Jeffrey Dukes

List of Publications by Year
in descending order

129 papers	17,984 citations	28190 55 h-index	17055 122 g-index
164 all docs	164 docs citations	164 times ranked	19212 citing authors

#	Article	IF	Citations
1	Mechanisms underlying the impacts of exotic plant invasions. Proceedings of the Royal Society B: Biological Sciences, 2003, 270, 775-781.	1.2	1,313
2	Does global change increase the success of biological invaders?. Trends in Ecology and Evolution, 1999, 14, 135-139.	4.2	1,254
3	Progressive Nitrogen Limitation of Ecosystem Responses to Rising Atmospheric Carbon Dioxide. BioScience, 2004, 54, 731.	2.2	1,092
4	Five Potential Consequences of Climate Change for Invasive Species. Conservation Biology, 2008, 22, 534-543.	2.4	997
5	Global threats from invasive alien species in the twenty-first century and national response capacities. Nature Communications, 2016, 7, 12485.	5.8	808
6	Plant invasion across space and time: factors affecting nonindigenous species success during four stages of invasion. New Phytologist, 2007, 176, 256-273.	3.5	762
7	ATMOSPHERIC SCIENCE: Nitrogen and Climate Change. Science, 2003, 302, 1512-1513.	6.0	735
8	Will extreme climatic events facilitate biological invasions?. Frontiers in Ecology and the Environment, 2012, 10, 249-257.	1.9	402
9	Plant respiration and photosynthesis in globalâ€scale models: incorporating acclimation to temperature and <scp><scp>CO</scp></scp>₂. Global Change Biology, 2013, 19, 45-63.	4.2	401
10	Responses of insect pests, pathogens, and invasive plant species to climate change in the forests of northeastern North America: What can we predict?This article is one of a selection of papers from NE Forests 2100: A Synthesis of Climate Change Impacts on Forests of the Northeastern US and Eastern Canada.. Canadian Journal of Forest Research, 2009, 39, 231-248.	0.8	393
11	Effects of soil moisture on the temperature sensitivity of heterotrophic respiration vary seasonally in an oldâ€field climate change experiment. Global Change Biology, 2012, 18, 336-348.	4.2	367
12	Simple additive effects are rare: a quantitative review of plant biomass and soil process responses to combined manipulations of <scp><scp>CO₂</scp></scp> and temperature. Global Change Biology, 2012, 18, 2681-2693.	4.2	365
13	A roadmap for improving the representation of photosynthesis in Earth system models. New Phytologist, 2017, 213, 22-42.	3.5	365
14	Global variability in leaf respiration in relation to climate, plant functional types and leaf traits. New Phytologist, 2015, 206, 614-636.	3.5	350
15	Responses of Grassland Production to Single and Multiple Global Environmental Changes. PLoS Biology, 2005, 3, e319.	2.6	308
16	Temperature response of soil respiration largely unaltered with experimental warming. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 13797-13802.	3.3	308
17	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
18	Overyielding among plant functional groups in a long-term experiment. Ecology Letters, 2003, 7, 95-105.	3.0	289

