Alan K Knapp

List of Publications by Year
in descending order

175 papers	21,059 citations	19608 61 h-index	10708 138 g-index
177 all docs	177 docs citations	177 times ranked	16335 citing authors

#	Article	IF	Citations
1	Convergence across biomes to a common rain-use efficiency. Nature, 2004, 429, 651-654.	13.7	968
2	Consequences of More Extreme Precipitation Regimes for Terrestrial Ecosystems. BioScience, 2008, 58, 811-821.	2.2	959
3	Rainfall Variability, Carbon Cycling, and Plant Species Diversity in a Mesic Grassland. Science, 2002, 298, 2202-2205.	6.0	942
4	The Origins of C ₄ Grasslands: Integrating Evolutionary and Ecosystem Science. Science, 2010, 328, 587-591.	6.0	899
5	Modulation of Diversity by Grazing and Mowing in Native Tallgrass Prairie. Science, 1998, 280, 745-747.	6.0	821
6	Assessing the Response of Terrestrial Ecosystems to Potential Changes in Precipitation. BioScience, 2003, 53, 941.	2.2	680
7	Leaf optical properties in higher plants: linking spectral characteristics to stress and chlorophyll concentration. American Journal of Botany, 2001, 88, 677-684.	0.8	641
8	Dominant species maintain ecosystem function with non-random species loss. Ecology Letters, 2003, 6, 509-517.	3.0	591
9	An Ecosystem in Transition: Causes and Consequences of the Conversion of Mesic Grassland to Shrubland. BioScience, 2005, 55, 243.	2.2	554
10	A framework for assessing ecosystem dynamics in response to chronic resource alterations induced by global change. Ecology, 2009, 90, 3279-3289.	1.5	458
11	Resistance and resilience of a grassland ecosystem to climate extremes. Ecology, 2014, 95, 2646-2656.	1.5	458
12	Shrub encroachment in North American grasslands: shifts in growth form dominance rapidly alters control of ecosystem carbon inputs. Global Change Biology, 2008, 14, 615-623.	4.2	435
13	Tracking the rhythm of the seasons in the face of global change: phenological research in the 21st century. Frontiers in Ecology and the Environment, 2009, 7, 253-260.	1.9	429
14	I<scp>nterannual variability in primary production in tallgrass prairie: climate, soil moisture, topographic position, and fire as determinants of aboveground biomass</scp>. American Journal of Botany, 1995, 82, 1024-1030.	0.8	420
15	Productivity responses to altered rainfall patterns in a C 4 -dominated grassland. Oecologia, 2003, 137, 245-251.	0.9	383
16	Increasing precipitation event size increases aboveground net primary productivity in a semi-arid grassland. Oecologia, 2008, 158, 129-140.	0.9	377
17	Increased rainfall variability and reduced rainfall amount decreases soil CO2 flux in a grassland ecosystem. Global Change Biology, 2005, 11, 322-334.	4.2	342
18	A meta-analysis of 1,119 manipulative experiments on terrestrial carbon-cycling responses to global change. Nature Ecology and Evolution, 2019, 3, 1309-1320.	3.4	304

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19	Contingent productivity responses to more extreme rainfall regimes across a grassland biome. Global Change Biology, 2009, 15, 2894-2904.	4.2	303
20	Reconciling inconsistencies in precipitationâ€“productivity relationships: implications for climate change. New Phytologist, 2017, 214, 41-47.	3.5	286
21	Modeled interactive effects of precipitation, temperature, and [CO₂] on ecosystem carbon and water dynamics in different climatic zones. Global Change Biology, 2008, 14, 1986-1999.	4.2	277
22	Biomass production and species composition change in a tallgrass prairie ecosystem after longâ€term exposure to elevated atmospheric CO 2. Global Change Biology, 1999, 5, 497-506.	4.2	266
23	Interannual variability in primary production in tallgrass prairie: climate, soil moisture, topographic position, and fire as determinants of aboveground biomass. , 1995, 82, 1024.		247
24	Coordinated distributed experiments: an emerging tool for testing global hypotheses in ecology and environmental science. Frontiers in Ecology and the Environment, 2013, 11, 147-155.	1.9	237
