

Robert B Jackson

List of Publications by Year in Descending Order

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Version: 2024-04-23

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

274
papers

56,193
citations

104
h-index

236
g-index

317
ext. papers

66,741
ext. citations

10.8
avg, IF

7.74
L-index

#	Paper	IF	Citations
274	Methane and NO Emissions From Natural Gas Stoves, Cooktops, and Ovens in Residential Homes.. <i>Environmental Science & Technology</i> , 2022 ,	10.3	7
273	Contrasting responses of woody and grassland ecosystems to increased CO as water supply varies.. <i>Nature Ecology and Evolution</i> , 2022 ,	12.3	2
272	Plant sizes and shapes above- and belowground and their interactions with climate.. <i>New Phytologist</i> , 2022 ,	9.8	4
271	Global temperature goals should determine the time horizons for greenhouse gas emission metrics. <i>Environmental Research Letters</i> , 2022 , 17, 024019	6.2	2
270	Anthropogenic emission is the main contributor to the rise of atmospheric methane during 1993-2017.. <i>National Science Review</i> , 2022 , 9, nwab200	10.8	4
269	Regional trends and drivers of the global methane budget. <i>Global Change Biology</i> , 2022 , 28, 182-200	11.4	14
268	Definitions and methods to estimate regional land carbon fluxes for the second phase of the REgional Carbon Cycle Assessment and Processes Project (RECCAP-2). <i>Geoscientific Model Development</i> , 2022 , 15, 1289-1316	6.3	6
267	Global fossil carbon emissions rebound near pre-COVID-19 levels. <i>Environmental Research Letters</i> , 2022 , 17, 031001	6.2	3
266	Fire effects on the persistence of soil organic matter and long-term carbon storage. <i>Nature Geoscience</i> , 2022 , 15, 5-13	18.3	7
265	Global Carbon Budget 2021. <i>Earth System Science Data</i> , 2022 , 14, 1917-2005	10.5	47
264	Land-use emissions embodied in international trade.. <i>Science</i> , 2022 , 376, 597-603	33.3	4
263	Magnitude and Uncertainty of Nitrous Oxide Emissions From North America Based on Bottom-Up and Top-Down Approaches: Informing Future Research and National Inventories. <i>Geophysical Research Letters</i> , 2021 , 48, e2021GL095264	4.9	1
262	Multiple constraints cause positive and negative feedbacks limiting grassland soil CO efflux under CO enrichment. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	3
261	A trade-off between plant and soil carbon storage under elevated CO. <i>Nature</i> , 2021 , 591, 599-603	50.4	78
260	COVID-19 and Emissions: An Opportunity for Sustainable Global Health. <i>European Heart Journal</i> , 2021 , 42, 3415-3417	9.5	0
259	Fossil CO2 emissions in the post-COVID-19 era. <i>Nature Climate Change</i> , 2021 , 11, 197-199	21.4	62
258	Substantial hysteresis in emergent temperature sensitivity of global wetland CH emissions. <i>Nature Communications</i> , 2021 , 12, 2266	17.4	10

