Russell L Scott

List of Publications by Year
in descending order

168 papers	13,115 citations	18436 62 h-index	26548 107 g-index
181 all docs	181 docs citations	181 times ranked	11027 citing authors

#	Article	IF	Citations
1	The increasing importance of atmospheric demand for ecosystem water and carbon fluxes. Nature Climate Change, 2016, 6, 1023-1027.	8.1	734
2	The FLUXNET2015 dataset and the ONEFlux processing pipeline for eddy covariance data. Scientific Data, 2020, 7, 225.	2.4	646
3	ECOHYDROLOGICAL IMPLICATIONS OF WOODY PLANT ENCROACHMENT. Ecology, 2005, 86, 308-319.	1.5	582
4	Measuring soil moisture content nonâ€invasively at intermediate spatial scale using cosmicâ€ray neutrons. Geophysical Research Letters, 2008, 35, .	1.5	372
5	Warm spring reduced carbon cycle impact of the 2012 US summer drought. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 5880-5885.	3.3	340
6	Reduction in carbon uptake during turn of the century drought in western North America. Nature Geoscience, 2012, 5, 551-556.	5.4	263
7	Evapotranspiration on western U.S. rivers estimated using the Enhanced Vegetation Index from MODIS and data from eddy covariance and Bowen ratio flux towers. Remote Sensing of Environment, 2005, 97, 337-351.	4.6	253
8	Estimation of net ecosystem carbon exchange for the conterminous United States by combining MODIS and AmeriFlux data. Agricultural and Forest Meteorology, 2008, 148, 1827-1847.	1.9	221
9	Partitioning overstory and understory evapotranspiration in a semiarid savanna woodland from the isotopic composition of water vapor. Agricultural and Forest Meteorology, 2003, 119, 53-68.	1.9	214
10	A continuous measure of gross primary production for the conterminous United States derived from MODIS and AmeriFlux data. Remote Sensing of Environment, 2010, 114, 576-591.	4.6	210
11	Ecohydrological impacts of woody-plant encroachment: seasonal patterns of water and carbon dioxide exchange within a semiarid riparian environment. Global Change Biology, 2006, 12, 311-324.	4.2	201
12	Remote sensing of dryland ecosystem structure and function: Progress, challenges, and opportunities. Remote Sensing of Environment, 2019, 233, 111401.	4.6	193
13	Effects of seasonal drought on net carbon dioxide exchange from a woodyâ€plantâ€encroached semiarid grassland. Journal of Geophysical Research, 2009, 114, .	3.3	187
14	Partitioning of evapotranspiration and its relation to carbon dioxide exchange in a Chihuahuan Desert shrubland. Hydrological Processes, 2006, 20, 3227-3243.	1.1	184
15	<scp>CO</scp>₂ exchange and evapotranspiration across dryland ecosystems of southwestern North America. Global Change Biology, 2017, 23, 4204-4221.	4.2	164
16	Interannual and seasonal variation in fluxes of water and carbon dioxide from a riparian woodland ecosystem. Agricultural and Forest Meteorology, 2004, 122, 65-84.	1.9	158
17	Assessing net ecosystem carbon exchange of U.S. terrestrial ecosystems by integrating eddy covariance flux measurements and satellite observations. Agricultural and Forest Meteorology, 2011, 151, 60-69.	1.9	157
18	Carbon dioxide exchange in a semidesert grassland through droughtâ€induced vegetation change. Journal of Geophysical Research, 2010, 115, .	3.3	156

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19	Productivity of North American grasslands is increased under future climate scenarios despite rising aridity. Nature Climate Change, 2016, 6, 710-714.	8.1	153
20	Reviews and syntheses: Turning the challenges of partitioning ecosystem evaporation and transpiration into opportunities. Biogeosciences, 2019, 16, 3747-3775.	1.3	150
21	Evapotranspiration partitioning in semiarid shrubland ecosystems: a twoâ€site evaluation of soil moisture control on transpiration. Ecohydrology, 2011, 4, 671-681.	1.1	145
22	Using watershed water balance to evaluate the accuracy of eddy covariance evaporation measurements for three semiarid ecosystems. Agricultural and Forest Meteorology, 2010, 150, 219-225.	1.9	144
23	The carbon balance pivot point of southwestern U.S. semiarid ecosystems: Insights from the 21st century drought. Journal of Geophysical Research G: Biogeosciences, 2015, 120, 2612-2624.	1.3	142
