Michael H Young

List of Publications by Year
in descending order

94 papers	2,217 citations	218677 26 h-index	276875 41 g-index
103 all docs	103 docs citations	103 times ranked	3072 citing authors

#	Article	IF	Citations
1	Green-Ampt infiltration model for sloping surfaces. Water Resources Research, 2006, 42, .	4.2	156
2	Soil structureÂis an important omission in Earth System Models. Nature Communications, 2020, 11, 522.	12.8	138
3	Development and analysis of the Soil Water Infiltration Global database. Earth System Science Data, 2018, 10, 1237-1263.	9.9	85
4	Effects of rainfall characteristics on infiltration and redistribution patterns in revegetation-stabilized desert ecosystems. Journal of Hydrology, 2008, 358, 134-143.	5.4	79
5	Influence of a Nonionic Surfactant on the Water Retention Properties of Unsaturated Soils. Soil Science Society of America Journal, 2001, 65, 1392-1399.	2.2	77
6	Estimating aquifer hydraulic properties using sinusoidal pumping at the Savannah River site, South Carolina, USA. Hydrogeology Journal, 2003, 11, 466-482.	2.1	74
7	LARGE WEIGHING LYSIMETERS FOR WATER USE AND DEEP PERCOLATION STUDIES. Soil Science, 1996, 161, 491-501.	0.9	74
8	Invasion of shrublands by exotic grasses: ecohydrological consequences in cold versus warm deserts. Ecohydrology, 2012, 5, 160-173.	2.4	72
9	Penman Monteith Crop Coefficients for Use with Desert Turf Systems. Crop Science, 2001, 41, 1197-1206.	1.8	47
10	Toward better hydraulic fracturing fluids and their application in energy production: A review of sustainable technologies and reduction of potential environmental impacts. Journal of Petroleum Science and Engineering, 2019, 173, 793-803.	4.2	47
11	Field and Laboratory Evaluation of the CS655 Soil Water Content Sensor. Vadose Zone Journal, 2018, 17, 1-16.	2.2	45
12	Two- and three-parameter calibrations of time domain reflectometry for soil moisture measurement. Water Resources Research, 1997, 33, 2417-2421.	4.2	42
13	Estimation of depth averaged unsaturated soil hydraulic properties from infiltration experiments. Journal of Hydrology, 2001, 242, 26-42.	5.4	37
14	Flexible Time Domain Reflectometry Probe for Deep Vadose Zone Monitoring. Vadose Zone Journal, 2003, 2, 270-275.	2.2	36
15	Reducing Saturated Hydraulic Conductivity of Sandy Soils with Polyacrylamide. Soil Science Society of America Journal, 2009, 73, 13-20.	2.2	36
16	Controls on Water Use for Thermoelectric Generation: Case Study Texas, U.S.. Environmental Science & Technology, 2013, 47, 11326-11334.	10.0	34
17	Microtopographic control on the ground thermal regime in ice wedge polygons. Cryosphere, 2018, 12, 1957-1968.	3.9	34
18	Dryland Ecohydrology in the Anthropocene: Taking Stock of Human-Ecological Interactions. Geography Compass, 2011, 5, 112-127.	2.7	33