257	Plant rhizodeposition: A key factor for soil organic matter formation in stable fractions. <i>Science Advances</i> , 2021 , 7,	14.3	28
256	Identifying dominant environmental predictors of freshwater wetland methane fluxes across diurnal to seasonal time scales. <i>Global Change Biology</i> , 2021 , 27, 3582-3604	11.4	11
255	Low-intensity frequent fires in coniferous forests transform soil organic matter in ways that may offset ecosystem carbon losses. <i>Global Change Biology</i> , 2021 , 27, 3810-3823	11.4	9
254	Root traits explain plant species distributions along climatic gradients yet challenge the nature of ecological trade-offs. <i>Nature Ecology and Evolution</i> , 2021 , 5, 1123-1134	12.3	11
253	Divergent controls of soil organic carbon between observations and process-based models. <i>Biogeochemistry</i> , 2021 , 156, 5-17	3.8	4
252	FLUXNET-CH ₄ : a global, multi-ecosystem dataset and analysis of methane seasonality from freshwater wetlands. <i>Earth System Science Data</i> , 2021 , 13, 3607-3689	10.5	23
251	Soil organic carbon accumulation rates on Mediterranean abandoned agricultural lands. <i>Science of the Total Environment</i> , 2021 , 759, 143535	10.2	11
250	Climate change extremes and photovoltaic power output. <i>Nature Sustainability</i> , 2021 , 4, 270-276	22.1	16
249	Ten new insights in climate science 2020 to horizon scan. <i>Global Sustainability</i> , 2021 , 4,	5.4	7
248	Orphaned oil and gas well stimulus: Maximizing economic and environmental benefits. <i>Elementa</i> , 2021 , 9,	3.6	4
247	Ecosystem Collapse and Climate Change: An Introduction. <i>Ecological Studies</i> , 2021 , 1-9	1.1	3
246	Decadal changes in fire frequencies shift tree communities and functional traits. <i>Nature Ecology and Evolution</i> , 2021 , 5, 504-512	12.3	16
245	Geochemical evidence for fugitive gas contamination and associated water quality changes in drinking-water wells from Parker County, Texas. <i>Science of the Total Environment</i> , 2021 , 780, 146555	10.2	8
244	Methane removal and the proportional reductions in surface temperature and ozone. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2021 , 379, 20210104	3	9
243	Atmospheric methane removal: a research agenda. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2021 , 379, 20200454	3	10
242	Gap-filling eddy covariance methane fluxes: Comparison of machine learning model predictions and uncertainties at FLUXNET-CH ₄ wetlands. <i>Agricultural and Forest Meteorology</i> , 2021 , 308-309, 108528	5.8	5
241	Global and regional drivers of land-use emissions in 1961-2017. <i>Nature</i> , 2021 , 589, 554-561	50.4	57
240	Moving toward Net-Zero Emissions Requires New Alliances for Carbon Dioxide Removal. <i>One Earth</i> , 2020 , 3, 145-149	8.1	24

239	Temporary reduction in daily global CO2 emissions during the COVID-19 forced confinement. <i>Nature Climate Change</i> , 2020 , 10, 647-653	21.4	842
238	Pervasive shifts in forest dynamics in a changing world. <i>Science</i> , 2020 , 368,	33.3	227
237	Influences of hydroxyl radicals (OH) on top-down estimates of the global and regional methane budgets 2020 ,		1
236	Climate-driven risks to the climate mitigation potential of forests. <i>Science</i> , 2020 , 368,	33.3	131
235	Agricultural acceleration of soil carbonate weathering. <i>Global Change Biology</i> , 2020 , 26, 5988-6002	11.4	20
234	Repeated fire shifts carbon and nitrogen cycling by changing plant inputs and soil decomposition across ecosystems. <i>Ecological Monographs</i> , 2020 , 90, e01409	9	19
233	Global patterns of terrestrial nitrogen and phosphorus limitation. <i>Nature Geoscience</i> , 2020 , 13, 221-226	18.3	184
232	Refining national greenhouse gas inventories. <i>Ambio</i> , 2020 , 49, 1581-1586	6.5	11
231	Advancing ecohydrology in the 21st century: A convergence of opportunities. <i>Ecohydrology</i> , 2020 , 13, e2208	2.5	14
230	Reply to: Practical constraints on atmospheric methane removal. <i>Nature Sustainability</i> , 2020 , 3, 358-359	22.1	3
229	On the role of trend and variability in the hydroxyl radical (OH) in the global methane budget. <i>Atmospheric Chemistry and Physics</i> , 2020 , 20, 13011-13022	6.8	5
228	Influences of hydroxyl radicals (OH) on top-down estimates of the global and regional methane budgets. <i>Atmospheric Chemistry and Physics</i> , 2020 , 20, 9525-9546	6.8	12
227	The Global Methane Budget 2000-2017. <i>Earth System Science Data</i> , 2020 , 12, 1561-1623	10.5	463
226	Global Carbon Budget 2020. <i>Earth System Science Data</i> , 2020 , 12, 3269-3340	10.5	533
225	TRY plant trait database - enhanced coverage and open access. <i>Global Change Biology</i> , 2020 , 26, 119-188	11.4	399
224	A comprehensive quantification of global nitrous oxide sources and sinks. <i>Nature</i> , 2020 , 586, 248-256	50.4	270
223	Peak grain forecasts for the US High Plains amid withering waters. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 26145-26150	11.5	5
222	Increasing anthropogenic methane emissions arise equally from agricultural and fossil fuel sources. <i>Environmental Research Letters</i> , 2020 , 15, 071002	6.2	99

