Robert B Jackson

List of PR Articles by Year
in descending order

230 PR articles	66,283 PR citations	1021 100 PR h-index	727 225 g-index
272 documents	84322 doc citations	814 115 h-index	68567 citing authors

#	Article	IF	PR Citations
1	Global distribution of surface soil organic carbon in urban greenspaces. Nature Communications, 2024, 15, .	13.9	47
2	Borealâ€“Arctic wetland methane emissions modulated by warming and vegetation activity. Nature Climate Change, 2024, 14, 282-288.	18.5	48
3	Emergent temperature sensitivity of soil organic carbon driven by mineral associations. Nature Geoscience, 2024, 17, 205-212.	11.6	70
4	Communities conditionally support deployment of direct air capture for carbon dioxide removal in the United States. Communications Earth & Environment, 2024, 5, .	6.9	19
5	Nitrogen dioxide exposure, health outcomes, and associated demographic disparities due to gas and propane combustion by U.S. stoves. Science Advances, 2024, 10, .	11.0	30
6	Global nitrous oxide budget (1980â€“2020). Earth System Science Data, 2024, 16, 2543-2604.	9.0	120
7	Deep learning for detecting and characterizing oil and gas well pads in satellite imagery. Nature Communications, 2024, 15, .	13.9	13
8	Reconciling the bottom-up and top-down estimates of the methane chemical sink using multiple observations. Atmospheric Chemistry and Physics, 2023, 23, 789-807.	4.6	19
9	Modeled production, oxidation, and transport processes of wetland methane emissions in temperate, boreal, and Arctic regions. Global Change Biology, 2023, 29, 2313-2334.	11.1	32
10	Extensive global wetland loss over the past three centuries. Nature, 2023, 614, 281-286.	38.7	650
11	Global patterns of water storage in the rooting zones of vegetation. Nature Geoscience, 2023, , .	11.6	76
12	Gas and Propane Combustion from Stoves Emits Benzene and Increases Indoor Air Pollution. Environmental Science & Technology, 2023, 57, 9653-9663.	11.1	51
13	Soil carbon storage capacity of drylands under altered fire regimes. Nature Climate Change, 2023, 13, 1089-1094.	18.5	25
14	Impacts of climate change, population growth, and power sector decarbonization on urban building energy use. Nature Communications, 2023, 14, .	13.9	82
15	Upscaling Wetland Methane Emissions From the FLUXNETâ€CH4 Eddy Covariance Network (UpCH4 v1.0): Model Development, Network Assessment, and Budget Comparison. AGU Advances, 2023, 4, .	5.4	49
16	Characterizing Performance of Freshwater Wetland Methane Models Across Time Scales at FLUXNETâ€CH‹sub›4‹/sub› Sites Using Wavelet Analyses. Journal of Geophysical Research G: Biogeosciences, 2023, 128, .	2.9	9
17	Global Carbon Budget 2023. Earth System Science Data, 2023, 15, 5301-5369.	9.0	1,018
18	Regional trends and drivers of the global methane budget. Global Change Biology, 2022, 28, 182-200.	11.1	129

