Chris Field

List of Publications by Year
in descending order

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248 papers	57,517 citations	1371 108 h-index	1347 223 g-index
251 all docs	251 docs citations	251 times ranked	49294 citing authors

#	Article	IF	Citations
1	Primary Production of the Biosphere: Integrating Terrestrial and Oceanic Components. , 1998, 281, 237-240.		4,598
2	Terrestrial ecosystem production: A process model based on global satellite and surface data. Global Biogeochemical Cycles, 1993, 7, 811-841.	4.9	2,290
3	Revisiting the Commons: Local Lessons, Global Challenges. Science, 1999, 284, 278-282.	12.6	1,994
4	The velocity of climate change. Nature, 2009, 462, 1052-1055.	27.8	1,930
5	Energy balance closure at FLUXNET sites. Agricultural and Forest Meteorology, 2002, 113, 223-243.	4.8	1,877
6	Contributions to accelerating atmospheric CO ₂ growth from economic activity, carbon intensity, and efficiency of natural sinks. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 18866-18870.	7.1	1,770
7	Global and regional drivers of accelerating CO2 emissions. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 10288-10293.	7.1	1,426
8	Vulnerability of Permafrost Carbon to Climate Change: Implications for the Global Carbon Cycle. BioScience, 2008, 58, 701-714.	4.9	1,379
9	Modeling the Exchanges of Energy, Water, and Carbon Between Continents and the Atmosphere. Science, 1997, 275, 502-509.	12.6	1,280
10	Net-zero emissions energy systems. Science, 2018, 360, .	12.6	1,165
11	Recent patterns and mechanisms of carbon exchange by terrestrial ecosystems. Nature, 2001, 414, 169-172.	27.8	1,162
12	Plant Responses to Multiple Environmental Factors. BioScience, 1987, 37, 49-57.	4.9	1,109
13	Progressive Nitrogen Limitation of Ecosystem Responses to Rising Atmospheric Carbon Dioxide. BioScience, 2004, 54, 731.	4.9	1,092
14	Crop Yield Gaps: Their Importance, Magnitudes, and Causes. Annual Review of Environment and Resources, 2009, 34, 179-204.	13.4	1,038
15	Global net primary production: Combining ecology and remote sensing. Remote Sensing of Environment, 1995, 51, 74-88.	11.0	1,016
16	Consistent Land- and Atmosphere-Based U.S. Carbon Sink Estimates. Science, 2001, 292, 2316-2320.	12.6	746
17	ATMOSPHERIC SCIENCE: Nitrogen and Climate Change. Science, 2003, 302, 1512-1513.	12.6	735
18	Towards an ecological understanding of biological nitrogen fixation. Biogeochemistry, 2002, 57, 1-45.	3.5	719

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19	Emissions pathways, climate change, and impacts on California. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 12422-12427.	7.1	709
20	Stomatal responses to increased CO2: implications from the plant to the global scale. Plant, Cell and Environment, 1995, 18, 1214-1225.	5.7	702
21	A unifying framework for dinitrogen fixation in the terrestrial biosphere. Nature, 2008, 454, 327-330.	27.8	648
22	Biomass energy: the scale of the potential resource. Trends in Ecology and Evolution, 2008, 23, 65-72.	8.7	637
23	Carbon emissions from tropical deforestation and regrowth based on satellite observations for the 1980s and 1990s. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 14256-14261.	7.1	562
24	The Global Potential of Bioenergy on Abandoned Agriculture Lands. Environmental Science & Technology, 2008, 42, 5791-5794.	10.0	546
25	The roles of hydraulic and carbon stress in a widespread climate-induced forest die-off. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 233-237.	7.1	539
26	Biospheric Primary Production During an ENSO Transition. Science, 2001, 291, 2594-2597.	12.6	523
27	Comparison of Radiative and Physiological Effects of Doubled Atmospheric CO2 on Climate. Science, 1996, 271, 1402-1406.	12.6	516
28	Canopy near-infrared reflectance and terrestrial photosynthesis. Science Advances, 2017, 3, e1602244.	10.3	506
29	Grassland Responses to Global Environmental Changes Suppressed by Elevated CO2. Science, 2002, 298, 1987-1990.	12.6	498
30	Changes in Ecologically Critical Terrestrial Climate Conditions. Science, 2013, 341, 486-492.	12.6	473
31	The fate of carbon in grasslands under carbon dioxide enrichment. Nature, 1997, 388, 576-579.	27.8	444
32	The contribution of terrestrial sources and sinks to trends in the seasonal cycle of atmospheric carbon dioxide. Global Biogeochemical Cycles, 1997, 11, 535-560.	4.9	435
33	Diverse responses of phenology to global changes in a grassland ecosystem. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 13740-13744.	7.1	397
34	ENVIRONMENT: Tropical Forests and Climate Policy. Science, 2007, 316, 985-986.	12.6	386
35	Fire history and the global carbon budget: a 1ox 1o fire history reconstruction for the 20th century. Global Change Biology, 2005, 11, 398-420.	9.5	363
36	Nitrogen limitation of microbial decomposition in a grassland under elevated CO2. Nature, 2001, 409, 188-191.	27.8	348

