Ashley M Matheny

List of Publications by Year
in descending order

30 papers	1,607 citations	430874 18 h-index	477307 29 g-index
33 all docs	33 docs citations	33 times ranked	3084 citing authors

#	Article	IF	Citations
1	Vegetation demographics in Earth System Models: A review of progress and priorities. Global Change Biology, 2018, 24, 35-54.	9.5	478
2	Contrasting strategies of hydraulic control in two codominant temperate tree species. Ecohydrology, 2017, 10, e1815.	2.4	102
3	Tree level hydrodynamic approach for resolving aboveground water storage and stomatal conductance and modeling the effects of tree hydraulic strategy. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 1792-1813.	3.0	84
4	Quantification of uncertainties in conifer sap flow measured with the thermal dissipation method. New Phytologist, 2018, 219, 1283-1299.	7.3	81
5	Speciesâ€specific transpiration responses to intermediate disturbance in a northern hardwood forest. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 2292-2311.	3.0	76
6	Observations of stem water storage in trees of opposing hydraulic strategies. Ecosphere, 2015, 6, 1-13.	2.2	76
7	Detecting forest response to droughts with global observations of vegetation water content. Global Change Biology, 2021, 27, 6005-6024.	9.5	73
8	Characterizing the diurnal patterns of errors in the prediction of evapotranspiration by several landâ€surface models: An NACP analysis. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 1458-1473.	3.0	69
9	The handbook for standardized field and laboratory measurements in terrestrial climate change experiments and observational studies (ClimEx). Methods in Ecology and Evolution, 2020, 11, 22-37.	5.2	68
10	Contrasting Hydraulic Strategies during Dry Soil Conditions in Quercus rubra and Acer rubrum in a Sandy Site in Michigan. Forests, 2013, 4, 1106-1120.	2.1	65
11	Global transpiration data from sap flow measurements: the SAPFLUXNET database. Earth System Science Data, 2021, 13, 2607-2649.	9.9	65
12	Trait-based representation of hydrological functional properties ofÂplants in weather and ecosystem models. Plant Diversity, 2017, 39, 1-12.	3.7	56
13	Representation of Plant Hydraulics in the Noahâ€MP Land Surface Model: Model Development and Multiscale Evaluation. Journal of Advances in Modeling Earth Systems, 2021, 13, e2020MS002214.	3.8	50
14	Boreal tree hydrodynamics: asynchronous, diverging, yet complementary. Tree Physiology, 2018, 38, 953-964.	3.1	46
15	Aboveground tree growth is a minor and decoupled fraction of boreal forest carbon input. Agricultural and Forest Meteorology, 2020, 290, 108030.	4.8	33
16	Opportunities, challenges and pitfalls in characterizing plant waterâ€use strategies. Functional Ecology, 2022, 36, 24-37.	3.6	27
17	Seasonal Patterns of Water Cycling in a Deep, Continental Mountain Valley Inferred From Stable Water Vapor Isotopes. Journal of Geophysical Research D: Atmospheres, 2018, 123, 7271-7291.	3.3	25
18	A Numerical Case Study of the Implications of Secondary Circulations to the Interpretation of Eddy-Covariance Measurements Over Small Lakes. Boundary-Layer Meteorology, 2017, 165, 311-332.	2.3	24

#	Article	IF	Citations
19	Root lateral interactions drive water uptake patterns under water limitation. Advances in Water Resources, 2021, 151, 103896.	3.8	20
20	Hydrodynamic trait coordination and costâ€“benefit tradeâ€offs throughout the isohydricâ€“anisohydric continuum in trees. Ecohydrology, 2019, 12, e2041.	2.4	17
21	Stable Water Isotopes Reveal Effects of Intermediate Disturbance and Canopy Structure on Forest Water Cycling. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 2958-2975.	3.0	15
22	Plant Hydraulic Trait Covariation: A Global Meta-Analysis to Reduce Degrees of Freedom in Trait-Based Hydrologic Models. Forests, 2018, 9, 446.	2.1	13
23	Modeling forest carbon cycle response to tree mortality: Effects of plant functional type and disturbance intensity. Journal of Geophysical Research G: Biogeosciences, 2015, 120, 2178-2193.	3.0	9
24	The Calibration and Use of Capacitance Sensors to Monitor Stem Water Content in Trees. Journal of Visualized Experiments, 2017, , .	0.3	8
25	Tree hydrodynamic modelling of the soilâ€“plantâ€“atmosphere continuum using FETCH3. Geoscientific Model Development, 2022, 15, 2619-2634.	3.6	5
26	An isotopic approach to partition evapotranspiration in a mixed deciduous forest. Ecohydrology, 2020, 13, e2229.	2.4	4
27	Intraâ€Specific Variability in Plant Hydraulic Parameters Inferred From Model Inversion of Sap Flux Data. Journal of Geophysical Research G: Biogeosciences, 2022, 127, .	3.0	4
28	LEAF: Logger for ecological and atmospheric factors. HardwareX, 2019, 6, e00079.	2.2	3
29	Impacts of Vegetation on Dryland River Morphology: Insights from Springâ€Fed Channel Reaches, Henry Mountains, Utah. Water Resources Research, 0, , .	4.2	2
30	Stressors Reveal Ecosystems' Hidden Characteristics. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2021JG006462.	3.0	1