J T Randerson

List of Publications by Citations

262 papers	38,599 citations	91 h-index	195 g-index
273 ext. papers	44,649 ext. citations	9.7 avg, IF	7.18 L-index

#	Paper	IF	Citations
262	Primary production of the biosphere: integrating terrestrial and oceanic components. *Science*, **1998**, 281, 237-40	33.3	3295
261	Global fire emissions and the contribution of deforestation, savanna, forest, agricultural, and peat fires (1997–2009). *Atmospheric Chemistry and Physics*, **2010**, 10, 11707-11735	6.8	2013
260	Terrestrial ecosystem production: A process model based on global satellite and surface data. *Global Biogeochemical Cycles*, **1993**, 7, 811-841	5.9	1781
259	Trends in the sources and sinks of carbon dioxide. *Nature Geoscience*, **2009**, 2, 831-836	18.3	1453
258	Interannual variability in global biomass burning emissions from 1997 to 2004. *Atmospheric Chemistry and Physics*, **2006**, 6, 3423-3441	6.8	1383
257	Towards robust regional estimates of CO2 sources and sinks using atmospheric transport models. *Nature*, **2002**, 415, 626-30	50.4	998
256	Present-day climate forcing and response from black carbon in snow. *Journal of Geophysical Research*, **2007**, 112,		898
255	Analysis of daily, monthly, and annual burned area using the fourth-generation global fire emissions database (GFED4). *Journal of Geophysical Research G: Biogeosciences*, **2013**, 118, 317-328	3.7	829
254	Global net primary production: Combining ecology and remote sensing. *Remote Sensing of Environment*, **1995**, 51, 74-88	13.2	814
253	Reconciling Carbon-cycle Concepts, Terminology, and Methods. *Ecosystems*, **2006**, 9, 1041-1050	3.9	754
252	An atmospheric perspective on North American carbon dioxide exchange: CarbonTracker. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 18925-30	11.5	737
251	Global fire emissions estimates during 1997–2016. *Earth System Science Data*, **2017**, 9, 697-720	10.5	693
250	The impact of boreal forest fire on climate warming. *Science*, **2006**, 314, 1130-2	33.3	615
249	Continental-scale partitioning of fire emissions during the 1997 to 2001 El Niño/La Niña period. *Science*, **2004**, 303, 73-6	33.3	480
248	The Orbiting Carbon Observatory (OCO) mission. *Advances in Space Research*, **2004**, 34, 700-709	2.4	480
247	Causes of variation in soil carbon simulations from CMIP5 Earth system models and comparison with observations. *Biogeosciences*, **2013**, 10, 1717-1736	4.6	474
246	Assessing variability and long-term trends in burned area by merging multiple satellite fire products. *Biogeosciences*, **2010**, 7, 1171-1186	4.6	471

245	Global estimation of burned area using MODIS active fire observations. *Atmospheric Chemistry and Physics*, **2006**, 6, 957-974	6.8	448
244	Global covariation of carbon turnover times with climate in terrestrial ecosystems. *Nature*, **2014**, 514, 213-7	50.4	446
243	Global burned area and biomass burning emissions from small fires. *Journal of Geophysical Research* , **2012**, 117, n/a-n/a		446
242	Biospheric primary production during an ENSO transition. *Science*, **2001**, 291, 2594-7	33.3	437
241	A human-driven decline in global burned area. *Science*, **2017**, 356, 1356-1362	33.3	433
240	Arctic and boreal ecosystems of western North America as components of the climate system.. *Global Change Biology*, **2000**, 6, 211-223	11.4	431
239	Estimated global mortality attributable to smoke from landscape fires. *Environmental Health Perspectives*, **2012**, 120, 695-701	8.4	398
238	The contribution of terrestrial sources and sinks to trends in the seasonal cycle of atmospheric carbon dioxide. *Global Biogeochemical Cycles*, **1997**, 11, 535-560	5.9	383
237	Carbon isotopes in terrestrial ecosystem pools and CO2 fluxes. *New Phytologist*, **2008**, 178, 24-40	9.8	379
236	Carbon-nitrogen interactions regulate climate-carbon cycle feedbacks: results from an atmosphere-ocean general circulation model. *Biogeosciences*, **2009**, 6, 2099-2120	4.6	366
235	Carbon emissions from fires in tropical and subtropical ecosystems. *Global Change Biology*, **2003**, 9, 547-562	3.4	348
234	Ecosystem carbon dioxide fluxes after disturbance in forests of North America. *Journal of Geophysical Research*, **2010**, 115,		328
233	Systematic assessment of terrestrial biogeochemistry in coupled climate–carbon models. *Global Change Biology*, **2009**, 15, 2462-2484	11.4	299
232	The Community Land Model Version 5: Description of New Features, Benchmarking, and Impact of Forcing Uncertainty. *Journal of Advances in Modeling Earth Systems*, **2019**, 11, 4245-4287	7.1	288
231	Plant responses to increasing CO2 reduce estimates of climate impacts on drought severity. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 10019-24	11.5	283
230	Climate regulation of fire emissions and deforestation in equatorial Asia. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 20350-5	11.5	278
229	Precision requirements for space-based data. *Journal of Geophysical Research*, **2007**, 112,		269
228	Protecting climate with forests. *Environmental Research Letters*, **2008**, 3, 044006	6.2	264

