Tyson E Ochsner

List of Publications by Year
in descending order

101	4,592	33	65
papers	citations	h-index	g-index
		126708	106150

101	101	101	5034
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Response of sediment concentration and load to removal of juniper woodland and subsequent establishment of grasslands â€“ A paired experimental watershed study. Catena, 2022, 209, 105816.	2.2	3
2	Calibration and validation of soil water reflectometers. Vadose Zone Journal, 2022, 21, .	1.3	7
3	Reply to Comment by Jakobi etÂ al. (2020) on â€œSoil Texture Often Exerts a Stronger Influence Than Precipitation on Mesoscale Soil Moisture Patternsâ€. Water Resources Research, 2021, 57, e2020WR028756.	1.7	1
4	From Standard Weather Stations to Virtual Micro-Meteorological Towers in Ungauged Sites: Modeling Tool for Surface Energy Fluxes, Evapotranspiration, Soil Temperature, and Soil Moisture Estimations. Remote Sensing, 2021, 13, 1271.	1.8	2
5	MesoSoil v2.0: An updated soil physical property database for the Oklahoma Mesonet. Vadose Zone Journal, 2021, 20, e20134.	1.3	3
6	Grassland productivity estimates informed by soil moisture measurements: Statistical and mechanistic approaches. Agronomy Journal, 2021, 113, 3498-3517.	0.9	10
7	Developing a strategy for the national coordinated soil moisture monitoring network. Vadose Zone Journal, 2021, 20, e20139.	1.3	13
8	A Novel Lithium Foil Cosmic-Ray Neutron Detector for Measuring Field-Scale Soil Moisture. Frontiers in Water, 2021, 3, .	1.0	7
9	Estimating root zone soil moisture across diverse land cover types by integrating in-situ and remotely sensed data. Agricultural and Forest Meteorology, 2021, 307, 108471.	1.9	9
10	Using Soil Moisture Information to Better Understand and Predict Wildfire Danger. CSA News, 2021, 66, 26.	0.1	0
11	Soil moisture as an indicator of growing-season herbaceous fuel moisture and curing rate in grasslands. International Journal of Wildland Fire, 2021, 30, 57.	1.0	16
12	Soil organic carbon more strongly related to soil moisture than soil temperature in temperate grasslands. Soil Science Society of America Journal, 2020, 84, 587-596.	1.2	30
13	Constructing retrospective gridded daily weather data for agroâ€hydrological applications inÂOklahoma. , 2020, 3, e20072.		4
14	In-situ soil moisture data improve seasonal streamflow forecast accuracy in rainfall-dominated watersheds. Journal of Hydrology, 2020, 590, 125404.	2.3	14
15	Sampling probes affect bulk density and soil organic carbon measurements. Agricultural and Environmental Letters, 2020, 5, e20005.	0.8	1
16	Recalibration of Sensors in One of The World's Longest Running Automated Soil Moisture Monitoring Networks. Soil Science Society of America Journal, 2019, 83, 1003-1011.	1.2	11
17	Mesoscale Soil Moisture Patterns Revealed Using a Sparse In Situ Network and Regression Kriging. Water Resources Research, 2019, 55, 4785-4800.	1.7	21
18	Noâ€Till Diversified Cropping Systems for Efficient Allocation of Precipitation in the Southern Great Plains. , 2019, 2, 1-8.		5