#	Article	IF	Citations
19	Biodiversity and invasibility in grassland microcosms. Oecologia, 2001, 126, 563-568.	0.9	281
20	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
21	Poised to prosper? A crossâ€system comparison of climate change effects on native and nonâ€native species performance. Ecology Letters, 2013, 16, 261-270.	3.0	256
22	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
23	Modeling the effects of temperature and moisture on soil enzyme activity: Linking laboratory assays to continuous field data. Soil Biology and Biochemistry, 2012, 55, 85-92.	4.2	219
24	Global change, global trade, and the next wave of plant invasions. Frontiers in Ecology and the Environment, 2012, 10, 20-28.	1.9	195
25	Global patterns and substrateâ€based mechanisms of theÂterrestrial nitrogen cycle. Ecology Letters, 2016, 19, 697-709.	3.0	192
26	SPECIES COMPOSITION AND DIVERSITY AFFECT GRASSLAND SUSCEPTIBILITY AND RESPONSE TO INVASION. , 2002, 12, 602-617.		180
27	Coordinated approaches to quantify longâ€term ecosystem dynamics in response to global change. Global Change Biology, 2011, 17, 843-854.	4.2	165
28	Microbial responses to multi-factor climate change: effects on soil enzymes. Frontiers in Microbiology, 2013, 4, 146.	1.5	164
29	Temperature acclimation of photosynthesis and respiration: A key uncertainty in the carbon cycleâ€climate feedback. Geophysical Research Letters, 2015, 42, 8624-8631.	1.5	160
30	Disruption of ecosystem processes in western North America by invasive species. Revista Chilena De Historia Natural, 2004, 77, .	0.5	159
31	Interactive responses of oldâ€field plant growth and composition to warming and precipitation. Global Change Biology, 2012, 18, 1754-1768.	4.2	157
32	Impacts of Invasive Species on Ecosystem Services. , 2008, , 217-237.		154
33	Impacts of the invasive plant Fallopia japonica (Houtt.) on plant communities and ecosystem processes. Biological Invasions, 2010, 12, 1243-1252.	1.2	140
34	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
35	Functional composition controls invasion success in a California serpentine grassland. Journal of Ecology, 2010, 98, 764-777.	1.9	125
36	Effects of warming and altered precipitation on plant and nutrient dynamics of a New England salt marsh. Ecological Applications, 2009, 19, 1758-1773.	1.8	123

#	Article	IF	Citations
37	Predicting soil carbon loss with warming. Nature, 2018, 554, E4-E5.	13.7	122
38	Burning Buried Sunshine: Human Consumption of Ancient Solar Energy. Climatic Change, 2003, 61, 31-44.	1.7	116
39	Current Practices and Future Opportunities for Policy on Climate Change and Invasive Species. Conservation Biology, 2008, 22, 585-592.	2.4	116
40	Adjusting the lens of invasion biology to focus on the impacts of climate-driven range shifts. Nature Climate Change, 2020, 10, 398-405.	8.1	116
41	The added complications of climate change: understanding and managing biodiversity and ecosystems. Frontiers in Ecology and the Environment, 2013, 11, 494-501.	1.9	114
42	Foliar temperature acclimation reduces simulated carbon sensitivity to climate. Nature Climate Change, 2016, 6, 407-411.	8.1	114
43	Modelled effects of precipitation on ecosystem carbon and water dynamics in different climatic zones. Global Change Biology, 2008, 14, 2365-2379.	4.2	112
44	Increased sensitivity to climate change in disturbed ecosystems. Nature Communications, 2015, 6, 6682.	5.8	111
45	Urgent need for a common metric to make precipitation manipulation experiments comparable. New Phytologist, 2012, 195, 518-522.	3.5	97
46	Changes in the structural composition and reactivity of <i>Acer rubrum</i> leaf litter tannins exposed to warming and altered precipitation: climatic stressâ€induced tannins are more reactive. New Phytologist, 2011, 191, 132-145.	3.5	92
47	Shortâ€term acclimation to warmer temperatures accelerates leaf carbon exchange processes across plant types. Global Change Biology, 2017, 23, 4840-4853.	4.2	91
48	Strong response of an invasive plant species (<i>Centaurea solstitialis</i>L.) to global environmental changes. , 2011, 21, 1887-1894.		85
49	The responses of soil and rhizosphere respiration to simulated climatic changes vary by season. Ecology, 2013, 94, 403-413.	1.5	85
50	A unified approach for quantifying invasibility and degree of invasion. Ecology, 2015, 96, 2613-2621.	1.5	82
51	The effect of experimental warming and precipitation change on proteolytic enzyme activity: positive feedbacks to nitrogen availability are not universal. Global Change Biology, 2012, 18, 2617-2625.	4.2	80
52	Experiments to confront the environmental extremes of climate change. Frontiers in Ecology and the Environment, 2015, 13, 219-225.	1.9	79
53	Can current moisture responses predict soil CO₂ efflux under altered precipitation regimes? A synthesis of manipulation experiments. Biogeosciences, 2014, 11, 2991-3013.	1.3	74
54	Community Response to Extreme Drought (<scp>CRED</scp>): a framework for droughtâ€induced shifts in plantâ€“plant interactions. New Phytologist, 2019, 222, 52-69.	3.5	74