25	Differential sensitivity to regional-scale drought in six central US grasslands. Oecologia, 2015, 177, 949-957.	0.9	236
26	Altering Rainfall Timing and Quantity in a Mesic Grassland Ecosystem: Design and Performance of Rainfall Manipulation Shelters. Ecosystems, 2000, 3, 308-319.	1.6	235
27	Characterizing differences in precipitation regimes of extreme wet and dry years: implications for climate change experiments. Global Change Biology, 2015, 21, 2624-2633.	4.2	233
28	Asymmetric responses of primary productivity to precipitation extremes: A synthesis of grassland precipitation manipulation experiments. Global Change Biology, 2017, 23, 4376-4385.	4.2	231
29	Effect of Fire and Drought on the Ecophysiology of Andropogon gerardii and Panicum virgatum in a Tallgrass Prairie. Ecology, 1985, 66, 1309-1320.	1.5	221
30	Drought consistently alters the composition of soil fungal and bacterial communities in grasslands from two continents. Global Change Biology, 2018, 24, 2818-2827.	4.2	221
31	How ecologists define drought, and why we should do better. Global Change Biology, 2019, 25, 3193-3200.	4.2	219
32	Woody plant proliferation in North American drylands: A synthesis of impacts on ecosystem carbon balance. Journal of Geophysical Research, 2011, 116, .	3.3	218
33	Exotic plant species in a C 4 -dominated grassland: invasibility, disturbance, and community structure. Oecologia, 1999, 120, 605-612.	0.9	204
34	Responses of Soil Respiration to Clipping and Grazing in a Tallgrass Prairie. Journal of Environmental Quality, 1998, 27, 1539-1548.	1.0	196
35	Intra-annual rainfall variability and grassland productivity: can the past predict the future?. Plant Ecology, 2006, 184, 65-74.	0.7	185
36	Variability in leaf optical properties among 26 Species From A Broad Range Of Habitats. American Journal of Botany, 1998, 85, 940-946.	0.8	184

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37	Dominance not richness determines invasibility of tallgrass prairie. Oikos, 2004, 106, 253-262.	1.2	184
38	Soil water partitioning contributes to species coexistence in tallgrass prairie. Oikos, 2007, 116, 1017-1029.	1.2	162
39	Intra-seasonal precipitation patterns and above-ground productivity in three perennial grasslands. Journal of Ecology, 2007, 95, 780-788.	1.9	160
40	Contrasting aboveâ€•and belowground sensitivity of three Great Plains grasslands to altered rainfall regimes. Global Change Biology, 2015, 21, 335-344.	4.2	141
41	Global change effects on plant communities are magnified by time and the number of global change factors imposed. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 17867-17873.	3.3	141
42	Change in dominance determines herbivore effects on plant biodiversity. Nature Ecology and Evolution, 2018, 2, 1925-1932.	3.4	140
43	Asynchrony among local communities stabilises ecosystem function of metacommunities. Ecology Letters, 2017, 20, 1534-1545.	3.0	136
44	Pushing precipitation to the extremes in distributed experiments: recommendations for simulating wet and dry years. Global Change Biology, 2017, 23, 1774-1782.	4.2	132
45	Unexpected patterns of sensitivity to drought in three semi-arid grasslands. Oecologia, 2012, 169, 845-852.	0.9	121
46	Past, Present, and Future Roles of Long-Term Experiments in the LTER Network. BioScience, 2012, 62, 377-389.	2.2	116
47	Stoichiometric homeostasis predicts plant species dominance, temporal stability, and responses to global change. Ecology, 2015, 96, 2328-2335.	1.5	106
48	POSTâ€BURN DIFFERENCES IN SOLAR RADIATION, LEAF TEMPERATURE AND WATER STRESS INFLUENCING PRODUCTION IN A LOWLAND TALLGRASS PRAIRIE. American Journal of Botany, 1984, 71, 220-227.	0.8	105
49	Water vapour fluxes and their impact under elevated CO 2 in a C4â€tallgrass prairie. Global Change Biology, 1997, 3, 189-195.	4.2	105
