Derek Eamus

List of Publications by Citations

241 papers	12,728 citations	57 h-index	104 g-index
252 ext. papers	14,419 ext. citations	4.9 avg, IF	6.18 L-index

#	Paper	IF	Citations
241	Tree allometry and improved estimation of carbon stocks and balance in tropical forests. *Oecologia*, **2005**, 145, 87-99	2.9	1855
240	Reconciling the optimal and empirical approaches to modelling stomatal conductance. *Global Change Biology*, **2011**, 17, 2134-2144	11.4	595
239	The Direct Effects of Increase in the Global Atmospheric CO2 Concentration on Natural and Commercial Temperate Trees and Forests. *Advances in Ecological Research*, **1989**, 19, 1-55	4.6	464
238	Ecosystem resilience despite large-scale altered hydroclimatic conditions. *Nature*, **2013**, 494, 349-52	50.4	331
237	The interaction of rising CO2 and temperatures with water use efficiency. *Plant, Cell and Environment*, **1991**, 14, 843-852	8.4	276
236	Optimal stomatal behaviour around the world. *Nature Climate Change*, **2015**, 5, 459-464	21.4	264
235	The FLUXNET2015 dataset and the ONEFlux processing pipeline for eddy covariance data. *Scientific Data*, **2020**, 7, 225	8.2	256
234	LEAF PHENOLOGY OF WOODY SPECIES IN A NORTH AUSTRALIAN TROPICAL SAVANNA. *Ecology*, **1997**, 78, 2542-2558	4.6	203
233	Ecophysiological traits of deciduous and evergreen woody species in the seasonally dry tropics. *Trends in Ecology and Evolution*, **1999**, 14, 11-16	10.9	187
232	Estimation of leaf area index in eucalypt forest using digital photography. *Agricultural and Forest Meteorology*, **2007**, 143, 176-188	5.8	185
231	A functional methodology for determining the groundwater regime needed to maintain the health of groundwater-dependent vegetation. *Australian Journal of Botany*, **2006**, 54, 97	1.2	143
230	Spatial patterns and temporal dynamics in savanna vegetation phenology across the North Australian Tropical Transect. *Remote Sensing of Environment*, **2013**, 139, 97-115	13.2	141
229	Carbon balance of a tropical savanna of northern Australia. *Oecologia*, **2003**, 137, 405-16	2.9	141
228	Ecophysiology of trees of seasonally dry tropics: Comparisons among phenologies. *Advances in Ecological Research*, **2001**, 32, 113-197	4.6	136
227	Global change-type drought-induced tree mortality: vapor pressure deficit is more important than temperature per se in causing decline in tree health. *Ecology and Evolution*, **2013**, 3, 2711-29	2.8	120
226	Groundwater-dependent ecosystems: the where, what and why of GDEs. *Australian Journal of Botany*, **2006**, 54, 91	1.2	120
225	An introduction to the Australian and New Zealand flux tower network OzFlux. *Biogeosciences*, **2016**, 13, 5895-5916	4.6	119

224	Evapotranspiration from Eucalypt open-forest savanna of Northern Australia. *Functional Ecology*, **2000**, 14, 183-194	5.6	118
223	The critical amplifying role of increasing atmospheric moisture demand on tree mortality and associated regional die-off. *Frontiers in Plant Science*, **2013**, 4, 266	6.2	116
222	Seasonal and Diurnal Patterns of Carbon Assimilation, Stomatal Conductance and Leaf Water Potential in Eucalyptus tetrodonta Saplings in a Wet - Dry Savanna in Northern Australia. *Australian Journal of Botany*, **1997**, 45, 241	1.2	114
221	Abrupt shifts in phenology and vegetation productivity under climate extremes. *Journal of Geophysical Research G: Biogeosciences*, **2015**, 120, 2036-2052	3.7	106
220	Carbon and water fluxes in an arid-zone Acacia savanna woodland: An analyses of seasonal patterns and responses to rainfall events. *Agricultural and Forest Meteorology*, **2013**, 182-183, 225-238	5.8	101
219	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
218	Seasonal changes in photosynthesis of eight savanna tree species. *Tree Physiology*, **1999**, 19, 665-671	4.2	95