24	Terrestrial carbon balance in a drier world: the effects of water availability in southwestern North America. Global Change Biology, 2016, 22, 1867-1879.	4.2	142
25	Effect of remote sensing spatial resolution on interpreting tower-based flux observations. Remote Sensing of Environment, 2008, 112, 337-349.	4.6	140
26	The AmeriFlux network: A coalition of the willing. Agricultural and Forest Meteorology, 2018, 249, 444-456.	1.9	140
27	Impacts of droughts and extreme-temperature events on gross primary production and ecosystem respiration: a systematic assessment across ecosystems and climate zones. Biogeosciences, 2018, 15, 1293-1318.	1.3	137
28	Global estimation of evapotranspiration using a leaf area index-based surface energy and water balance model. Remote Sensing of Environment, 2012, 124, 581-595.	4.6	136
29	Observed relation between evapotranspiration and soil moisture in the North American monsoon region. Geophysical Research Letters, 2008, 35, .	1.5	134
30	Productivity, Respiration, and Light-Response Parameters of World Grassland and Agroecosystems Derived From Flux-Tower Measurements. Rangeland Ecology and Management, 2010, 63, 16-39.	1.1	133
31	The ecohydrologic significance of hydraulic redistribution in a semiarid savanna. Water Resources Research, 2008, 44, .	1.7	132
32	Representativeness of Eddy-Covariance flux footprints for areas surrounding AmeriFlux sites. Agricultural and Forest Meteorology, 2021, 301-302, 108350.	1.9	125
33	Hydraulic redistribution by a dominant, warm-desert phreatophyte: seasonal patterns and response to precipitation pulses. Functional Ecology, 2004, 18, 530-538.	1.7	122
34	Relationship between evapotranspiration and precipitation pulses in a semiarid rangeland estimated by moisture flux towers and MODIS vegetation indices. Journal of Arid Environments, 2007, 70, 443-462.	1.2	119
35	The water use of two dominant vegetation communities in a semiarid riparian ecosystem. Agricultural and Forest Meteorology, 2000, 105, 241-256.	1.9	115
36	Energy exchange and evapotranspiration over two temperate semi-arid grasslands in North America. Agricultural and Forest Meteorology, 2012, 153, 31-44.	1.9	115

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37	Whole ecosystem metabolic pulses following precipitation events. Functional Ecology, 2008, 22, 924-930.	1.7	114
38	Modeling multiyear observations of soil moisture recharge in the semiarid American Southwest. Water Resources Research, 2000, 36, 2233-2247.	1.7	113
39	Thermal optimality of net ecosystem exchange of carbon dioxide and underlying mechanisms. New Phytologist, 2012, 194, 775-783.	3.5	111
40	Controls on transpiration in a semiarid riparian cottonwood forest. Agricultural and Forest Meteorology, 2006, 137, 56-67.	1.9	110
41	Chlorophyll Fluorescence Better Captures Seasonal and Interannual Gross Primary Productivity Dynamics Across Dryland Ecosystems of Southwestern North America. Geophysical Research Letters, 2018, 45, 748-757.	1.5	109
42	Partitioning evapotranspiration in semiarid grassland and shrubland ecosystems using time series of soil surface temperature. Agricultural and Forest Meteorology, 2009, 149, 59-72.	1.9	107
43	Partitioning evapotranspiration using longâ€term carbon dioxide and water vapor fluxes. Geophysical Research Letters, 2017, 44, 6833-6840.	1.5	104
44	Seasonal estimates of riparian evapotranspiration using remote and in situ measurements. Agricultural and Forest Meteorology, 2000, 105, 281-309.	1.9	100
45	Multiyear riparian evapotranspiration and groundwater use for a semiarid watershed. Journal of Arid Environments, 2008, 72, 1232-1246.	1.2	100
46	The three major axes of terrestrial ecosystem function. Nature, 2021, 598, 468-472.	13.7	99
47	Recent tree dieâ€off has little effect on streamflow in contrast to expected increases from historical studies. Water Resources Research, 2015, 51, 9775-9789.	1.7	97
48	Ecosystem transpiration and evaporation: Insights from three water flux partitioning methods across FLUXNET sites. Global Change Biology, 2020, 26, 6916-6930.	4.2	97