#	Article	IF	Citations
55	Warming and drought reduce temperature sensitivity of nitrogen transformations. Global Change Biology, 2013, 19, 662-676.	4.2	70
56	Rising atmospheric CO ₂ is reducing the protein concentration of a floral pollen source essential for North American bees. Proceedings of the Royal Society B: Biological Sciences, 2016, 283, 20160414.	1.2	69
57	Labile compounds in plant litter reduce the sensitivity of decomposition to warming and altered precipitation. New Phytologist, 2013, 200, 122-133.	3.5	68
58	Do maize models capture the impacts of heat and drought stresses on yield? Using algorithm ensembles to identify successful approaches. Global Change Biology, 2016, 22, 3112-3126.	4.2	63
59	Warming and drought differentially influence the production and resorption of elemental and metabolic nitrogen pools in <i><scp>Q</scp>uercus rubra</i>. Global Change Biology, 2015, 21, 4177-4195.	4.2	59
60	Linking Plant Invasions to Global Environmental Change. , 2007, , 93-102.		57
61	Responses of a California annual grassland to litter manipulation. Journal of Vegetation Science, 2008, 19, 605-612.	1.1	57
62	Productivity and complementarity in grassland microcosms of varying diversity. Oikos, 2001, 94, 468-480.	1.2	56
63	Triose phosphate limitation in photosynthesis models reduces leaf photosynthesis and global terrestrial carbon storage. Environmental Research Letters, 2018, 13, 074025.	2.2	56
64	Soil bacterial community responses to altered precipitation and temperature regimes in an old field grassland are mediated by plants. FEMS Microbiology Ecology, 2018, 94, .	1.3	54
65	Climateâ€"biosphere interactions in a more extreme world. New Phytologist, 2014, 202, 356-359.	3.5	51
66	Globally consistent influences of seasonal precipitation limit grassland biomass response to elevated CO2. Nature Plants, 2019, 5, 167-173.	4.7	51
67	Climate Influences the Content and Chemical Composition of Foliar Tannins in Green and Senesced Tissues of Quercus rubra. Frontiers in Plant Science, 2017, 8, 423.	1.7	50
68	Integrated assessment of biological invasions. Ecological Applications, 2014, 24, 25-37.	1.8	46
69	Title is missing!. Plant Ecology, 2002, 160, 225-234.	0.7	44
70	Warming alters potential enzyme activity but precipitation regulates chemical transformations in grass litter exposed to simulated climatic changes. Soil Biology and Biochemistry, 2014, 75, 102-112.	4.2	44
71	Rainfall variability and nitrogen addition synergistically reduce plant diversity in a restored tallgrass prairie. Journal of Applied Ecology, 2016, 53, 579-586.	1.9	42
72	Microbial dormancy promotes microbial biomass and respiration across pulses of drying-wetting stress. Soil Biology and Biochemistry, 2018, 116, 237-244.	4.2	41