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19	Influence of relative surface age on hydraulic properties and infiltration on soils associated with desert pavements. Catena, 2008, 72, 169-178.	5.0	31
20	Monitoring Vegetation Phenological Cycles in Two Different Semi-Arid Environmental Settings Using a Ground-Based NDVI System: A Potential Approach to Improve Satellite Data Interpretation. Remote Sensing, 2010, 2, 990-1013.	4.0	31
21	Geochemical sensitivity to CO2leakage: detection in potable aquifers at carbon sequestration sites. , 2014, 4, 384-399.		30
22	Diurnal fluctuations of tensiometric readings due to surface temperature changes. Water Resources Research, 1998, 34, 2863-2869.	4.2	29
23	Longâ€term effects of restoration on soil hydraulic properties in revegetationâ€stabilized desert ecosystems. Geophysical Research Letters, 2007, 34, .	4.0	29
24	Quantifying the effects of phenology on ecosystem evapotranspiration in planted grassland mesocosms using EcoCELL technology. Agricultural and Forest Meteorology, 2003, 118, 173-183.	4.8	28
25	Simulating the Effect of Vegetation in Formation of Pedogenic Carbonate. Soil Science Society of America Journal, 2014, 78, 914-924.	2.2	28
26	Steering operational synergies in terrestrial observation networks: opportunity for advancing Earth system dynamics modelling. Earth System Dynamics, 2018, 9, 593-609.	7.1	28
27	The Texas Soil Observation Network:A Comprehensive Soil Moisture Dataset for Remote Sensing and Land Surface Model Validation. Vadose Zone Journal, 2019, 18, 1-20.	2.2	28
28	Evapotranspiration of mixed shrub communities in phreatophytic zones of the Great Basin region of Nevada (USA). Ecohydrology, 2011, 4, 807-822.	2.4	27
29	A New Technique for Characterizing the Efficacy of Fugitive Dust Suppressants. Journal of the Air and Waste Management Association, 2009, 59, 603-612.	1.9	26
30	Interference of river level changes on riparian zone evapotranspiration estimates from diurnal groundwater level fluctuations. Journal of Hydrology, 2011, 403, 381-389.	5.4	26
31	Numerical Modeling of Coupled Water Flow and Heat Transport in Soil and Snow. Soil Science Society of America Journal, 2016, 80, 247-263.	2.2	26
32	Spatial structure of hydraulic properties from canopy to interspace in the Mojave Desert. Geophysical Research Letters, 2008, 35, .	4.0	25
33	Changes in Soil Structure and Hydraulic Properties in a Woodedâ€Shrubland Ecosystem following a Prescribed Fire. Soil Science Society of America Journal, 2012, 76, 1965-1977.	2.2	25
34	Soil disturbance and hydrologic response at the National Training Center, Ft. Irwin, California. Journal of Arid Environments, 2006, 67, 456-472.	2.4	24
35	Upscaling Schemes and Relationships for the Gardner and van Genuchten Hydraulic Functions for Heterogeneous Soils. Vadose Zone Journal, 2007, 6, 186-195.	2.2	24
36	Spatiotemporal patterns in nutrient loads, nutrient concentrations, and algal biomass in Lake Taihu, China. Lake and Reservoir Management, 2011, 27, 298-309.	1.3	24

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37	Leveraging Environmental Research and Observation Networks to Advance Soil Carbon Science. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 1047-1055.	3.0	24
38	Brief communication: Rapid machine-learning-based extraction and measurement of ice wedge polygons in high-resolution digital elevation models. Cryosphere, 2019, 13, 237-245.	3.9	24
39	Impacts of interrelated biotic and abiotic processes during the past 125000 years of landscape evolution in the Northern Mojave Desert, Nevada, USA. Journal of Arid Environments, 2007, 69, 633-657.	2.4	23
40	Correcting Dualâ€Probe Heatâ€Pulse Readings for Changes in Ambient Temperature. Vadose Zone Journal, 2008, 7, 22-30.	2.2	23
41	Influence of surfactants on unsaturated water flow and solute transport. Water Resources Research, 2015, 51, 1977-1988.	4.2	23
42	A gas-phase partitioning tracer method for the in situ measurement of soil-water content. Water Resources Research, 1999, 35, 3699-3707.	4.2	22
43	Variability of soil physical and hydraulic properties at the Mojave Global Change Facility, Nevada: Implications for water budget and evapotranspiration. Journal of Arid Environments, 2009, 73, 733-744.	2.4	22
44	Soil heterogeneity in Mojave Desert shrublands: Biotic and abiotic processes. Water Resources Research, 2012, 48, .	4.2	22
45	Optimal parameters for the Green-Ampt infiltration model under rainfall conditions. Journal of Hydrology and Hydromechanics, 2015, 63, 93-101.	2.0	22
46	Physiological Response of Daphnia magna to Linear Anionic Polyacrylamide: Ecological Implications for Receiving Waters. Water, Air, and Soil Pollution, 2010, 212, 309-317.	2.4	18
47	Microbially Mediated Aerobic and Anaerobic Degradation of Acrylamide in a Western United States Irrigation Canal. Journal of Environmental Quality, 2010, 39, 1563-1569.	2.0	18
48	Impacts from Above-Ground Activities in the Eagle Ford Shale Play on Landscapes and Hydrologic Flows, La Salle County, Texas. Environmental Management, 2015, 55, 1262-1275.	2.7	18
49	Impacts of riparian zone plant water use on temporal scaling of groundwater systems. Hydrological Processes, 2012, 26, 1352-1360.	2.6	17
50	Time Series Analysis of Energy Production and Associated Landscape Fragmentation in the Eagle Ford Shale Play. Environmental Management, 2017, 60, 852-866.	2.7	17
51	A Laboratory Method for Determining the Unsaturated Hydraulic Properties of Soil Peds. Soil Science Society of America Journal, 2005, 69, 807-815.	2.2	15
52	Gas source attribution techniques for assessing leakage at geologic CO2 storage sites: Evaluating a CO2 and CH4 soil gas anomaly at the Cranfield CO2-EOR site. Chemical Geology, 2017, 454, 93-104.	3.3	15
53	High-resolution mapping of spatial heterogeneity in ice wedge polygon geomorphology near Prudhoe Bay, Alaska. Scientific Data, 2020, 7, 87.	5.3	15
54	Airborne lidar on the Alaskan North Slope: Wetlands mapping, lake volumes, and permafrost features. The Leading Edge, 2013, 32, 798-805.	0.7	14