217	Water balance of a tropical woodland ecosystem, Northern Australia: A combination of micro-meteorological, soil physical and groundwater chemical approaches. *Journal of Hydrology*, **1998**, 210, 161-177	6	92
216	Seasonal responses of xylem sap velocity to VPD and solar radiation during drought in a stand of native trees in temperate Australia. *Functional Plant Biology*, **2004**, 31, 461-470	2.7	92
215	Leaf attributes in the seasonally dry tropics: a comparison of four habitats in northern Australia. *Functional Ecology*, **2003**, 17, 504-515	5.6	92
214	Convergence of tree water use within an arid-zone woodland. *Oecologia*, **2009**, 160, 643-55	2.9	87
213	Groundwater-dependent ecosystems in Australia: It's more than just water for rivers. *Ecological Management and Restoration*, **2003**, 4, 110-113	1.4	85
212	Seasonal Variation in Water Relations of Trees of Differing Leaf Phenology in a Wet - Dry Tropical Savanna near Darwin, Northern Australia. *Australian Journal of Botany*, **1997**, 45, 225	1.2	84
211	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
210	Groundwater-dependent ecosystems: recent insights from satellite and field-based studies. *Hydrology and Earth System Sciences*, **2015**, 19, 4229-4256	5.5	82
209	Dynamics of component carbon fluxes in a semi-arid Acacia woodland, central Australia. *Journal of Geophysical Research G: Biogeosciences*, **2013**, 118, 1168-1185	3.7	82
208	Tree growth rates in north Australian savanna habitats: seasonal patterns and correlations with leaf attributes. *Australian Journal of Botany*, **2004**, 52, 303	1.2	82
207	Composition, leaf area index and standing biomass of eucalypt open forests near Darwin in the Northern Territory, Australia. *Australian Journal of Botany*, **2000**, 48, 629	1.2	82

206	Rates of nocturnal transpiration in two evergreen temperate woodland species with differing water-use strategies. *Tree Physiology*, **2010**, 30, 988-1000	4.2	81
205	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*, **2008**, 35, 509-520	2.7	81
204	Fly-ash: An exploitable resource for management of Australian agricultural soils. *Fuel*, **2006**, 85, 2337-2344	3.1	81
203	Groundwater use by vegetation in a tropical savanna riparian zone (Daly River, Australia). *Journal of Hydrology*, **2005**, 310, 280-293	6	80
202	Ecohydrology **2006**,		79
201	Monsoonal influences on evapotranspiration of savanna vegetation of northern Australia. *Oecologia*, **2001**, 126, 434-443	2.9	77
200	A cost-benefit analysis of leaves of four Australian savanna species. *Tree Physiology*, **1998**, 18, 537-545	4.2	75
199	Fire in Australian savannas: from leaf to landscape. *Global Change Biology*, **2015**, 21, 62-81	11.4	74
198	Seasonal Patterns in Soil Moisture, Vapour Pressure Deficit, Tree Canopy Cover and Pre-dawn Water Potential in a Northern Australian Savanna. *Australian Journal of Botany*, **1997**, 45, 211	1.2	74
197	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
196	Sulphate and ammonium in mist impair the frost hardening of red spruce seedlings. *New Phytologist*, **1991**, 118, 119-126	9.8	68
195	Improving the responses of the Australian community land surface model (CABLE) to seasonal drought. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		67
194	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
193	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. *Australian Journal of Botany*, **1997**, 45, 275	1.2	66
192	The response of sap flow to pulses of rain in a temperate Australian woodland. *Plant and Soil*, **2008**, 305, 121-130	4.2	66
191	Stomatal responses to a range of variables in two tropical tree species grown with CO2enrichment. *Journal of Experimental Botany*, **1994**, 45, 539-546	7	65
190	Root biomass and root fractal analyses of an open Eucalyptus forest in a savanna of north Australia. *Australian Journal of Botany*, **2002**, 50, 31	1.2	64
