Mark A Adams

List of Publications by Year
in descending order

126 papers	9,514 citations	31902 53 h-index	40881 93 g-index
126 all docs	126 docs citations	126 times ranked	10780 citing authors

#	Article	IF	Citations
1	Optimization of photosynthesis and stomatal conductance in the date palm Phoenix dactylifera during acclimation to heat and drought. New Phytologist, 2019, 223, 1973-1988.	3.5	18
2	Climate determines vascular traits in the ecologically diverse genus Eucalyptus. Ecology Letters, 2016, 19, 240-248.	3.0	137
3	Soil carbon and nitrogen stocks in forests along an altitudinal gradient in the eastern Himalayas and a metaâ€analysis of global data. Global Change Biology, 2016, 22, 2255-2268.	4.2	129
4	Emissions from prescribed fires in temperate forest in south-east Australia: implications for carbon accounting. Biogeosciences, 2015, 12, 257-268.	1.3	19
5	Pyrogenic carbon: the influence of particle size and chemical composition on soil carbon release. International Journal of Wildland Fire, 2014, 23, 1027.	1.0	13
6	Insulation capacity of three bark types of temperate Eucalyptus species. Forest Ecology and Management, 2014, 313, 224-232.	1.4	34
7	Combustion influences on natural abundance nitrogen isotope ratio in soil and plants following a wildfire in a sub-alpine ecosystem. Oecologia, 2013, 173, 1063-1074.	0.9	23
8	Photosynthetic benefits of ultraviolet-A to Pimelea ligustrina, a woody shrub of sub-alpine Australia. Oecologia, 2013, 173, 375-385.	0.9	29
9	Water flux of Eucalyptus regnans: defying summer drought and a record heatwave in 2009. Oecologia, 2013, 172, 317-326.	0.9	41
10	Stand water use status in relation to fire in a mixed species eucalypt forest. Forest Ecology and Management, 2013, 304, 162-170.	1.4	26
11	Validation of canopy transpiration in a mixed-species foothill eucalypt forest using a soilâ€“plantâ€“atmosphere model. Journal of Hydrology, 2013, 492, 219-227.	2.3	13
12	Mega-fires, inquiries and politics in the eucalypt forests of Victoria, south-eastern Australia. Forest Ecology and Management, 2013, 294, 45-53.	1.4	97
13	The knowns, known unknowns and unknowns of sequestration of soil organic carbon. Agriculture, Ecosystems and Environment, 2013, 164, 80-99.	2.5	1,143
14	Mega-fires, tipping points and ecosystem services: Managing forests and woodlands in an uncertain future. Forest Ecology and Management, 2013, 294, 250-261.	1.4	235
15	Sensitivity of plants to changing atmospheric <scp>CO</scp>₂ concentration: from the geological past to the next century. New Phytologist, 2013, 197, 1077-1094.	3.5	336
16	Soil Security: Solving the Global Soil Crisis. Global Policy, 2013, 4, 434-441.	1.0	219
17	Modern tools to tackle traditional concerns: Evaluation of site productivity and Pinus radiata management via Î´13C- and Î´18O-analysis of tree-rings. Forest Ecology and Management, 2012, 285, 227-238.	1.4	13
18	Differences in water use between mature and post-fire regrowth stands of subalpine Eucalyptus delegatensis R. Baker. Forest Ecology and Management, 2012, 270, 1-10.	1.4	39

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19	Hydraulic traits and water use of Eucalyptus on restored versus natural sites in a seasonally dry forest in southwestern Australia. Forest Ecology and Management, 2012, 274, 58-66.	1.4	17
20	Effects of elevated atmospheric [<scp>CO₂</scp>] on instantaneous transpiration efficiency at leaf and canopy scales in <scp>E</scp>ucalyptus saligna. Global Change Biology, 2012, 18, 585-595.	4.2	75
21	Simple models for stomatal conductance derived from a process model: crossâ€validation against sap flux data. Plant, Cell and Environment, 2012, 35, 1647-1662.	2.8	60