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19	Anthropogenic emission is the main contributor to the rise of atmospheric methane during 1993â€“2017. National Science Review, 2022, 9, .	9.8	41
20	Methane and NO_x Emissions from Natural Gas Stoves, Cooktops, and Ovens in Residential Homes. Environmental Science & Technology, 2022, 56, 2529-2539.	11.1	134
21	Contrasting responses of woody and grassland ecosystems to increased CO2 as water supply varies. Nature Ecology and Evolution, 2022, 6, 315-323.	10.3	33
22	Plant sizes and shapes above and belowground and their interactions with climate. New Phytologist, 2022, 235, 1032-1056.	8.1	138
23	Global temperature goals should determine the time horizons for greenhouse gas emission metrics. Environmental Research Letters, 2022, 17, 024019.	5.2	52
24	Definitions and methods to estimate regional land carbon fluxes for the second phase of the REgional Carbon Cycle Assessment and Processes Project (RECCAP-2). Geoscientific Model Development, 2022, 15, 1289-1316.	3.8	72
25	Global fossil carbon emissions rebound near pre-COVID-19 levels. Environmental Research Letters, 2022, 17, 031001.	5.2	79
26	Human wellâ€being and per capita energy use. Ecosphere, 2022, 13, .	2.6	37
27	Global Carbon Budget 2021. Earth System Science Data, 2022, 14, 1917-2005.	9.0	1,207
28	Land-use emissions embodied in international trade. Science, 2022, 376, 597-603.	36.4	149
29	A 130â€year global inventory of methane emissions from livestock: Trends, patterns, and drivers. Global Change Biology, 2022, 28, 5142-5158.	11.1	60
30	Global patterns of daily CO2 emissions reductions in the first year of COVID-19. Nature Geoscience, 2022, 15, 615-620.	11.6	113
31	Global stocks and capacity of mineral-associated soil organic carbon. Nature Communications, 2022, 13, .	13.9	594
32	Global Carbon Budget 2022. Earth System Science Data, 2022, 14, 4811-4900.	9.0	1,436
33	The global spectrum of plant form and function: enhanced species-level trait dataset. Scientific Data, 2022, 9, .	5.7	90
34	Soil organic carbon accumulation rates on Mediterranean abandoned agricultural lands. Science of the Total Environment, 2021, 759, 143535.	8.4	61
35	Ten new insights in climate science 2020 â€“ a horizon scan. Global Sustainability, 2021, 4, .	3.3	19
36	Orphaned oil and gas well stimulusâ€”Maximizing economic and environmental benefits. Elementa, 2021, 9, .	3.5	23

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37	Decadal changes in fire frequencies shift tree communities and functional traits. Nature Ecology and Evolution, 2021, 5, 504-512.	10.3	73
38	A trade-off between plant and soil carbon storage under elevated CO2. Nature, 2021, 591, 599-603.	38.7	501
39	COVID-19 and Emissions: An Opportunity for Sustainable Global Health. European Heart Journal, 2021, 42, 3415-3417.	2.3	2
40	Fossil CO2 emissions in the post-COVID-19 era. Nature Climate Change, 2021, 11, 197-199.	18.5	266
41	Substantial hysteresis in emergent temperature sensitivity of global wetland CH4 emissions. Nature Communications, 2021, 12, .	13.9	61
42	Plant rhizodeposition: A key factor for soil organic matter formation in stable fractions. Science Advances, 2021, 7, .	11.0	369
43	Identifying dominant environmental predictors of freshwater wetland methane fluxes across diurnal to seasonal time scales. Global Change Biology, 2021, 27, 3582-3604.	11.1	125
44	Lowâ€intensity frequent fires in coniferous forests transform soil organic matter in ways that may offset ecosystem carbon losses. Global Change Biology, 2021, 27, 3810-3823.	11.1	67
45	Root traits explain plant species distributions along climatic gradients yet challenge the nature of ecological trade-offs. Nature Ecology and Evolution, 2021, 5, 1123-1134.	10.3	129
46	Divergent controls of soil organic carbon between observations and process-based models. Biogeochemistry, 2021, 156, 5-17.	3.1	35
47	FLUXNET-CH₄: a global, multi-ecosystem dataset and analysis of methane seasonality from freshwater wetlands. Earth System Science Data, 2021, 13, 3607-3689.	9.0	142
48	Quantification of global and national nitrogen budgets for crop production. Nature Food, 2021, 2, 529-540.	17.3	228
49	Geochemical evidence for fugitive gas contamination and associated water quality changes in drinking-water wells from Parker County, Texas. Science of the Total Environment, 2021, 780, 146555.	8.4	17
50	Methane removal and the proportional reductions in surface temperature and ozone. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20210104.	2.6	65
51	Atmospheric methane removal: a research agenda. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200454.	2.6	91
52	Gap-filling eddy covariance methane fluxes: Comparison of machine learning model predictions and uncertainties at FLUXNET-CH4 wetlands. Agricultural and Forest Meteorology, 2021, 308-309, 108528.	5.4	63
53	Global and regional drivers of land-use emissions in 1961â€“2017. Nature, 2021, 589, 554-561.	38.7	477
54	Multiple constraints cause positive and negative feedbacks limiting grassland soil CO₂efflux under CO₂enrichment. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.6	7