227	Toward more realistic projections of soil carbon dynamics by Earth system models. *Global Biogeochemical Cycles*, **2016**, 30, 40-56	5.9	251
226	A framework for benchmarking land models. *Biogeosciences*, **2012**, 9, 3857-3874	4.6	238
225	Iterative near-term ecological forecasting: Needs, opportunities, and challenges. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 1424-1432	11.5	230
224	Influence of tree species on continental differences in boreal fires and climate feedbacks. *Nature Geoscience*, **2015**, 8, 228-234	18.3	229
223	Differences between surface and column atmospheric CO2 and implications for carbon cycle research. *Journal of Geophysical Research*, **2004**, 109,		222
222	Changing feedbacks in the climate–biosphere system. *Frontiers in Ecology and the Environment*, **2008**, 6, 313-320	5.5	220
221	Biophysical considerations in forestry for climate protection. *Frontiers in Ecology and the Environment*, **2011**, 9, 174-182	5.5	209
220	Insights from Earth system model initial-condition large ensembles and future prospects. *Nature Climate Change*, **2020**, 10, 277-286	21.4	207
219	El Niño and health risks from landscape fire emissions in Southeast Asia. *Nature Climate Change*, **2013**, 3, 131-136	21.4	204
218	Fire frequency drives decadal changes in soil carbon and nitrogen and ecosystem productivity. *Nature*, **2018**, 553, 194-198	50.4	204
217	Changes in soil organic carbon storage predicted by Earth system models during the 21st century. *Biogeosciences*, **2014**, 11, 2341-2356	4.6	201
216	Climate controls on the variability of fires in the tropics and subtropics. *Global Biogeochemical Cycles*, **2008**, 22, n/a-n/a	5.9	193
215	Increases in early season ecosystem uptake explain recent changes in the seasonal cycle of atmospheric CO2 at high northern latitudes. *Geophysical Research Letters*, **1999**, 26, 2765-2768	4.9	181
214	Carbon 13 exchanges between the atmosphere and biosphere. *Global Biogeochemical Cycles*, **1997**, 11, 507-533	5.9	178
213	Sustained climate warming drives declining marine biological productivity. *Science*, **2018**, 359, 1139-1143	33.3	176
212	Forecasting fire season severity in South America using sea surface temperature anomalies. *Science* , **2011**, 334, 787-91	33.3	175
211	Daily and 3-hourly variability in global fire emissions and consequences for atmospheric model predictions of carbon monoxide. *Journal of Geophysical Research*, **2011**, 116, n/a-n/a		165
210	Lightning as a major driver of recent large fire years in North American boreal forests. *Nature Climate Change*, **2017**, 7, 529-534	21.4	164

209	The effect of post-fire stand age on the boreal forest energy balance. *Agricultural and Forest Meteorology*, **2006**, 140, 41-50	5.8	164
208	Fire dynamics during the 20th century simulated by the Community Land Model. *Biogeosciences*, **2010**, 7, 1877-1902	4.6	163
207	The sensitivity of carbon fluxes to spring warming and summer drought depends on plant functional type in boreal forest ecosystems. *Agricultural and Forest Meteorology*, **2007**, 147, 172-185	5.8	159
206	Changes in the surface energy budget after fire in boreal ecosystems of interior Alaska: An annual perspective. *Journal of Geophysical Research*, **2005**, 110,		158
205	Agricultural intensification increases deforestation fire activity in Amazonia. *Global Change Biology*, **2008**, 14, 2262-2275	11.4	154
204	The changing radiative forcing of fires: global model estimates for past, present and future. *Atmospheric Chemistry and Physics*, **2012**, 12, 10857-10886	6.8	153
203	NET ECOSYSTEM PRODUCTION: A COMPREHENSIVE MEASURE OF NET CARBON ACCUMULATION BY ECOSYSTEMS **2002**, 12, 937-947		148
202	Reduced methane growth rate explained by decreased Northern Hemisphere microbial sources. *Nature*, **2011**, 476, 194-7	50.4	146
201	Ecosystem responses to recent climate change and fire disturbance at northern high latitudes: observations and model results contrasting northern Eurasia and North America. *Environmental Research Letters*, **2007**, 2, 045031	6.2	140
200	A few extreme events dominate global interannual variability in gross primary production. *Environmental Research Letters*, **2014**, 9, 035001	6.2	134
199	Substrate limitations for heterotrophs: Implications for models that estimate the seasonal cycle of atmospheric CO2. *Global Biogeochemical Cycles*, **1996**, 10, 585-602	5.9	134
198	Climate-driven risks to the climate mitigation potential of forests. *Science*, **2020**, 368,	33.3	131
197	New constraints on Northern Hemisphere growing season net flux. *Geophysical Research Letters*, **2007**, 34,	4.9	130
196	Interannual variation in global-scale net primary production: Testing model estimates. *Global Biogeochemical Cycles*, **1997**, 11, 367-392	5.9	126
195	Postfire response of North American boreal forest net primary productivity analyzed with satellite observations. *Global Change Biology*, **2003**, 9, 1145-1157	11.4	126
194	Preindustrial-Control and Twentieth-Century Carbon Cycle Experiments with the Earth System Model CESM1(BGC). *Journal of Climate*, **2014**, 27, 8981-9005	4.4	125
193	The impacts and implications of an intensifying fire regime on Alaskan boreal forest composition and albedo. *Global Change Biology*, **2011**, 17, 2853-2866	11.4	125
192	C4MIP The Coupled ClimateCarbon Cycle Model Intercomparison Project: experimental protocol for CMIP6. *Geoscientific Model Development*, **2016**, 9, 2853-2880	6.3	123

