Chris B Zou

List of Publications by Year
in descending order

94 papers	4,673 citations	147801 31 h-index	106344 65 g-index
94 all docs	94 docs citations	94 times ranked	5936 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.	5.0	3
2	Response of Surface Runoff and Sediment to the Conversion of a Marginal Grassland to a Switchgrass (Panicum virgatum) Bioenergy Feedstock System. Land, 2022, 11, 540.	2.9	2
3	Interactive effect of climate warming and nitrogen deposition may shift the dynamics of native and invasive species. Journal of Plant Ecology, 2021, 14, 84-95.	2.3	27
4	Improved productivity, water yield, and water use efficiency by incorporating switchgrass cultivation and native ecosystems in an integrated biofuel feedstock system. GCB Bioenergy, 2021, 13, 369-381.	5.6	6
5	Isotopic partitioning of evapotranspiration in a mesic grassland during two wettingâ€“drying episodes. Agricultural and Forest Meteorology, 2021, 301-302, 108321.	4.8	4
6	Management and climate variability effects on understory productivity of forest and savanna ecosystems in Oklahoma, USA. Ecosphere, 2021, 12, e03576.	2.2	4
7	Effects of climate variability and management on shortleaf pine radial growth across a forest-savanna continuum in a 34-year experiment. Forest Ecology and Management, 2021, 491, 119125.	3.2	4
8	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.	4.8	9
9	Stand-Level Transpiration Increases after Eastern Redcedar (Juniperus virginiana L.) Encroachment into the Midstory of Oak Forests. Forests, 2020, 11, 901.	2.1	10
10	Drought Tolerance and Competition in Eastern Redcedar (Juniperus virginiana) Encroachment of the Oak-Dominated Cross Timbers. Frontiers in Plant Science, 2020, 11, 59.	3.6	10
11	The effect of nitrogen and temperature changes on <scp><i>Solidago canadensis</i></scp> phenotypic plasticity and fitness. Plant Species Biology, 2020, 35, 283-299.	1.0	22
12	Conversion of encroached juniper woodland back to native prairie and to switchgrass increases root zone soil moisture and watershed runoff. Journal of Hydrology, 2020, 584, 124640.	5.4	9
13	Effects of <i>Solidago canadensis</i> Invasion and Climate Warming on Soil Net N Mineralization. Polish Journal of Environmental Studies, 2020, 29, 3285-3294.	1.2	9
14	Managing environmental contamination through phytoremediation by invasive plants: A review. Ecological Engineering, 2019, 138, 28-37.	3.6	99
15	The enhancement of root biomass increases the competitiveness of an invasive plant against a co-occurring native plant under elevated nitrogen deposition. Flora: Morphology, Distribution, Functional Ecology of Plants, 2019, 261, 151486.	1.2	35
16	Sustaining Cross-Timbers Forest Resources: Current Knowledge and Future Research Needs. Sustainability, 2019, 11, 4703.	3.2	12
17	Evapotranspiration partitioning in dryland ecosystems: A global meta-analysis of in situ studies. Journal of Hydrology, 2019, 576, 123-136.	5.4	52
18	Understanding Market Opportunities Utilizing the Forest Resources of the Cross-timbers Ecoregion. Journal of Forestry, 2019, 117, 234-243.	1.0	5