49	Calculating <scp><scp>CO₂</scp></scp> and <scp><scp>H₂O</scp></scp> eddy covariance fluxes from an enclosed gas analyzer using an instantaneous mixing ratio. Global Change Biology, 2012, 18, 385-399.	4.2	95
50	Latitudinal patterns of magnitude and interannual variability in net ecosystem exchange regulated by biological and environmental variables. Global Change Biology, 2009, 15, 2905-2920.	4.2	94
51	The relative controls of temperature, soil moisture, and plant functional group on soil CO₂efflux at diel, seasonal, and annual scales. Journal of Geophysical Research, 2011, 116, .	3.3	94
52	Evaluation of the VIIRS BRDF, Albedo and NBAR products suite and an assessment of continuity with the long term MODIS record. Remote Sensing of Environment, 2017, 201, 256-274.	4.6	89
53	Comparing ecosystem and soil respiration: Review and key challenges of tower-based and soil measurements. Agricultural and Forest Meteorology, 2018, 249, 434-443.	1.9	89
54	Data-driven diagnostics of terrestrial carbon dynamics over North America. Agricultural and Forest Meteorology, 2014, 197, 142-157.	1.9	88

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55	The understory and overstory partitioning of energy and water fluxes in an open canopy, semiarid woodland. Agricultural and Forest Meteorology, 2003, 114, 127-139.	1.9	80
56	When vegetation change alters ecosystem water availability. Global Change Biology, 2014, 20, 2198-2210.	4.2	78
57	Estimating Riparian and Agricultural Actual Evapotranspiration by Reference Evapotranspiration and MODIS Enhanced Vegetation Index. Remote Sensing, 2013, 5, 3849-3871.	1.8	76
58	Invasion of shrublands by exotic grasses: ecohydrological consequences in cold versus warm deserts. Ecohydrology, 2012, 5, 160-173.	1.1	72
59	The SMAP Level 4 Carbon Product for Monitoring Ecosystem Landâ€“Atmosphere CO₂ Exchange. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 6517-6532.	2.7	69
60	An integrated modelling framework of catchmentâ€scale ecohydrological processes: 1. Model description and tests over an energyâ€limited watershed. Ecohydrology, 2014, 7, 427-439.	1.1	68
61	Comparison of methods to estimate ephemeral channel recharge, Walnut Gulch, San Pedro River Basin, Arizona. Water Science and Application, 2004, , 77-99.	0.3	66
62	Temperature and precipitation controls over leafâ€and ecosystemâ€level <scp>CO₂</scp> flux along a woody plant encroachment gradient. Global Change Biology, 2012, 18, 1389-1400.	4.2	65
63	Changes in photosynthesis and soil moisture drive the seasonal soil respiration-temperature hysteresis relationship. Agricultural and Forest Meteorology, 2018, 259, 184-195.	1.9	65
64	Intraseasonal Variation in Water and Carbon Dioxide Flux Components in a Semiarid Riparian Woodland. Ecosystems, 2007, 10, 1100-1115.	1.6	63
65	Land-surface controls on afternoon precipitation diagnosed from observational data: uncertainties and confounding factors. Atmospheric Chemistry and Physics, 2014, 14, 8343-8367.	1.9	63
66	Longâ€term runoff and sediment yields from small semiarid watersheds in southern Arizona. Water Resources Research, 2010, 46, .	1.7	61
67	Actual Evapotranspiration (Water Use) Assessment of the Colorado River Basin at the Landsat Resolution Using the Operational Simplified Surface Energy Balance Model. Remote Sensing, 2014, 6, 233-256.	1.8	61
68	The water balance components of undisturbed tropical woodlands in the Brazilian cerrado. Hydrology and Earth System Sciences, 2015, 19, 2899-2910.	1.9	57
69	Groundwater recharge decrease with increased vegetation density in the Brazilian cerrado. Ecohydrology, 2017, 10, e1759.	1.1	56
70	Preface paper to the Semi-Arid Land-Surface-Atmosphere (SALSA) Program special issue. Agricultural and Forest Meteorology, 2000, 105, 3-20.	1.9	55
71	Changes in Vegetation Condition and Surface Fluxes during NAME 2004. Journal of Climate, 2007, 20, 1810-1820.	1.2	55
72	Biophysical controls on carbon and water vapor fluxes across a grassland climatic gradient in the United States. Agricultural and Forest Meteorology, 2015, 214-215, 293-305.	1.9	51