191	Satellite remote sounding of mid-tropospheric CO2. *Geophysical Research Letters*, **2008**, 35,	4.9	123
190	Vegetation controls on northern high latitude snow-albedo feedback: observations and CMIP5 model simulations. *Global Change Biology*, **2014**, 20, 594-606	11.4	119
189	Radiocarbon constraints imply reduced carbon uptake by soils during the 21st century. *Science*, **2016**, 353, 1419-1424	33.3	119
188	Climate control of terrestrial carbon exchange across biomes and continents. *Environmental Research Letters*, **2010**, 5, 034007	6.2	116
187	Carbon dioxide sources from Alaska driven by increasing early winter respiration from Arctic tundra. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 5361-5366	11.5	115
186	Impacts of biomass burning emissions and land use change on Amazonian atmospheric phosphorus cycling and deposition. *Global Biogeochemical Cycles*, **2005**, 19, n/a-n/a	5.9	114
185	The Global Fire Atlas of individual fire size, duration, speed and direction. *Earth System Science Data* , **2019**, 11, 529-552	10.5	113
184	Trends in North American net primary productivity derived from satellite observations, 1982–1998. *Global Biogeochemical Cycles*, **2002**, 16, 2-1-2-14	5.9	111
183	The impacts of climate, land use, and demography on fires during the 21st century simulated by CLM-CN. *Biogeosciences*, **2012**, 9, 509-525	4.6	108
182	Global impact of smoke aerosols from landscape fires on climate and the Hadley circulation. *Atmospheric Chemistry and Physics*, **2013**, 13, 5227-5241	6.8	105
181	Causes and implications of persistent atmospheric carbon dioxide biases in Earth System Models. *Journal of Geophysical Research G: Biogeosciences*, **2014**, 119, 141-162	3.7	102
180	Recovery of Aboveground Plant Biomass and Productivity After Fire in Mesic and Dry Black Spruce Forests of Interior Alaska. *Ecosystems*, **2008**, 11, 209-225	3.9	102
179	The International Land Model Benchmarking (ILAMB) System: Design, Theory, and Implementation. *Journal of Advances in Modeling Earth Systems*, **2018**, 10, 2731-2754	7.1	98
178	Trends in high northern latitude soil freeze and thaw cycles from 1988 to 2002. *Journal of Geophysical Research*, **2004**, 109,		97
177	Long-term trends and interannual variability of forest, savanna and agricultural fires in South America. *Carbon Management*, **2013**, 4, 617-638	3.3	96
176	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	5.9	95
175	Climate change impacts on net primary production (NPP) and export production (EP) regulated by increasing stratification and phytoplankton community structure in the CMIP5 models. *Biogeosciences*, **2016**, 13, 5151-5170	4.6	95
174	Fire emissions from C3 and C4 vegetation and their influence on interannual variability of atmospheric CO2 and 13CO2. *Global Biogeochemical Cycles*, **2005**, 19, n/a-n/a	5.9	93

173	Regional patterns of radiocarbon and fossil fuel-derived CO2 in surface air across North America. *Geophysical Research Letters*, **2007**, 34,	4.9	91
172	Top-down estimates of global CO sources using MOPITT measurements. *Geophysical Research Letters*, **2004**, 31,	4.9	91
171	Satellite-derived increases in net primary productivity across North America, 1982–1998. *Geophysical Research Letters*, **2002**, 29, 69-1-69-4	4.9	91
170	Model comparisons for estimating carbon emissions from North American wildland fire. *Journal of Geophysical Research*, **2011**, 116,		90
169	Time-dependent inversion estimates of global biomass-burning CO emissions using Measurement of Pollution in the Troposphere (MOPITT) measurements. *Journal of Geophysical Research*, **2006**, 111,		90
168	The COVID-19 lockdowns: a window into the Earth System. *Nature Reviews Earth & Environment*, **2020**, 1, 470-481	30.2	90
167	Do volcanic eruptions enhance or diminish net primary production? Evidence from tree rings. *Global Biogeochemical Cycles*, **2003**, 17, n/a-n/a	5.9	87
166	Seasonal and latitudinal variability of troposphere Δ14CO2: Post bomb contributions from fossil fuels, oceans, the stratosphere, and the terrestrial biosphere. *Global Biogeochemical Cycles*, **2002**, 16, 59-1-59-19	5.9	86
165	Continental-scale net radiation and evapotranspiration estimated using MODIS satellite observations. *Remote Sensing of Environment*, **2011**, 115, 2302-2319	13.2	84
164	The influence of burn severity on postfire vegetation recovery and albedo change during early succession in North American boreal forests. *Journal of Geophysical Research*, **2012**, 117,		83
163	Dynamics of fire plumes and smoke clouds associated with peat and deforestation fires in Indonesia. *Journal of Geophysical Research*, **2011**, 116,		81
162	Changes in surface albedo after fire in boreal forest ecosystems of interior Alaska assessed using MODIS satellite observations. *Journal of Geophysical Research*, **2008**, 113, n/a-n/a		81
161	Do biomass burning aerosols intensify drought in equatorial Asia during El Niño?. *Atmospheric Chemistry and Physics*, **2010**, 10, 3515-3528	6.8	77
160	A pan-tropical cascade of fire driven by El Niño/Southern Oscillation. *Nature Climate Change*, **2017**, 7, 906-911	21.4	74
159	Impulse response functions of terrestrial carbon cycle models: method and application. *Global Change Biology*, **1999**, 5, 371-394	11.4	71
158	Global fire emissions and the contribution of deforestation, savanna, forest, agricultural, and peat fires (1997–2009)		71
157	Representing leaf and root physiological traits in CLM improves global carbon and nitrogen cycling predictions. *Journal of Advances in Modeling Earth Systems*, **2016**, 8, 598-613	7.1	71
156	Fire effects on net radiation and energy partitioning: Contrasting responses of tundra and boreal forest ecosystems. *Journal of Geophysical Research*, **2005**, 110,		68