50	A TENâ€YEAR RECORD OF ABOVEGROUND BIOMASS IN A KANSAS TALLGRASS PRAIRIE: EFFECTS OF FIRE AND TOPOGRAPHIC POSITION. American Journal of Botany, 1986, 73, 1509-1515.	0.8	103
51	Consequences of shrub expansion in mesic grassland: Resource alterations and graminoid responses. Journal of Vegetation Science, 2003, 14, 487-496.	1.1	99
52	Trait selection and community weighting are key to understanding ecosystem responses to changing precipitation regimes. Functional Ecology, 2018, 32, 1746-1756.	1.7	94
53	Increased photosynthesis and water potentials in Silphium integrifolium galled by cynipid wasps. Oecologia, 1993, 93, 114-120.	0.9	90
54	Stomatal and photosynthetic responses to variable sunlight. Physiologia Plantarum, 1990, 78, 160-165.	2.6	88

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55	Plant Tolerance of Gall-Insect Attack and Gall-Insect Performance. Ecology, 1996, 77, 521-534.	1.5	85
56	Shifts in plant functional composition following longâ€term drought in grasslands. Journal of Ecology, 2019, 107, 2133-2148.	1.9	85
57	A TEN-YEAR RECORD OF ABOVEGROUND BIOMASS IN A KANSAS TALLGRASS PRAIRIE: EFFECTS OF FIRE AND TOPOGRAPHIC POSITION. , 1986, 73, 1509.		85
58	Regional Patterns in Carbon Cycling Across the Great Plains of North America. Ecosystems, 2005, 8, 106-121.	1.6	83
59	Warming and land use change concurrently erode ecosystem services in Tibet. Global Change Biology, 2018, 24, 5534-5548.	4.2	83
60	Climatic controls of aboveground net primary production in semi-arid grasslands along a latitudinal gradient portend low sensitivity to warming. Oecologia, 2015, 177, 959-969.	0.9	80
61	Soil Heterogeneity Effects on Tallgrass Prairie Community Heterogeneity: An Application of Ecological Theory to Restoration Ecology. Restoration Ecology, 2005, 13, 413-424.	1.4	78
62	Convergence and contingency in productionâ€“precipitation relationships in North American and South African C4 grasslands. Oecologia, 2006, 149, 456-464.	0.9	78
63	MILITARY TRAINING EFFECTS ON TERRESTRIAL AND AQUATIC COMMUNITIES ON A GRASSLAND MILITARY INSTALLATION. , 2003, 13, 432-442.		72
64	Plant community response to loss of large herbivores differs between North American and South African savanna grasslands. Ecology, 2014, 95, 808-816.	1.5	70
65	Legacy effects of a regional drought on aboveground net primary production in six central US grasslands. Plant Ecology, 2018, 219, 505-515.	0.7	66
66	Asymmetry in aboveâ€•and belowground productivity responses to N addition in a semiâ€arid temperate steppe. Global Change Biology, 2019, 25, 2958-2969.	4.2	63
67	Resolving the Dust Bowl paradox of grassland responses to extreme drought. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 22249-22255.	3.3	63
68	Precipitation amount and event size interact to reduce ecosystem functioning during dry years in a mesic grassland. Global Change Biology, 2020, 26, 658-668.	4.2	62
69	Differential responses of canopy nutrients to experimental drought along a natural aridity gradient. Ecology, 2018, 99, 2230-2239.	1.5	61
70	Does ecosystem sensitivity to precipitation at the siteâ€level conform to regionalâ€scale predictions?. Ecology, 2016, 97, 561-568.	1.5	59
71	Responses in stomatal conductance to elevated CO2 in 12 grassland species that differ in growth form. Plant Ecology, 1996, 125, 31-41.	1.2	58
72	Shifts in the dynamics of productivity signal ecosystem state transitions at the biomeâ€scale. Ecology Letters, 2018, 21, 1457-1466.	3.0	57

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73	The importance of extreme rainfall events and their timing in a semiâ€arid grassland. Journal of Ecology, 2020, 108, 2431-2443.	1.9	57
74	Moisture availability mediates the relationship between terrestrial gross primary production and solarâ€induced chlorophyll fluorescence: Insights from globalâ€scale variations. Global Change Biology, 2021, 27, 1144-1156.	4.2	57