189	Estimation of leaf area index in eucalypt forest with vertical foliage, using cover and fullframe fisheye photography. *Forest Ecology and Management*, **2007**, 242, 756-763	3.9	63

188	Groundwater use by riparian vegetation in the wet - dry tropics of northern Australia. *Australian Journal of Botany*, **2006**, 54, 145	1.2	62
187	Year patterns of climate impact on wheat yields. *International Journal of Climatology*, **2014**, 34, 518-528	3.5	60
186	How does ecosystem water balance affect net primary productivity of woody ecosystems?. *Functional Plant Biology*, **2003**, 30, 187-205	2.7	58
185	Drought rapidly diminishes the large net CO uptake in 2011 over semi-arid Australia. *Scientific Reports*, **2016**, 6, 37747	4.9	58
184	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. *Functional Plant Biology*, **2008**, 35, 1070-1079	2.7	57
183	Soil moisture controls on phenology and productivity in a semi-arid critical zone. *Science of the Total Environment*, **2016**, 568, 1227-1237	10.2	56
182	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
181	Persistent effects of ozone on needle water loss and wettability in Norway spruce. *Environmental Pollution*, **1990**, 63, 345-63	9.3	56
180	Comparing model predictions and experimental data for the response of stomatal conductance and guard cell turgor to manipulations of cuticular conductance, leaf-to-air vapour pressure difference and temperature: feedback mechanisms are able to account for all observations. *Plant, Cell and Environment*, **2008**, 31, 269-77	8.4	55
179	Is productivity of mesic savannas light limited or water limited? Results of a simulation study. *Global Change Biology*, **2011**, 17, 3130-3149	11.4	54
178	Seasonal Trends in Carbon Assimilation, Stomatal Conductance, Pre-dawn Leaf Water Potential and Growth in Terminalia ferdinandiana, a Deciduous Tree of Northern Australian Savannas. *Australian Journal of Botany*, **1997**, 45, 53	1.2	54
177	Seasonal patterns of soil carbon dioxide efflux from a wet-dry tropical savanna of northern Australia. *Australian Journal of Botany*, **2002**, 50, 43	1.2	54
176	Long term trends of stand transpiration in a remnant forest during wet and dry years. *Journal of Hydrology*, **2008**, 349, 200-213	6	53
175	Reproductive Phenology of Woody Species in a North Australian Tropical Savanna1. *Biotropica*, **1999**, 31, 626-636	2.3	53
174	Photosynthetic and stomatal conductance responses to acid mist of red spruce seedlings. *Plant, Cell and Environment*, **1990**, 13, 349-357	8.4	53
173	Persistent stimulation of CO2 assimilation and stomatal conductance by summer ozone fumigation in Norway spruce. *Environmental Pollution*, **1990**, 63, 365-79	9.3	53
172	Seasonal differences in leaf attributes in Australian tropical tree species: family and habitat comparisons. *Functional Ecology*, **2004**, 18, 707-718	5.6	52
171	The importance of interacting climate modes on Australia's contribution to global carbon cycle extremes. *Scientific Reports*, **2016**, 6, 23113	4.9	50

170	Changes in photosynthesis during leaf expansion in Corymbia gummifera. *Australian Journal of Botany*, **2003**, 51, 111	1.2	49
169	Productivity and evapotranspiration of two contrasting semiarid ecosystems following the 2011 global carbon land sink anomaly. *Agricultural and Forest Meteorology*, **2016**, 220, 151-159	5.8	49
168	Groundwater-dependent distribution of vegetation in Hailiutu River catchment, a semi-arid region in China. *Ecohydrology*, **2013**, 6, 142-149	2.5	47
167	Valuation of groundwater-dependent ecosystems: a functional methodology incorporating ecosystem services. *Australian Journal of Botany*, **2006**, 54, 221	1.2	47
166	The Australian SuperSite Network: A continental, long-term terrestrial ecosystem observatory. *Science of the Total Environment*, **2016**, 568, 1263-1274	10.2	47