#	Article	IF	Citations
73	The ecology of peace: preparing Colombia for new political and planetary climates. Frontiers in Ecology and the Environment, 2018, 16, 525-531.	1.9	41
74	Diverse mechanisms for CO2 effects on grassland litter decomposition. Global Change Biology, 2000, 6, 145-154.	4.2	40
75	Integrated Monitoring and Information Systems for Managing Aquatic Invasive Species in a Changing Climate. Conservation Biology, 2008, 22, 575-584.	2.4	40
76	How do climate change experiments alter plotâ€scale climate?. Ecology Letters, 2019, 22, 748-763.	3.0	39
77	Shifting Impacts of Climate Change. Advances in Ecological Research, 2016, 55, 437-473.	1.4	36
78	Effects of Climate Change on Invasive Species. , 2021, , 57-83.		36
79	What have we learned from global change manipulative experiments in China? A meta-analysis. Scientific Reports, 2015, 5, 12344.	1.6	35
80	Combined impacts of prolonged drought and warming on plant size and foliar chemistry. Annals of Botany, 2019, 124, 41-52.	1.4	34
81	Relationships between urban tree communities and the biomes in which they reside. Applied Vegetation Science, 2013, 16, 8-20.	0.9	31
82	Agricultural Weed Research: A Critique and Two Proposals. Weed Science, 2014, 62, 672-678.	0.8	30
83	Field experiments underestimate aboveground biomass response to drought. Nature Ecology and Evolution, 2022, 6, 540-545.	3.4	30
84	Changes in the Size of the Active Microbial Pool Explain Short-Term Soil Respiratory Responses to Temperature and Moisture. Frontiers in Microbiology, 2016, 7, 524.	1.5	29
85	Drivers of leaf carbon exchange capacity across biomes at the continental scale. Ecology, 2018, 99, 1610-1620.	1.5	29
86	Railways redistribute plant species in mountain landscapes. Journal of Applied Ecology, 2021, 58, 1967-1980.	1.9	27
87	Increasing the spatial and temporal impact of ecological research: A roadmap for integrating a novel terrestrial process into an Earth system model. Global Change Biology, 2022, 28, 665-684.	4.2	27
88	Elevated Carbon Dioxide and Litter Decomposition in California Annual Grasslands: Which Mechanisms Matter?. Ecosystems, 2002, 5, 171-183.	1.6	25
89	Global environmental changes more frequently offset than intensify detrimental effects of biological invasions. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	25
90	Biophysical consequences of photosynthetic temperature acclimation for climate. Journal of Advances in Modeling Earth Systems, 2017, 9, 536-547.	1.3	24

#	Article	IF	Citations
91	Reviews and syntheses: Soil responses to manipulated precipitation changes â€“ an assessment of meta-analyses. Biogeosciences, 2020, 17, 3859-3873.	1.3	24
92	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
93	Relationships among land use, soil texture, species richness, and soil carbon in Midwestern tallgrass prairie, CRP and crop lands. Agriculture, Ecosystems and Environment, 2016, 216, 237-246.	2.5	23
94	Shrubland primary production and soil respiration diverge along European climate gradient. Scientific Reports, 2017, 7, 43952.	1.6	23
95	Nonâ€additive effects of invasive tree litter shift seasonal N release: a potential invasion feedback. Oikos, 2014, 123, 1101-1111.	1.2	22
96	Understanding the combined impacts of weeds and climate change on crops. Environmental Research Letters, 2021, 16, 034043.	2.2	22
97	Warming increases the sensitivity of seedling growth capacity to rainfall in six temperate deciduous tree species. AoB PLANTS, 2018, 10, ply003.	1.2	21
98	Agricultural impacts of climate change in Indiana and potential adaptations. Climatic Change, 2020, 163, 2005-2027.	1.7	21
99	Nitrification kinetics and ammoniaâ€oxidizing community respond to warming and altered precipitation. Ecosphere, 2015, 6, 1-17.	1.0	19
100	Tree leaf out response to temperature: comparing field observations, remote sensing, and a warming experiment. International Journal of Biometeorology, 2014, 58, 1251-1257.	1.3	17
101	Microbial dormancy improves predictability of soil respiration at the seasonal time scale. Biogeochemistry, 2019, 144, 103-116.	1.7	16
102	Nighttime warming enhances ecosystem carbonâ€use efficiency in a temperate steppe. Functional Ecology, 2020, 34, 1721-1730.	1.7	16
103	Ecosystem Responses to Warming and Interacting Global Change Factors. Global Change - the IGBP Series, 2007, , 23-36.	2.1	16
104	Increasing Forest Carbon Sequestration through Cooperation and Shared Strategies between China and the United States. Environmental Science & Technology, 2011, 45, 2033-2034.	4.6	15
105	Rainfall variability counteracts N addition by promoting invasive Lonicera maackii and extending phenology in prairie. Ecological Applications, 2017, 27, 1555-1563.	1.8	15
106	LCE: leaf carbon exchange data set for tropical, temperate, and boreal species of North and Central America. Ecology, 2017, 98, 2978-2978.	1.5	15
107	Short-term thermal acclimation of dark respiration is greater in non-photosynthetic than in photosynthetic tissues. AoB PLANTS, 2019, 11, plz064.	1.2	15
108	Leaf-Level Gas Exchange and Foliar Chemistry of Common Old-Field Species Responding to Warming and Precipitation Treatments. International Journal of Plant Sciences, 2012, 173, 957-970.	0.6	14