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55	Global mapping of crop-specific emission factors highlights hotspots of nitrous oxide mitigation. Nature Food, 2021, 2, 886-893.	17.3	142
56	Magnitude and Uncertainty of Nitrous Oxide Emissions From North America Based on Bottomâ€Up and Topâ€Down Approaches: Informing Future Research and National Inventories. Geophysical Research Letters, 2021, 48, .	4.1	15
57	Fire effects on the persistence of soil organic matter and long-term carbon storage. Nature Geoscience, 2021, 15, 5-13.	11.6	158
58	Data-driven estimates of global nitrous oxide emissions from croplands. National Science Review, 2020, 7, 441-452.	9.8	151
59	TRY plant trait database â€“ enhanced coverage and open access. Global Change Biology, 2020, 26, 119-188.	11.1	1,765
60	A comprehensive quantification of global nitrous oxide sources and sinks. Nature, 2020, 586, 248-256.	38.7	1,553
61	Peak grain forecasts for the US High Plains amid withering waters. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 26145-26150.	7.6	23
62	Large stocks of peatland carbon and nitrogen are vulnerable to permafrost thaw. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 20438-20446.	7.6	541
63	Methane Emissions from Abandoned Oil and Gas Wells in California. Environmental Science & Technology, 2020, 54, 14617-14626.	11.1	61
64	Temporary reduction in daily global CO2 emissions during the COVID-19 forced confinement. Nature Climate Change, 2020, 10, 647-653.	18.5	1,712
65	Pervasive shifts in forest dynamics in a changing world. Science, 2020, 368, .	36.4	1,061
66	Climate-driven risks to the climate mitigation potential of forests. Science, 2020, 368, .	36.4	670
67	Agricultural acceleration of soil carbonate weathering. Global Change Biology, 2020, 26, 5988-6002.	11.1	89
68	Repeated fire shifts carbon and nitrogen cycling by changing plant inputs and soil decomposition across ecosystems. Ecological Monographs, 2020, 90, .	8.4	89
69	Global patterns of terrestrial nitrogen and phosphorus limitation. Nature Geoscience, 2020, 13, 221-226.	11.6	1,052
70	Advancing ecohydrology in the 21st century: A convergence of opportunities. Ecohydrology, 2020, 13, .	2.3	53
71	Quantifying Methane Emissions from Natural Gas Water Heaters. Environmental Science & Technology, 2020, 54, 5737-5745.	11.1	45
72	Climate change extremes and photovoltaic power output. Nature Sustainability, 2020, 4, 270-276.	21.7	192

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73	On the role of trend and variability in the hydroxyl radical (OH) in the global methane budget. Atmospheric Chemistry and Physics, 2020, 20, 13011-13022.	4.6	42
74	Influences of hydroxyl radicals (OH) on top-down estimates of the global and regional methane budgets. Atmospheric Chemistry and Physics, 2020, 20, 9525-9546.	4.6	35
75	The Global Methane Budget 2000â€“2017. Earth System Science Data, 2020, 12, 1561-1623.	9.0	1,984
76	Global Carbon Budget 2020. Earth System Science Data, 2020, 12, 3269-3340.	9.0	1,960
77	FLUXNET-CH4 Synthesis Activity: Objectives, Observations, and Future Directions. Bulletin of the American Meteorological Society, 2019, 100, 2607-2632.	0.0	180
78	The landscape of soil carbon data: Emerging questions, synergies and databases. Progress in Physical Geography, 2019, 43, 707-719.	3.0	32
79	Deep groundwater quality in the southwestern United States. Environmental Research Letters, 2019, 14, 034004.	5.2	27
80	Flexibility and intensity of global water use. Nature Sustainability, 2019, 2, 515-523.	21.7	165
81	Management intensification maintains wood production over multiple harvests in tropical Eucalyptus plantations. Ecological Applications, 2019, 29, .	3.9	10
82	Inter-model comparison of global hydroxyl radical (OH) distributions and their impact on atmospheric methane over the 2000â€“2016 period. Atmospheric Chemistry and Physics, 2019, 19, 13701-13723.	4.6	78
83	Persistent fossil fuel growth threatens the Paris Agreement and planetary health. Environmental Research Letters, 2019, 14, 121001.	5.2	184
84	Advancing Scientific Understanding of the Global Methane Budget in Support of the Paris Agreement. Global Biogeochemical Cycles, 2019, 33, 1475-1512.	5.2	103
85	Ungulates mediate tradeâ€offs between carbon storage and wildfire hazard in Mediterranean oak woodlands. Journal of Applied Ecology, 2019, 56, 699-710.	3.8	27
86	Global soil nitrous oxide emissions since the preindustrial era estimated by an ensemble of terrestrial biosphere models: Magnitude, attribution, and uncertainty. Global Change Biology, 2019, 25, 640-659.	11.1	328
87	CO₂ enrichment and soil type additively regulate grassland productivity. New Phytologist, 2019, 222, 183-192.	8.1	12
88	Monthly gridded data product of northern wetland methane emissions based on upscaling eddy covariance observations. Earth System Science Data, 2019, 11, 1263-1289.	9.0	100
89	Global Carbon Budget 2019. Earth System Science Data, 2019, 11, 1783-1838.	9.0	1,362
90	The need to protect fresh and brackish groundwater resources during unconventional oil and gas development. Current Opinion in Environmental Science and Health, 2018, 3, 1-7.	4.5	14