165	Evapotranspiration seasonality across the Amazon Basin. *Earth System Dynamics*, **2017**, 8, 439-454	4.8	46
164	Seasonal patterns of fine-root productivity and turnover in a tropical savanna of northern Australia. *Journal of Tropical Ecology*, **2004**, 20, 221-224	1.3	46
163	The influence of ozone, acid mist and soil nutrient status on Norway spruce [Picea abies (L.) Karst.]. *New Phytologist*, **1990**, 115, 149-156	9.8	46
162	Parameterization of an ecosystem light-use-efficiency model for predicting savanna GPP using MODIS EVI. *Remote Sensing of Environment*, **2014**, 154, 253-271	13.2	45
161	. *IEEE Transactions on Geoscience and Remote Sensing*, **2017**, 55, 6517-6532	8.1	45
160	Rooting depth explains [CO2] x drought interaction in Eucalyptus saligna. *Tree Physiology*, **2011**, 31, 922-31	4.1	44
159	Application of Coal Fly Ash in Agriculture: A Strategic Perspective. *Critical Reviews in Environmental Science and Technology*, **2012**, 42, 559-600	11.1	44
158	Recognition of key regions for restoration of phytoplankton communities in the Huai River basin, China. *Journal of Hydrology*, **2012**, 420-421, 292-300	6	42
157	Assessing the ability of MODIS EVI to estimate terrestrial ecosystem gross primary production of multiple land cover types. *Ecological Indicators*, **2017**, 72, 153-164	5.8	42
156	Radiation- and water-use associated with growth and yields of wheat and chickpea in sole and mixed crops. *European Journal of Agronomy*, **2007**, 26, 275-282	5	42
155	A modified Jarvis-Stewart model for predicting stand-scale transpiration of an Australian native forest. *Plant and Soil*, **2008**, 305, 35-47	4.2	42
154	Use of satellite leaf area index estimating evapotranspiration and gross assimilation for Australian ecosystems. *Ecohydrology*, **2018**, 11, e1974	2.5	41
153	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

152	Leaf nitrogen determination using non-destructive techniquesA review. *Journal of Plant Nutrition*, **2017**, 40, 928-953	2.3	40
151	A Cost-Benefit Analysis of Leaves of Eight Australian Savanna Tree Species of Differing Leaf Life-Span. *Photosynthetica*, **2000**, 36, 575-586	2.2	40
150	Photosynthetic responses to temperature, light flux-density, CO2 concentration and vapour pressure deficit in Eucalyptus tetrodonta grown under CO2 enrichment. *Environmental Pollution*, **1995**, 90, 41-9	9.3	40
149	Differences in osmotic adjustment, foliar abscisic acid dynamics, and stomatal regulation between an isohydric and anisohydric woody angiosperm during drought. *Plant, Cell and Environment*, **2017**, 40, 3122-3134	8.4	39
148	Root biomass distribution and soil properties of an open woodland on a duplex soil. *Plant and Soil*, **2010**, 327, 377-388	4.2	39
147	Convergence in hydraulic architecture, water relations and primary productivity amongst habitats and across seasons in Sydney. *Functional Plant Biology*, **2004**, 31, 429-439	2.7	39
146	Tree rings of Pinus nigra from the Vienna basin region (Austria) show evidence of change in climatic sensitivity in the late 20th century. *Canadian Journal of Forest Research*, **2008**, 38, 744-759	1.9	38
145	Ecosystem services: an ecophysiological examination. *Australian Journal of Botany*, **2005**, 53, 1	1.2	38
144	The Influence of CO2 Enrichment on Growth, Nutrient Content and Biomass Allocation of Maranthes corymbosa. *Australian Journal of Botany*, **1993**, 41, 195	1.2	38
143	Mechanisms underlying the amelioration of O3-induced damage by elevated atmospheric concentrations of CO2. *Journal of Experimental Botany*, **2004**, 55, 771-81	7	37
142	ABA Levels and Effects in Chilled and HardenedPhaseolus vulgaris. *Journal of Experimental Botany*, **1983**, 34, 1000-1006	7	37
141	Evapotranspiration partitioning, stomatal conductance, and components of the water balance: A special case of a desert ecosystem in China. *Journal of Hydrology*, **2016**, 538, 374-386	6	37