155	Nitrogen deposition in tropical forests from savanna and deforestation fires. *Global Change Biology* , **2010**, 16, 2024-2038	11.4	67
154	Estimates of fire emissions from an active deforestation region in the southern Amazon based on satellite data and biogeochemical modelling. *Biogeosciences*, **2009**, 6, 235-249	4.6	66
153	Contribution of ocean, fossil fuel, land biosphere, and biomass burning carbon fluxes to seasonal and interannual variability in atmospheric CO2. *Journal of Geophysical Research*, **2008**, 113, n/a-n/a		63
152	Carbon isotope evidence for the latitudinal distribution and wind speed dependence of the air□ea gas transfer velocity. *Tellus, Series B: Chemical and Physical Meteorology*, **2006**, 58, 390-417	3.3	62
151	A possible global covariance between terrestrial gross primary production and 13C discrimination: Consequences for the atmospheric 13C budget and its response to ENSO. *Global Biogeochemical Cycles*, **2002**, 16, 83-1-83-16	5.9	60
150	Identification of two distinct fire regimes in Southern California: implications for economic impact and future change. *Environmental Research Letters*, **2015**, 10, 094005	6.2	59
149	High-latitude cooling associated with landscape changes from North American boreal forest fires. *Biogeosciences*, **2013**, 10, 699-718	4.6	59
148	Influence of clouds and diffuse radiation on ecosystem-atmosphere CO2 and CO18O exchanges. *Journal of Geophysical Research*, **2009**, 114,		59
147	The use of ATSR active fire counts for estimating relative patterns of biomass burning □a study from the boreal forest region. *Geophysical Research Letters*, **2003**, 30,	4.9	59
146	Evaluating two experimental approaches for measuring ecosystem carbon oxidation state and oxidative ratio. *Journal of Geophysical Research*, **2008**, 113,		58
145	Satellite observations of terrestrial water storage provide early warning information about drought and fire season severity in the Amazon. *Journal of Geophysical Research G: Biogeosciences*, **2013**, 118, 495-504	3.7	54
144	Modeling the effects of snowpack on heterotrophic respiration across northern temperate and high latitude regions: Comparison with measurements of atmospheric carbon dioxide in high latitudes. *Biogeochemistry*, **2000**, 48, 91-114	3.8	54
143	The sensitivity of CO and aerosol transport to the temporal and vertical distribution of North American boreal fire emissions. *Atmospheric Chemistry and Physics*, **2009**, 9, 6559-6580	6.8	53
142	Contrasting controls on wildland fires in Southern California during periods with and without Santa Ana winds. *Journal of Geophysical Research G: Biogeosciences*, **2014**, 119, 432-450	3.7	52
141	Mapping the daily progression of large wildland fires using MODIS active fire data. *International Journal of Wildland Fire*, **2014**, 23, 655	3.2	52
140	Fire severity influences the response of soil microbes to a boreal forest fire. *Environmental Research Letters*, **2016**, 11, 035004	6.2	52
139	Forest response to rising CO2 drives zonally asymmetric rainfall change over tropical land. *Nature Climate Change*, **2018**, 8, 434-440	21.4	50
138	Expansion of high-latitude deciduous forests driven by interactions between climate warming and fire. *Nature Plants*, **2019**, 5, 952-958	11.5	49