#	Article	IF	Citations
109	Tomorrow's plant communities: different, but how?. New Phytologist, 2007, 176, 235-237.	3.5	12
110	Corrigendum to "Can current moisture responses predict soil CO₂ efflux under altered precipitation regimes? A synthesis of manipulation experiments". Biogeosciences, 2014, 11, 3307-3308.	1.3	10
111	Responses of aboveground C and N pools to rainfall variability and nitrogen deposition are mediated by seasonal precipitation and plant community dynamics. Biogeochemistry, 2016, 129, 389-400.	1.7	10
112	Temporal variability in the thermal requirements for vegetation phenology on the Tibetan plateau and its implications for carbon dynamics. Climatic Change, 2016, 138, 617-632.	1.7	10
113	Longâ€term propagule pressure overwhelms initial community determination of invader success. Ecosphere, 2019, 10, e02826.	1.0	10
114	No Accession-Specific Effect of Rhizosphere Soil Communities on the Growth and Competition of Arabidopsis thaliana Accessions. PLoS ONE, 2011, 6, e27585.	1.1	7
115	Characterizing the drivers of seedling leaf gas exchange responses to warming and altered precipitation: indirect and direct effects. AoB PLANTS, 2016, 8, .	1.2	7
116	No acclimation: instantaneous responses to temperature maintain homeostatic photosynthetic rates under experimental warming across a precipitation gradient in Ulmus americana. AoB PLANTS, 2020, 12, .	1.2	6
117	Seasonality of Tropical Photosynthesis: A Pantropical Map of Correlations With Precipitation and Radiation and Comparison to Model Outputs. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2020JG006123.	1.3	6
118	Engagement 2.0: increasing our collective impact. Frontiers in Ecology and the Environment, 2016, 14, 403-403.	1.9	5
119	Understory plant composition and nitrogen transformations resistant to changes in seasonal precipitation. Ecosphere, 2019, 10, e02747.	1.0	5
120	Peace and the environment at the crossroads: Elections in a conflict-troubled biodiversity hotspot. Environmental Science and Policy, 2022, 135, 77-85.	2.4	5
121	Demographic analysis of invasible habitat fraction identifies contextâ€dependent roles of resource availability and biotic resistance in determining invasion success. Journal of Ecology, 2021, 109, 714-726.	1.9	4
122	Undermining Colombia's peace and environment. Science, 2021, 373, 289-290.	6.0	4
123	Introduction to the Indiana Climate Change Impacts Assessment: overview of the process and context. Climatic Change, 2020, 163, 1869-1879.	1.7	3
124	Impacts of Invasive Species on Forest and Grassland Ecosystem Processes in the United States. , 2021, , 41-55.		3
125	Responses to Changing Atmosphere and Climate. , 2007, , 218-229.		3
126	Distribution of Terrestrial Ecosystems and Changes in Plant Community Composition. , 2014, , 341-347.		1

#	Article	IF	Citations
127	Fresh perspectives on timeless questions. Frontiers in Ecology and the Environment, 2007, 5, 334-335.	1.9	0
128	Call for new AAAS harassment policy. Science, 2018, 361, 984-984.	6.0	0
129	Increased rainfall variability and nitrogen deposition accelerate succession along a common sere. Ecosphere, 2021, 12, e03313.	1.0	0