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55	Defoliation effects of Diorhabda carinulata on tamarisk evapotranspiration and groundwater levels. Ecohydrology, 2015, 8, 1560-1571.	2.4	14
56	Characterizing Disturbed Desert Soils Using Multiobjective Parameter Optimization. Vadose Zone Journal, 2013, 12, 1-23.	2.2	13
57	Fate and Transport of Thirteen Pharmaceutical and Personal Care Products in a Controlled Irrigated Turfgrass System. Agronomy Journal, 2012, 104, 1244-1254.	1.8	12
58	Feedbacks Between Surface Deformation and Permafrost Degradation in Ice Wedge Polygons, Arctic Coastal Plain, Alaska. Journal of Geophysical Research F: Earth Surface, 2020, 125, e2019JF005349.	2.8	12
59	Variability of wetting front velocities during a field-scale infiltration experiment. Water Resources Research, 1999, 35, 3079-3087.	4.2	10
60	Estimating the Fine Soil Fraction of Desert Pavements Using Ground Penetrating Radar. Vadose Zone Journal, 2006, 5, 720-730.	2.2	10
61	Effects of paleoclimate and timeâ€varying canopy structures on paleowater fluxes. Journal of Geophysical Research, 2008, 113, .	3.3	10
62	Numerical Modelling of Ice-Wedge Polygon Geomorphic Transition. Permafrost and Periglacial Processes, 2017, 28, 347-355.	3.4	10
63	Incorporating Parametric Uncertainty in the Design of Alternative Landfill Covers in Arid Regions. Vadose Zone Journal, 2006, 5, 742-750.	2.2	9
64	Probabilistic Analysis of Monitoring Systems for Detecting Subsurface Contaminant Plumes. Ground Water, 1998, 36, 894-900.	1.3	7
65	Optimized System to Improve Pumping Rate Stability During Aquifer Tests. Ground Water, 2002, 40, 629-637.	1.3	7
66	Introduction to special section on Bridging Hydrology, Soil Science, and Ecology: Hydropedology and Ecohydrology. Geophysical Research Letters, 2007, 34, .	4.0	7
67	Projected Landscape Impacts from Oil and Gas Development Scenarios in the Permian Basin, USA. Environmental Management, 2020, 66, 348-363.	2.7	7
68	A screening approach to improve water management practices in undeveloped shale plays, with application to the transboundary Eagle Ford Formation in northeast Mexico. Journal of Environmental Management, 2019, 236, 146-162.	7.8	7
69	An integrated approach for modeling solute transport in streams and canals with applications. Journal of Hydrology, 2009, 378, 128-136.	5.4	6
70	The seedbed microclimate and active revegetation of disturbed lands in the Mojave Desert. Journal of Arid Environments, 2009, 73, 563-573.	2.4	6
71	Challenges in the Application of Fractional Derivative Models in Capturing Solute Transport in Porous Media: Darcy-Scale Fractional Dispersion and the Influence of Medium Properties. Mathematical Problems in Engineering, 2013, 2013, 1-10.	1.1	6
72	Potential Economic Impacts of Environmental Flows Following a Possible Listing of Endangered Texas Freshwater Mussels. Journal of the American Water Resources Association, 2014, 50, 1081-1101.	2.4	6