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37	Climate-driven risks to the climate mitigation potential of forests. Science, 2020, 368, .	12.6	346
38	Climate change and ecosystems: threats, opportunities and solutions. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20190104.	4.0	333
39	Remote sensing of the xanthophyll cycle and chlorophyll fluorescence in sunflower leaves and canopies. Oecologia, 1990, 85, 1-7.	2.0	332
40	Leaf carbon isotope and mineral composition in subtropical plants along an irradiance cline. Oecologia, 1986, 70, 520-526.	2.0	326
41	GRASSLAND RESPONSES TO THREE YEARS OF ELEVATED TEMPERATURE, CO2, PRECIPITATION, AND N DEPOSITION. Ecological Monographs, 2003, 73, 585-604.	5.4	326
42	Tree mortality predicted from drought-induced vascular damage. Nature Geoscience, 2015, 8, 367-371.	12.9	317
43	Protecting climate with forests. Environmental Research Letters, 2008, 3, 044006.	5.2	313
44	Combining satellite data and biogeochemical models to estimate global effects of human-induced land cover change on carbon emissions and primary productivity. Global Biogeochemical Cycles, 1999, 13, 803-815.	4.9	309
45	Responses of Grassland Production to Single and Multiple Global Environmental Changes. PLoS Biology, 2005, 3, e319.	5.6	308
46	Toward an allocation scheme for global terrestrial carbon models. Global Change Biology, 1999, 5, 755-770.	9.5	307
47	Drought's legacy: multiyear hydraulic deterioration underlies widespread aspen forest dieâ€off and portends increased future risk. Global Change Biology, 2013, 19, 1188-1196.	9.5	307
48	Climate as a risk factor for armed conflict. Nature, 2019, 571, 193-197.	27.8	306
49	Managed retreat as a response to natural hazardÂrisk. Nature Climate Change, 2017, 7, 364-370.	18.8	297
50	Carnegie Airborne Observatory-2: Increasing science data dimensionality via high-fidelity multi-sensor fusion. Remote Sensing of Environment, 2012, 124, 454-465.	11.0	283
51	Variation in foliar Î´13C in Hawaiian Metrosideros polymorpha: a case of internal resistance?. Oecologia, 1990, 84, 362-370.	2.0	271
52	Ammonia-oxidizing bacteria respond to multifactorial global change. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 15136-15141.	7.1	270
53	Nitrogen and phosphorus constrain the CO2 fertilization of global plant biomass. Nature Climate Change, 2019, 9, 684-689.	18.8	269
54	Feedbacks of Terrestrial Ecosystems to Climate Change. Annual Review of Environment and Resources, 2007, 32, 1-29.	13.4	268

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55	Additive effects of simulated climate changes, elevated CO2, and nitrogen deposition on grassland diversity. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 7650-7654.	7.1	266
56	Projections of future meteorological drought and wet periods in the Amazon. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 13172-13177.	7.1	265
57	Relationships Among Leaf Construction Cost, Leaf Longevity, and Light Environment in Rain-Forest Plants of the Genus Piper. American Naturalist, 1989, 133, 198-211.	2.1	260
58	The IPCC AR5 guidance note on consistent treatment of uncertainties: a common approach across the working groups. Climatic Change, 2011, 108, 675-691.	3.6	259
59	Changing feedbacks in the climateâ€“biosphere system. Frontiers in Ecology and the Environment, 2008, 6, 313-320.	4.0	247
60	Impacts of future climate change on California perennial crop yields: Model projections with climate and crop uncertainties. Agricultural and Forest Meteorology, 2006, 141, 208-218.	4.8	246
61	Historical effects of temperature and precipitation on California crop yields. Climatic Change, 2007, 81, 187-203.	3.6	240
62	Assessing community type, plant biomass, pigment composition, and photosynthetic efficiency of aquatic vegetation from spectral reflectance. Remote Sensing of Environment, 1993, 46, 110-118.	11.0	228
63	Commentary: Carbon Metabolism of the Terrestrial Biosphere: A Multitechnique Approach for Improved Understanding. Ecosystems, 2000, 3, 115-130.	3.4	225
64	Photographic estimation of photosynthetically active radiation: evaluation of a computerized technique. Oecologia, 1987, 73, 525-532.	2.0	220
65	Predicting responses of photosynthesis and root fraction to elevated [CO2]a: interactions among carbon, nitrogen, and growth*. Plant, Cell and Environment, 1994, 17, 1195-1204.	5.7	212
66	Direct impacts on local climate of sugar-cane expansion in Brazil. Nature Climate Change, 2011, 1, 105-109.	18.8	208
67	CO2 alters water use, carbon gain, and yield for the dominant species in a natural grassland. Oecologia, 1994, 98, 257-262.	2.0	207
68	Carbon 13 exchanges between the atmosphere and biosphere. Global Biogeochemical Cycles, 1997, 11, 507-533.	4.9	206
69	Increases in early season ecosystem uptake explain recent changes in the seasonal cycle of atmospheric CO2at high northern latitudes. Geophysical Research Letters, 1999, 26, 2765-2768.	4.0	206
70	Satellite estimates of productivity and light use efficiency in United States agriculture, 1982-98. Global Change Biology, 2002, 8, 722-735.	9.5	203
71	Risk management and climate change. Nature Climate Change, 2013, 3, 447-450.	18.8	203
72	A model of biogeochemical cycles of carbon, nitrogen, and phosphorus including symbiotic nitrogen fixation and phosphatase production. Global Biogeochemical Cycles, 2007, 21, .	4.9	200