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91	Structural and Hydrogeological Controls on Hydrocarbon and Brine Migration into Drinking Water Aquifers in Southern New York. Ground Water, 2018, 56, 225-244.	2.1	37
92	Flowering in grassland predicted by <scp>CO</scp>₂ and resource effects on species aboveground biomass. Global Change Biology, 2018, 24, 1771-1781.	11.1	4
93	Coâ€occurring woody species have diverse hydraulic strategies and mortality rates during an extreme drought. Plant, Cell and Environment, 2018, 41, 576-588.	6.5	148
94	Global energy growth is outpacing decarbonization. Environmental Research Letters, 2018, 13, 120401.	5.2	233
95	Projected drought effects on the demography of Ashe juniper populations inferred from remote measurements of tree canopies. Plant Ecology, 2018, 219, 1259-1267.	1.3	7
96	Accounting for landscape heterogeneity improves spatial predictions of tree vulnerability to drought. New Phytologist, 2018, 220, 132-146.	8.1	35
97	Aerial Interyear Comparison and Quantification of Methane Emissions Persistence in the Bakken Formation of North Dakota, USA. Environmental Science & Technology, 2018, 52, 8947-8953.	11.1	33
98	Global Carbon Budget 2017. Earth System Science Data, 2018, 10, 405-448.	9.0	924
99	The geochemistry of naturally occurring methane and saline groundwater in an area of unconventional shale gas development. Geochimica Et Cosmochimica Acta, 2017, 208, 302-334.	4.8	137
100	Hydrologic regulation of plant rooting depth. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 10572-10577.	7.6	990
101	The Ecology of Soil Carbon: Pools, Vulnerabilities, and Biotic and Abiotic Controls. Annual Review of Ecology, Evolution, and Systematics, 2017, 48, 419-445.	8.8	965
102	Hydrologic resilience and Amazon productivity. Nature Communications, 2017, 8, .	13.9	47
103	Warning signs for stabilizing global CO ₂ emissions. Environmental Research Letters, 2017, 12, 110202.	5.2	190
104	Measuring canopy loss and climatic thresholds from an extreme drought along a fivefold precipitation gradient across Texas. Global Change Biology, 2017, 23, 5120-5135.	11.1	40
105	A global metaâ€analysis of soil phosphorus dynamics after afforestation. New Phytologist, 2017, 213, 181-192.	8.1	135
106	Variability and quasi-decadal changes in the methane budget over the period 2000â€“2012. Atmospheric Chemistry and Physics, 2017, 17, 11135-11161.	4.6	95
107	Impact to Underground Sources of Drinking Water and Domestic Wells from Production Well Stimulation and Completion Practices in the Pavillion, Wyoming, Field. Environmental Science & Technology, 2016, 50, 4524-4536.	11.1	158
108	Aerial Surveys of Elevated Hydrocarbon Emissions from Oil and Gas Production Sites. Environmental Science & Technology, 2016, 50, 4877-4886.	11.1	126