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73	Impacts of hydraulic redistribution on grassâ€“tree competition vs facilitation in a semiâ€arid savanna. New Phytologist, 2017, 215, 1451-1461.	3.5	51
74	Using observations and a distributed hydrologic model to explore runoff thresholds linked with mesquite encroachment in the Sonoran Desert. Water Resources Research, 2014, 50, 8191-8215.	1.7	50
75	Precipitation legacy effects on dryland ecosystem carbon fluxes: direction, magnitude and biogeochemical carryovers. Biogeosciences, 2016, 13, 425-439.	1.3	50
76	COSORE: A community database for continuous soil respiration and other soilâ€atmosphere greenhouse gas flux data. Global Change Biology, 2020, 26, 7268-7283.	4.2	50
77	Shrubland carbon sink depends upon winter water availability in the warm deserts of North America. Agricultural and Forest Meteorology, 2018, 249, 407-419.	1.9	49
78	Critical Zone Water Balance Over 13ÂYears in a Semiarid Savanna. Water Resources Research, 2019, 55, 574-588.	1.7	49
79	Sensitivity of riparian ecosystems in arid and semiarid environments to moisture pulses. Hydrological Processes, 2006, 20, 3191-3205.	1.1	48
80	Confronting the water potential information gap. Nature Geoscience, 2022, 15, 158-164.	5.4	47
81	The potential of carbonyl sulfide as a proxy for gross primary production at flux tower sites. Journal of Geophysical Research, 2011, 116, .	3.3	46
82	Exceptional heat and atmospheric dryness amplified losses of primary production during the 2020 U.S. Southwest hot drought. Global Change Biology, 2022, 28, 4794-4806.	4.2	46
83	Estimating evapotranspiration under warmer climates: Insights from a semi-arid riparian system. Journal of Hydrology, 2011, 399, 1-11.	2.3	45
84	Event to multidecadal persistence in rainfall and runoff in southeast Arizona. Water Resources Research, 2008, 44, .	1.7	44
85	Nocturnal soil CO₂ uptake and its relationship to subsurface soil and ecosystem carbon fluxes in a Chihuahuan Desert shrubland. Journal of Geophysical Research G: Biogeosciences, 2013, 118, 1593-1603.	1.3	44
86	High-resolution characterization of a semiarid watershed: Implications on evapotranspiration estimates. Journal of Hydrology, 2014, 509, 306-319.	2.3	44
87	Implementing Dynamic Root Optimization in Noahâ€MP for Simulating Phreatophytic Root Water Uptake. Water Resources Research, 2018, 54, 1560-1575.	1.7	44
88	Functional differences between summer and winter season rain assessed with MODIS-derived phenology in a semi-arid region. Journal of Vegetation Science, 2010, 21, 16-30.	1.1	43
89	On the theory relating changes in areaâ€average and pan evaporation. Quarterly Journal of the Royal Meteorological Society, 2009, 135, 1230-1247.	1.0	42
90	Vegetation productivity responds to subâ€annual climate conditions across semiarid biomes. Ecosphere, 2016, 7, e01339.	1.0	42

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91	SENSITIVITY OF MESQUITE SHRUBLAND CO₂EXCHANGE TO PRECIPITATION IN CONTRASTING LANDSCAPE SETTINGS. Ecology, 2008, 89, 2900-2910.	1.5	41
92	Quantifying the timescales over which exogenous and endogenous conditions affect soil respiration. New Phytologist, 2014, 202, 442-454.	3.5	40
93	Water Availability Impacts on Evapotranspiration Partitioning. Agricultural and Forest Meteorology, 2021, 297, 108251.	1.9	39
94	Timescales of Land Surface Evapotranspiration Response. Journal of Climate, 1997, 10, 559-566.	1.2	38
95	Preface to special section on Fifty Years of Research and Data Collection: U.S. Department of Agriculture Walnut Gulch Experimental Watershed. Water Resources Research, 2008, 44, .	1.7	38
96	How do variations in the temporal distribution of rainfall events affect ecosystem fluxes in seasonally water-limited Northern Hemisphere shrublands and forests?. Biogeosciences, 2012, 9, 1007-1024.	1.3	38
97	The sensitivity of ecosystem carbon exchange to seasonal precipitation and woody plant encroachment. Oecologia, 2006, 150, 453-463.	0.9	37
98	Antecedent Conditions Influence Soil Respiration Differences in Shrub and Grass Patches. Ecosystems, 2013, 16, 1230-1247.	1.6	37