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19	Establishment of Quercus marilandica Muenchh. and Juniperus virginiana L. in the Tallgrass Prairie of Oklahoma, USA Increases Litter Inputs and Soil Organic Carbon. Forests, 2019, 10, 329.	2.1	11
20	Elevated nitrogen deposition may advance invasive weed, Solidago canadensis, in calcareous soils. Journal of Plant Ecology, 2019, 12, 846-856.	2.3	18
21	Interactive Effect of Meteorological Drought and Vegetation Types on Root Zone Soil Moisture and Runoff in Rangeland Watersheds. Water (Switzerland), 2019, 11, 2357.	2.7	6
22	Effect of Vegetation on the Energy Balance and Evapotranspiration in Tallgrass Prairie: A Paired Study Using the Eddy-Covariance Method. Boundary-Layer Meteorology, 2019, 170, 127-160.	2.3	21
23	Perceptions regarding active management of the Cross-timbers forest resources of Oklahoma, Texas, and Kansas: A SWOT-ANP analysis. Land Use Policy, 2019, 81, 523-530.	5.6	33
24	Bioclimatic Envelopes for Individual Demographic Events Driven by Extremes: Plant Mortality from Drought and Warming. International Journal of Plant Sciences, 2019, 180, 53-62.	1.3	25
25	Physiological regulation of poplar species to experimental warming differs between species with contrasting elevation ranges. New Forests, 2018, 49, 329-340.	1.7	5
26	Legacy effects of historical grazing affect the response of vegetation dynamics to water and nitrogen addition in semiâ€arid steppe. Applied Vegetation Science, 2018, 21, 229-239.	1.9	14
27	Phosphorus addition reduces the competitive ability of the invasive weed Solidago canadensis under high nitrogen conditions. Flora: Morphology, Distribution, Functional Ecology of Plants, 2018, 240, 68-75.	1.2	24
28	Estimating increased fuel loading within the Cross Timbers forest matrix of Oklahoma, USA due to an encroaching conifer, Juniperus virginiana, using leaf-off satellite imagery. Forest Ecology and Management, 2018, 409, 215-224.	3.2	23
29	Growth responses of Canada goldenrod (<i>Solidago canadensis</i> L.) to increased nitrogen supply correlate with bioavailability of insoluble phosphorus source. Ecological Research, 2018, 33, 261-269.	1.5	18
30	Long-term effects of nitrogen fertilization on aggregation and localization of carbon, nitrogen and microbial activities in soil. Science of the Total Environment, 2018, 624, 1131-1139.	8.0	60
31	Impact of Climate Variability and Landscape Patterns on Water Budget and Nutrient Loads in a Peri-urban Watershed: A Coupled Analysis Using Process-based Hydrological Model and Landscape Indices. Environmental Management, 2018, 61, 954-967.	2.7	19
32	Impact of Eastern Redcedar Proliferation on Water Resources in the Great Plains USAâ€”Current State of Knowledge. Water (Switzerland), 2018, 10, 1768.	2.7	33
33	Encroachment Dynamics of Juniperus virginiana L. and Mesic Hardwood Species into Cross Timbers Forests of North-Central Oklahoma, USA. Forests, 2018, 9, 75.	2.1	26
34	Perceptions of Government and Research Expert Groups and Their Implications for Watershed Management in Oklahoma, USA. Environmental Management, 2018, 62, 1048-1059.	2.7	3
35	Woody Plant Encroachment Impacts on Groundwater Recharge: A Review. Water (Switzerland), 2018, 10, 1466.	2.7	45
36	Viewing Woody-Plant Encroachment through a Socialâ€“Ecological Lens. BioScience, 2018, 68, 691-705.	4.9	37

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37	The mutual restraint effect between the expansion of Alternanthera philoxeroides (Mart.) Griseb and cadmium mobility in aquatic environment. Ecotoxicology and Environmental Safety, 2018, 148, 237-243.	6.0	11
38	Hydrological properties of litter layers in mixed forests in Mt. Qinling, China. IForest, 2018, 11, 243-250.	1.4	10
39	Analysis of Precipitation Projections over the Climate Gradient of the Arkansas Red River Basin. Journal of Applied Meteorology and Climatology, 2017, 56, 1325-1336.	1.5	13
40	Vegetation Controls on the Spatio-Temporal Heterogeneity of Deep Moisture in the Unsaturated Zone: A Hydrogeophysical Evaluation. Scientific Reports, 2017, 7, 1499.	3.3	19
41	Woody plant encroachment alters soil hydrological properties and reduces downward flux of water in tallgrass prairie. Plant and Soil, 2017, 414, 379-391.	3.7	28
42	Monitoring litter interception of rainfall using leaf wetness sensor under controlled and field conditions. Hydrological Processes, 2017, 31, 240-249.	2.6	36
43	Impact of Plant Functional Types on Coherence Between Precipitation and Soil Moisture: A Wavelet Analysis. Geophysical Research Letters, 2017, 44, 12,197.	4.0	31
44	On the teleconnection patterns to precipitation in the eastern Tianshan Mountains, China. Climate Dynamics, 2017, 49, 3123-3139.	3.8	23
45	Local-scale correlates of native and non-native earthworm distributions in juniper-encroached tallgrass prairie. Biological Invasions, 2017, 19, 1621-1635.	2.4	4
46	Aboveground Biomass Invariance Masks Significant Belowground Productivity Changes in Response to Salinization and Nitrogen Loading in Reed Marshes. Wetlands, 2017, 37, 985-995.	1.5	11
47	The influence of large-scale climate phenomena on precipitation in the Ordos Basin, China. Theoretical and Applied Climatology, 2017, 130, 791-805.	2.8	5
48	Woody plant encroachment reduces annual runoff and shifts runoff mechanisms in the tallgrass prairie, <scp>U</scp>SA. Water Resources Research, 2017, 53, 4838-4849.	4.2	41
49	Effects of grazing exclusion on carbon sequestration and plant diversity in grasslands of Chinaâ€"A meta-analysis. Ecological Engineering, 2016, 94, 647-655.	3.6	148
50	Woodland expansion in central Oklahoma will significantly reduce streamflows â€" a modelling analysis. Ecohydrology, 2016, 9, 807-816.	2.4	21
51	Pyric-herbivory and Hydrological Responses in Tallgrass Prairie. Rangeland Ecology and Management, 2016, 69, 20-27.	2.3	7
52	Sensitivity of regional evapotranspiration partitioning to variation in woody plant cover: insights from experimental dryland tree mosaics. Global Ecology and Biogeography, 2015, 24, 1040-1048.	5.8	28
53	Deep drainage sensitivity to climate, edaphic factors, and woody encroachment, Oklahoma, USA. Hydrological Processes, 2015, 29, 3779-3789.	2.6	22
54	Calibration of SWAT model for woody plant encroachment using paired experimental watershed data. Journal of Hydrology, 2015, 523, 231-239.	5.4	38