137	Multicentury changes in ocean and land contributions to the climate-carbon feedback. *Global Biogeochemical Cycles*, **2015**, 29, 744-759	5.9	49
136	Multi-scale influence of vapor pressure deficit on fire ignition and spread in boreal forest ecosystems. *Biogeosciences*, **2014**, 11, 3739-3755	4.6	49
135	How much global burned area can be forecast on seasonal time scales using sea surface temperatures?. *Environmental Research Letters*, **2016**, 11, 045001	6.2	49
134	The age distribution of global soil carbon inferred from radiocarbon measurements. *Nature Geoscience*, **2020**, 13, 555-559	18.3	47
133	Where do fossil fuel carbon dioxide emissions from California go? An analysis based on radiocarbon observations and an atmospheric transport model. *Journal of Geophysical Research*, **2008**, 113,		47
132	Carbon isotope discrimination of arctic and boreal biomes inferred from remote atmospheric measurements and a biosphere-atmosphere model. *Global Biogeochemical Cycles*, **2002**, 16, 1-1-1-15	5.9	46
131	Atmospheric Carbon Dioxide Variability in the Community Earth System Model: Evaluation and Transient Dynamics during the Twentieth and Twenty-First Centuries. *Journal of Climate*, **2013**, 26, 4447-4475	4.4	45
130	Economic carbon cycle feedbacks may offset additional warming from natural feedbacks. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 759-764	11.5	45
129	Coccidioidomycosis Dynamics in Relation to Climate in the Southwestern United States. *GeoHealth*, **2018**, 2, 6-24	5	43
128	Controls on the spatial pattern of wildfire ignitions in Southern California. *International Journal of Wildland Fire*, **2014**, 23, 799	3.2	42
127	Measurement of soil carbon oxidation state and oxidative ratio by 13C nuclear magnetic resonance. *Journal of Geophysical Research*, **2009**, 114, n/a-n/a		42
126	Is carbon within the global terrestrial biosphere becoming more oxidized? Implications for trends in atmospheric O2. *Global Change Biology*, **2006**, 12, 260-271	11.4	42
125	Daily burned area and carbon emissions from boreal fires in Alaska. *Biogeosciences*, **2015**, 12, 3579-3601	4.6	39
124	Desert dust and anthropogenic aerosol interactions in the Community Climate System Model coupled-carbon-climate model. *Biogeosciences*, **2011**, 8, 387-414	4.6	38
123	Interannual variability of surface energy exchange depends on stand age in a boreal forest fire chronosequence. *Journal of Geophysical Research*, **2008**, 113, n/a-n/a		38
122	Concentration and 𝔻 of molecular hydrogen in boreal forests: Ecosystem-scale systematics of atmospheric H2. *Geophysical Research Letters*, **2002**, 29, 35-1-35-4	4.9	38
121	The covariation of Northern Hemisphere summertime CO₂ with surface temperature in boreal regions. *Atmospheric Chemistry and Physics*, **2013**, 13, 9447-9459	6.8	37
120	Spatial patterns and source attribution of urban methane in the Los Angeles Basin. *Journal of Geophysical Research D: Atmospheres*, **2016**, 121, 2490-2507	4.4	37

119	Satellite-based assessment of climate controls on US burned area. *Biogeosciences*, **2013**, 10, 247-260	4.6	36
118	ELEVATED ATMOSPHERIC CO2 INCREASES WATER AVAILABILITY IN A WATER-LIMITED GRASSLAND ECOSYSTEM1. *Journal of the American Water Resources Association*, **1997**, 33, 1033-1039	2.1	35
117	Evaluating greenhouse gas emissions inventories for agricultural burning using satellite observations of active fires **2012**, 22, 1345-64		33
116	Molecular hydrogen uptake by soils in forest, desert, and marsh ecosystems in California. *Journal of Geophysical Research*, **2008**, 113,		33
115	Temperature and moisture dependence of soil H2 uptake measured in the laboratory. *Geophysical Research Letters*, **2006**, 33,	4.9	33
114	Carbon cycle extremes during the 21st century in CMIP5 models: Future evolution and attribution to climatic drivers. *Geophysical Research Letters*, **2014**, 41, 8853-8861	4.9	32
113	Fire-related carbon emissions from land use transitions in southern Amazonia. *Geophysical Research Letters*, **2008**, 35,	4.9	32
112	A high-resolution time series of oxygen isotopes from the Kolyma River: Implications for the seasonal dynamics of discharge and basin-scale water use. *Geophysical Research Letters*, **2005**, 32, n/a-n/a	4.9	32
111	Consequences of Incomplete Surface Energy Balance Closure for CO2 Fluxes from Open-Path CO2/H2O Infrared Gas Analysers. *Boundary-Layer Meteorology*, **2006**, 120, 65-85	3.4	32
110	Interactions between land use change and carbon cycle feedbacks. *Global Biogeochemical Cycles*, **2017**, 31, 96-113	5.9	31
109	A new interhemispheric teleconnection increases predictability of winter precipitation in southwestern US. *Nature Communications*, **2018**, 9, 2332	17.4	31
108	Quantifying fire-wide carbon emissions in interior Alaska using field measurements and Landsat imagery. *Journal of Geophysical Research G: Biogeosciences*, **2014**, 119, 1608-1629	3.7	31
107	Why Does Amazon Precipitation Decrease When Tropical Forests Respond to Increasing CO2?. *Earth's Future*, **2019**, 7, 450-468	7.9	30
106	Impacts of precipitation seasonality and ecosystem types on evapotranspiration in the Yukon River Basin, Alaska. *Water Resources Research*, **2010**, 46,	5.4	30
105	Influence of reduced carbon emissions and oxidation on the distribution of atmospheric CO2: Implications for inversion analyses. *Global Biogeochemical Cycles*, **2005**, 19, n/a-n/a	5.9	30
104	Post-fire changes in net shortwave radiation along a latitudinal gradient in boreal North America. *Geophysical Research Letters*, **2012**, 39, n/a-n/a	4.9	29
103	Optimal use of land surface temperature data to detect changes in tropical forest cover. *Journal of Geophysical Research*, **2011**, 116,		29
102	Biomass burning contribution to black carbon in the Western United States Mountain Ranges. *Atmospheric Chemistry and Physics*, **2011**, 11, 11253-11266	6.8	29