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73	Direct climate effects of perennial bioenergy crops in the United States. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 4307-4312.	7.1	199
74	Terrestrial gross primary production: Using NIR_V to scale from site to globe. Global Change Biology, 2019, 25, 3731-3740.	9.5	196
75	Increasing net primary production in China from 1982 to 1999. Frontiers in Ecology and the Environment, 2003, 1, 293-297.	4.0	195
76	Greater Transportation Energy and GHG Offsets from Bioelectricity Than Ethanol. Science, 2009, 324, 1055-1057.	12.6	190
77	Linking definitions, mechanisms, and modeling of drought-induced tree death. Trends in Plant Science, 2012, 17, 693-700.	8.8	186
78	Rise in carbon dioxide changes soil structure. Nature, 1999, 400, 628-628.	27.8	175
79	Artificial climate warming positively affects arbuscular mycorrhizae but decreases soil aggregate water stability in an annual grassland. Oikos, 2002, 97, 52-58.	2.7	174
80	The future of bioenergy. Global Change Biology, 2020, 26, 274-286.	9.5	173
81	Microbial communities and their responses to simulated global change fluctuate greatly over multiple years. Global Change Biology, 2012, 18, 2256-2269.	9.5	172
82	Energy partitioning between latent and sensible heat flux during the warm season at FLUXNET sites. Water Resources Research, 2002, 38, 30-1-30-11.	4.2	169
83	Planetary Opportunities: A Social Contract for Global Change Science to Contribute to a Sustainable Future. BioScience, 2012, 62, 603-606.	4.9	169
84	Temporal evolution of the European forest sector carbon sink from 1950 to 1999. Global Change Biology, 2003, 9, 152-160.	9.5	168
85	Soil biota responses to long-term atmospheric CO 2 enrichment in two California annual grasslands. Oecologia, 1999, 119, 572-577.	2.0	167
86	Stimulation of grassland nitrogen cycling under carbon dioxide enrichment. Oecologia, 1997, 109, 149-153.	2.0	166
87	Coordinated approaches to quantify longâ€term ecosystem dynamics in response to global change. Global Change Biology, 2011, 17, 843-854.	9.5	165
88	Climate Change: New Dimensions in Disaster Risk, Exposure, Vulnerability, and Resilience. , 2012, , 25-64.		159
89	Photosynthetic light acclimation in two rainforest Piper species with different ecological amplitudes. Oecologia, 1987, 72, 449-456.	2.0	156
90	Simulated global changes alter phosphorus demand in annual grassland. Global Change Biology, 2007, 13, 2582-2591.	9.5	154