140	Daily, seasonal and annual patterns of transpiration from a stand of remnant vegetation dominated by a coniferous Callitris species and a broad-leaved Eucalyptus species. *Physiologia Plantarum*, **2006** , 127, 413-422	4.6	36
139	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. *Journal of Experimental Botany*, **1999**, 50, 393-400	7	36
138	A continental-scale assessment of variability in leaf traits: Within species, across sites and between seasons. *Functional Ecology*, **2018**, 32, 1492-1506	5.6	35
137	Coordination of leaf area, sapwood area and canopy conductance leads to species convergence of tree water use in a remnant evergreen woodland. *Australian Journal of Botany*, **2008**, 56, 97	1.2	35
136	Coordinating leaf functional traits with branch hydraulic conductivity: resource substitution and implications for carbon gain. *Tree Physiology*, **2008**, 28, 1169-77	4.2	34
135	Interactive effects of elevated CO2 and drought on nocturnal water fluxes in Eucalyptus saligna. *Tree Physiology*, **2011**, 31, 932-44	4.2	33

134	Assessments of Class F fly ashes for amelioration of soil acidity and their influence on growth and uptake of Mo and Se by canola. *Fuel*, **2010**, 89, 3498-3504	7.1	33
133	Independent effects of the environment on the leaf gas exchange of three banana (Musa sp.) cultivars of different genomic constitution. *Scientia Horticulturae*, **1998**, 75, 41-57	4.1	33
132	Seasonal changes in hydraulic conductance, xylem embolism and leaf area in Eucalyptus tetrodonta and Eucalyptus miniata saplings in a north Australian savanna. *Plant, Cell and Environment*, **2000**, 23, 955-965	8.4	33
131	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. *Australian Journal of Botany*, **2000**, 48, 143	1.2	31
130	Seasonal Changes in Leaf Water Characteristics of Eucalyptus tetrodonta and Terminalia ferdinandiana Saplings in a Northern Australian Savanna. *Australian Journal of Botany*, **1999**, 47, 587	1.2	31
129	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. *Australian Journal of Botany*, **2002**, 50, 229	1.2	30
128	Assimilation, Stomatal Conductance, Specific Leaf Area and Chlorophyll Responses to Elevated CO2 of Maranthes corymbosa, a Tropical Monsoon Rain Forest Species. *Functional Plant Biology*, **1993**, 20, 741	2.7	30
127	Impacts of future climate change on water resource availability of eastern Australia: A case study of the Manning River basin. *Journal of Hydrology*, **2019**, 573, 49-59	6	29
126	The influence of depth-to-groundwater on structure and productivity of Eucalyptus woodlands. *Australian Journal of Botany*, **2014**, 62, 428	1.2	29
125	Is Climate Change a Possible Explanation for Woody Thickening in Arid and Semi-Arid Regions?. *Research Letters in Ecology*, **2007**, 2007, 1-5		28
124	Soil organic carbon content at a range of north Australian tropical savannas with contrasting site histories. *Plant and Soil*, **2005**, 268, 161-171	4.2	28
123	Internal Structure and Hydraulic Conductivity of Basidiomycete Translocating Organs. *Journal of Experimental Botany*, **1985**, 36, 1110-1116	7	28
122	Impacts of elevated CO2, climate change and their interactions on water budgets in four different catchments in Australia. *Journal of Hydrology*, **2014**, 519, 1350-1361	6	27
121	Field comparison of methods for estimating groundwater discharge by evaporation and evapotranspiration in an arid-zone playa. *Journal of Hydrology*, **2015**, 527, 1073-1083	6	26
120	Intra-specific variation in leaf attributes of four savanna tree species across a rainfall gradient in tropical Australia. *Australian Journal of Botany*, **2005**, 53, 323	1.2	26
119	Photosynthetic and stomatal conductance responses of Norway spruce and beech to ozone, acid mist and frost--a conceptual model. *Environmental Pollution*, **1991**, 72, 23-44	9.3	26