22	An analytical model of nonâ€photorespiratory CO₂ release in the light and dark in leaves of C₃ species based on stoichiometric flux balance. Plant, Cell and Environment, 2011, 34, 89-112.	2.8	52
23	Compoundâ€specific differences in ¹³C of soluble carbohydrates in leaves and phloem of 6â€monthâ€old Eucalyptus globulus (Labill). Plant, Cell and Environment, 2011, 34, 1599-1608.	2.8	18
24	Steps towards a mechanistic understanding of respiratory temperature responses. New Phytologist, 2011, 189, 659-677.	3.5	79
25	Respiratory quotients and Q10 of soil respiration in sub-alpine Australia reflect influences of vegetation types. Soil Biology and Biochemistry, 2011, 43, 1266-1274.	4.2	29
26	Nocturnal water loss in mature subalpine Eucalyptus delegatensis tall open forests and adjacent E. pauciflora woodlands. Ecology and Evolution, 2011, 1, 435-450.	0.8	37
27	Variations saisonniÃ¨res des hydrates de carbone, des cyclitols et des relations hydriques chez 3 espÃ¨ces dâ€™Eucalyptus de taxonomie contrastÃ©e, en plein champ et poussant sur un site commun. Annals of Forest Science, 2010, 67, 104-104.	0.8	19
28	The challenge of tree height in Eucalyptus regnans: when xylem tapering overcomes hydraulic resistance. New Phytologist, 2010, 187, 1146-1153.	3.5	79
29	Vegetation type determines heterotrophic respiration in subalpine Australian ecosystems. Global Change Biology, 2010, 16, 209-219.	4.2	31
30	Phloem sap and leaf Î´13C, carbohydrates, and amino acid concentrations in Eucalyptus globulus change systematically according to flooding and water deficit treatment. Journal of Experimental Botany, 2010, 61, 1785-1793.	2.4	75
31	Sap flow measurements reveal influence of temperature and stand structure on water use of Eucalyptus regnans forests. Forest Ecology and Management, 2010, 259, 1190-1199.	1.4	67
32	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.	1.9	108
33	Rewetting and litter addition influence mineralisation and microbial communities in soils from a semi-arid intermittent stream. Soil Biology and Biochemistry, 2009, 41, 92-101.	4.2	60
34	Eucalypt smoke and wildfires: Temperature dependent emissions of biogenic volatile organic compounds. International Journal of Mass Spectrometry, 2009, 279, 126-133.	0.7	54
35	Premature Decline of Eucalyptus and Altered Ecosystem Processes in the Absence of Fire in Some Australian Forests. Botanical Review, The, 2009, 75, 191-202.	1.7	55
36	Using aminoâ€nitrogen pools and fluxes to identify contributions of understoryAcaciaspp. to overstoryEucalyptus regnansand stand nitrogen uptake in temperate Australia. New Phytologist, 2009, 183, 1097-1113.	3.5	29

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37	Nitrogen mineralization potential in rewetted soils from a semi-arid stream landscape, north-west Australia. Journal of Arid Environments, 2009, 73, 48-54.	1.2	29
38	Temperature responses are a window to the physiology of dark respiration: differences between CO2release and O2reduction shed light on energy conservation. Plant, Cell and Environment, 2008, 31, 901-914.	2.8	22
39	Three parameters comprehensively describe the temperature response of respiratory oxygen reduction. Plant, Cell and Environment, 2008, 31, 954-967.	2.8	36
40	Estimation of drought-related limitations to mid-rotation aged plantation grown Eucalyptus globulus by phloem sap analysis. Forest Ecology and Management, 2008, 256, 844-848.	1.4	16
41	Harnessing forest ecological sciences in the service of stewardship and sustainability. Forest Ecology and Management, 2008, 256, 1636-1645.	1.4	20