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91	Circadian Rhythms in Photosynthesis. Plant Physiology, 1991, 96, 831-836.	4.8	153
92	Substrate limitations for heterotrophs: Implications for models that estimate the seasonal cycle of atmospheric CO2. Global Biogeochemical Cycles, 1996, 10, 585-602.	4.9	153
93	The COVID-19 lockdowns: a window into the Earth System. Nature Reviews Earth & Environment, 2020, 1, 470-481.	29.7	153
94	Interannual variation in global-scale net primary production: Testing model estimates. Global Biogeochemical Cycles, 1997, 11, 367-392.	4.9	151
95	Tree Mortality in Gap Models: Application to Climate Change. Climatic Change, 2001, 51, 509-540.	3.6	151
96	Rightsizing carbon dioxide removal. Science, 2017, 356, 706-707.	12.6	150
97	Postfire response of North American boreal forest net primary productivity analyzed with satellite observations. Global Change Biology, 2003, 9, 1145-1157.	9.5	147
98	Detecting changes in soil carbon in CO2 enrichment experiments. Plant and Soil, 1995, 187, 135-145.	3.7	134
99	Negative Xylem Pressures in Plants: A Test of the Balancing Pressure Technique. Science, 1995, 270, 1193-1194.	12.6	133
100	Interactive effects of elevated CO2, N deposition and climate change on extracellular enzyme activity and soil density fractionation in a California annual grassland. Global Change Biology, 2005, 11, 1808-1815.	9.5	130
101	Plants reverse warming effect on ecosystem water balance. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 9892-9893.	7.1	129
102	Managed retreat through voluntary buyouts of flood-prone properties. Science Advances, 2019, 5, eaax8995.	10.3	126
103	Elevated CO2 increases belowground respiration in California grasslands. Oecologia, 1996, 108, 130-137.	2.0	125
104	Colocation opportunities for large solar infrastructures and agriculture in drylands. Applied Energy, 2016, 165, 383-392.	10.1	125
105	Assessing photosynthetic downregulation in sunflower stands with an optically-based model. Photosynthesis Research, 2001, 67, 113-125.	2.9	121
106	Nonlinear, interacting responses to climate limit grassland production under global change. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 10589-10594.	7.1	119
107	Leaf carbon isotope ratios of plants from a subtropical monsoon forest. Oecologia, 1987, 72, 109-114.	2.0	116
108	Responses of photosynthesis and carbohydrate-partitioning to limitations in nitrogen and water availability in field-grown sunflower*. Plant, Cell and Environment, 1991, 14, 963-970.	5.7	115

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109	Change in net primary production and heterotrophic respiration: How much is necessary to sustain the terrestrial carbon sink?. Global Biogeochemical Cycles, 1996, 10, 711-726.	4.9	115
110	Litter Decomposition in a California Annual Grassland: Interactions Between Photodegradation and Litter Layer Thickness. Ecosystems, 2008, 11, 545-554.	3.4	113
111	Determinants of photosynthetic capacity in six rainforest Piper species. Oecologia, 1987, 73, 222-230.	2.0	109
112	The photosynthesis - leaf nitrogen relationship at ambient and elevated atmospheric carbon dioxide: a meta-analysis. Global Change Biology, 1999, 5, 331-346.	9.5	109
113	Does Nitrogen Constrain Carbon Cycling, or Does Carbon Input Stimulate Nitrogen Cycling?1. Ecology, 2006, 87, 3-4.	3.2	109
114	Renewable energy potential on marginal lands in the United States. Renewable and Sustainable Energy Reviews, 2014, 29, 473-481.	16.4	109
115	Mangrove Biodiversity and Ecosystem Function. Global Ecology and Biogeography Letters, 1998, 7, 3.	0.6	106
116	GLOBAL CHANGE: Enhanced: Sharing the Garden. Science, 2001, 294, 2490-2491.	12.6	106
117	Natural climate solutions are not enough. Science, 2019, 363, 933-934.	12.6	104
118	The effects of chamber pressurization on soil-surface CO2 flux and the implications for NEE measurements under elevated CO2. Global Change Biology, 1999, 5, 269-281.	9.5	102
119	Nitrogen Controls on Climate Model Evapotranspiration. Journal of Climate, 2002, 15, 278-295.	3.2	99
120	Interactive effects of elevated CO2, N deposition and climate change on plant litter quality in a California annual grassland. Oecologia, 2005, 142, 465-473.	2.0	99
121	Methane removal and atmospheric restoration. Nature Sustainability, 2019, 2, 436-438.	23.7	96
122	Efficient use of land to meet sustainable energyÂneeds. Nature Climate Change, 2015, 5, 353-358.	18.8	95
123	Photocontrol of the Functional Coupling between Photosynthesis and Stomatal Conductance in the Intact Leaf. Plant Physiology, 1982, 70, 370-375.	4.8	94
124	Theoretical Impact of Changing Albedo on Precipitation at the Southernmost Boundary of the ITCZ in South America. Earth Interactions, 2012, 16, 1-14.	1.5	93
125	Interactions between Vegetation and Climate: Radiative and Physiological Effects of Doubled Atmospheric CO2. Journal of Climate, 1999, 12, 309-324.	3.2	91
126	Ecosystem Gas Exchange in a California Grassland: Seasonal Patterns and Implications for Scaling. Ecology, 1995, 76, 1940-1952.	3.2	89

