and southern African woodlands and savannas. <i>Australian Journal of Botany</i> , 2008, 56, 557.	0.6	11
197	The hydraulic architecture of Eucalyptus trees growing across a gradient of depth-to-groundwater. <i>Functional Plant Biology</i> , 2015, 42, 888.	2.1	11
198	Flooding Regime Impacts on Radiation, Evapotranspiration, and Latent Energy Fluxes over Groundwater-Dependent Riparian Cottonwood and Saltcedar Forests. <i>Advances in Meteorology</i> , 2015, 2015, 1-14.	1.6	10

#	ARTICLE	IF	CITATIONS
199	Mechanisms linking plant productivity and water status for a temperate Eucalyptus forest flux site: analysis over wet and dry years with a simple model. <i>Functional Plant Biology</i> , 2008, 35, 493.	2.1	10
200	Seasonal impacts on leaf attributes of several tree species growing in three diverse ecosystems of south-eastern Australia. <i>Australian Journal of Botany</i> , 2004, 52, 293.	0.6	9
201	Photosynthetic Pigment Concentrations, Gas Exchange and Vegetative Growth for Selected Monocots and Dicots Treated with Two Contrasting Coal Fly Ashes. <i>Journal of Environmental Quality</i> , 2009, 38, 1466-1472.	2.0	9
202	Seasonal variations in tree water use and physiology correlate with soil salinity and soil water content in remnant woodlands on saline soils. <i>Journal of Arid Environments</i> , 2016, 129, 102-110.	2.4	9
203	The effect of chilling temperatures on the water relation of leaf epidermal cells of <i>Rhoeo discolor</i> . <i>Plant Science Letters</i> , 1984, 37, 101-104.	1.8	7
204	The hydraulic conductivity of roots of rust-infected barley seedlings. <i>Physiological and Molecular Plant Pathology</i> , 1991, 38, 407-415.	2.5	7
205	Latent heat fluxes during two contrasting years from a juvenile plantation established over a waste disposal landscape. <i>Journal of Hydrology</i> , 2011, 399, 48-56.	5.4	7
206	Preface: OzFlux: a network for the study of ecosystem carbon and water dynamics across Australia and New Zealand. <i>Biogeosciences</i> , 2018, 15, 349-352.	3.3	7
207	Probability Models of Fire Risk Based on Forest Fire Indices in Contrasting Climates over China. <i>Journal of Resources and Ecology</i> , 2012, 3, 105-117.	0.4	6
208	Belowground eco-restoration of a suburban waste-storage landscape: Earthworm dynamics in grassland and in a succession of woody vegetation covers. <i>Landscape and Urban Planning</i> , 2013, 120, 16-24.	7.5	5
209	Spatial pattern and seasonal dynamics of the photosynthesis activity across Australian rainfed croplands. <i>Ecological Indicators</i> , 2020, 108, 105669.	6.3	5
210	Water quality guidelines to protect groundwater-dependent ecosystems. <i>Ecological Management and Restoration</i> , 2004, 5, 78-80.	1.5	4
211	Design of store-release covers to minimize deep drainage in the mining and waste-disposal industries: results from a modelling analyses based on ecophysiological principles. <i>Hydrological Processes</i> , 2013, 27, 3815-3824.	2.6	4
212	Improving Estimation of Seasonal Evapotranspiration in Australian Tropical Savannas using a Flexible Drought Index. <i>Agricultural and Forest Meteorology</i> , 2020, 295, 108203.	4.8	4
213	Variations in epidermal cell turgor of rust-infected barley seedlings. <i>New Phytologist</i> , 1991, 119, 535-540.	7.3	3
214	The potential impact of dryland salinity on the threatened flora and fauna of New South Wales. <i>Ecological Management and Restoration</i> , 2003, 4, S53-S59.	1.5	3
215	Patterns of plant species composition in mesic woodlands are related to a naturally occurring depth-to-groundwater gradient. <i>Community Ecology</i> , 2017, 18, 21-30.	0.9	3
216	Some Tree Responses to CO2 Enrichment. , 2000, , 75-95.		3

#	ARTICLE	IF	CITATIONS
217	A delayed effect of ozone fumigation on photosynthesis of Norway spruce. <i>Annales Des Sciences Forestières</i> , 1989, 46, 568s-572s.	1.2	2
218	Plant Ecophysiology: Linking Pattern and Process—a Review. <i>Australian Journal of Botany</i> , 1997, 45, 351.	0.6	2
219	Corrigendum to: Seasonal patterns of soil carbon dioxide efflux from a wet-dry tropical savanna of northern Australia. <i>Australian Journal of Botany</i> , 2002, 50, 373.	0.6	2
220	Speculations on the application of foliar $\delta^{13}C$ discrimination to reveal groundwater dependency of vegetation and provide estimates of root depth and rates of groundwater use. <i>Hydrology and Earth System Sciences</i> , 2018, 22, 4875-4889.	4.9	2
221	The influence of acid mist upon transpiration, shoot water potential and pressure-volume curves of red spruce seedlings. <i>Annales Des Sciences Forestières</i> , 1989, 46, 577s-580s.	1.2	2
222	Simulation of Evapotranspiration and Vadose Zone Hydrology Using Limited Soil Data: A Comparison of Four Computer Models. , 2009, , .		1
223	Differential growth and yield by canola (<i>Brassica napus</i> L.) and wheat (<i>Triticum aestivum</i>) Tj ETQq1 1 0.784314 rgBT /Ove of the Science of Food and Agriculture, 2013, 93, 995-1002.	3.5	1
224	Plant Ecophysiology. By Jean-Claude Leclerc. Enfield (New Hampshire): Science Publishers. \$67.00. xviii + 296 p; ill.; index. ISBN: 1-57808-247-1. [Translation of <i>écophysiologie végétale</i> , published by Université de Saint-Étienne, Saint-Étienne, France, 1999.] 2003.. <i>Quarterly Review of Biology</i> , 2003, 78, 481-482.	0.178	0
225	An Introduction to Biogeography: Broad-Scale Relationships Amongst Climate, Vegetation Distribution and Vegetation Attributes. , 0, , 3-42.		0
226	An Introduction to Plant Structure and Ecophysiology. , 0, , 43-109.		0
227	Water Relations, Hydraulic Architecture and Transpiration by Plants. , 0, , 110-152.		0
228	Satellite Sensors and Platforms. , 0, , 184-205.		0
229	Remote Sensing of Landscape Biophysical Properties. , 0, , 206-236.		0
230	Modelling Stomatal and Canopy Conductance. , 0, , 281-295.		0
231	Coupling Models of Photosynthesis, Transpiration and Stomatal Conductance and Environmental Controls of Leaf Function. , 0, , 321-344.		0
232	Boreal Forests. , 0, , 347-367.		0
233	Arid and Semi-Arid Grasslands. , 0, , 368-382.		0
234	Savannas. , 0, , 383-414.		0

#	ARTICLE	IF	CITATIONS
235	Groundwater Dependent Ecosystems. , 2015, , 460-483.		0
236	Global-Change Drought and Forest Mortality. , 0, , 484-512.		0
237	Corrigendum to: An analysis of the sensitivity of sap flux to soil and plant variables assessed for an Australian woodland using a soil - plant - atmosphere model. Functional Plant Biology, 2009, 36, 1120.	2.1	0