101	Contribution of soil respiration in tropical, temperate, and boreal forests to the 18O enrichment of atmospheric O2. *Global Biogeochemical Cycles*, **2003**, 17, n/a-n/a	5.9	29
100	Future increases in Arctic lightning and fire risk for permafrost carbon. *Nature Climate Change*, **2021**, 11, 404-410	21.4	29
99	Mitigation of methane emissions in cities: How new measurements and partnerships can contribute to emissions reduction strategies. *Earth's Future*, **2016**, 4, 408-425	7.9	29
98	Separating the influence of temperature, drought, and fire on interannual variability in atmospheric CO. *Global Biogeochemical Cycles*, **2014**, 28, 1295-1310	5.9	28
97	Large-scale plant light-use efficiency inferred from the seasonal cycle of atmospheric CO2. *Global Change Biology*, **2004**, 10, 1240-1252	11.4	28
96	Smoke radiocarbon measurements from Indonesian fires provide evidence for burning of millennia-aged peat. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 12419-12424	11.5	28
95	Expansion of Coccidioidomycosis Endemic Regions in the United States in Response to Climate Change. *GeoHealth*, **2019**, 3, 308-327	5	26
94	Influence of terrestrial ecosystems and topography on coastal CO2 measurements: A case study at Trinidad Head, California. *Journal of Geophysical Research*, **2005**, 110,		26
93	2016 International Land Model Benchmarking (ILAMB) Workshop Report		26
92	Carbon-nitrogen interactions regulate climate-carbon cycle feedbacks: results from an atmosphere-ocean general circulation model		26
91	Statistical prediction of terrestrial water storage changes in the Amazon Basin using tropical Pacific and North Atlantic sea surface temperature anomalies. *Hydrology and Earth System Sciences*, **2014**, 18, 2089-2102	5.5	23
90	Zonally contrasting shifts of the tropical rainbelt in response to climate change. *Nature Climate Change*, **2021**, 11, 143-151	21.4	23
89	Seasonal exchange of CO2 and δ18O-CO2 varies with postfire succession in boreal forest ecosystems. *Journal of Geophysical Research*, **2006**, 111,		22
88	Using generalized cross-validation to select parameters in inversions for regional carbon fluxes. *Geophysical Research Letters*, **2004**, 31,	4.9	22
87	Recent changes in the air-sea gas exchange of methyl chloroform. *Geophysical Research Letters*, **2004**, 31,	4.9	21
86	Evaluating the strength of the land–atmosphere moisture feedback in Earth system models using satellite observations. *Hydrology and Earth System Sciences*, **2016**, 20, 4837-4856	5.5	20
85	Black carbon aerosol dynamics and isotopic composition in Alaska linked with boreal fire emissions and depth of burn in organic soils. *Global Biogeochemical Cycles*, **2015**, 29, 1977-2000	5.9	19
84	The effect of plant physiological responses to rising CO2 on global streamflow. *Nature Climate Change*, **2019**, 9, 873-879	21.4	18

83	Spatial patterns and controls on burned area for two contrasting fire regimes in Southern California. *Ecosphere*, **2016**, 7, e01210	3.1	18
82	Reversal of Increasing Tropical Ocean Hypoxia Trends With Sustained Climate Warming. *Global Biogeochemical Cycles*, **2018**, 32, 551-564	5.9	16
81	Improving Representation of Deforestation Effects on Evapotranspiration in the E3SM Land Model. *Journal of Advances in Modeling Earth Systems*, **2019**, 11, 2412-2427	7.1	16
80	Rate and velocity of climate change caused by cumulative carbon emissions. *Environmental Research Letters*, **2015**, 10, 095001	6.2	16
79	The role of fire in global forest loss dynamics. *Global Change Biology*, **2021**, 27, 2377-2391	11.4	16
78	Disturbance suppresses the aboveground carbon sink in North American boreal forests. *Nature Climate Change*, **2021**, 11, 435-441	21.4	16
77	The role of temporal evolution in modeling atmospheric emissions from tropical fires. *Atmospheric Environment*, **2014**, 89, 158-168	5.3	15
76	Plant Physiological Responses to Rising CO2 Modify Simulated Daily Runoff Intensity With Implications for Global-Scale Flood Risk Assessment. *Geophysical Research Letters*, **2018**, 45, 12,457	4.9	15
75	Microsatellite instability in follicle centre cell lymphoma. *British Journal of Haematology*, **1996**, 93, 160-2	4.5	14
74	Causes of variation in soil carbon predictions from CMIP5 Earth system models and comparison with observations		14
73	Iconic CO2 time series at risk. *Science*, **2012**, 337, 1038-40	33.3	13
72	Are the impacts of land use on warming underestimated in climate policy?. *Environmental Research Letters*, **2017**, 12, 094016	6.2	12
71	Design and application of a mobile ground-based observatory for continuous measurements of atmospheric trace gas and criteria pollutant species. *Atmospheric Measurement Techniques*, **2015**, 8, 3481-3492	4	12
70	Quantifying aerosol direct radiative effect with Multiangle Imaging Spectroradiometer observations: Top-of-atmosphere albedo change by aerosols based on land surface types. *Journal of Geophysical Research*, **2009**, 114,		12
69	Management and climate contributions to satellite-derived active fire trends in the contiguous United States. *Journal of Geophysical Research G: Biogeosciences*, **2014**, 119, 645-660	3.7	11
68	Using radiocarbon to constrain black and organic carbon aerosol sources in Salt Lake City. *Journal of Geophysical Research D: Atmospheres*, **2017**, 122, 9843-9857	4.4	11
67	Simulating boreal forest carbon dynamics after stand-replacing fire disturbance: insights from a global process-based vegetation model. *Biogeosciences*, **2013**, 10, 8233-8252	4.6	11
66	Heterogeneity in cell proliferation and expression of p53 and bcl-2 during the indolent phase of germinal centre cell lymphoma: an explanation for clinical variability. *British Journal of Haematology* , **1995**, 90, 830-6	4.5	11

