Heather R Mccarthy

List of Publications by Year
in descending order

58 papers	6,685 citations	94269 37 h-index	149479 56 g-index
59 all docs	59 docs citations	59 times ranked	7322 citing authors

#	Article	IF	Citations
1	The response of coarse root biomass to longâ€term CO₂ enrichment and nitrogen application in a maturing <i>Pinus taeda</i> stand with a large broadleaved component. Global Change Biology, 2022, 28, 1458-1476.	4.2	4
2	Urban plant diversity in Los Angeles, California: Species and functional type turnover in cultivated landscapes. Plants People Planet, 2020, 2, 144-156.	1.6	35
3	Germination, Survival, and Establishment of a Rare Riparian Species Alnus maritima. Castanea, 2019, 84, 144.	0.2	1
4	Global patterns of extreme drought-induced loss in land primary production: Identifying ecological extremes from rain-use efficiency. Science of the Total Environment, 2018, 628-629, 611-620.	3.9	69
5	Responses of gross primary production of grasslands and croplands under drought, pluvial, and irrigation conditions during 2010â€“2016, Oklahoma, USA. Agricultural Water Management, 2018, 204, 47-59.	2.4	38
6	Housing Age and Affluence Influence Plant and Soil Nitrogen and Carbon Cycles in Two Semiarid Cities. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 3178-3192.	1.3	4
7	Evapotranspiration and water yield of a pineâ€broadleaf forest are not altered by longâ€term atmospheric [CO₂] enrichment under native or enhanced soil fertility. Global Change Biology, 2018, 24, 4841-4856.	4.2	16
8	Tree Species with Photosynthetic Stems Have Greater Nighttime Sap Flux. Frontiers in Plant Science, 2018, 9, 30.	1.7	12
9	Carbon dioxide and water vapor fluxes in winter wheat and tallgrass prairie in central Oklahoma. Science of the Total Environment, 2018, 644, 1511-1524.	3.9	29
10	Dynamics of soil CO₂ efflux under varying atmospheric CO₂ concentrations reveal dominance of slow processes. Global Change Biology, 2017, 23, 3501-3512.	4.2	5
11	A method for estimating transpiration of irrigated urban trees in California. Landscape and Urban Planning, 2017, 158, 48-61.	3.4	38
12	Hydraulic Balance of a Eucalyptus urophylla Plantation in Response to Periodic Drought in Low Subtropical China. Frontiers in Plant Science, 2016, 7, 1346.	1.7	11
13	Canopy and physiological controls of GPP during drought and heat wave. Geophysical Research Letters, 2016, 43, 3325-3333.	1.5	75
14	Influence of the decoupling degree on the estimation of canopy stomatal conductance for two broadleaf tree species. Agricultural and Forest Meteorology, 2016, 221, 230-241.	1.9	39
15	Tree diversity in southern California's urban forest: the interacting roles of social and environmental variables. Frontiers in Ecology and Evolution, 2015, 3, .	1.1	63
16	Using ecosystem experiments to improve vegetation models. Nature Climate Change, 2015, 5, 528-534.	8.1	249
17	Understanding preferences for tree attributes: the relative effects of socio-economic and local environmental factors. Urban Ecosystems, 2015, 18, 73-86.	1.1	84
18	How Climate Change Affects Extremes in Maize and Wheat Yield in Two Cropping Regions. Journal of Climate, 2015, 28, 4653-4687.	1.2	25

#	ARTICLE	IF	CITATIONS
19	Increases in atmospheric CO₂ have little influence on transpiration of a temperate forest canopy. New Phytologist, 2015, 205, 518-525.	3.5	61
20	CO² uptake of a mature <i>Acacia mangium</i> plantation estimated from sap flow measurements and stable carbon isotope discrimination. Biogeosciences, 2014, 11, 1393-1411.	1.3	9
21	Where does the carbon go? A modelâ€“data intercomparison of vegetation carbon allocation and turnover processes at two temperate forest freeâ€air CO₂ enrichment sites. New Phytologist, 2014, 203, 883-899.	3.5	263
22	Evaluation of 11 terrestrial carbonâ€“nitrogen cycle models against observations from two temperate <scp>F</scp>reeâ€<scp>A</scp>ir <scp>CO</scp>₂<scp> E</scp>nrichment studies. New Phytologist, 2014, 202, 803-822.	3.5	378
23	Sustained effects of atmospheric [<scp><scp>CO₂</scp></scp>] and nitrogen availability on forest soil <scp><scp>CO₂</scp></scp> efflux. Global Change Biology, 2014, 20, 1146-1160.	4.2	23
24	Comprehensive ecosystem modelâ€data synthesis using multiple data sets at two temperate forest freeâ€air CO₂ enrichment experiments: Model performance at ambient CO₂ concentration. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 937-964.	1.3	95
25	A traitâ€based ecology of the Los Angeles urban forest. Ecosphere, 2013, 4, 1-20.	1.0	53
26	The effects of elevated CO2 and nitrogen fertilization on stomatal conductance estimated from 11 years of scaled sap flux measurements at Duke FACE. Tree Physiology, 2013, 33, 135-151.	1.4	54
27	Elevated <scp>CO</scp>₂ increases treeâ€level intrinsic water use efficiency: insights from carbon and oxygen isotope analyses in tree rings across three forest <scp>FACE</scp> sites. New Phytologist, 2013, 197, 544-554.	3.5	210
28	VIC+ for waterâ€limited conditions: A study of biological and hydrological processes and their interactions in soilâ€plantâ€atmosphere continuum. Water Resources Research, 2013, 49, 7711-7732.	1.7	25
29	Increased resin flow in mature pine trees growing under elevated CO2 and moderate soil fertility. Tree Physiology, 2012, 32, 752-763.	1.4	41
30	Transpiration sensitivity of urban trees in a semi-arid climate is constrained by xylem vulnerability to cavitation. Tree Physiology, 2012, 32, 373-388.	1.4	80
31	Integrating empiricalâ€“modeling approaches to improve understanding of terrestrial ecology processes. New Phytologist, 2012, 195, 523-525.	3.5	6
32	Water sources of urban trees in the Los Angeles metropolitan area. Urban Ecosystems, 2012, 15, 195-214.	1.1	52
33	Transpiration of urban forests in the Los Angeles metropolitan area. , 2011, 21, 661-677.		223
34	Increases in the flux of carbon belowground stimulate nitrogen uptake and sustain the long-term enhancement of forest productivity under elevated CO2. Ecology Letters, 2011, 14, 349-357.	3.0	374
35	Water relations of coast redwood planted in the semiâ€arid climate of southern California. Plant, Cell and Environment, 2011, 34, 1384-1400.	2.8	26
36	Sources of increased N uptake in forest trees growing under elevated CO2: results of a large-scale 15N study. Global Change Biology, 2011, 17, 3338-3350.	4.2	40