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127	Soil microbiota in two annual grasslands: responses to elevated atmospheric CO 2. Oecologia, 2000, 124, 589-598.	2.0	87
128	Geospatial analysis of near-term potential for carbon-negative bioenergy in the United States. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 3290-3295.	7.1	82
129	Functional patterns in an annual grassland during an AVIRIS overflight. Remote Sensing of Environment, 1993, 44, 239-253.	11.0	81
130	Land-Use Efficiency of Big Solar. Environmental Science & Technology, 2014, 48, 1315-1323.	10.0	81
131	Unleashing expert judgment in assessment. Global Environmental Change, 2017, 44, 1-14.	7.8	78
132	CO 2 effects on the water budget of grassland microcosm communities. Global Change Biology, 1997, 3, 197-206.	9.5	77
133	Mapping the climate change challenge. Nature Climate Change, 2016, 6, 663-668.	18.8	75
134	Environmental and community controls on plant canopy chemistry in a Mediterranean-type ecosystem. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 6895-6900.	7.1	74
135	Title is missing!. Biogeochemistry, 1997, 36, 223-237.	3.5	73
136	Barriers and enablers for prescribed burns for wildfire management in California. Nature Sustainability, 2020, 3, 101-109.	23.7	73
137	Global carbon emissions from biomass burning in the 20th century. Geophysical Research Letters, 2006, 33, n/a-n/a.	4.0	72
138	Virus-induced differences in the response of oat plants to elevated carbon dioxide. Plant, Cell and Environment, 1997, 20, 178-188.	5.7	71
139	California perennial crops in a changing climate. Climatic Change, 2011, 109, 317-333.	3.6	69
140	Loss of whole-tree hydraulic conductance during severe drought and multi-year forest die-off. Oecologia, 2014, 175, 11-23.	2.0	69
141	Biophysical feedbacks between the Pleistocene megafauna extinction and climate: The first humanâ€induced global warming?. Geophysical Research Letters, 2010, 37, .	4.0	68
142	Interactive Effects of Fire, Elevated Carbon Dioxide, Nitrogen Deposition, and precipitation on a California Annual Grassland. Ecosystems, 2006, 9, 1066-1075.	3.4	67
143	Plant species-specific changes in root-inhabiting fungi in a California annual grassland: responses to elevated CO 2 and nutrients. Oecologia, 1998, 113, 252-259.	2.0	63
144	Evidence of Multiple Circadian Oscillators in Bean Plants. Journal of Biological Rhythms, 1992, 7, 105-113.	2.6	62

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145	Low and High Temperature Limits to PSII. Plant Physiology, 1989, 91, 1494-1500.	4.8	60
146	Effect of vineyard-scale climate variability on Pinot noir phenolic composition. Agricultural and Forest Meteorology, 2011, 151, 1556-1567.	4.8	59
147	High-tide flooding disrupts local economic activity. Science Advances, 2019, 5, eaau2736.	10.3	59
148	Environmental effects on circadian rhythms in photosynthesis and stomatal opening. Planta, 1993, 189, 369-376.	3.2	58
149	Responses of a California annual grassland to litter manipulation. Journal of Vegetation Science, 2008, 19, 605-612.	2.2	57
150	Testing interactive effects of global environmental changes on soil nitrogen cycling. Ecosphere, 2011, 2, art56.	2.2	56
151	Understanding and responding to danger from climate change: the role of key risks in the IPCC AR5. Climatic Change, 2016, 136, 427-444.	3.6	54
152	Plant Physiology of the â€œMissingâ€•Carbon Sink. Plant Physiology, 2001, 125, 25-28.	4.8	52
153	Forest biomass allometry in global land surface models. Global Biogeochemical Cycles, 2011, 25, n/a-n/a.	4.9	52
154	A dual isotope approach to isolate soil carbon pools of different turnover times. Biogeosciences, 2013, 10, 8067-8081.	3.3	52
155	Species-specific responses of plant communities to altered carbon and nutrient availability. Global Change Biology, 2001, 7, 435-450.	9.5	50
156	Tradeoffs and Synergies between Biofuel Production and Large Solar Infrastructure in Deserts. Environmental Science & Technology, 2014, 48, 3021-3030.	10.0	50
157	Climate Change Mitigation, Air Pollution, and Environmental Justice in California. Environmental Science & Technology, 2018, 52, 10829-10838.	10.0	49
158	Is carbon within the global terrestrial biosphere becoming more oxidized? Implications for trends in atmospheric O2. Global Change Biology, 2006, 12, 260-271.	9.5	48
159	Title is missing!. Plant and Soil, 2003, 254, 383-391.	3.7	47
160	Estimation of the carbon dioxide (CO₂) fertilization effect using growth rate anomalies of CO₂ and crop yields since 1961. Global Change Biology, 2008, 14, 39-45.	9.5	47
161	Potential impact of U.S. biofuels on regional climate. Geophysical Research Letters, 2009, 36, .	4.0	47
162	Can crop albedo be increased through the modification of leaf trichomes, and could this cool regional climate?. Climatic Change, 2011, 104, 379-387.	3.6	46

