Todd M Scanlon

List of Publications by Year
in descending order

64	2,900	186265	175258
papers	citations	28 h-index	52 g-index

66	66	66	3916
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Positive feedbacks promote power-law clustering of Kalahari vegetation. Nature, 2007, 449, 209-212.	27.8	337
2	On soil moistureâ€“vegetation feedbacks and their possible effects on the dynamics of dryland ecosystems. Journal of Geophysical Research, 2007, 112, .	3.3	202
3	Plant acclimation to long-term high nitrogen deposition in an N-rich tropical forest. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 5187-5192.	7.1	164
4	Determining land surface fractional cover from NDVI and rainfall time series for a savanna ecosystem. Remote Sensing of Environment, 2002, 82, 376-388.	11.0	147
5	Partitioning carbon dioxide and water vapor fluxes using correlation analysis. Agricultural and Forest Meteorology, 2010, 150, 89-99.	4.8	116
6	Dynamic response of grass cover to rainfall variability: implications for the function and persistence of savanna ecosystems. Advances in Water Resources, 2005, 28, 291-302.	3.8	101
7	Î´²H isotopic flux partitioning of evapotranspiration over a grass field following a water pulse and subsequent dry down. Water Resources Research, 2014, 50, 1410-1432.	4.2	96
8	Canopy scale measurements of CO2 and water vapor exchange along a precipitation gradient in southern Africa. Global Change Biology, 2004, 10, 329-341.	9.5	89
9	Modeling transport of dissolved silica in a forested headwater catchment: Implications for defining the hydrochemical response of observed flow pathways. Water Resources Research, 2001, 37, 1071-1082.	4.2	83
10	Modelling transport of dissolved silica in a forested headwater catchment: the effect of hydrological and chemical time scales on hysteresis in the concentration-discharge relationship. Hydrological Processes, 2001, 15, 2029-2038.	2.6	80
11	On the correlation structure of water vapor and carbon dioxide in the atmospheric surface layer: A basis for flux partitioning. Water Resources Research, 2008, 44, .	4.2	74
12	Ecohydrological optimization of pattern and processes in waterâ€limited ecosystems: A tradeâ€offâ€based hypothesis. Water Resources Research, 2009, 45, .	4.2	71
13	Shallow subsurface storm flow in a forested headwater catchment: Observations and modeling using a modified TOPMODEL. Water Resources Research, 2000, 36, 2575-2586.	4.2	65
14	Seasonal variability in gaseous mercury fluxes measured in a high-elevation meadow. Atmospheric Environment, 2010, 44, 2176-2185.	4.1	64
15	Large-eddy simulation over heterogeneous terrain with remotely sensed land surface conditions. Water Resources Research, 2001, 37, 1939-1953.	4.2	63
16	Feasible optimality of vegetation patterns in river basins. Geophysical Research Letters, 2004, 31, n/a-n/a.	4.0	59
17	More trees less loss: Nitrogen leaching losses decrease with increasing biomass in coffee agroforests. Agriculture, Ecosystems and Environment, 2012, 161, 137-144.	5.3	59
18	Managed grasslands: A greenhouse gas sink or source?. Geophysical Research Letters, 2004, 31, .	4.0	57