#	Article	IF	Citations
19	Development and Evaluation of Soil Moistureâ€Based Indices for Agricultural Drought Monitoring. Agronomy Journal, 2019, 111, 1392-1406.	0.9	19
20	Estimating Deep Drainage Using Deep Soil Moisture Data under Young Irrigated Cropland in a Desertâ€Oasis Ecotone, Northwest China. Vadose Zone Journal, 2019, 18, 1-10.	1.3	14
21	From Field Experiments to Regional Forecasts: Upscaling Wheat Grain and Forage Yield Response to Acidic Soils. Agronomy Journal, 2019, 111, 287-302.	0.9	23
22	Building a One-Stop Shop for Soil Moisture Information. Eos, 2019, 100, .	0.1	3
23	Rating Fire Danger from the Ground Up. Eos, 2019, 100, .	0.1	4
24	Pyric herbivory, scales of heterogeneity and drought. Functional Ecology, 2018, 32, 1599-1608.	1.7	15
25	Nondestructive Estimation of Standing Crop and Fuel Moisture Content in Tallgrass Prairie. Rangeland Ecology and Management, 2018, 71, 356-362.	1.1	20
26	Soil Texture Often Exerts a Stronger Influence Than Precipitation on Mesoscale Soil Moisture Patterns. Water Resources Research, 2018, 54, 2199-2211.	1.7	48
27	Nitrate leaching in soybean rotations without nitrogen fertilizer. Plant and Soil, 2018, 423, 27-40.	1.8	15
28	Performance Assessment of Five Different Soil Moisture Sensors under Irrigated Field Conditions in Oklahoma. Sensors, 2018, 18, 3786.	2.1	42
29	Soil Water Dynamics and Nitrate Leaching Under Cornâ€"Soybean Rotation, Continuous Corn, and Kura Clover. Vadose Zone Journal, 2018, 17, 1-11.	1.3	17
30	Modeling transient soil moisture dichotomies in landscapes with intermixed land covers. Journal of Hydrology, 2018, 566, 783-794.	2.3	10
31	Meteorological limits to winter wheat productivity in the U.S. southern Great Plains. Field Crops Research, 2017, 203, 212-226.	2.3	87
32	Human factors were dominant drivers of record low streamflow to a surface water irrigation district in the US southern Great Plains. Agricultural Water Management, 2017, 185, 93-104.	2.4	13
33	Measurement of soilâ€surface heat flux with a multiâ€needle heatâ€pulse probe. European Journal of Soil Science, 2017, 68, 336-344.	1.8	8
34	Woody plant encroachment alters soil hydrological properties and reduces downward flux of water in tallgrass prairie. Plant and Soil, 2017, 414, 379-391.	1.8	28
35	Useful Drainage Estimates Obtained from a Largeâ€Scale Soil Moisture Monitoring Network by Applying the Unitâ€Gradient Assumption. Vadose Zone Journal, 2017, 16, 1-15.	1.3	18
36	Comparison of Three Methods for Vertical Extrapolation of Soil Moisture in Oklahoma. Vadose Zone Journal, 2017, 16, 1-19.	1.3	16

#	Article	IF	Citations
37	Weighing Lysimeter Data Confirm the Accuracy and Precision of the Heat-Pulse Technique for Measuring Daily Soil Evaporation. Soil Science Society of America Journal, 2017, 81, 1074-1078.	1.2	2
38	Hydrologic cost-effectiveness ratio favors switchgrass production on marginal croplands over existing grasslands. PLoS ONE, 2017, 12, e0181924.	1.1	7
39	Measured Soil Moisture is a Better Predictor of Large Growingâ€Season Wildfires than the Keetchâ€"Byram Drought Index. Soil Science Society of America Journal, 2017, 81, 490-502.	1.2	23
40	The Soil Moisture Active Passive Marena, Oklahoma, In Situ Sensor Testbed (SMAPâ€MOISST): Testbed Design and Evaluation of In Situ Sensors. Vadose Zone Journal, 2016, 15, 1-11.	1.3	55
41	Prediction of Plant Available Water at Sowing for Winter Wheat in the Southern Great Plains. Agronomy Journal, 2016, 108, 745-757.	0.9	22
42	Determining soil moisture and soil properties in vegetated areas by assimilating soil temperatures. Water Resources Research, 2016, 52, 4280-4300.	1.7	32
43	Concurrent and antecedent soil moisture relate positively or negatively to probability of large wildfires depending on season. International Journal of Wildland Fire, 2016, 25, 657.	1.0	45
44	Mapping highâ€resolution soil moisture and properties using distributed temperature sensing data and an adaptive particle batch smoother. Water Resources Research, 2016, 52, 7690-7710.	1.7	16
45	Validation of GPS-IR Soil Moisture Retrievals: Comparison of Different Algorithms to Remove Vegetation Effects. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 4759-4770.	2.3	51
46	Estimating soil moisture and soil thermal and hydraulic properties by assimilating soil temperatures using a particle batch smoother. Advances in Water Resources, 2016, 91, 104-116.	1.7	22
47	A Comparison between Evapotranspiration Estimates Based on Remotely Sensed Surface Energy Balance and Ground-Based Soil Water Balance Analyses. , 2015, , .		0
48	Measuring Soil Temperature. , 2015, , 235-251.		0
49	Canopeo: A Powerful New Tool for Measuring Fractional Green Canopy Cover. Agronomy Journal, 2015, 107, 2312-2320.	0.9	312
50	Deep drainage sensitivity to climate, edaphic factors, and woody encroachment, Oklahoma, USA. Hydrological Processes, 2015, 29, 3779-3789.	1.1	22
51	Soil Moisture Affects Growing-Season Wildfire Size in the Southern Great Plains. Soil Science Society of America Journal, 2015, 79, 1567-1576.	1.2	78
52	Evapotranspiration partitioning and water use efficiency of switchgrass and biomass sorghum managed for biofuel. Agricultural Water Management, 2015, 155, 40-47.	2.4	43
53	Determining soil moisture by assimilating soil temperature measurements using the Ensemble Kalman Filter. Advances in Water Resources, 2015, 86, 340-353.	1.7	25
54	Calibration and Validation of the COSMOS Rover for Surface Soil Moisture Measurement. Vadose Zone Journal, 2014, 13, 1-8.	1.3	66