99	Estimation of area-average sensible heat flux using a large-aperture scintillometer during the Semi-Arid Land-Surface-Atmosphere (SALSA) Experiment. Water Resources Research, 1999, 35, 2505-2511.	1.7	36
100	Robust estimates of soil moisture and latent heat flux coupling strength obtained from triple collocation. Geophysical Research Letters, 2015, 42, 8415-8423.	1.5	36
101	Endogenous circadian regulation of carbon dioxide exchange in terrestrial ecosystems. Global Change Biology, 2012, 18, 1956-1970.	4.2	35
102	Synergistic use of SMAP and OCO-2 data in assessing the responses of ecosystem productivity to the 2018 U.S. drought. Remote Sensing of Environment, 2020, 251, 112062.	4.6	34
103	Longâ€term decrease in satellite vegetation indices in response to environmental variables in an iconic desert riparian ecosystem: the Upper San Pedro, Arizona, United States. Ecohydrology, 2015, 8, 610-625.	1.1	33
104	Carbon dioxide and water vapour exchange in a tropical dry forest as influenced by the North American Monsoon System (NAMS). Journal of Arid Environments, 2010, 74, 556-563.	1.2	32
105	Understanding ecohydrological connectivity in savannas: a system dynamics modelling approach. Ecohydrology, 2012, 5, 200-220.	1.1	31
106	Integrating continuous atmospheric boundary layer and tower-based flux measurements to advance understanding of land-atmosphere interactions. Agricultural and Forest Meteorology, 2021, 307, 108509.	1.9	31
107	Woody plants modulate the temporal dynamics of soil moisture in a semiâ€arid mesquite savanna. Ecohydrology, 2010, 3, 20-27.	1.1	30
108	Thermal adaptation of net ecosystem exchange. Biogeosciences, 2011, 8, 1453-1463.	1.3	30

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109	Combined measurement and modeling of the hydrological impact of hydraulic redistribution using CLM4.5 at eight AmeriFlux sites. Hydrology and Earth System Sciences, 2016, 20, 2001-2018.	1.9	29
110	Evaluating Soil Resistance Formulations in Thermalâ€Based Twoâ€Source Energy Balance (TSEB) Model: Implications for Heterogeneous Semiarid and Arid Regions. Water Resources Research, 2019, 55, 1059-1078.	1.7	29
111	Shrub encroachment alters sensitivity of soil respiration to temperature and moisture. Journal of Geophysical Research, 2012, 117, .	3.3	28
112	High Vapor Pressure Deficit Decreases the Productivity and Water Use Efficiency of Rainâ€Induced Pulses in Semiarid Ecosystems. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2020JG005665.	1.3	28
113	Effect of a Canopy Interception Reservoir on Hydrological Persistence in a General Circulation Model. Journal of Climate, 1995, 8, 1917-1922.	1.2	27
114	Growing season ecosystem and leaf-level gas exchange of an exotic and native semiarid bunchgrass. Oecologia, 2010, 163, 561-570.	0.9	26
115	Quantification of terrestrial ecosystem carbon dynamics in the conterminous United States combining a process-based biogeochemical model and MODIS and AmeriFlux data. Biogeosciences, 2011, 8, 2665-2688.	1.3	26
116	Coupling diffusion and maximum entropy models to estimate thermal inertia. Remote Sensing of Environment, 2012, 119, 222-231.	4.6	26
117	Intensification of the North American Monsoon Rainfall as Observed From a Longâ€Term Highâ€Density Gauge Network. Geophysical Research Letters, 2019, 46, 6839-6847.	1.5	26
118	Satellite solar-induced chlorophyll fluorescence and near-infrared reflectance capture complementary aspects of dryland vegetation productivity dynamics. Remote Sensing of Environment, 2022, 270, 112858.	4.6	26
119	Improving the accuracy of the gradient method for determining soil carbon dioxide efflux. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 50-64.	1.3	25
120	Soil evaporation response to Lehmann lovegrass (Eragrostis lehmanniana) invasion in a semiarid watershed. Agricultural and Forest Meteorology, 2009, 149, 2133-2142.	1.9	24
121	Gross primary production variability associated with meteorology, physiology, leaf area, and water supply in contrasting woodland and grassland semiarid riparian ecosystems. Journal of Geophysical Research, 2009, 114, .	3.3	24
122	Impact of Hydraulic Redistribution on Multispecies Vegetation Water Use in a Semiarid Savanna Ecosystem: An Experimental and Modeling Synthesis. Water Resources Research, 2018, 54, 4009-4027.	1.7	24