221	Opportunities and challenges in using remaining carbon budgets to guide climate policy. <i>Nature Geoscience</i> , 2020 , 13, 769-779	18.3	18
220	Large stocks of peatland carbon and nitrogen are vulnerable to permafrost thaw. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 20438-20446	11.5	142
219	The COVID-19 lockdowns: a window into the Earth System. <i>Nature Reviews Earth & Environment</i> , 2020 , 1, 470-481	30.2	90
218	Methane Emissions from Abandoned Oil and Gas Wells in California. <i>Environmental Science & Technology</i> , 2020 , 54, 14617-14626	10.3	9
217	Data-driven estimates of global nitrous oxide emissions from croplands. <i>National Science Review</i> , 2020 , 7, 441-452	10.8	42
216	Quantifying Methane Emissions from Natural Gas Water Heaters. <i>Environmental Science & Technology</i> , 2020 , 54, 5737-5745	10.3	7
215	The landscape of soil carbon data: Emerging questions, synergies and databases. <i>Progress in Physical Geography</i> , 2019 , 43, 707-719	3.5	13
214	Deep groundwater quality in the southwestern United States. <i>Environmental Research Letters</i> , 2019 , 14, 034004	6.2	9
213	Flexibility and intensity of global water use. <i>Nature Sustainability</i> , 2019 , 2, 515-523	22.1	55
212	Management intensification maintains wood production over multiple harvests in tropical Eucalyptus plantations. <i>Ecological Applications</i> , 2019 , 29, e01879	4.9	6
211	Inter-model comparison of global hydroxyl radical (OH) distributions and their impact on atmospheric methane over the 2000-2016 period 2019 ,		2
210	Nitrogen and phosphorus constrain the CO ₂ fertilization of global plant biomass. <i>Nature Climate Change</i> , 2019 , 9, 684-689	21.4	125
209	A first record of bulk atmospheric deposition patterns of major ions in southern South America. <i>Biogeochemistry</i> , 2019 , 144, 261-271	3.8	3
208	FLUXNET-CH ₄ Synthesis Activity: Objectives, Observations, and Future Directions. <i>Bulletin of the American Meteorological Society</i> , 2019 , 100, 2607-2632	6.1	77
207	Tunable laser-based detection of benzene using spectrally narrow absorption features. <i>Applied Physics B: Lasers and Optics</i> , 2019 , 125, 1	1.9	7
206	Monthly gridded data product of northern wetland methane emissions based on upscaling eddy covariance observations. <i>Earth System Science Data</i> , 2019 , 11, 1263-1289	10.5	45
205	Global Carbon Budget 2019. <i>Earth System Science Data</i> , 2019 , 11, 1783-1838	10.5	776
204	Inter-model comparison of global hydroxyl radical (OH) distributions and their impact on atmospheric methane over the 2000-2016 period. <i>Atmospheric Chemistry and Physics</i> , 2019 , 19, 13701-13723	6.8	30