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73	On Evaluating Characteristics of the Solute Transport in the Arid Vadose Zone. Ground Water, 2014, 52, 50-62.	1.3	6
74	Synchrotron X-Ray Microtomography-New Means to Quantify Root Induced Changes of Rhizosphere Physical Properties. SSSA Special Publication Series, 2015, , 39-67.	0.2	6
75	Baseflow recession analysis in a large shale play: Climate variability and anthropogenic alterations mask effects of hydraulic fracturing. Journal of Hydrology, 2017, 553, 160-171.	5.4	6
76	Field-Scale Monitoring of Pharmaceutical Compounds Applied to Active Golf Courses by Recycled Water. Journal of Environmental Quality, 2014, 43, 658-670.	2.0	5
77	Shrub spatial organization and partitioning of evaporation and transpiration in arid environments. Ecohydrology, 2015, 8, 1218-1228.	2.4	5
78	Monitoring water content dynamics of biological soil crusts. Journal of Arid Environments, 2017, 142, 41-49.	2.4	5
79	Airborne LiDAR and Aerial Imagery to Assess Potential Burrow Locations for the Desert Tortoise (Gopherus agassizii). Remote Sensing, 2017, 9, 458.	4.0	5
80	Impacts of Surfactant Adjuvants on Pesticide Availability and Transport in Soils. ACS Symposium Series, 2003, , 231-245.	0.5	4
81	Sensitivity of Unlined Canal Seepage to Hydraulic Properties of Polyacrylamideâ€Treated Soil. Soil Science Society of America Journal, 2009, 73, 695-703.	2.2	4
82	Water and Salt Status of Bare Soil and Turfgrass Systems Irrigated with Recycled Water. Agronomy Journal, 2013, 105, 1051-1060.	1.8	4
83	Implications of unconventional oil and gas development on groundwater resources. Current Opinion in Environmental Science and Health, 2022, 27, 100346.	4.1	4
84	Introduction to Coupling Soil Science and Hydrology with Ecology: Toward Integrating Landscape Processes. Vadose Zone Journal, 2010, 9, 515-516.	2.2	3
85	Model-based Assessment of the Site-specific Cost of Monitoring. Energy Procedia, 2017, 114, 5316-5319.	1.8	2
86	An outlier detection approach for water footprint assessments in shale formations: case Eagle Ford play (Texas). Environmental Earth Sciences, 2020, 79, 1.	2.7	2
87	Geomorphic controls on shrub canopy volume and spacing of creosote bush in northern Mojave Desert, USA. Landscape Ecology, 2021, 36, 527-547.	4.2	2
88	Sensitivity and Uncertainty of Groundâ€Water Discharge Estimates for Semiarid Shrublands¹. Journal of the American Water Resources Association, 2009, 45, 641-653.	2.4	1
89	DETERMINING WETLANDS DISTRIBUTION, LAKE DEPTHS, AND TOPOGRAPHY USING AIRBORNE LIDAR AND IMAGERY ON THE NORTH SLOPE, ALASKA. , 2013, , .		1
90	Airborne LiDAR on the Alaskan North Slope: wetlands mapping, lake volumes, and permafrost features. , 2013, , .		1

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91	Answer to the comment on â€œInterference of river level changes on riparian zone evapotranspiration estimates from diurnal groundwater level fluctuationsâ€• by J. Zhu, M. Young, J. Healey, R. Jasoni, J. Osterberg [J. Hydrol. 403(3â€“4) (2011) 381â€“389]. Journal of Hydrology, 2011, 408, 316-317.	5.4	0
92	VZJ Introduces New Type of Article: â€˜Priority Communicationsâ€™. CSA News, 2013, 58, 16-16.	0.0	0
93	Vadose Zone Journal: The First Ten Years. Vadose Zone Journal, 2013, 12, 1-3.	2.2	0
94	Connecting Modern Soil and Paleosol Communities: Improving Climate Proxies and Our Understanding of Earth's Critical Zone. CSA News, 2014, 59, 24-25.	0.0	0