75	Asymmetric responses of primary productivity to altered precipitation simulated by ecosystem models across three long-term grassland sites. Biogeosciences, 2018, 15, 3421-3437.	1.3	55
76	Rapid recovery of ecosystem function following extreme drought in a South African savanna grassland. Ecology, 2020, 101, e02983.	1.5	55
77	DETERMINANTS OF SOIL CO2FLUX FROM A SUB-HUMID GRASSLAND: EFFECT OF FIRE AND FIRE HISTORY. , 1998, 8, 760-770.		54
78	Precipitationâ€"productivity relationships and the duration of precipitation anomalies: An underappreciated dimension of climate change. Global Change Biology, 2021, 27, 1127-1140.	4.2	53
79	Drought timing differentially affects above- and belowground productivity in a mesic grassland. Plant Ecology, 2017, 218, 317-328.	0.7	52
80	Controls of Aboveground Net Primary Production in Mesic Savanna Grasslands: An Inter-Hemispheric Comparison. Ecosystems, 2009, 12, 982-995.	1.6	51
81	Rainfall manipulation experiments as simulated by terrestrial biosphere models: Where do we stand?. Global Change Biology, 2020, 26, 3336-3355.	4.2	50
82	Determinants of C3 forb growth and production in a C4 dominated grassland. Plant Ecology, 2001, 152, 93-100.	0.7	49
83	Biomass and density responses in tallgrass prairie legumes to annual fire and topographic position. American Journal of Botany, 1996, 83, 175-179.	0.8	48
84	Global environmental change and the nature of aboveground net primary productivity responses: insights from long-term experiments. Oecologia, 2015, 177, 935-947.	0.9	48
85	Altered rainfall patterns increase forb abundance and richness in native tallgrass prairie. Scientific Reports, 2016, 6, 20120.	1.6	48
86	A reality check for climate change experiments: Do they reflect the real world?. Ecology, 2018, 99, 2145-2151.	1.5	48
87	Is leaf-level photosynthesis related to plant success in a highly productive grassland?. Oecologia, 1998, 117, 40-46.	0.9	46
88	Fire and grazing impacts on silica production and storage in grass dominated ecosystems. Biogeochemistry, 2010, 97, 263-278.	1.7	46
89	Responses to fire differ between <scp>S</scp>outh <scp>A</scp>frican and <scp>N</scp>orth <scp>A</scp>merican grassland communities. Journal of Vegetation Science, 2014, 25, 793-804.	1.1	44
90	Ecological genomics: making the leap from model systems in the lab to native populations in the field. Frontiers in Ecology and the Environment, 2007, 5, 19-24.	1.9	43

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91	The immediate and prolonged effects of climate extremes on soil respiration in a mesic grassland. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 1034-1044.	1.3	43
92	Species asynchrony stabilises productivity under extreme drought across Northern China grasslands. Journal of Ecology, 2021, 109, 1665-1675.	1.9	42
93	POST-BURN DIFFERENCES IN SOLAR RADIATION, LEAF TEMPERATURE AND WATER STRESS INFLUENCING PRODUCTION IN A LOWLAND TALLGRASS PRAIRIE. , 1984, 71, 220.		42
94	Standardized metrics are key for assessing drought severity. Global Change Biology, 2020, 26, e1-e3.	4.2	41
95	Extending the osmometer method for assessing drought tolerance in herbaceous species. Oecologia, 2019, 189, 353-363.	0.9	40
96	Compound hydroclimatic extremes in a semiâ€arid grassland: Drought, deluge, and the carbon cycle. Global Change Biology, 2022, 28, 2611-2621.	4.2	40
97	C3 woody plant expansion in a C4 grassland: are grasses and shrubs functionally distinct?. American Journal of Botany, 2001, 88, 1818-1823.	0.8	38
98	Assessing community and ecosystem sensitivity to climate change â€“ toward a more comparative approach. Journal of Vegetation Science, 2017, 28, 235-237.	1.1	38
99	Effects of extreme drought on plant nutrient uptake and resorption in rhizomatous vs bunchgrass-dominated grasslands. Oecologia, 2018, 188, 633-643.	0.9	35