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37	Plant water-use efficiency as a metric of urban ecosystem services. , 2011, 21, 3115-3127.		62
38	Drivers of variability in water use of native and non-native urban trees in the greater Los Angeles area. Urban Ecosystems, 2010, 13, 393-414.	1.1	79
39	Reâ€assessment of plant carbon dynamics at the Duke freeâ€air CO₂ enrichment site: interactions of atmospheric [CO₂] with nitrogen and water availability over stand development. New Phytologist, 2010, 185, 514-528.	3.5	242
40	Greater seed production in elevated CO₂ is not accompanied by reduced seed quality in <i>Pinus taeda</i> L.. Global Change Biology, 2010, 16, 1046-1056.	4.2	50
41	Variable conductivity and embolism in roots and branches of four contrasting tree species and their impacts on whole-plant hydraulic performance under future atmospheric CO2 concentration. Tree Physiology, 2010, 30, 1001-1015.	1.4	91
42	Estimation of longâ€term basin scale evapotranspiration from streamflow time series. Water Resources Research, 2010, 46, .	1.7	64
43	Energy, water, and carbon fluxes in a loblolly pine stand: Results from uniform and gappy canopy models with comparisons to eddy flux data. Journal of Geophysical Research, 2009, 114, .	3.3	22
44	Investigating a Hierarchy of Eulerian Closure Models for Scalar Transfer Inside Forested Canopies. Boundary-Layer Meteorology, 2008, 128, 1-32.	1.2	72
45	Role of vegetation in determining carbon sequestration along ecological succession in the southeastern United States. Global Change Biology, 2008, 14, 1409-1427.	4.2	87
46	Temporal dynamics and spatial variability in the enhancement of canopy leaf area under elevated atmospheric CO₂. Global Change Biology, 2007, 13, 2479-2497.	4.2	107
47	Modeling nighttime ecosystem respiration from measured CO2concentration and air temperature profiles using inverse methods. Journal of Geophysical Research, 2006, 111, .	3.3	34
48	Interaction of ice storms and management practices on current carbon sequestration in forests with potential mitigation under future CO2atmosphere. Journal of Geophysical Research, 2006, 111, .	3.3	50
49	PROGRESSIVE NITROGEN LIMITATION OF ECOSYSTEM PROCESSES UNDER ELEVATED CO2IN A WARM-TEMPERATE FOREST. Ecology, 2006, 87, 15-25.	1.5	210
50	Estimating the uncertainty in annual net ecosystem carbon exchange: spatial variation in turbulent fluxes and sampling errors in eddy-covariance measurements. Global Change Biology, 2006, 12, 883-896.	4.2	140
51	Multiscale model intercomparisons of CO2 and H2 O exchange rates in a maturing southeastern US pine forest. Global Change Biology, 2006, 12, 1189-1207.	4.2	80
52	Separating the effects of climate and vegetation on evapotranspiration along a successional chronosequence in the southeastern US. Global Change Biology, 2006, 12, 2115-2135.	4.2	219
53	Aboveground sink strength in forests controls the allocation of carbon below ground and its [CO2]-induced enhancement. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 19362-19367.	3.3	109
54	Canopy leaf area constrains [CO2]-induced enhancement of productivity and partitioning among aboveground carbon pools. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 19356-19361.	3.3	94

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55	Contrasting responses to drought of forest floor CO_2 efflux in a Loblolly pine plantation and a nearby Oak-Hickory forest. Global Change Biology, 2005, 11, 421-434.	4.2	95
56	Variability in net ecosystem exchange from hourly to inter-annual time scales at adjacent pine and hardwood forests: a wavelet analysis. Tree Physiology, 2005, 25, 887-902.	1.4	129
57	Forest response to elevated CO_2 is conserved across a broad range of productivity. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 18052-18056.	3.3	880
58	Soil fertility limits carbon sequestration by forest ecosystems in a CO_2-enriched atmosphere. Nature, 2001, 411, 469-472.	13.7	957