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163	Unprecedented rates of land-use transformation in modelled climate change mitigation pathways. Nature Sustainability, 2018, 1, 240-245.	23.7	46
164	Patterns of ecological specialization among microbial populations in the <scp>R</scp>ed <scp>S</scp>ea and diverse oligotrophic marine environments. Ecology and Evolution, 2013, 3, 1780-1797.	1.9	45
165	Fire affects the taxonomic and functional composition of soil microbial communities, with cascading effects on grassland ecosystem functioning. Global Change Biology, 2020, 26, 431-442.	9.5	45
166	Estimation of the CO₂ fertilization effect using growth rate anomalies of CO₂ and crop yields since 1961. Global Change Biology, 2008, 14, 451-451.	9.5	42
167	Boosted carbon emissions from Amazon deforestation. Geophysical Research Letters, 2009, 36, .	4.0	42
168	Constraints and enablers for increasing carbon storage in the terrestrial biosphere. Nature Reviews Earth & Environment, 2021, 2, 436-446.	29.7	42
169	BIOGEOCHEMICAL CYCLES:Enhanced: The Not-So-Big U.S. Carbon Sink. Science, 1999, 285, 544-545.	12.6	41
170	Root production and demography in a california annual grassland under elevated atmospheric carbon dioxide. Global Change Biology, 2002, 8, 841-850.	9.5	41
171	Production efficiency in sunflower: The role of water and nitrogen stress. Remote Sensing of Environment, 1997, 62, 176-188.	11.0	40
172	ELEVATED ATMOSPHERIC CO2INCREASES WATER AVAILABILITY IN A WATER-LIMITED GRASSLAND ECOSYSTEM. Journal of the American Water Resources Association, 1997, 33, 1033-1039.	2.4	40
173	Fungal root colonization responses in natural grasslands after longâ€term exposure to elevated atmospheric CO2. Global Change Biology, 1999, 5, 577-585.	9.5	40
174	Diverse mechanisms for CO2 effects on grassland litter decomposition. Global Change Biology, 2000, 6, 145-154.	9.5	40
175	Phylogenetic Structure of Foliar Spectral Traits in Tropical Forest Canopies. Remote Sensing, 2016, 8, 196.	4.0	40
176	INTERACTIONS BETWEEN CROWN STRUCTURE AND LIGHT ENVIRONMENT IN FIVE RAIN FOREST PIPER SPECIES. American Journal of Botany, 1988, 75, 1459-1471.	1.7	38
177	The use of CO2 flux measurements in models of the global terrestrial carbon budget. Global Change Biology, 1996, 2, 287-296.	9.5	38
178	Land-Cover and Surface Water Change Drive Large Albedo Increases in South America*. Earth Interactions, 2011, 15, 1-16.	1.5	38
179	Assessing photosynthetic radiation-use efficiency of emergent aquatic vegetation from spectral reflectance. Aquatic Botany, 1997, 58, 307-315.	1.6	37
180	Simulated hydroclimatic impacts of projected Brazilian sugarcane expansion. Geophysical Research Letters, 2013, 40, 972-977.	4.0	37

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181	Directions for Research on Climate and Conflict. Earth's Future, 2020, 8, e2020EF001532.	6.3	37
182	Biochemical Correlates of the Circadian Rhythm in Photosynthesis in Phaseolus vulgaris. Plant Physiology, 1991, 97, 415-419.	4.8	36
183	The global overlap of bioenergy and carbon sequestration potential. Climatic Change, 2018, 148, 1-10.	3.6	35
184	Global Change Could Amplify Fire Effects on Soil Greenhouse Gas Emissions. PLoS ONE, 2011, 6, e20105.	2.5	35
185	The Carbon Balance of an Old-growth Forest: Building Across Approaches. Ecosystems, 2004, 7, 525.	3.4	34
186	Climate extremes in California agriculture. Climatic Change, 2011, 109, 355-363.	3.6	34
187	Strengthened scientific support for the Endangerment Finding for atmospheric greenhouse gases. Science, 2019, 363, .	12.6	34
188	Long-term elevated CO2 shifts composition of soil microbial communities in a Californian annual grassland, reducing growth and N utilization potentials. Science of the Total Environment, 2019, 652, 1474-1481.	8.0	34
189	Quantifying the response of photosynthesis to changes in leaf nitrogen content and leaf mass per area in plants grown under atmospheric CO 2 enrichment. Plant, Cell and Environment, 1999, 22, 1109-1119.	5.7	33
190	Forest offsets partner climateâ€change mitigation with conservation. Frontiers in Ecology and the Environment, 2017, 15, 359-365.	4.0	31
191	Modeling the impact of carbon farming on land use in a New Zealand landscape. Environmental Science and Policy, 2014, 37, 1-10.	4.9	28
192	Linking vegetation patterns to environmental gradients and human impacts in a mediterranean-type island ecosystem. Landscape Ecology, 2014, 29, 1571-1585.	4.2	27
193	Effects of light quantity and quality and soil nitrogen status on nitrate reductase activity in rainforest species of the genus Piper. Oecologia, 1991, 86, 441-446.	2.0	26
194	Arbuscular mycorrhizal percent root infection and infection intensity of Bromus hordeaceus grown in elevated atmospheric CO₂. Mycologia, 1998, 90, 199-205.	1.9	25
195	Biophysical Properties of Cultivated Pastures in the Brazilian Savanna Biome: An Analysis in the Spatial-Temporal Domains Based on Ground and Satellite Data. Remote Sensing, 2013, 5, 307-326.	4.0	25
196	Harvesting Carbon from Eastern US Forests: Opportunities and Impacts of an Expanding Bioenergy Industry. Forests, 2012, 3, 370-397.	2.1	24
197	An Ecosystem-Scale Flux Measurement Strategy to Assess Natural Climate Solutions. Environmental Science & Technology, 2021, 55, 3494-3504.	10.0	24
198	Herbivore control of annual grassland composition in current and future environments. Ecology Letters, 2006, 9, 86-94.	6.4	23