123	Downscaling SMAP and SMOS soil moisture with moderate-resolution imaging spectroradiometer visible and infrared products over southern Arizona. Journal of Applied Remote Sensing, 2017, 11, 026021.	0.6	24
124	Dynamic global vegetation models underestimate net CO₂ flux mean and inter-annual variability in dryland ecosystems. Environmental Research Letters, 2021, 16, 094023.	2.2	23
125	Subterranean ventilation of allochthonous CO 2 governs net CO 2 exchange in a semiarid Mediterranean grassland. Agricultural and Forest Meteorology, 2017, 234-235, 115-126.	1.9	22
126	Montane forest productivity across a semiarid climatic gradient. Global Change Biology, 2020, 26, 6945-6958.	4.2	22

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127	Landscape and environmental controls over leaf and ecosystem carbon dioxide fluxes under woody plant expansion. Journal of Ecology, 2013, 101, 1471-1483.	1.9	21
128	Environmental and Vegetative Controls on Soil CO2 Efflux in Three Semiarid Ecosystems. Soil Systems, 2019, 3, 6.	1.0	21
129	Runoff and erosional responses to a droughtâ€induced shift in a desert grassland community composition. Journal of Geophysical Research, 2010, 115, .	3.3	20
130	Comparative rates of wind versus water erosion from a small semiarid watershed in southern Arizona, USA. Aeolian Research, 2011, 3, 197-204.	1.1	20
131	Multiple year effects of a biological control agent (Diorhabda carinulata) on Tamarix (saltcedar) ecosystem exchanges of carbon dioxide and water. Agricultural and Forest Meteorology, 2012, 164, 161-169.	1.9	20
132	Soil moisture and ecosystem function responses of desert grassland varying in vegetative cover to a saturating precipitation pulse. Ecohydrology, 2012, 5, 297-305.	1.1	20
133	Modeling evapotranspiration and its partitioning over a semiarid shrub ecosystem from satellite imagery: a multiple validation. Journal of Applied Remote Sensing, 2013, 7, 073495.	0.6	20
134	An integrated modelling framework of catchmentâ€scale ecohydrological processes: 2. The role of water subsidy by overland flow on vegetation dynamics in a semiâ€arid catchment. Ecohydrology, 2014, 7, 815-827.	1.1	20
135	Evapotranspiration Estimates Derived Using Multi-Platform Remote Sensing in a Semiarid Region. Remote Sensing, 2017, 9, 184.	1.8	20
136	Consequences of Cool-Season Drought-Induced Plant Mortality to Chihuahuan Desert Grassland Ecosystem and Soil Respiration Dynamics. Ecosystems, 2013, 16, 1178-1191.	1.6	19
137	Wide-area ratios of evapotranspiration to precipitation in monsoon-dependent semiarid vegetation communities. Journal of Arid Environments, 2015, 117, 84-95.	1.2	19
138	Commonalities of carbon dioxide exchange in semiarid regions with monsoon and Mediterranean climates. Journal of Arid Environments, 2012, 84, 71-79.	1.2	18
139	Evaluating the effect of rainfall variability on vegetation establishment in a semidesert grassland. Environmental Monitoring and Assessment, 2014, 186, 395-406.	1.3	17
140	Hydraulic redistribution affects modeled carbon cycling via soil microbial activity and suppressed fire. Global Change Biology, 2018, 24, 3472-3485.	4.2	17
141	Ecosystem carbon and water cycling from a sky island montane forest. Agricultural and Forest Meteorology, 2020, 281, 107835.	1.9	17
142	Monitoring agroecosystem productivity and phenology at a national scale: A metric assessment framework. Ecological Indicators, 2021, 131, 108147.	2.6	16
143	Testing water fluxes and storage from two hydrology configurations within the ORCHIDEE land surface model across US semi-arid sites. Hydrology and Earth System Sciences, 2020, 24, 5203-5230.	1.9	16
144	Improved dryland carbon flux predictions with explicit consideration of water-carbon coupling. Communications Earth & Environment, 2021, 2, .	2.6	16

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145	Inter- and under-canopy soil water, leaf-level and whole-plant gas exchange dynamics of a semi-arid perennial C4 grass. Oecologia, 2011, 165, 17-29.	0.9	15