203	Persistent fossil fuel growth threatens the Paris Agreement and planetary health. <i>Environmental Research Letters</i> , 2019 , 14, 121001	6.2	76
202	Advancing Scientific Understanding of the Global Methane Budget in Support of the Paris Agreement. <i>Global Biogeochemical Cycles</i> , 2019 , 33, 1475-1512	5.9	40
201	Ungulates mediate trade-offs between carbon storage and wildfire hazard in Mediterranean oak woodlands. <i>Journal of Applied Ecology</i> , 2019 , 56, 699-710	5.8	6
200	Global soil nitrous oxide emissions since the preindustrial era estimated by an ensemble of terrestrial biosphere models: Magnitude, attribution, and uncertainty. <i>Global Change Biology</i> , 2019 , 25, 640-659	11.4	111
199	CO enrichment and soil type additively regulate grassland productivity. <i>New Phytologist</i> , 2019 , 222, 183-192	4.8	7
198	The need to protect fresh and brackish groundwater resources during unconventional oil and gas development. <i>Current Opinion in Environmental Science and Health</i> , 2018 , 3, 1-7	8.1	8
197	Structural and Hydrogeological Controls on Hydrocarbon and Brine Migration into Drinking Water Aquifers in Southern New York. <i>Ground Water</i> , 2018 , 56, 225-244	2.4	25
196	Flowering in grassland predicted by CO and resource effects on species aboveground biomass. <i>Global Change Biology</i> , 2018 , 24, 1771-1781	11.4	3
195	The Global N2O Model Intercomparison Project. <i>Bulletin of the American Meteorological Society</i> , 2018 , 99, 1231-1251	6.1	71
194	Co-occurring woody species have diverse hydraulic strategies and mortality rates during an extreme drought. <i>Plant, Cell and Environment</i> , 2018 , 41, 576-588	8.4	79
193	Accounting for landscape heterogeneity improves spatial predictions of tree vulnerability to drought. <i>New Phytologist</i> , 2018 , 220, 132-146	9.8	19
192	Aerial Interyear Comparison and Quantification of Methane Emissions Persistence in the Bakken Formation of North Dakota, USA. <i>Environmental Science & Technology</i> , 2018 , 52, 8947-8953	10.3	17
191	Global Carbon Budget 2017. <i>Earth System Science Data</i> , 2018 , 10, 405-448	10.5	614
190	Fire frequency drives decadal changes in soil carbon and nitrogen and ecosystem productivity. <i>Nature</i> , 2018 , 553, 194-198	50.4	204
189	Global energy growth is outpacing decarbonization. <i>Environmental Research Letters</i> , 2018 , 13, 120401	6.2	119
188	Projected drought effects on the demography of Ashe juniper populations inferred from remote measurements of tree canopies. <i>Plant Ecology</i> , 2018 , 219, 1259-1267	1.7	3
187	Key indicators to track current progress and future ambition of the Paris Agreement. <i>Nature Climate Change</i> , 2017 , 7, 118-122	21.4	210
186	The geochemistry of naturally occurring methane and saline groundwater in an area of unconventional shale gas development. <i>Geochimica Et Cosmochimica Acta</i> , 2017 , 208, 302-334	5.5	91

185	Hydrologic regulation of plant rooting depth. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 10572-10577	11.5	365
184	The Ecology of Soil Carbon: Pools, Vulnerabilities, and Biotic and Abiotic Controls. <i>Annual Review of Ecology, Evolution, and Systematics</i> , 2017 , 48, 419-445	13.5	329
183	Hydrologic resilience and Amazon productivity. <i>Nature Communications</i> , 2017 , 8, 387	17.4	28
182	Warning signs for stabilizing global CO ₂ emissions. <i>Environmental Research Letters</i> , 2017 , 12, 110202	6.2	111
181	Measuring canopy loss and climatic thresholds from an extreme drought along a fivefold precipitation gradient across Texas. <i>Global Change Biology</i> , 2017 , 23, 5120-5135	11.4	25
180	A global meta-analysis of soil phosphorus dynamics after afforestation. <i>New Phytologist</i> , 2017 , 213, 181-192	11.2	58
179	Focus on negative emissions. <i>Environmental Research Letters</i> , 2017 , 12, 110201	6.2	10
178	Variability and quasi-decadal changes in the methane budget over the period 2000-2012. <i>Atmospheric Chemistry and Physics</i> , 2017 , 17, 11135-11161	6.8	69
177	Variability and quasi-decadal changes in the methane budget over the period 2000-2012 2017 ,		2
176	Identification and characterization of high methane-emitting abandoned oil and gas wells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 13636-13641	11.5	83
175	Stabilization of new carbon inputs rather than old carbon decomposition determines soil organic carbon shifts following woody or herbaceous vegetation transitions. <i>Plant and Soil</i> , 2016 , 409, 99-116	4.2	20
174	Salinity of deep groundwater in California: Water quantity, quality, and protection. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 7768-73	11.5	43
173	Toward more realistic projections of soil carbon dynamics by Earth system models. <i>Global Biogeochemical Cycles</i> , 2016 , 30, 40-56	5.9	251
172	Biophysical and economic limits to negative CO ₂ emissions. <i>Nature Climate Change</i> , 2016 , 6, 42-50	21.4	684
171	Reply to 'Greenhouse gas emissions from synthetic natural gas production'. <i>Nature Climate Change</i> , 2016 , 6, 221-222	21.4	
170	The global methane budget 2000-2012. <i>Earth System Science Data</i> , 2016 , 8, 697-751	10.5	641
169	Research priorities for negative emissions. <i>Environmental Research Letters</i> , 2016 , 11, 115007	6.2	95
168	Simulating the Earth system response to negative emissions. <i>Environmental Research Letters</i> , 2016 , 11, 095012	6.2	69