#	Article	IF	Citations
199	GASTROPOD HERBIVORY IN RESPONSE TO ELEVATED CO2AND N ADDITION IMPACTS PLANT COMMUNITY COMPOSITION. Ecology, 2006, 87, 686-694.	3.2	22
200	Decoupled dimensions of leaf economic and anti-herbivore defense strategies in a tropical canopy tree community. Oecologia, 2018, 186, 765-782.	2.0	22
201	Experimental fire increases soil carbon dioxide efflux in a grassland longâ€term multifactor global change experiment. Global Change Biology, 2017, 23, 1975-1987.	9.5	20
202	Effects of CO2 and nutrient enrichment on tissue quality of two California annuals. Oecologia, 1996, 107, 433-440.	2.0	19
203	Fire history and plant community composition outweigh decadal multiâ€factor global change as drivers of microbial composition in an annual grassland. Journal of Ecology, 2020, 108, 611-625.	4.0	19
204	Contrasting leaf and ?ecosystem? CO2 and H2O exchange in Avena fatua monoculture: Growth at ambient and elevated CO2. Photosynthesis Research, 1995, 43, 263-271.	2.9	16
205	Accentuation of phosphorus limitation in Geranium dissectum by nitrogen: an ecological genomics study. Global Change Biology, 2008, 14, 1877-1890.	9.5	15
206	Orientation behavior of predaceous ground beetle species in response to volatile emissions identified from yellow starthistle damaged by an invasive slug. Arthropod-Plant Interactions, 2014, 8, 429-437.	1.1	15
207	Weather-based yield forecasts developed for 12 California crops. California Agriculture, 2006, 60, 211-215.	0.8	14
208	Water, Climate, Energy, Food: Inseparable & Indispensable. Daedalus, 2015, 144, 7-17.	1.8	13
209	Reduced sea ice protection period increases storm exposure in Kivalina, Alaska. Arctic Science, 2018, 4, 525-537.	2.3	13
210	Forest fires and climate-induced tree range shifts in the western US. Nature Communications, 2021, 12, 6583.	12.8	13
211	Added value from IPCC approval sessions. Science, 2015, 350, 36-36.	12.6	12
212	A multistage crucible of revision and approval shapes IPCC policymaker summaries. Science Advances, 2016, 2, e1600421.	10.3	12
213	Long-term warming in a Mediterranean-type grassland affects soil bacterial functional potential but not bacterial taxonomic composition. Npj Biofilms and Microbiomes, 2021, 7, 17.	6.4	12
214	Atmospheric variability contributes to increasing wildfire weather but not as much as global warming. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	12
215	Linking rainforest ecophysiology and microclimate through fusion of airborne LiDAR and hyperspectral imagery. Ecosphere, 2014, 5, 1-37.	2.2	11
216	Assessing Cumulative Effects of Climate Change Manipulations on Phosphorus Limitation in a Californian Grassland. Environmental Science & Technology, 2018, 52, 98-106.	10.0	11