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109	Quantifying drought-induced tree mortality in the open canopy woodlands of central Texas. Remote Sensing of Environment, 2016, 181, 54-64.	11.2	50
110	State of knowledge about energy development impacts on North American rangelands: An integrative approach. Journal of Environmental Management, 2016, 180, 1-9.	8.4	20
111	Canopy foliation and area as predictors of mortality risk from episodic drought for individual trees of Ashe juniper. Plant Ecology, 2016, 217, 1105-1114.	1.3	9
112	Identification and characterization of high methane-emitting abandoned oil and gas wells. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 13636-13641.	7.6	181
113	Stabilization of new carbon inputs rather than old carbon decomposition determines soil organic carbon shifts following woody or herbaceous vegetation transitions. Plant and Soil, 2016, 409, 99-116.	3.4	35
114	Salinity of deep groundwater in California: Water quantity, quality, and protection. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 7768-7773.	7.6	95
115	Toward more realistic projections of soil carbon dynamics by Earth system models. Global Biogeochemical Cycles, 2016, 30, 40-56.	5.2	423
116	The global methane budget 2000â€“2012. Earth System Science Data, 2016, 8, 697-751.	9.0	919
117	The evolution of Devonian hydrocarbon gases in shallow aquifers of the northern Appalachian Basin: Insights from integrating noble gas and hydrocarbon geochemistry. Geochimica Et Cosmochimica Acta, 2015, 170, 321-355.	4.8	107
118	Quantifying surface albedo and other direct biogeophysical climate forcings of forestry activities. Global Change Biology, 2015, 21, 3246-3266.	11.1	178
119	Greater humification of belowground than aboveground biomass carbon into particulate soil organic matter in no-till corn and soybean crops. Soil Biology and Biochemistry, 2015, 85, 22-30.	10.6	126
120	Pre-drilling background groundwater quality in the Deep River Triassic Basin of central North Carolina, USA. Applied Geochemistry, 2015, 60, 3-13.	3.3	12
121	Soil carbon responses to past and future CO2 in three Texas prairie soils. Soil Biology and Biochemistry, 2015, 83, 66-75.	10.6	18
122	Methane emissions from natural gas infrastructure and use in the urban region of Boston, Massachusetts. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 1941-1946.	7.6	270
123	The Depths of Hydraulic Fracturing and Accompanying Water Use Across the United States. Environmental Science & Technology, 2015, 49, 8969-8976.	11.1	70
124	Plant community change mediates the response of foliar Î´15N to CO2 enrichment in mesic grasslands. Oecologia, 2015, 178, 591-601.	1.7	9
125	Elevated levels of diesel range organic compounds in groundwater near Marcellus gas operations are derived from surface activities. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 13184-13189.	7.6	139
126	Natural Gas Pipeline Replacement Programs Reduce Methane Leaks and Improve Consumer Safety. Environmental Science and Technology Letters, 2015, 2, 286-291.	9.0	65