167	The growing role of methane in anthropogenic climate change. <i>Environmental Research Letters</i> , 2016 , 11, 120207	6.2	190
166	Impact to Underground Sources of Drinking Water and Domestic Wells from Production Well Stimulation and Completion Practices in the Pavillion, Wyoming, Field. <i>Environmental Science & Technology</i> , 2016 , 50, 4524-36	10.3	109
165	Aerial Surveys of Elevated Hydrocarbon Emissions from Oil and Gas Production Sites. <i>Environmental Science & Technology</i> , 2016 , 50, 4877-86	10.3	70
164	Quantifying drought-induced tree mortality in the open canopy woodlands of central Texas. <i>Remote Sensing of Environment</i> , 2016 , 181, 54-64	13.2	38
163	Water Use and Management in the Bakken Shale Oil Play in North Dakota. <i>Environmental Science & Technology</i> , 2016 , 50, 3275-82	10.3	47
162	State of knowledge about energy development impacts on North American rangelands: An integrative approach. <i>Journal of Environmental Management</i> , 2016 , 180, 1-9	7.9	12
161	Response to Comment on "Impact to Underground Sources of Drinking Water and Domestic Wells from Production Well Stimulation and Completion Practices in the Pavillion, Wyoming Field". <i>Environmental Science & Technology</i> , 2016 , 50, 10771-10772	10.3	3
160	Canopy foliation and area as predictors of mortality risk from episodic drought for individual trees of Ashe juniper. <i>Plant Ecology</i> , 2016 , 217, 1105-1114	1.7	7
159	The Depths of Hydraulic Fracturing and Accompanying Water Use Across the United States. <i>Environmental Science & Technology</i> , 2015 , 49, 8969-76	10.3	57
158	Plant community change mediates the response of foliar $\delta^{15}N$ to CO ₂ enrichment in mesic grasslands. <i>Oecologia</i> , 2015 , 178, 591-601	2.9	8
157	Elevated levels of diesel range organic compounds in groundwater near Marcellus gas operations are derived from surface activities. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 13184-9	11.5	101
156	Natural Gas Pipeline Replacement Programs Reduce Methane Leaks and Improve Consumer Safety. <i>Environmental Science and Technology Letters</i> , 2015 , 2, 286-291	11	41
155	The evolution of Devonian hydrocarbon gases in shallow aquifers of the northern Appalachian Basin: Insights from integrating noble gas and hydrocarbon geochemistry. <i>Geochimica Et Cosmochimica Acta</i> , 2015 , 170, 321-355	5.5	83
154	Quantifying surface albedo and other direct biogeophysical climate forcings of forestry activities. <i>Global Change Biology</i> , 2015 , 21, 3246-66	11.4	92
153	Greater humification of belowground than aboveground biomass carbon into particulate soil organic matter in no-till corn and soybean crops. <i>Soil Biology and Biochemistry</i> , 2015 , 85, 22-30	7.5	67
152	Pre-drilling background groundwater quality in the Deep River Triassic Basin of central North Carolina, USA. <i>Applied Geochemistry</i> , 2015 , 60, 3-13	3.5	9
151	Potential impacts of hydraulic fracturing for oil and gas on drinking water resources. <i>Ground Water</i> , 2015 , 53, 19-21	2.4	7
150	Soil carbon responses to past and future CO ₂ in three Texas prairie soils. <i>Soil Biology and Biochemistry</i> , 2015 , 83, 66-75	7.5	15