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19	Partitioning Evapotranspiration Using an Eddy Covarianceâ€Based Technique: Improved Assessment of Soil Moisture and Landâ€“Atmosphere Exchange Dynamics. Vadose Zone Journal, 2012, 11, vzj2012.0025.	2.2	56
20	Comparing methods for partitioning a decade of carbon dioxide and water vapor fluxes in a temperate forest. Agricultural and Forest Meteorology, 2016, 226-227, 229-245.	4.8	56
21	Ecosystem-scale measurements of nitrous oxide fluxes for an intensely grazed, fertilized grassland. Geophysical Research Letters, 2003, 30, .	4.0	53
22	Decreased Atmospheric Sulfur Deposition across the Southeastern U.S.: When Will Watersheds Release Stored Sulfate?. Environmental Science & Technology, 2014, 48, 10071-10078.	10.0	53
23	Partitioning Eddy Covariance Water Flux Components Using Physiological and Micrometeorological Approaches. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 3353-3370.	3.0	50
24	Influence of surface heterogeneity on scalar dissimilarity in the roughness sublayer. Boundary-Layer Meteorology, 2007, 122, 149-165.	2.3	47
25	Turbulent transport of carbon dioxide and water vapor within a vegetation canopy during unstable conditions: Identification of episodes using wavelet analysis. Journal of Geophysical Research, 2001, 106, 7251-7262.	3.3	44
26	A nested catchment approach for defining the hydrological controls on non-point phosphorus transport. Journal of Hydrology, 2004, 291, 218-231.	5.4	44
27	Inferred controls on tree/grass composition in a savanna ecosystem: Combining 16-year normalized difference vegetation index data with a dynamic soil moisture model. Water Resources Research, 2003, 39, .	4.2	36
28	Controls on stream water dissolved mercury in three midâ€Appalachian forested headwater catchments. Water Resources Research, 2011, 47, .	4.2	33
29	Examining the linkage between shrub encroachment and recent greening in waterâ€limited southern Africa. Ecosphere, 2015, 6, 1-16.	2.2	28
30	Association of dissolved mercury with dissolved organic carbon in U.S. rivers and streams: The role of watershed soil organic carbon. Water Resources Research, 2016, 52, 3040-3051.	4.2	26
31	Intensified vegetation water use under acid deposition. Science Advances, 2019, 5, eaav5168.	10.3	26
32	On the importance of accurate depiction of infiltration processes on modelled soil moisture and vegetation water stress. Ecohydrology, 2010, 3, 155-165.	2.4	25
33	CO2 and H2O flux partitioning in a Mediterranean cropping system. Agricultural and Forest Meteorology, 2018, 260-261, 118-130.	4.8	24
34	Streamwater Particulate Mercury and Suspended Sediment Dynamics in a Forested Headwater Catchment. Water, Air, and Soil Pollution, 2011, 220, 23-36.	2.4	20
35	On the correlation of water vapor and CO₂: Application to flux partitioning of evapotranspiration. Water Resources Research, 2016, 52, 9452-9469.	4.2	20
36	Correlation-based flux partitioning of water vapor and carbon dioxide fluxes: Method simplification and estimation of canopy water use efficiency. Agricultural and Forest Meteorology, 2019, 279, 107732.	4.8	20