#	Article	IF	Citations
55	Vertical Distribution of Structural Components in Corn Stover. Agriculture (Switzerland), 2014, 4, 274-287.	1.4	3
56	Soil Water Dynamics and Evapotranspiration under Annual and Perennial Bioenergy Crops. Soil Science Society of America Journal, 2014, 78, 1584-1593.	1.2	25
57	Yield Gap and Production Gap of Rainfed Winter Wheat in the Southern Great Plains. Agronomy Journal, 2014, 106, 1329-1339.	0.9	88
58	On-farm environmental assessment of corn silage production systems receiving liquid dairy manure. Journal of Soils and Water Conservation, 2013, 68, 438-449.	0.8	9
59	New Soil Property Database Improves Oklahoma Mesonet Soil Moisture Estimates*. Journal of Atmospheric and Oceanic Technology, 2013, 30, 2585-2595.	0.5	54
60	State of the Art in Large-Scale Soil Moisture Monitoring. Soil Science Society of America Journal, 2013, 77, 1888-1919.	1.2	335
61	Comparison of Drought Probability Assessments Based on Atmospheric Water Deficit and Soil Water Deficit. Agronomy Journal, 2013, 105, 428-436.	0.9	55
62	Soil Water Dynamics of Conventional and No-Till Wheat in the Southern Great Plains. Soil Science Society of America Journal, 2012, 76, 1768-1775.	1.2	20
63	Coupling landscape water storage and supplemental irrigation to increase productivity and improve environmental stewardship in the U.S. Midwest. Water Resources Research, 2012, 48, .	1.7	50
64	Ryeâ€"Corn Silage Doubleâ€Cropping Reduces Corn Yield but Improves Environmental Impacts. Agronomy Journal, 2012, 104, 888-896.	0.9	37
65	Effects of eastern redcedar encroachment on soil hydraulic properties along Oklahoma's grasslandâ€forest ecotone. Hydrological Processes, 2012, 26, 1720-1728.	1.1	39
66	Growth Stage Influences Forage Yield and Quality of Winter Rye. Forage and Grazinglands, 2011, 9, 1-7.	0.2	11
67	Winter Rye Cover Crop Management Influences on Soil Water, Soil Nitrate, and Corn Development. Agronomy Journal, 2011, 103, 316-323.	0.9	118
68	Vertical Distribution of Corn Stover Dry Mass Grown at Several US Locations. Bioenergy Research, 2011, 4, 11-21.	2.2	43
69	Soil Structure and Physical Properties under Ryeâ€Corn Silage Doubleâ€Cropping Systems. Soil Science Society of America Journal, 2011, 75, 1307-1314.	1.2	25
70	Water Balance and Nitrate Leaching under Corn in Kura Clover Living Mulch. Agronomy Journal, 2010, 102, 1169-1178.	0.9	51
71	Nutrient Removal as a Function of Corn Stover Cutting Height and Cob Harvest. Bioenergy Research, 2010, 3, 342-352.	2.2	64
72	Growth Stage at Harvest of a Winter Rye Cover Crop Influences Soil Moisture and Nitrogen. Crop Management, 2010, 9, 1-12.	0.3	7