149	Methane emissions from natural gas infrastructure and use in the urban region of Boston, Massachusetts. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 1941-6	11.5	173
148	New tracers identify hydraulic fracturing fluids and accidental releases from oil and gas operations. <i>Environmental Science & Technology</i> , 2014 , 48, 12552-60	10.3	100
147	Biophysical forcings of land-use changes from potential forestry activities in North America. <i>Ecological Monographs</i> , 2014 , 84, 329-353	9	111
146	Shifting carbon pools along a plant cover gradient in woody encroached savannas of central Argentina. <i>Forest Ecology and Management</i> , 2014 , 331, 71-78	3.9	11
145	The Environmental Costs and Benefits of Fracking. <i>Annual Review of Environment and Resources</i> , 2014 , 39, 327-362	17.2	274
144	Natural gas pipeline leaks across Washington, DC. <i>Environmental Science & Technology</i> , 2014 , 48, 2051-8	10.3	130
143	Air impacts of increased natural gas acquisition, processing, and use: a critical review. <i>Environmental Science & Technology</i> , 2014 , 48, 8349-59	10.3	138
142	Role of aquaporin activity in regulating deep and shallow root hydraulic conductance during extreme drought. <i>Trees - Structure and Function</i> , 2014 , 28, 1323-1331	2.6	31
141	Impacts of climate change drivers on C4 grassland productivity: scaling driver effects through the plant community. <i>Journal of Experimental Botany</i> , 2014 , 65, 3415-24	7	25
140	A critical review of the risks to water resources from unconventional shale gas development and hydraulic fracturing in the United States. <i>Environmental Science & Technology</i> , 2014 , 48, 8334-48	10.3	952
139	Priming of soil organic carbon decomposition induced by corn compared to soybean crops. <i>Soil Biology and Biochemistry</i> , 2014 , 75, 273-281	7.5	50
138	Oil and gas wells and their integrity: Implications for shale and unconventional resource exploitation. <i>Marine and Petroleum Geology</i> , 2014 , 56, 239-254	4.7	235
137	The integrity of oil and gas wells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 10902-3	11.5	76
136	Noble gases identify the mechanisms of fugitive gas contamination in drinking-water wells overlying the Marcellus and Barnett Shales. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 14076-81	11.5	309
135	Geophysical subsurface imaging for ecological applications. <i>New Phytologist</i> , 2014 , 201, 1170-5	9.8	43
134	Nitrogen fertilization has a stronger effect on soil nitrogen-fixing bacterial communities than elevated atmospheric CO ₂ . <i>Applied and Environmental Microbiology</i> , 2014 , 80, 3103-12	4.8	87
133	Fungal Community Responses to Past and Future Atmospheric CO ₂ Differ by Soil Type. <i>Applied and Environmental Microbiology</i> , 2014 , 80, 7364-77	4.8	25
132	Increasing atmospheric CO ₂ reduces metabolic and physiological differences between isoprene- and non-isoprene-emitting poplars. <i>New Phytologist</i> , 2013 , 200, 534-546	9.8	31