65	The Carbon Isotope Composition of Plants and Soils as Biomarkers of Pollution **2010**, 407-423		11
64	Unraveling the Role of Temperature and Rainfall on Active Fires in the Brazilian Amazon Using a Nonlinear Poisson Model. *Journal of Geophysical Research G: Biogeosciences*, **2018**, 123, 117-128	3.7	10
63	Tropical biomass burning smoke plume size, shape, reflectance, and age based on 2001–2009 MISR imagery of Borneo. *Atmospheric Chemistry and Physics*, **2012**, 12, 3437-3454	6.8	10
62	Plant Physiology Increases the Magnitude and Spread of the Transient Climate Response to CO2 in CMIP6 Earth System Models. *Journal of Climate*, **2020**, 33, 8561-8578	4.4	10
61	Global fire emissions estimates during 1997–2015		10
60	Climate change decreases the cooling effect from postfire albedo in boreal North America. *Global Change Biology*, **2020**, 26, 1592-1607	11.4	10
59	Machine learning to predict final fire size at the time of ignition. *International Journal of Wildland Fire*, **2019**, 28, 861-873	3.2	9
58	Comparison With Global Soil Radiocarbon Observations Indicates Needed Carbon Cycle Improvements in the E3SM Land Model. *Journal of Geophysical Research G: Biogeosciences*, **2019**, 124, 1098-1114	3.7	9
57	Harnessing cross-border resources to confront climate change. *Environmental Science and Policy*, **2018**, 87, 128-132	6.2	9
56	Accuracy and precision of ¹⁴C-based source apportionment of organic and elemental carbon in aerosols using the Swiss_4S protocol. *Atmospheric Measurement Techniques*, **2015**, 8, 3729-3743	4	9
55	Recurrent patterns in surface thermal fronts associated with cold filaments along the West Coast of North America. *Remote Sensing of Environment*, **1993**, 46, 146-163	13.2	9
54	Changes in soil organic carbon storage predicted by Earth system models during the 21st century		8
53	A framework of benchmarking land models		8
52	Soil Moisture Variability Intensifies and Prolongs Eastern Amazon Temperature and Carbon Cycle Response to El Niño–Southern Oscillation. *Journal of Climate*, **2019**, 32, 1273-1292	4.4	8
51	Modeling methane emissions from rice agriculture in China during 1961–2007. *Journal of Integrative Environmental Sciences*, **2010**, 7, 49-60	3	7
50	. *Tellus, Series B: Chemical and Physical Meteorology*, **1999**, 51, 668-678	3.3	7
49	Fluorescent polymerase chain reaction of a panel of CA repeats on chromosome 6 in the indolent phase of follicular centre cell lymphoma. *British Journal of Cancer*, **1996**, 74, 942-6	8.7	7
48	Climate change impacts on net primary production (NPP) and export production (EP) regulated by increasing stratification and phytoplankton community structure in CMIP5 models		7

47	Assessing variability and long-term trends in burned area by merging multiple satellite fire products		7
46	Future Drying in Central America and Northern South America Linked With Atlantic Meridional Overturning Circulation. *Geophysical Research Letters*, **2018**, 45, 9226-9235	4.9	7
45	Satellite hydrology observations as operational indicators of forecasted fire danger across the contiguous United States. *Natural Hazards and Earth System Sciences*, **2020**, 20, 1097-1106	3.9	6
44	Tropical North Atlantic ocean-atmosphere interactions synchronize forest carbon losses from hurricanes and Amazon fires. *Geophysical Research Letters*, **2015**, 42, 6462-6470	4.9	6
43	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	3.3	6
42	The changing radiative forcing of fires: global model estimates for past, present and future		6
41	Vapor pressure deficit controls on fire ignition and fire spread in boreal forest ecosystems		6
40	Fire dynamics during the 20th century simulated by the Community Land Model		6
39	The influence of daily meteorology on boreal fire emissions and regional trace gas variability. *Journal of Geophysical Research G: Biogeosciences*, **2016**, 121, 2793-2810	3.7	6
38	Climate, Fuel, and Land Use Shaped the Spatial Pattern of Wildfire in California Sierra Nevada. *Journal of Geophysical Research G: Biogeosciences*, **2021**, 126, e2020JG005786	3.7	6
37	Forecasting Daily Wildfire Activity Using Poisson Regression. *IEEE Transactions on Geoscience and Remote Sensing*, **2020**, 58, 4837-4851	8.1	5
36	The response of the 18O/16O composition of atmospheric CO2 to changes in environmental conditions. *Journal of Geophysical Research G: Biogeosciences*, **2014**, 119, 55-79	3.7	5
35	Results from the carbon-land model intercomparison project (C-LAMP) and availability of the data on the earth system grid (ESG). *Journal of Physics: Conference Series*, **2007**, 78, 012026	0.3	5
34	The impacts of climate, land use, and demography on fires during the 21st century simulated by CLM-CN		5
33	Terrestrial Ecosystems and Interannual Variability in the Global Atmospheric Budgets of 13CO2 and 12CO2 **2005**, 217-234		5
32	Recent California tree mortality portends future increase in drought-driven forest die-off. *Environmental Research Letters*, **2020**, 15, 124040	6.2	5
31	Climate-Driven Limits to Future Carbon Storage in California's Wildland Ecosystems. *AGU Advances*, **2021**, 2, e2021AV000384	5.4	5
30	Graph-Guided Regularized Regression of Pacific Ocean Climate Variables to Increase Predictive Skill of Southwestern U.S. Winter Precipitation. *Journal of Climate*, **2020**, 34, 737-754	4.4	5