100	Plant traits and soil fertility mediate productivity losses under extreme drought in C₃ grasslands. Ecology, 2021, 102, e03465.	1.5	35
101	Decadal-scale shifts in soil hydraulic properties as induced by altered precipitation. Science Advances, 2019, 5, eaau6635.	4.7	34
102	Is a drought a drought in grasslands? Productivity responses to different types of drought. Oecologia, 2021, 197, 1017-1026.	0.9	34
103	Seasonal changes in GPP/SIF ratios and their climatic determinants across the Northern Hemisphere. Global Change Biology, 2021, 27, 5186-5197.	4.2	34
104	Competition and coexistence in grassland codominants: responses to neighbour removal and resource availability. Canadian Journal of Botany, 2004, 82, 450-460.	1.2	32
105	Fire frequency drives habitat selection by a diverse herbivore guild impacting topâ€“down control of plant communities in an African savanna. Oikos, 2016, 125, 1636-1646.	1.2	32
106	Shifting seasonal patterns of water availability: ecosystem responses to an unappreciated dimension of climate change. New Phytologist, 2022, 233, 119-125.	3.5	32
107	Loss of a large grazer impacts savanna grassland plant communities similarly in North America and South Africa. Oecologia, 2014, 175, 293-303.	0.9	31
108	Rangeland Responses to Predicted Increases in Drought Extremity. Rangelands, 2016, 38, 191-196.	0.9	31

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109	Long term experimental drought alters community plant trait variation, not trait means, across three semiarid grasslands. Plant and Soil, 2019, 442, 343-353.	1.8	31
110	Mass ratio effects underlie ecosystem responses to environmental change. Journal of Ecology, 2020, 108, 855-864.	1.9	31
111	Asymmetric responses of ecosystem productivity to rainfall anomalies vary inversely with mean annual rainfall over the conterminous United States. Global Change Biology, 2020, 26, 6959-6973.	4.2	31
112	CONTRASTING STOMATAL RESPONSES TO VARIABLE SUNLIGHT IN TWO SUBALPINE HERBS. American Journal of Botany, 1990, 77, 226-231.	0.8	30
113	Title is missing!. Plant Ecology, 2002, 163, 15-22.	0.7	30
114	Community stability does not preclude ecosystem sensitivity to chronic resource alteration. Functional Ecology, 2012, 26, 1231-1233.	1.7	30
115	Rainfall variability has minimal effects on grassland recovery from repeated grazing. Journal of Vegetation Science, 2014, 25, 36-44.	1.1	30
116	LEAF GAS EXCHANGE IN QUERCUS MACROCARPA (FAGACEAE): RAPID STOMATAL RESPONSES TO VARIABILITY IN SUNLIGHT IN A TREE GROWTH FORM. American Journal of Botany, 1992, 79, 599-604.	0.8	29
117	Variation in gene expression of<i>Andropogon gerardii</i>in response to altered environmental conditions associated with climate change. Journal of Ecology, 2010, 98, 374-383.	1.9	29
118	RESPONSE OF ANDROPOGON GERARDII (POACEAE) TO FIREâ€INDUCED HIGH VS. LOW IRRADIANCE ENVIRONMENTS IN TALLGRASS PRAIRIE: LEAF STRUCTURE AND PHOTOSYNTHETIC PIGMENTS. American Journal of Botany, 1985, 72, 1668-1671.	0.8	28
119	Response of plant functional traits of Leymus chinensis to extreme drought in Inner Mongolia grasslands. Plant Ecology, 2019, 220, 141-149.	0.7	28
120	Does ecosystem sensitivity to precipitation at the site-level conform to regional-scale predictions?. Ecology, 2016, 97, 561-8.	1.5	28
121	Herbivore size matters for productivityâ€"richness relationships in A frican savannas. Journal of Ecology, 2017, 105, 674-686.	1.9	27
122	The signature of sea surface temperature anomalies on the dynamics of semiarid grassland productivity. Ecosphere, 2017, 8, e02069.	1.0	27
123	Carbon exchange responses of a mesic grassland to an extreme gradient of precipitation. Oecologia, 2019, 189, 565-576.	0.9	27
124	Determinants of community compositional change are equally affected by global change. Ecology Letters, 2021, 24, 1892-1904.	3.0	27
125	Assessing precipitation, evapotranspiration, and <scp>NDVI</scp> as controls of U.S. Great Plains plant production. Ecosphere, 2019, 10, e02889.	1.0	26