131	The Structure, Distribution, and Biomass of the World's Forests. <i>Annual Review of Ecology, Evolution, and Systematics</i> , 2013 , 44, 593-622	13.5	419
130	Increased stray gas abundance in a subset of drinking water wells near Marcellus shale gas extraction. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 11250-5	11.5	389
129	Geochemical and isotopic variations in shallow groundwater in areas of the Fayetteville Shale development, north-central Arkansas. <i>Applied Geochemistry</i> , 2013 , 35, 207-220	3.5	116
128	Mapping urban pipeline leaks: methane leaks across Boston. <i>Environmental Pollution</i> , 2013 , 173, 1-4	9.3	143
127	Shifts in soil organic carbon for plantation and pasture establishment in native forests and grasslands of South America. <i>Global Change Biology</i> , 2012 , 18, 3237-3251	11.4	95
126	Assessing the potential of wildfires as a sustainable bioenergy opportunity. <i>GCB Bioenergy</i> , 2012 , 4, 634-641	5.6	12
125	Analytical models of soil and litter decomposition: Solutions for mass loss and time-dependent decay rates. <i>Soil Biology and Biochemistry</i> , 2012 , 50, 66-76	7.5	67
124	Common bacterial responses in six ecosystems exposed to 10 years of elevated atmospheric carbon dioxide. <i>Environmental Microbiology</i> , 2012 , 14, 1145-58	5.2	68
123	Soil-mediated effects of subambient to increased carbon dioxide on grassland productivity. <i>Nature Climate Change</i> , 2012 , 2, 742-746	21.4	42
122	Revised calibration of the MBT/MBT paleotemperature proxy based on branched tetraether membrane lipids in surface soils. <i>Geochimica Et Cosmochimica Acta</i> , 2012 , 96, 215-229	5.5	298
121	Global resorption efficiencies and concentrations of carbon and nutrients in leaves of terrestrial plants. <i>Ecological Monographs</i> , 2012 , 82, 205-220	9	346
120	A Global Analysis of Groundwater Recharge for Vegetation, Climate, and Soils. <i>Vadose Zone Journal</i> , 2012 , 11,	2.7	103
119	Ecosystem impacts of geoengineering: a review for developing a science plan. <i>Ambio</i> , 2012 , 41, 350-69	6.5	51
118	Geochemical evidence for possible natural migration of Marcellus Formation brine to shallow aquifers in Pennsylvania. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 11961-6	11.5	363
117	Biophysical considerations in forestry for climate protection. <i>Frontiers in Ecology and the Environment</i> , 2011 , 9, 174-182	5.5	209
116	Research frontiers in the analysis of coupled biogeochemical cycles. <i>Frontiers in Ecology and the Environment</i> , 2011 , 9, 74-80	5.5	39
115	Water subsidies from mountains to deserts: their role in sustaining groundwater-fed oases in a sandy landscape 2011 , 21, 678-94		79
114	A synthesis of current knowledge on forests and carbon storage in the United States 2011 , 21, 1902-24		272

113	Earth Stewardship: science for action to sustain the human-earth system. <i>Ecosphere</i> , 2011 , 2, art89	3.1	121
112	Increases in the flux of carbon belowground stimulate nitrogen uptake and sustain the long-term enhancement of forest productivity under elevated CO ₂ . <i>Ecology Letters</i> , 2011 , 14, 349-57	10	323
111	Responses of soil cellulolytic fungal communities to elevated atmospheric CO ₂ are complex and variable across five ecosystems. <i>Environmental Microbiology</i> , 2011 , 13, 2778-93	5.2	46
110	Sources of increased N uptake in forest trees growing under elevated CO ₂ : results of a large-scale 15N study. <i>Global Change Biology</i> , 2011 , 17, 3338-3350	11.4	35
109	A large and persistent carbon sink in the world's forests. <i>Science</i> , 2011 , 333, 988-93	33.3	3950
108	Methane contamination of drinking water accompanying gas-well drilling and hydraulic fracturing. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, 8172-6	11.5	855
107	Response to Comment on Potential Impacts of Leakage from Deep CO ₂ Geosequestration on Overlying Freshwater Aquifers. <i>Environmental Science & Technology</i> , 2011 , 45, 3175-3176	10.3	5
106	Opportunities and barriers to pumped-hydro energy storage in the United States. <i>Renewable and Sustainable Energy Reviews</i> , 2011 , 15, 839-844	16.2	187
105	Reply to Davies: Hydraulic fracturing remains a possible mechanism for observed methane contamination of drinking water. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, E872-E872	11.5	9
104	Atmospheric CO ₂ and soil extracellular enzyme activity: a meta-analysis and CO ₂ gradient experiment. <i>Ecosphere</i> , 2011 , 2, art96	3.1	43
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