42	Contrasting Physiological Responses of Six Eucalyptus Species to Water Deficit. Annals of Botany, 2007, 100, 1507-1515.	1.4	110
43	Soil Water Nitrate and Ammonium Dynamics under a Sewage Effluentâ€“Irrigated Eucalypt Plantation. Journal of Environmental Quality, 2007, 36, 1883-1894.	1.0	14
44	Estimation of leaf area index in eucalypt forest using digital photography. Agricultural and Forest Meteorology, 2007, 143, 176-188.	1.9	219
45	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.	1.4	70
46	Potential for rural electrification based on biomass gasification in Cambodia. Biomass and Bioenergy, 2007, 31, 656-664.	2.9	66
47	PTR-MS analysis of reference and plant-emitted volatile organic compounds. International Journal of Mass Spectrometry, 2007, 262, 203-210.	0.7	123
48	Quercitol links the physiology, taxonomy and evolution of 279 eucalypt species. Global Ecology and Biogeography, 2007, 16, 810-819.	2.7	27
49	Novel mannoseâ€sequestration technique reveals variation in subcellular orthophosphate pools do not explain the effects of phosphorus nutrition on photosynthesis in Eucalyptus globulus seedlings. New Phytologist, 2007, 176, 849-861.	3.5	27
50	Role of soil drying in nitrogen mineralization and microbial community function in semi-arid grasslands of north-west Australia. Soil Biology and Biochemistry, 2007, 39, 1557-1569.	4.2	56
51	Changes in gas exchange versus leaf solutes as a means to cope with summer drought in Eucalyptus marginata. Oecologia, 2007, 154, 1-10.	0.9	34
52	Comparison of four methods for measuring osmotic potential of tree leaves. Physiologia Plantarum, 2006, 127, 383-392.	2.6	57
53	Internal conductance does not scale with photosynthetic capacity: implications for carbon isotope discrimination and the economics of water and nitrogen use in photosynthesis. Plant, Cell and Environment, 2006, 29, 192-201.	2.8	204
54	Cyclitols and carbohydrates in leaves and roots of 13 Eucalyptus species suggest contrasting physiological responses to water deficit. Plant, Cell and Environment, 2006, 29, 2017-2029.	2.8	96

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55	Ecotype adaptation and acclimation of leaf traits to rainfall in 29 species of 16-year-old Eucalyptus at two common gardens. Functional Ecology, 2006, 20, 929-940.	1.7	51
56	Quantifying uncertainty from large-scale model predictions of forest carbon dynamics. Global Change Biology, 2006, 12, 1421-1434.	4.2	57
57	Short-term variation in the isotopic composition of organic matter allocated from the leaves to the stem of Pinus sylvestris : effects of photosynthetic and postphotosynthetic carbon isotope fractionation. Global Change Biology, 2006, 12, 1922-1939.	4.2	133
58	Water and Nutrient Dynamics in Surface Roots and Soils are not Modified by Short-term Flooding of Phreatophytic Plants in a Hyperarid Desert. Plant and Soil, 2006, 279, 129-139.	1.8	53
59	Water stress impacts on respiratory rate, efficiency and substrates, in growing and mature foliage of Eucalyptus spp. Planta, 2006, 224, 680-691.	1.6	16
60	Targeted metabolite profiling provides a functional link among eucalypt taxonomy, physiology and evolution. Phytochemistry, 2006, 67, 402-408.	1.4	63
61	Salt tolerance in Eucalyptus spp.: identity and response of putative osmolytes. Plant, Cell and Environment, 2005, 28, 772-787.	2.8	47
62	Dynamic light use and protection from excess light in upper canopy and coppice leaves of Nothofagus cunninghamii in an old growth, cool temperate rainforest in Victoria, Australia. New Phytologist, 2005, 165, 143-156.	3.5	46