126	Guidelines and considerations for designing field experiments simulating precipitation extremes in forest ecosystems. Methods in Ecology and Evolution, 2018, 9, 2310-2325.	2.2	24

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127	Lithologic controls on biogenic silica cycling in South African savanna ecosystems. Biogeochemistry, 2012, 108, 317-334.	1.7	23
128	Terrestrial Precipitation Analysis (<scp>TPA</scp>): A resource for characterizing longâ€term precipitation regimes and extremes. Methods in Ecology and Evolution, 2016, 7, 1396-1401.	2.2	23
129	Deconstructing precipitation variability: Rainfall event size and timing uniquely alter ecosystem dynamics. Journal of Ecology, 2021, 109, 3356-3369.	1.9	23
130	Biomass and density responses in tallgrass prairie legumes to annual fire and topographic position. , 1996, 83, 175.		23
131	Growth dynamics of oak seedlings (Quercus macrocarpa Michx. and Quercus muhlenbergii Engelm.) from gallery forests: implications for forest expansion into grasslands. Trees - Structure and Function, 2001, 15, 271-277.	0.9	22
132	Facilitation by leguminous shrubs increases along a precipitation gradient. Functional Ecology, 2018, 32, 203-213.	1.7	21
133	Shared Drivers but Divergent Ecological Responses: Insights from Long-Term Experiments in Mesic Savanna Grasslands. BioScience, 2016, 66, 666-682.	2.2	20
134	Precipitation manipulation and terrestrial carbon cycling: The roles of treatment magnitude, experimental duration and local climate. Global Ecology and Biogeography, 2021, 30, 1909-1921.	2.7	20
135	Consequences of shrub expansion in mesic grassland: Resource alterations and graminoid responses. , 2003, 14, 487.		20
136	Stomatal and photosynthetic responses to shade in sorghum, soybean and eastern gamagrass. Physiologia Plantarum, 1995, 94, 613-620.	2.6	19
137	Drought timing, not previous drought exposure, determines sensitivity of two shortgrass species to water stress. Oecologia, 2018, 188, 965-975.	0.9	19
138	Dominant tree species of the Colorado Rockies have divergent physiological and morphological responses to warming. Forest Ecology and Management, 2017, 402, 234-240.	1.4	18
139	LEAF GAS EXCHANGE IN QUERCUS MACROCARPA (FAGACEAE): RAPID STOMATAL RESPONSES TO VARIABILITY IN SUNLIGHT IN A TREE GROWTH FORM. , 1992, 79, 599.		18
140	Plant growth and aboveground production respond differently to late-season deluges in a semi-arid grassland. Oecologia, 2019, 191, 673-683.	0.9	17
141	Experimental drought reâ€ordered assemblages of rootâ€associated fungi across North American grasslands. Journal of Ecology, 2021, 109, 776-792.	1.9	17
142	How big is big enough? Surprising responses of a semiarid grassland to increasing deluge size. Global Change Biology, 2021, 27, 1157-1169.	4.2	17
143	Photosynthesis phenology, as defined by solar-induced chlorophyll fluorescence, is overestimated by vegetation indices in the extratropical Northern Hemisphere. Agricultural and Forest Meteorology, 2022, 323, 109027.	1.9	17
144	Photosynthetic and stomatal responses of <i>Avena sativa</i> (poaceae) to a variable light environment. American Journal of Botany, 1993, 80, 1369-1373.	0.8	16

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145	Abiotic constraints on the establishment of Quercus seedlings in grassland. Global Change Biology, 2003, 9, 266-275.	4.2	16
146	Stability of grassland soil C and N pools despite 25â€‰years of an extreme climatic and disturbance regime. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 1934-1945.	1.3	16
147	CONTRASTING STOMATAL RESPONSES TO VARIABLE SUNLIGHT IN TWO SUBALPINE HERBS. , 1990, 77, 226.		16
148	Early season cuticular conductance and gas exchange in two oaks near the western edge of their range. Trees - Structure and Function, 1996, 10, 403-409.	0.9	14