118	Modelling vegetation water-use and groundwater recharge as affected by climate variability in an arid-zone Acacia savanna woodland. *Journal of Hydrology*, **2014**, 519, 1084-1096	6	25
117	Applying a SPA model to examine the impact of climate change on GPP of open woodlands and the potential for woody thickening. *Ecohydrology*, **2011**, 4, 379-393	2.5	25

116	A rate equation model of stomatal responses to vapour pressure deficit and drought. *BMC Ecology*, **2002**, 2, 8	2.7	25
115	Tree responses to CO(2) enrichment: CO(2) and temperature interactions, biomass allocation and stand-scale modeling. *Tree Physiology*, **1996**, 16, 43-47	4.2	25
114	Functional Traits and Water Transport Strategies in Lowland Tropical Rainforest Trees. *PLoS ONE*, **2015**, 10, e0130799	3.7	25
113	The Water Relations of Allosyncarpia ternata (Myrtaceae) at Contrasting Sites in the Monsoonal Tropics of Northern Australia. *Australian Journal of Botany*, **1997**, 45, 259	1.2	25
112	Intrinsic climate dependency of ecosystem light and water-use-efficiencies across Australian biomes. *Environmental Research Letters*, **2014**, 9, 104002	6.2	24
111	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. *Australian Journal of Botany*, **2007**, 55, 700	1.2	24
110	MODIS vegetation products as proxies of photosynthetic potential along a gradient of meteorologically and biologically driven ecosystem productivity. *Biogeosciences*, **2016**, 13, 5587-5608	4.6	24
109	The validity of optimal leaf traits modelled on environmental conditions. *New Phytologist*, **2019**, 221, 1409-1423	9.8	24
108	Root water compensation sustains transpiration rates in an Australian woodland. *Advances in Water Resources*, **2014**, 74, 91-101	4.7	23
107	The Impact of CO2 Enrichment on Water Relations in Maranthes corymbosa and Eucalyptus tetrodonta. *Australian Journal of Botany*, **1995**, 43, 273	1.2	23
106	Determination of Water, Solute and Turgor Potentials of Mycelium of Various Basidiomycete Fungi causing Wood Decay. *Journal of Experimental Botany*, **1984**, 35, 1782-1786	7	23
105	Water flux through mycelium of Serpula lacrimans. *Transactions of the British Mycological Society*, **1985**, 84, 601-608		22
104	Groundwater Dependent Ecosystems: Classification, Identification Techniques and Threats **2016**, 313-346		21
103	Reconciling the optimal and empirical approaches to modelling stomatal conductance. *Global Change Biology*, **2012**, 18, 3476-3476	11.4	20
102	Water-use efficiency in a semi-arid woodland with high rainfall variability. *Global Change Biology*, **2020**, 26, 496-508	11.4	20
101	Xylem traits and water-use efficiency of woody species co-occurring in the Ti Tree Basin arid zone. *Trees - Structure and Function*, **2016**, 30, 295-303	2.6	19
100	Morphological and moisture availability controls of the leaf area-to-sapwood area ratio: analysis of measurements on Australian trees. *Ecology and Evolution*, **2015**, 5, 1263-70	2.8	19
99	An assessment of the water budget for contrasting vegetation covers associated with waste management. *Hydrological Processes*, **2010**, 24, 1149-1158	3.3	19

98	A Model for the Interaction of Low Temperature, ABA, IAA, and CO2in the Control of Stomatal Behaviour. *Journal of Experimental Botany*, **1984**, 35, 91-98	7	19
97	Variation in bulk-leaf C discrimination, leaf traits and water-use efficiency-trait relationships along a continental-scale climate gradient in Australia. *Global Change Biology*, **2018**, 24, 1186-1200	11.4	18
96	Aerodynamic Resistance and Penman Monteith Evapotranspiration over a Seasonally Two-Layered Canopy in Semiarid Central Australia. *Journal of Hydrometeorology*, **2013**, 14, 1562-1570	3.7	18
95	Optimization theory of stomatal behaviourI. A critical evaluation of five methods of calculation. *Journal of Experimental Botany*, **1999**, 50, 385-392	7	18