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127	Biophysical and economic limits to negative CO2 emissions. Nature Climate Change, 2015, 6, 42-50.	18.5	1,247
128	Noble gases identify the mechanisms of fugitive gas contamination in drinking-water wells overlying the Marcellus and Barnett Shales. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 14076-14081.	7.6	427
129	Geophysical subsurface imaging for ecological applications. New Phytologist, 2014, 201, 1170-1175.	8.1	56
130	Nitrogen Fertilization Has a Stronger Effect on Soil Nitrogen-Fixing Bacterial Communities than Elevated Atmospheric CO ₂. Applied and Environmental Microbiology, 2014, 80, 3103-3112.	3.5	149
131	Fungal Community Responses to Past and Future Atmospheric CO ₂ Differ by Soil Type. Applied and Environmental Microbiology, 2014, 80, 7364-7377.	3.5	38
132	Biophysical forcings of landâ€use changes from potential forestry activities in North America. Ecological Monographs, 2014, 84, 329-353.	8.4	170
133	Shifting carbon pools along a plant cover gradient in woody encroached savannas of central Argentina. Forest Ecology and Management, 2014, 331, 71-78.	3.7	22
134	The Environmental Costs and Benefits of Fracking. Annual Review of Environment and Resources, 2014, 39, 327-362.	12.4	385
135	Natural Gas Pipeline Leaks Across Washington, DC. Environmental Science & Technology, 2014, 48, 2051-2058.	11.1	213
136	Air Impacts of Increased Natural Gas Acquisition, Processing, and Use: A Critical Review. Environmental Science & Technology, 2014, 48, 8349-8359.	11.1	197
137	Role of aquaporin activity in regulating deep and shallow root hydraulic conductance during extreme drought. Trees - Structure and Function, 2014, 28, 1323-1331.	1.8	50
138	Impacts of climate change drivers on C4 grassland productivity: scaling driver effects through the plant community. Journal of Experimental Botany, 2014, 65, 3415-3424.	5.1	34
139	A Critical Review of the Risks to Water Resources from Unconventional Shale Gas Development and Hydraulic Fracturing in the United States. Environmental Science & Technology, 2014, 48, 8334-8348.	11.1	1,369
140	Priming of soil organic carbon decomposition induced by corn compared to soybean crops. Soil Biology and Biochemistry, 2014, 75, 273-281.	10.6	106
141	Oil and gas wells and their integrity: Implications for shale and unconventional resource exploitation. Marine and Petroleum Geology, 2014, 56, 239-254.	3.3	412
142	Increasing atmospheric <scp>CO</scp>₂ reduces metabolic and physiological differences between isopreneâ€and nonâ€isopreneâ€emitting poplars. New Phytologist, 2013, 200, 534-546.	8.1	42
143	The Structure, Distribution, and Biomass of the World's Forests. Annual Review of Ecology, Evolution, and Systematics, 2013, 44, 593-622.	8.8	796
144	Increased stray gas abundance in a subset of drinking water wells near Marcellus shale gas extraction. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 11250-11255.	7.6	508

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145	Geochemical and isotopic variations in shallow groundwater in areas of the Fayetteville Shale development, north-central Arkansas. Applied Geochemistry, 2013, 35, 207-220.	3.3	142
146	Mapping urban pipeline leaks: Methane leaks across Boston. Environmental Pollution, 2013, 173, 1-4.	7.8	251
147	Geochemical evidence for possible natural migration of Marcellus Formation brine to shallow aquifers in Pennsylvania. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 11961-11966.	7.6	467
148	Revised calibration of the MBTâ€“CBT paleotemperature proxy based on branched tetraether membrane lipids in surface soils. Geochimica Et Cosmochimica Acta, 2012, 96, 215-229.	4.8	434
149	Global resorption efficiencies and concentrations of carbon and nutrients in leaves of terrestrial plants. Ecological Monographs, 2012, 82, 205-220.	8.4	642
150	A Global Analysis of Groundwater Recharge for Vegetation, Climate, and Soils. Vadose Zone Journal, 2012, 11, .	2.7	161
151	Ecosystem Impacts of Geoengineering: A Review for Developing a Science Plan. Ambio, 2012, 41, 350-369.	4.0	80
152	Shifts in soil organic carbon for plantation and pasture establishment in native forests and grasslands of South America. Global Change Biology, 2012, 18, 3237-3251.	11.1	126
153	Assessing the potential of wildfires as a sustainable bioenergy opportunity. GCB Bioenergy, 2012, 4, 634-641.	4.2	19
154	Analytical models of soil and litter decomposition: Solutions for mass loss and time-dependent decay rates. Soil Biology and Biochemistry, 2012, 50, 66-76.	10.6	102
155	Common bacterial responses in six ecosystems exposed to 10 years of elevated atmospheric carbon dioxide. Environmental Microbiology, 2012, 14, 1145-1158.	3.8	88
156	A Large and Persistent Carbon Sink in the Worldâ€™s Forests. Science, 2011, 333, 988-993.	36.4	6,941
157	Methane contamination of drinking water accompanying gas-well drilling and hydraulic fracturing. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 8172-8176.	7.6	1,086
158	Biophysical considerations in forestry for climate protection. Frontiers in Ecology and the Environment, 2011, 9, 174-182.	5.2	328
159	Research frontiers in the analysis of coupled biogeochemical cycles. Frontiers in Ecology and the Environment, 2011, 9, 74-80.	5.2	44
160	A synthesis of current knowledge on forests and carbon storage in the United States. , 2011, 21, 1902-1924.		406
161	Earth Stewardship: science for action to sustain the human-earth system. Ecosphere, 2011, 2, art89.	2.6	181
162	Responses of soil cellulolytic fungal communities to elevated atmospheric CO₂ are complex and variable across five ecosystems. Environmental Microbiology, 2011, 13, 2778-2793.	3.8	60