29	A Growing Freshwater Lens in the Arctic Ocean With Sustained Climate Warming Disrupts Marine Ecosystem Function. *Journal of Geophysical Research G: Biogeosciences*, **2020**, 125, e2020JG005693	3.7	4
28	International Land Model Benchmarking (ILAMB) Workshop Report, Technical Report DOE/SC-0186		4
27	Global impact of contemporary smoke aerosols from landscape fires on climate and the Hadley circulation		4
26	Simulating boreal forest carbon dynamics after stand-replacing fire disturbance: insights from a global process-based vegetation model		4
25	Estimates of fire emissions from an active deforestation region in the southern Amazon based on satellite data and biogeochemical modelling		4
24	Forecasting terrestrial water storage changes in the Amazon Basin using Atlantic and Pacific sea surface temperatures		4
23	Forecasting Global Fire Emissions on Subseasonal to Seasonal (S2S) Time Scales. *Journal of Advances in Modeling Earth Systems*, **2020**, 12, e2019MS001955	7.1	4
22	Warming as a Driver of Vegetation Loss in the Sonoran Desert of California. *Journal of Geophysical Research G: Biogeosciences*, **2021**, 126, e2020JG005942	3.7	4
21	Reply to: A critical examination of a newly proposed interhemispheric teleconnection to Southwestern US winter precipitation. *Nature Communications*, **2019**, 10, 2918	17.4	3
20	Wildfire response to changing daily temperature extremes in California's Sierra Nevada. *Science Advances*, **2021**, 7, eabe6417	14.3	3
19	Desert dust and anthropogenic aerosol interactions in the Community Climate System Model coupled-carbon-climate model		3
18	High latitude cooling associated with landscape changes from North American boreal forest fires		3
17	Coccidioidomycosis (Valley Fever) Case Data for the Southwestern United States. *Open Health Data* , **2020**, 7, 1	4.5	3
16	Boreal forest fire CO and CH₄ emission factors derived from tower observations in Alaska during the extreme fire season of 2015. *Atmospheric Chemistry and Physics*, **2021**, 21, 8557-8574	6.8	3
15	Human-ignited fires result in more extreme fire behavior and ecosystem impacts.. *Nature Communications*, **2022**, 13, 2717	17.4	3
14	Accuracy and precision of ¹⁴C-based source apportionment of organic and elemental carbon in aerosols using the Swiss_4S protocol **2015**,		2
13	Do biomass burning aerosols intensify drought in equatorial Asia during El Niño?		2
12	Design and application of a mobile ground-based observatory for continuous measurements of atmospheric trace-gas and criteria pollutant species **2015**,		1

11	Kai, Tyler, Randerson & Blake reply. *Nature*, **2012**, 486, E4-E4	50.4	1
10	VEMAP: model shootout at the sub-continental corral. *Trends in Ecology and Evolution*, **1996**, 11, 313-4	10.9	1
9	Biomass burning contribution to black carbon in the western United States mountain ranges		1
8	Top-down estimates of biomass burning emissions of black carbon in the Western United States		1
7	Satellite-based assessment of climate controls on US burned area		1
6	The sensitivity of CO and aerosol transport to the temporal and vertical distribution of North American boreal fire emissions		1
5	The covariation of Northern Hemisphere summertime CO₂ with surface temperature at boreal latitudes		1
4	Building a machine learning surrogate model for wildfire activities within a global Earth system model. *Geoscientific Model Development*, **2022**, 15, 1899-1911	6.3	1
3	Deforestation-induced climate change reduces carbon storage in remaining tropical forests.. *Nature Communications*, **2022**, 13, 1964	17.4	1
2	Escalating carbon emissions from North American boreal forest wildfires and the climate mitigation potential of fire management.. *Science Advances*, **2022**, 8, eabl7161	14.3	0
1	Allele imbalance at tumour suppressor loci during the indolent phase of follicle centre cell lymphoma. *Leukemia and Lymphoma*, **1996**, 22, 113-7, follow. 186, color plate X	1.9	