94	A Pressure-Volume Analysis of Solanum melongena Leaves. *Journal of Experimental Botany*, **1990**, 41, 661-668	7	18
93	Stomatal Behaviour and Water Relations of ChilledPhaseolus vulgarisL. andPisum sativumL.. *Journal of Experimental Botany*, **1983**, 34, 434-441	7	18
92	Bridging Thermal Infrared Sensing and Physically-Based Evapotranspiration Modeling: From Theoretical Implementation to Validation Across an Aridity Gradient in Australian Ecosystems. *Water Resources Research*, **2018**, 54, 3409-3435	5.4	17
91	TERN, Australia's land observatory: addressing the global challenge of forecasting ecosystem responses to climate variability and change. *Environmental Research Letters*, **2019**, 14, 095004	6.2	17
90	Zooplankton in highly regulated rivers: Changing with water environment. *Ecological Engineering*, **2013**, 58, 323-334	3.9	17
89	Structural and hydrological alterations of soil due to addition of coal fly ash. *Journal of Soils and Sediments*, **2011**, 11, 423-431	3.4	17
88	Postharvest water relationships and tissue browning of rambutan fruit. *Scientia Horticulturae*, **1996**, 66, 201-208	4.1	17
87	The influence of abscisic acid on the water relations of leaf epidermal cells of Rhoeo discolor. *Plant Science Letters*, **1983**, 31, 253-259		17
86	Mulga, a major tropical dry open forest of Australia: recent insights to carbon and water fluxes. *Environmental Research Letters*, **2016**, 11, 125011	6.2	17
85	Modelling Seasonal and Inter-annual Variations in Carbon and Water Fluxes in an Arid-Zone Acacia Savanna Woodland, 1981–2012. *Ecosystems*, **2016**, 19, 625-644	3.9	16
84	Estimation of latent heat flux over savannah vegetation across the North Australian Tropical Transect from multiple sensors and global meteorological data. *Agricultural and Forest Meteorology* , **2017**, 232, 689-703	5.8	15
83	Effectiveness of time of sowing and cultivar choice for managing climate change: wheat crop phenology and water use efficiency. *International Journal of Biometeorology*, **2018**, 62, 1049-1061	3.7	14
82	Co-ordination among leaf water relations and xylem vulnerability to embolism of Eucalyptus trees growing along a depth-to-groundwater gradient. *Tree Physiology*, **2015**, 35, 732-43	4.2	14
81	Topographical and seasonal trends in transpiration by two co-occurring Eucalyptus species during two contrasting years in a low rainfall environment. *Agricultural and Forest Meteorology*, **2010**, 150, 1234-1244	5.8	14

80	Hydraulic architecture and water relations of several species at diverse sites around Sydney. *Australian Journal of Botany*, **2004**, 52, 509	1.2	14
79	The Responses of Leaf Water Potential and Leaf Diffusive Resistance to Abscisic Acid, Water Stress and Low Temperature in Hibiscus esculentus: The Effect of Water Stress and ABA Pre-Treatments. *Journal of Experimental Botany*, **1986**, 37, 1854-1862	7	14
78	Stomatal behaviour and leaf water potential of chilled and water-stressed Solanum melongena, as influenced by growth history. *Plant, Cell and Environment*, **1987**, 10, 649-654	8.4	14
77	Divergence in plant water-use strategies in semiarid woody species. *Functional Plant Biology*, **2017**, 44, 1134-1146	2.7	13
76	Groundwater-dependent ecosystems: recent insights, new techniques and an ecosystem-scale threshold response		13
75	The Ecophysiology of Allosyncarpia ternata (Myrtaceae) in Northern Australia: Tree Physiognomy, Leaf Characteristics and Assimilation at Contrasting Sites. *Australian Journal of Botany*, **1995**, 43, 367	1.2	13
74	Evaluating Global Land Surface Models in CMIP5: Analysis of Ecosystem Water- and Light-Use Efficiencies and Rainfall Partitioning. *Journal of Climate*, **2018**, 31, 2995-3008	4.4	12
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