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163	Sources of increased N uptake in forest trees growing under elevated CO2: results of a large-scale 15N study. Global Change Biology, 2011, 17, 3338-3350.	11.1	43
164	Opportunities and barriers to pumped-hydro energy storage in the United States. Renewable and Sustainable Energy Reviews, 2011, 15, 839-844.	16.7	273
165	Atmospheric CO₂and soil extracellular enzyme activity: a meta-analysis and CO₂gradient experiment. Ecosphere, 2011, 2, art96.	2.6	62
166	Reâ€assessment of plant carbon dynamics at the Duke freeâ€air CO₂ enrichment site: interactions of atmospheric [CO₂] with nitrogen and water availability over stand development. New Phytologist, 2010, 185, 514-528.	8.1	259
167	Water uptake and hydraulic redistribution across large woody root systems to 20â€ƒm depth. Plant, Cell and Environment, 2010, 33, 2132-2148.	6.5	177
168	Root responses along a subambient to elevated CO₂ gradient in a C₃â€“C₄ grassland. Global Change Biology, 2010, 16, 454-468.	11.1	28
169	Greater seed production in elevated CO₂ is not accompanied by reduced seed quality in Pinus taeda L.. Global Change Biology, 2010, 16, 1046-1056.	11.1	55
170	Opportunities and Constraints for Forest Climate Mitigation. BioScience, 2010, 60, 698-707.	4.0	55
171	Estimation of longâ€term basin scale evapotranspiration from streamflow time series. Water Resources Research, 2010, 46, .	4.6	71
172	Stoichiometric controls on carbon, nitrogen, and phosphorus dynamics in decomposing litter. Ecological Monographs, 2010, 80, 89-106.	8.4	702
173	Increased belowground biomass and soil CO₂ fluxes after a decade of carbon dioxide enrichment in a warmâ€temperate forest. Ecology, 2009, 90, 3352-3366.	3.3	148
174	Future land use and land cover influences on regional biogenic emissions and air quality in the United States. Atmospheric Environment, 2009, 43, 5771-5780.	3.8	50
175	Primary Productivity and Water Balance of Grassland Vegetation on Three Soils in a Continuous CO2 Gradient: Initial Results from the Lysimeter CO2 Gradient Experiment. Ecosystems, 2009, 12, 699-714.	2.4	35
176	Sheep Grazing Decreases Organic Carbon and Nitrogen Pools in the Patagonian Steppe: Combination of Direct and Indirect Effects. Ecosystems, 2009, 12, 686-697.	2.4	116
177	Leaf isoprene emission rate as a function of atmospheric CO₂ concentration. Global Change Biology, 2009, 15, 1189-1200.	11.1	157
178	Risks to forest carbon offset projects in a changing climate. Forest Ecology and Management, 2009, 257, 2209-2216.	3.7	167
179	Grazing effects on belowground C and N stocks along a network of cattle exclosures in temperate and subtropical grasslands of South America. Global Biogeochemical Cycles, 2009, 23, .	5.2	123
180	A global metaâ€analysis of soil exchangeable cations, pH, carbon, and nitrogen with afforestation. Ecological Applications, 2009, 19, 2228-2241.	3.9	460

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181	Nonlinear rootâ€derived carbon sequestration across a gradient of nitrogen and phosphorous deposition in experimental mesocosms. Global Change Biology, 2008, 14, 1113-1124.	11.1	62
182	Soil carbon sequestration in a pine forest after 9 years of atmospheric CO₂ enrichment. Global Change Biology, 2008, 14, 2910-2922.	11.1	84
183	Fineâ€root respiration in a loblolly pine (Pinus taeda L.) forest exposed to elevated CO₂ and N fertilization. Plant, Cell and Environment, 2008, 31, 1663-1672.	6.5	62
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