63	Is the bark of shining gum (Eucalyptus nitens) a sun or a shade leaf?. Trees - Structure and Function, 2005, 19, 415-421.	0.9	22
64	What determines interspecific variation in relative growth rate of Eucalyptus seedlings?. Oecologia, 2005, 144, 373-381.	0.9	21
65	Differential effects of N, P and K on photosynthesis and partitioning of N in Pinus pinaster needles. Annals of Forest Science, 2005, 62, 1-8.	0.8	48
66	Stable osmotica in Eucalyptus spathulata â€" responses to salt and water deficit stress. Functional Plant Biology, 2005, 32, 797.	1.1	21
67	A validation, comparison and error analysis of two heat-pulse methods for measuring sap flow in Eucalyptus marginata saplings. Functional Plant Biology, 2004, 31, 645.	1.1	85
68	Productivity, carbon isotope discrimination and leaf traits of trees of Eucalyptus globulus Labill. in relation to water availability. Plant, Cell and Environment, 2004, 27, 1515-1524.	2.8	50
69	Assessment of ecological effects due to forest harvesting: approaches and statistical issues. Journal of Applied Ecology, 2004, 41, 585-598.	1.9	72
70	The apparent feed-forward response to vapour pressure deficit of stomata in droughted, field-grown Eucalyptus globulus Labill. Plant, Cell and Environment, 2004, 27, 1268-1280.	2.8	61
71	Nitrogen fixation and metabolism by groundwater-dependent perennial plants in a hyperarid desert. Oecologia, 2004, 141, 385-394.	0.9	47
72	Evergreen trees do not maximize instantaneous photosynthesis. Trends in Plant Science, 2004, 9, 270-274.	4.3	133

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73	What determines rates of photosynthesis per unit nitrogen in Eucalyptus seedlings?. Functional Plant Biology, 2004, 31, 1169.	1.1	30
74	Loss of patch-scale heterogeneity on primary productivity and rainfall-use efficiency in Western Australia. Basic and Applied Ecology, 2003, 4, 569-578.	1.2	28
75	Carbon and oxygen isotope composition of organic compounds in the phloem sap provides a short-term measure for stomatal conductance of European beech (Fagus sylvatica L.). Plant, Cell and Environment, 2003, 26, 1157-1168.	2.8	163
76	Possible causes of slow growth of nitrate-suppliedPinus pinaster. Canadian Journal of Forest Research, 2002, 32, 569-580.	0.8	26
77	Broadacre crop yield in the lee of windbreaks in the medium and low rainfall areas of south-western Australia. Australian Journal of Experimental Agriculture, 2002, 42, 739.	1.0	28
78	Relationships between empirical and nominal indices of landscape function in the arid shrubland of Western Australia. Journal of Arid Environments, 2002, 50, 1-21.	1.2	47
79	Do variations on a model of landscape function assist in interpreting the growth response of vegetation to rainfall in arid environments?. Journal of Arid Environments, 2002, 50, 23-52.	1.2	22
80	The tree - crop interface: the effects of root pruning in south-western Australia. Australian Journal of Experimental Agriculture, 2002, 42, 763.	1.0	34
81	Phosphorus sources and availability modify growth and distribution of root clusters and nodules of native Australian legumes. Plant, Cell and Environment, 2002, 25, 837-850.	2.8	38
82	Response of a perennial grassland to nitrogen and phosphorus additions in sub-tropical, semi-arid Australia. Journal of Arid Environments, 2001, 48, 289-308.	1.2	41
83	Tree roots: conduits for deep recharge of soil water. Oecologia, 2001, 126, 158-165.	0.9	186
84	Water availability and carbon isotope discrimination in conifers. Oecologia, 2001, 127, 476-486.	0.9	313