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55	Climate, water use, and land surface transformation in an irrigation intensive watershedâ€"Streamflow responses from 1950 through 2010. Agricultural Water Management, 2015, 160, 144-152.	5.6	18
56	Canopy Interception for a Tallgrass Prairie under Juniper Encroachment. PLoS ONE, 2015, 10, e0141422.	2.5	48
57	Water use of <i>Juniperus virginiana</i> trees encroached into mesic prairies in Oklahoma, USA. Ecohydrology, 2014, 7, 1124-1134.	2.4	26
58	Calibration and Validation of the COSMOS Rover for Surface Soil Moisture Measurement. Vadose Zone Journal, 2014, 13, 1-8.	2.2	66
59	Droughtâ€induced woody plant mortality in an encroached semiâ€arid savanna depends on topoedaphic factors and land management. Applied Vegetation Science, 2014, 17, 42-52.	1.9	33
60	Performance assessment of the successive Version 6 and Version 7 TMPA products over the climate-transitional zone in the southern Great Plains, USA. Journal of Hydrology, 2014, 513, 446-456.	5.4	51
61	Alteration of hydrological processes and streamflow with juniper (<i>Juniperus virginiana</i>) encroachment in a mesic grassland catchment. Hydrological Processes, 2014, 28, 6173-6182.	2.6	68
62	Application of Gash analytical model and parameterized Fan model to estimate canopy interception of a Chinese red pine forest. Journal of Forest Research, 2013, 18, 335-344.	1.4	16
63	Nonstructural leaf carbohydrate dynamics of <i><scp>P</scp>inus edulis</i> during droughtâ€induced tree mortality reveal role for carbon metabolism in mortality mechanism. New Phytologist, 2013, 197, 1142-1151.	7.3	221
64	Increased vapor pressure deficit due to higher temperature leads to greater transpiration and faster mortality during drought for tree seedlings common to the forestâ€"grassland ecotone. New Phytologist, 2013, 200, 366-374.	7.3	243
65	The critical amplifying role of increasing atmospheric moisture demand on tree mortality and associated regional die-off. Frontiers in Plant Science, 2013, 4, 266.	3.6	163
66	Impacts of woody plant encroachment on regional climate in the southern Great Plains of the United States. Journal of Geophysical Research D: Atmospheres, 2013, 118, 9093-9104.	3.3	26
67	Density-Dependent Ecohydrological Effects of PiÃ±onâ€"Juniper Woody Canopy Cover on Soil Microclimate and Potential Soil Evaporation. Rangeland Ecology and Management, 2012, 65, 11-20.	2.3	30
68	Effects of inundation on growth and nutrient allocation of six major macrophytes in the Florida Everglades. Ecological Engineering, 2012, 42, 10-18.	3.6	25
69	Long-term streamflow relations with riparian gallery forest expansion into tallgrass prairie in the Southern Great Plains, USA. Forest Ecology and Management, 2012, 266, 170-179.	3.2	32
70	Sediment capture by vegetation patches: Implications for desertification and increased resource redistribution. Journal of Geophysical Research, 2012, 117, .	3.3	52
71	Characterizing ecohydrological and biogeochemical connectivity across multiple scales: a new conceptual framework. Ecohydrology, 2012, 5, 221-233.	2.4	17
72	Understanding ecohydrological connectivity in savannas: a system dynamics modelling approach. Ecohydrology, 2012, 5, 200-220.	2.4	31