#	Article	IF	Citations
217	Ammonium and nitrate uptake in gap, generalist and understory species of the genus Piper. Oecologia, 1992, 92, 207-214.	2.0	10
218	Influence of fertilization and atmospheric CO2 enrichment on ecosystem CO2 and H2O exchanges in single- and multiple-species grassland microcosms. Environmental and Experimental Botany, 1998, 40, 147-157.	4.2	10
219	The effects of elevated atmospheric CO2 on the amount and depth distribution of plant water uptake in a California annual grassland. Global Change Biology, 2006, 12, 578-587.	9.5	10
220	Integrating Stand and Soil Properties to Understand Foliar Nutrient Dynamics during Forest Succession Following Slash-and-Burn Agriculture in the Bolivian Amazon. PLoS ONE, 2014, 9, e86042.	2.5	10
221	Managing cropland and rangeland for climate mitigation: an expert elicitation on soil carbon in California. Climatic Change, 2018, 147, 633-646.	3.6	9
222	The limiting factors and regulatory processes that control the environmental responses of C3, C3â€“C4 intermediate, and C4 photosynthesis. Oecologia, 2021, 197, 841-866.	2.0	9
223	Catastrophic xylem failure: Tree life at the brink. Trends in Ecology and Evolution, 1989, 4, 124-126.	8.7	8
224	Linking 13C-based estimates of land and ocean sinks with predictions of carbon storage from CO2 fertilization of plant growth. Tellus, Series B: Chemical and Physical Meteorology, 1999, 51, 668-678.	1.6	7
225	Responses of temporal distribution of gastropods to individual and combined effects of elevated CO2 and N deposition in annual grassland. Acta Oecologica, 2007, 31, 343-352.	1.1	7
226	Energy assumptions were reasonable at the time, but not now. Nature, 2008, 453, 154-155.	27.8	6
227	In-field yellow starthistle (Centaurea solstitialis) volatile composition under elevated temperature and CO2 and implications for future control. Chemoecology, 2015, 25, 313-323.	1.1	6
228	Factors influencing adoption and rejection of fire hazard severity zone maps in California. International Journal of Disaster Risk Reduction, 2020, 50, 101686.	3.9	6
229	Plant Strategies and the Dynamics and Structure of Plant Communities. David Tilman. Princeton University Press, Princeton, NJ, 1988. xii, 360 pp., illus. $45; paper, $15.95. Monographs in Population Biology, vol. 26. Science, 1988, 241, 853-855.	12.6	5
230	Arctic chill for C02 uptake. Nature, 1994, 371, 472-473.	27.8	5
231	Forest management in the Sierra Nevada provides limited carbon storage potential: an expert elicitation. Ecosphere, 2018, 9, e02321.	2.2	5
232	Landscape scale variation in the hydrologic niche of California coast redwood. Ecography, 2020, 43, 1305-1315.	4.5	5
233	Leaf respiration in Piper species native to a Mexican rainforest. Physiologia Plantarum, 1991, 82, 85-92.	5.2	5
234	Leaf chamber methods for measuring photosynthesis under field conditions. International Journal of Remote Sensing, 1990, 5, 117-139.	1.0	4

#	Article	IF	Citations
235	Native and Nonâ€Native Community Assembly through Edaphic Manipulation: Implications for Habitat Creation and Restoration. Restoration Ecology, 2011, 19, 709-716.	2.9	4
236	Regression tools for CO2 inversions: application of a shrinkage estimator to process attribution. Tellus, Series B: Chemical and Physical Meteorology, 2006, 58, 279-292.	1.6	3
237	Smart adaptation in an era of rising climate risks. Bulletin of the Atomic Scientists, 2018, 74, 73-80.	0.6	3
238	Rightsizing expectations for bioenergy with carbon capture and storage toward ambitious climate goals. , 2019, , 63-84.		3
239	Reply to: Practical constraints on atmospheric methane removal. Nature Sustainability, 2020, 3, 358-359.	23.7	3
240	Hydraulic lift: Broadening the sphere of plant-environment interactions. Trends in Ecology and Evolution, 1988, 3, 189-190.	8.7	2
241	VEMAP: model shootout at the sub-continental corral. Trends in Ecology and Evolution, 1996, 11, 313-314.	8.7	1
242	Responseâ€"Energy Strategies and Efficiency. Science, 2009, 325, 812-813.	12.6	1
243	Environmental justice concerns in the use of offsets. Frontiers in Ecology and the Environment, 2019, 17, 144-144.	4.0	1
244	Bidirectional Interactions between the Biosphere and the Atmosphereâ€"introduction. Global Change Biology, 1998, 4, 459-460.	9.5	1
245	Why do Plants Grow at Different Rates?. Ecology, 1990, 71, 2397-2398.	3.2	0
246	Nutrient Limitations of Carbon Uptake: From Leaves to Landscapes in a California Rangeland Ecosystem. Rangeland Ecology and Management, 2010, 63, 120-127.	2.3	0
247	Reply to Rice and Henderson-Sellers: Survival of the fittest is not always the best option. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E2664-E2664.	7.1	0
248	Bob Scholes: Multifaceted scientist with a genius for synthesis. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, e2113299118.	7.1	0