85	Radiation modifies the effect of water availability on the carbon isotope composition of beech (Fagus) Tj ETQq1 1 0.784314 rgBT /Ov	3.5	109
86	Distribution of N, Rubisco and photosynthesis in Pinus pinaster and acclimation to light. Plant, Cell and Environment, 2001, 24, 597-609.	2.8	147
87	Stable Isotopes at Natural Abundance in Terrestrial Plant Ecology and Ecophysiology: An Update. Plant Biology, 2001, 3, 299-310.	1.8	104
88	Mineralisation of nitrogen in a chronosequence of rehabilitated bauxite mines. Soil Research, 2000, 38, 435.	0.6	18
89	Litter cover as an index of nitrogen availability in rehabilitated mine sites. Soil Research, 2000, 38, 423.	0.6	14
90	Effect of N source on concentration of Rubisco inEucalyptus diversicolor, as measured by capillary electrophoresis. Physiologia Plantarum, 2000, 110, 52-58.	2.6	17

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91	Seasonal Water Acquisition and Redistribution in the Australian Woody Phreatophyte, Banksia prionotes. Annals of Botany, 2000, 85, 215-224.	1.4	113
92	Characterisation of hydrogen isotope profiles in an agroforestry system: implications for tracing water sources of trees. Agricultural Water Management, 2000, 45, 229-241.	2.4	39
93	Photographic exposure affects indirect estimation of leaf area in plantations of Eucalyptus globulus Labill. Agricultural and Forest Meteorology, 2000, 100, 155-168.	1.9	78
94	Plant species affect acid phosphatase, ergosterol and microbial P in a Jarrah (Eucalyptus marginata) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	4.2	112
95	Sequential fractionation and characterisation (31P-NMR) of phosphorus-amended soils in Banksia integrifolia (L.f.) woodland and adjacent pasture. Soil Biology and Biochemistry, 2000, 32, 169-177.	4.2	31
96	Simultaneous determination of aliphatic and aromatic acids in plant tissue extracts by ion-exclusion chromatography. Analytica Chimica Acta, 1999, 386, 249-256.	2.6	24
97	2,6-Pyridinedicarboxylic acid as an eluent for UV and conductivity detection of inorganic anions, magnesium and calcium in water by ion chromatography. Chromatographia, 1999, 49, 496-502.	0.7	18
98	Simultaneous Determination by Capillary Gas Chromatography of Organic Acids, Sugars, and Sugar Alcohols in Plant Tissue Extracts as Their Trimethylsilyl Derivatives. Analytical Biochemistry, 1999, 266, 77-84.	1.1	110
99	Indices for characterising spatial variability of soil nitrogen semi-arid grasslands of Northwestern Australia. Soil Biology and Biochemistry, 1999, 31, 735-746.	4.2	27
100	Phosphorus availability and the growth, mineral composition and nutritive value of ephemeral forbs and associated perennials from the Pilbara, Western Australia. Australian Journal of Experimental Agriculture, 1999, 39, 149.	1.0	14
101	Direct determination of phosphate in soil extracts by potentiometric flow injection using a cobalt wire electrode. Analytica Chimica Acta, 1998, 363, 191-197.	2.6	40
102	Indirect photometric detection of aliphatic acids separated by ion-exclusion chromatography using aromatic acidic eluents. Journal of Chromatography A, 1998, 818, 61-68.	1.8	18
103	Simultaneous Analysis of Amino and Organic Acids in Extracts of Plant Leaves astert-Butyldimethylsilyl Derivatives by Capillary Gas Chromatography. Analytical Biochemistry, 1998, 259, 203-211.	1.1	40
104	The redistribution of soil water by tree root systems. Oecologia, 1998, 115, 306-311.	0.9	480
105	Spatial and temporal variations in phloem sap composition of plantation-grown Eucalyptus globulus. Oecologia, 1998, 117, 312-322.	0.9	79
106	Î´13 C of wood in growth-rings indicates cambial activity of drought-stressed trees of Eucalyptus globulus. Functional Ecology, 1998, 12, 655-664.	1.7	30