149	RESPONSE OF ANDROPOGON GERARDII (POACEAE) TO FIRE-INDUCED HIGH VS. LOW IRRADIANCE ENVIRONMENTS IN TALLGRASS PRAIRIE: LEAF STRUCTURE AND PHOTOSYNTHETIC PIGMENTS. , 1985, 72, 1668.		14
150	Differential responses of grassland community nonstructural carbohydrate to experimental drought along a natural aridity gradient. Science of the Total Environment, 2022, 822, 153589.	3.9	14
151	Functional diversity response to geographic and experimental precipitation gradients varies with plant community type. Functional Ecology, 2021, 35, 2119-2132.	1.7	13
152	Contrasting responses of plant above and belowground biomass carbon pools to extreme drought in six grasslands spanning an aridity gradient. Plant and Soil, 2022, 473, 167-180.	1.8	13
153	Understanding ecosystems of the future will require more than realistic climate change experiments â€“ A response to Korell et al.. Global Change Biology, 2020, 26, e6-e7.	4.2	12
154	Why Coordinated Distributed Experiments Should Go Global. BioScience, 2021, 71, 918-927.	2.2	12
155	Teaching with principles: toward more effective pedagogy in ecology. Ecosphere, 2010, 1, 1-10.	1.0	10
156	Effects of Compounded Precipitation Pattern Intensification and Drought Occur Belowground in a Mesic Grassland. Ecosystems, 2022, 25, 1265-1278.	1.6	10
157	Repeated extreme droughts decrease root production, but not the potential for postâ€drought recovery of root production, in a mesic grassland. Oikos, 2023, 2023, .	1.2	10
158	Photosynthetic and Stomatal Responses of Avena sativa (Poaceae) to a Variable Light Environment. American Journal of Botany, 1993, 80, 1369.	0.8	9
159	Patterns and determinants of potential carbon gain in the C3 evergreen Yucca glauca (Liliaceae) in a C4 grassland. American Journal of Botany, 2000, 87, 230-236.	0.8	9
160	Functional ecology: integrative research in the modern age of ecology. Functional Ecology, 2013, 27, 1-4.	1.7	8
161	Doubleâ€blind peer reviewâ€"An experiment. Functional Ecology, 2019, 33, 4-6.	1.7	8
162	Experimentally derived nitrogen critical loads for northern Great Plains vegetation. Ecological Applications, 2019, 29, e01915.	1.8	8

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163	Temporal variability in production is not consistently affected by global change drivers across herbaceous-dominated ecosystems. Oecologia, 2020, 194, 735-744.	0.9	8
164	Codominant grasses differ in gene expression under experimental climate extremes in native tallgrass prairie. PeerJ, 2018, 6, e4394.	0.9	7
165	Carbon and water relations of juvenile Quercus species in tallâ€grass prairie. Journal of Vegetation Science, 2001, 12, 807-816.	1.1	6
166	Higher temperatures increase growth rates of Rocky Mountain montane tree seedlings. Ecosphere, 2021, 12, e03414.	1.0	6
167	Temperature induced shifts in leaf water relations and growth efficiency indicate climate change may limit aspen growth in the Colorado Rockies. Environmental and Experimental Botany, 2019, 159, 132-137.	2.0	5
168	Does ecosystem sensitivity to precipitation at the site-level conform to regional-scale predictions?. Ecology, 2016, 97, 561.	1.5	5
169	Are regional precipitationâ€"productivity relationships robust to decadal-scale dry period?. Journal of Plant Ecology, 2022, 15, 711-720.	1.2	5
170	Fire history as a key determinant of grassland soil CO2 flux. Plant and Soil, 2021, 460, 579-592.	1.8	4
171	Functional ecology: the evolution of an ecological journal. Functional Ecology, 2015, 29, 1-2.	1.7	2
172	Semiarid grasslands and extreme precipitation events: do experimental results scale to the landscape?. Ecology, 2021, 102, e03437.	1.5	2
173	Functional ecology: moving forward into a new era of publishing. Functional Ecology, 2014, 28, 291-292.	1.7	1
174	Early season cuticular conductance and gas exchange in two oaks near the western edge of their range. , 1996, 10, 403.		1
175	30ÂYears of <i>Functional Ecology</i>. Functional Ecology, 2017, 31, 4-6.	1.7	0