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73	Runoff and sediment responses to grazing native and introduced species on highly erodible Southern Great Plains soil. Journal of Hydrology, 2012, 450-451, 336-341.	5.4	26
74	Interactive effects of grazing and burning on wind- and water-driven sediment fluxes: rangeland management implications. , 2011, 21, 22-32.		33
75	On the ratio of wind- to water-driven sediment transport: Conserving soil under global-change-type extreme events. Journal of Soils and Water Conservation, 2011, 66, 51A-56A.	1.6	13
76	Seasonally Pulsed Heterogeneity in Microclimate: Phenology and Cover Effects along Deciduous Grasslandâ€"Forest Continuum. Vadose Zone Journal, 2010, 9, 537-547.	2.2	53
77	Density-dependent shading patterns by Sonoran saguaros. Journal of Arid Environments, 2010, 74, 156-158.	2.4	13
78	Ecohydrological controls of soil evaporation in deciduous drylands: How the hierarchical effects of litter, patch and vegetation mosaic cover interact with phenology and season. Journal of Arid Environments, 2010, 74, 595-602.	2.4	87
79	Streamflow responses to vegetation manipulations along a gradient of precipitation in the Colorado River Basin. Forest Ecology and Management, 2010, 259, 1268-1276.	3.2	29
80	Ecohydrological energy inputs in semiarid coniferous gradients: Responses to management- and drought-induced tree reductions. Forest Ecology and Management, 2010, 260, 1646-1655.	3.2	30
81	Temperature sensitivity of drought-induced tree mortality portends increased regional die-off under global-change-type drought. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 7063-7066.	7.1	857
82	Reply to Leuzinger et al.: Drought-induced tree mortality temperature sensitivity requires pressing forward with best available science. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, E107-E107.	7.1	10
83	Reply to Sala: Temperature sensitivity in drought-induced tree mortality hastens the need to further resolve a physiological model of death. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, .	7.1	9
84	A conceptual framework for dryland aeolian sediment transport along the grasslandâ€"forest continuum: Effects of woody plant canopy cover and disturbance. Geomorphology, 2009, 105, 28-38.	2.6	91
85	Seasonal variation in seed bank composition and its interaction with nutrient enrichment in the Everglades wetlands. Aquatic Botany, 2009, 90, 157-164.	1.6	18
86	Vegetation Responses to Extreme Hydrological Events: Sequence Matters. American Naturalist, 2009, 173, 113-118.	2.1	73
87	Tree dieâ€off in response to global changeâ€type drought: mortality insights from a decade of plant water potential measurements. Frontiers in Ecology and the Environment, 2009, 7, 185-189.	4.0	436
88	Soil water dynamics under lowâ€•versus highâ€ponderosa pine tree density: ecohydrological functioning and restoration implications. Ecohydrology, 2008, 1, 309-315.	2.4	39
89	Vegetation synchronously leans upslope as climate warms. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 11591-11592.	7.1	120
90	Effects of topography and woody plant canopy cover on nearâ€ground solar radiation: Relevant energy inputs for ecohydrology and hydropedology. Geophysical Research Letters, 2007, 34, .	4.0	61

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91	Soil moisture redistribution as a mechanism of facilitation in savanna treeâ€“shrub clusters. Oecologia, 2005, 145, 32-40.	2.0	114
92	Title is missing!. Plant and Soil, 2001, 236, 105-115.	3.7	66
93	Least limiting water range: a potential indicator of physical quality of forest soils. Soil Research, 2000, 38, 947.	1.1	72
94	Physiological responses of radiata pine roots to soil strength and soil water deficit. Tree Physiology, 2000, 20, 1205-1207.	3.1	18