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37	Roles of sulfate adsorption and base cation supply in controlling the chemical response of streams of western Virginia to reduced acid deposition. Biogeochemistry, 2013, 116, 119-130.	3.5	18
38	Declines in dissolved silica concentrations in western Virginia streams (1988â€“2003): Gypsy moth defoliation stimulates diatoms?. Journal of Geophysical Research, 2007, 112, .	3.3	17
39	Suppression of rainfall by fires in African drylands. Geophysical Research Letters, 2016, 43, 8527-8533.	4.0	17
40	Source partitioning of H₂O and CO₂ fluxes based on high-frequency eddy covariance data: a comparison between study sites. Biogeosciences, 2019, 16, 1111-1132.	3.3	17
41	Mercury Accumulation in Tree Rings: Observed Trends in Quantity and Isotopic Composition in Shenandoah National Park, Virginia. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2019JG005445.	3.0	17
42	Model determination of non-point source phosphorus transport pathways in a fertilized grassland catchment. Hydrological Processes, 2005, 19, 2801-2814.	2.6	16
43	Nitrate variability in hydrological flow paths for three midâ€Appalachian forested watersheds following a largeâ€scale defoliation. Journal of Geophysical Research, 2009, 114, .	3.3	16
44	High Heterogeneity in Canopy Temperature Among Coâ€occurring Tree Species in a Temperate Forest. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2020JG005892.	3.0	16
45	Water Availability and the Spatial Complexity of CO2, Water, and Energy Fluxes over a Heterogeneous Sparse Canopy. Journal of Hydrometeorology, 2003, 4, 798-809.	1.9	15
46	Albedo changes after fire as an explanation of fire-induced rainfall suppression. Geophysical Research Letters, 2017, 44, 3916-3923.	4.0	15
47	Emerging investigator series: the effect of wildfire on streamwater mercury and organic carbon in a forested watershed in the southeastern United States. Environmental Sciences: Processes and Impacts, 2017, 19, 1505-1517.	3.5	14
48	Stream Runoff and Nitrate Recovery Times After Forest Disturbance in the USA and Japan. Water Resources Research, 2018, 54, 6042-6054.	4.2	14
49	Climate seasonality as an essential predictor of global fire activity. Global Ecology and Biogeography, 2019, 28, 198-210.	5.8	14
50	Sensitivity analysis of a source partitioning method for H2O and CO2 fluxes based on high frequency eddy covariance data: Findings from field data and large eddy simulations. Agricultural and Forest Meteorology, 2019, 265, 152-170.	4.8	13
51	Terrestrial and inâ€stream influences on the spatial variability of nitrate in a forested headwater catchment. Journal of Geophysical Research, 2010, 115, .	3.3	12
52	Particulate and dissolved mercury export in streamwater within three mid-Appalachian forested watersheds in the US. Journal of Hydrology, 2013, 501, 92-100.	5.4	12
53	Stream geochemical response to reductions in acid deposition in headwater streams: Chronic versus episodic acidification recovery. Hydrological Processes, 2019, 33, 512-526.	2.6	12
54	Topographical Influences on the Spatial Distribution of Soil Mercury at the Catchment Scale. Water, Air, and Soil Pollution, 2013, 224, 1.	2.4	11

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55	Kalahari Wildfires Drive Continental Post-Fire Brightening in Sub-Saharan Africa. Remote Sensing, 2019, 11, 1090.	4.0	8
56	Evaluation of automated streamwater sampling during storm events for total mercury analysis. Journal of Environmental Monitoring, 2010, 12, 1833.	2.1	7
57	Climate Change to Offset Improvements in Watershed Acidâ€Base Status Provided by Clean Air Act and Amendments: A Model Application in Shenandoah National Park, Virginia. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 2863-2877.	3.0	7
58	Seasonal contribution of dewfall to mercury deposition determined using a micrometeorological technique and dew chemistry. Journal of Geophysical Research D: Atmospheres, 2014, 119, 284-292.	3.3	5
59	Assessing Temperate Forest Growth and Climate Sensitivity in Response to a Longâ€Term Wholeâ€Watershed Acidification Experiment. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2019JG005560.	3.0	5
60	Observed changes in chronic and episodic acidification in Virginia mountain streams in response to the Clean Air Act and amendments. Atmospheric Environment, 2021, 252, 118279.	4.1	5
61	Comparison of northeastern and southeastern U.S. watershed response to the declines in atmospheric sulfur deposition. Atmospheric Environment, 2021, 253, 118365.	4.1	4
62	The impacts of stream acidification on fish assemblages: Assessing three decades of recovery in Shenandoah National Park. Global Ecology and Conservation, 2021, 26, e01386.	2.1	3
63	Shenandoah Watershed <scp>Studyâ€Virginia</scp> Trout Stream Sensitivity Study (<scp>SWASâ€VTSSS</scp>): Stream water quality and hydrologic monitoring data for <scp>midâ€Appalachian</scp> headwater streams. Hydrological Processes, 2021, 35, e14164.	2.6	1
64	SOIL MOISTURE CONTROLS ON WATER VAPOR AND CARBON FLUXES IN SEMI-ARID REGIONS. , 2006, , 67-83.		1