107	A metallic cobalt electrode for the indirect potentiometric determination of calcium and magnesium in natural waters using flow injection analysis. Talanta, 1998, 47, 779-786.	2.9	15
108	Effects of phosphorus supply on growth and nitrogen fractions in xylem sap and foliage of Eucalyptus regnans (F.Muell.), E. nitens (Maiden) and E. globulus (Labill.) seedlings: implications for herbivory. Trees - Structure and Function, 1995, 9, 324-331.	0.9	18

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109	Tree decline in southeastern Australia: Nitrate reductase activity and indications of unbalanced nutrition in Eucalyptus ovata (Labill.) and E. camphora (R.T. Baker) communities at Yellingbo, Victoria. Oecologia, 1994, 98, 221-228.	0.9	27
110	Phosphatase activity and phosphorus fractions in Karri (Eucalyptus diversicolor F. Muell.) forest soils. Biology and Fertility of Soils, 1992, 14, 200-204.	2.3	59
111	Availability of organic and inorganic forms of phosphorus to lupins (Lupinus spp.). Plant and Soil, 1992, 145, 107-113.	1.8	146
112	Nitrogen and phosphorus cycling in relation to stand age of Eucalyptus regnans F. Muell. Plant and Soil, 1992, 142, 177-185.	1.8	49
113	Nutrient balance in forests of northern Tasmania. 1. Atmospheric inputs and within-stand cycles. Forest Ecology and Management, 1991, 44, 93-113.	1.4	29
114	Nutrient balance in forests of northern Tasmania. 2. Alteration of nutrient availability and soil-water chemistry as a result of logging, slash-burning and fertilizer application. Forest Ecology and Management, 1991, 44, 115-131.	1.4	32
115	31P-NMR identification of phosphorus compounds in neutral extracts of mountain ash (Eucalyptus) Tj ETQq1 1 0.784314 rgBT /Overl	4.2	25
116	Availability of nitrogen and phosphorus in forest soils in northeastern Tasmania. Biology and Fertility of Soils, 1989, 8, 212.	2.3	24
117	31P-NMR analysis of phosphorus compounds in extracts of surface soils from selected karri (Eucalyptus diversicolor F. Muell.) forests. Soil Biology and Biochemistry, 1989, 21, 523-528.	4.2	75
118	In situ studies of nitrogen mineralization and uptake in forest soils; some comments on methodology. Soil Biology and Biochemistry, 1989, 21, 423-429.	4.2	118
119	Nutrient cycling and nitrogen mineralization in eucalypt forests of south-eastern Australia. Plant and Soil, 1986, 92, 319-339.	1.8	75
120	Nutrient cycling and nitrogen mineralization in eucalypt forests of south-eastern Australia. Plant and Soil, 1986, 92, 341-362.	1.8	191
121	Effects of mound-cultivation (bedding) on concentration and conservation of nutrients in a sandy podzol. Forest Ecology and Management, 1985, 11, 97-110.	1.4	20
122	Role of Acacia Spp. In Nutrient Balance and Cycling in Regenerating Eucalyptus regnans F. Muell. Forests. I. Temporal Changes in Biomass and Nutrient Content. Australian Journal of Botany, 1984, 32, 205.	0.3	58
123	Patterns of nitrogen mineralization in 23-year old pine forest following nitrogen fertilizing. Forest Ecology and Management, 1984, 7, 241-248.	1.4	23
124	Role of Acacia Spp. In Nutrient Balance and Cycling in Regenerating Eucalyptus regnans F. Muell. Forests. II. Field Studies of Acetylene Reduction. Australian Journal of Botany, 1984, 32, 217.	0.3	35
125	Nitrogen mineralization and nitrate reduction in forests. Soil Biology and Biochemistry, 1982, 14, 197-202.	4.2	62
126	Nitrate reductase activity and growth response of forest species to ammonium and nitrate sources of nitrogen. Plant and Soil, 1982, 66, 373-381.	1.8	55