#	Article	IF	Citations
73	Urea Decreases Nitrous Oxide Emissions Compared with Anhydrous Ammonia in a Minnesota Corn Cropping System. Soil Science Society of America Journal, 2010, 74, 407-418.	1.2	92
74	The SMAP in situ soil moisture sensor testbed: Comparing in situ sensors for satellite validation. , 2010, , .		7
75	In Situ Monitoring of Soil Thermal Properties and Heat Flux during Freezing and Thawing. Soil Science Society of America Journal, 2008, 72, 1025-1032.	1.2	41
76	A Partial Cylindrical Thermoâ€Time Domain Reflectometry Sensor. Soil Science Society of America Journal, 2008, 72, 571-577.	1.2	16
77	SURFACE AND SUBSURFACE SOLUTE TRANSPORT PROPERTIES AT ROW AND INTERROW POSITIONS. Soil Science, 2007, 172, 419-431.	0.9	2
78	Improved Analysis of Heat Pulse Signals for Soil Water Flux Determination. Soil Science Society of America Journal, 2007, 71, 53-55.	1.2	29
79	Soil Heat Storage Measurements in Energy Balance Studies. Agronomy Journal, 2007, 99, 311-319.	0.9	102
80	Soil Heat Flux Plates: Heat Flow Distortion and Thermal Contact Resistance. Agronomy Journal, 2007, 99, 304-310.	0.9	31
81	An Improved Approach for Measurement of Coupled Heat and Water Transfer in Soil Cells. Soil Science Society of America Journal, 2007, 71, 872-880.	1.2	35
82	Tillage and soil carbon sequestrationâ€"What do we really know?. Agriculture, Ecosystems and Environment, 2007, 118, 1-5.	2.5	971
83	Field Tests of the Soil Heat Flux Plate Method and Some Alternatives. Agronomy Journal, 2006, 98, 1005-1014.	0.9	71
84	Sorption of a Hydrophilic Pesticide. Soil Science Society of America Journal, 2006, 70, 1991-1997.	1.2	26
85	Method for Maintaining One-Dimensional Temperature Gradients in Unsaturated, Closed Soil Cells. Soil Science Society of America Journal, 2006, 70, 1303-1309.	1.2	21
86	Comparing Ambient Temperature Effects on Heat Pulse and Time Domain Reflectometry Soil Water Content Measurements. Vadose Zone Journal, 2006, 5, 751-756.	1.3	13
87	Sorption of Isoxaflutole Diketonitrile Degradate (DKN) and Dicamba in Unsaturated Soil. Journal of Environmental Science and Health - Part B Pesticides, Food Contaminants, and Agricultural Wastes, 2006, 41, 1071-1083.	0.7	5
88	Evaluation of the Heat Pulse Ratio Method for Measuring Soil Water Flux. Soil Science Society of America Journal, 2005, 69, 757-765.	1.2	40
89	Development of Thermo-Time Domain Reflectometry for Vadose Zone Measurements. Vadose Zone Journal, 2003, 2, 544-551.	1.3	8
90	Errors in Heat Flux Measurement by Flux Plates of Contrasting Design and Thermal Conductivity. Vadose Zone Journal, 2003, 2, 580-588.	1.3	8

#	Article	IF	Citations
91	Development of Thermoâ€Time Domain Reflectometry for Vadose Zone Measurements. Vadose Zone Journal, 2003, 2, 544-551.	1.3	73
92	Heatâ€Pulse Method for Soil Water Content Measurement. Soil Science Society of America Journal, 2003, 67, 1631-1634.	1.2	81
93	Use of the Dual-Probe Heat-Pulse Technique to Monitor Soil Water Content in the Vadose Zone. Vadose Zone Journal, 2003, 2, 572-579.	1.3	53
94	Use of the Dual-Probe Heat-Pulse Technique to Monitor Soil Water Content in the Vadose Zone. Vadose Zone Journal, 2003, 2, 572-579.	1.3	4
95	Development of Thermo-Time Domain Reflectometry for Vadose Zone Measurements. Vadose Zone Journal, 2003, 2, 544.	1.3	11
96	Use of the Dual-Probe Heat-Pulse Technique to Monitor Soil Water Content in the Vadose Zone. Vadose Zone Journal, 2003, 2, 572.	1.3	10
97	Errors in Heat Flux Measurement by Flux Plates of Contrasting Design and Thermal Conductivity. Vadose Zone Journal, 2003, 2, 580-588.	1.3	50
98	Mathematical analysis of heat pulse signals for soil water flux determination. Water Resources Research, 2002, 38, 27-1-27-7.	1.7	22
99	Correction to â€œMathematical analysis of heat pulse signals for soil water flux determinationâ€•by Quanjiu Wang, Tyson E. Ochsner, and Robert Horton. Water Resources Research, 2002, 38, 24-1-24-1.	1.7	18
100	Simultaneous Water Content, Airâ€Filled Porosity, and Bulk Density Measurements with Thermoâ€Time Domain Reflectometry. Soil Science Society of America Journal, 2001, 65, 1618-1622.	1.2	51
101	A New Perspective on Soil Thermal Properties. Soil Science Society of America Journal, 2001, 65, 1641-1647.	1.2	289