146	Spatio-temporal variations in surface characteristics over the North American Monsoon region. Journal of Arid Environments, 2010, 74, 540-548.	1.2	14
147	Seasonality in aerodynamic resistance across a range of North American ecosystems. Agricultural and Forest Meteorology, 2021, 310, 108613.	1.9	14
148	A remote sensing approach for estimating distributed daily net carbon dioxide flux in semiarid grasslands. Water Resources Research, 2008, 44, .	1.7	13
149	The Photochemical Reflectance Index (PRI) Captures the Ecohydrologic Sensitivity of a Semiarid Mixed Conifer Forest. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2019JG005624.	1.3	11
150	Assessment and Validation of AirMOSS P-Band Root-Zone Soil Moisture Products. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 6181-6196.	2.7	11
151	Hydrologic response to precipitation pulses under and between shrubs in the Chihuahuan Desert, Arizona. Water Resources Research, 2010, 46, .	1.7	10
152	Cool-season whole-plant gas exchange of exotic and native semiarid bunchgrasses. Plant Ecology, 2012, 213, 1229-1239.	0.7	10
153	Longâ€term research catchments to investigate shrub encroachment in the Sonoran and Chihuahuan deserts: Santa Rita and Jornada experimental ranges. Hydrological Processes, 2021, 35, e14031.	1.1	10
154	Canopy Temperature Is Regulated by Ecosystem Structural Traits and Captures the Ecohydrologic Dynamics of a Semiarid Mixed Conifer Forest Site. Journal of Geophysical Research G: Biogeosciences, 2022, 127, .	1.3	10
155	Streamflow Response to Wildfire Differs With Season and Elevation in Adjacent Headwaters of the Lower Colorado River Basin. Water Resources Research, 2022, 58, .	1.7	10
156	Convergent Hydraulic Redistribution and Groundwater Access Supported Facilitative Dependency Between Trees and Grasses in a Semiâ€Arid Environment. Water Resources Research, 2021, 57, e2020WR028103.	1.7	9
157	Insights for empirically modeling evapotranspiration influenced by riparian and upland vegetation in semiarid regions. Journal of Arid Environments, 2014, 111, 42-52.	1.2	8
158	Optimizing Carbon Cycle Parameters Drastically Improves Terrestrial Biosphere Model Underestimates of Dryland Mean Net CO₂ Flux and its Interâ€Annual Variability. Journal of Geophysical Research G: Biogeosciences, 2021, 126, .	1.3	8
159	Hydraulic redistribution buffers climate variability and regulates grassâ€tree interactions in a semiarid riparian savanna. Ecohydrology, 2021, 14, e2271.	1.1	7
160	A Microbialâ€Explicit Soil Organic Carbon Decomposition Model (MESDM): Development and Testing at a Semiarid Grassland Site. Journal of Advances in Modeling Earth Systems, 2022, 14, e2021MS002485.	1.3	7
161	Water use efficiency of annualâ€dominated and bunchgrassâ€dominated savanna intercanopy space. Ecohydrology, 2014, 7, 1208-1215.	1.1	6
162	Longer term effects of biological control on tamarisk evapotranspiration and carbon dioxide exchange. Hydrological Processes, 2020, 34, 223-236.	1.1	4

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163	Site Characteristics Mediate the Relationship Between Forest Productivity and Satellite Measured Solar Induced Fluorescence. Frontiers in Forests and Global Change, 2021, 4, .	1.0	4
164	Disentangling the Relative Drivers of Seasonal Evapotranspiration Across a Continentalâ€Scale Aridity Gradient. Journal of Geophysical Research G: Biogeosciences, 2022, 127, .	1.3	4
165	Ecosystem hydrologic and metabolic flashiness are shaped by plant community traits and precipitation. Agricultural and Forest Meteorology, 2019, 279, 107674.	1.9	3
166	A micrometeorological flux perspective on brush management in a shrub-encroached Sonoran Desert grassland. Agricultural and Forest Meteorology, 2022, 313, 108763.	1.9	3
167	Evaluating the Met Office Unified Model land surface temperature in Global Atmosphere/Land 3.1 (GA/L3.1), Global Atmosphere/Land 6.1 (GA/L6.1) and limited area 2.2â€‰km configurations. Geoscientific Model Development, 2019, 12, 1703-1724.	1.3	2
168	The USDAâ€Agricultural Research Service's long term agroâ€ecosystems Walnut Gulch Experimental Watershed, Arizona, USA. Hydrological Processes, 2021, 35, e14349.	1.1	1