# J William Munger

## List of Publications by Citations

Source: https://exaly.com/author-pdf/2894410/j-william-munger-publications-by-citations.pdf

Version: 2024-04-10

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

82 225 29,412 170 h-index g-index citations papers 6.28 32,469 9.2 257 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
225	FLUXNET: A New Tool to Study the Temporal and Spatial Variability of Ecosystem <b>B</b> cale Carbon Dioxide, Water Vapor, and Energy Flux Densities. <i>Bulletin of the American Meteorological Society</i> , <b>2001</b> , 82, 2415-2434	6.1	2615
224	Gap filling strategies for defensible annual sums of net ecosystem exchange. <i>Agricultural and Forest Meteorology</i> , <b>2001</b> , 107, 43-69	5.8	1381
223	Measurements of carbon sequestration by long-term eddy covariance: methods and a critical evaluation of accuracy. <i>Global Change Biology</i> , <b>1996</b> , 2, 169-182	11.4	1124
222	Environmental controls over carbon dioxide and water vapor exchange of terrestrial vegetation. <i>Agricultural and Forest Meteorology</i> , <b>2002</b> , 113, 97-120	5.8	965
221	Net Exchange of CO2 in a Mid-Latitude Forest. <i>Science</i> , <b>1993</b> , 260, 1314-7	33.3	765
220	CO2 balance of boreal, temperate, and tropical forests derived from a global database. <i>Global Change Biology</i> , <b>2007</b> , 13, 2509-2537	11.4	744
219	The Amazon basin in transition. <i>Nature</i> , <b>2012</b> , 481, 321-8	50.4	729
218	Increase in forest water-use efficiency as atmospheric carbon dioxide concentrations rise. <i>Nature</i> , <b>2013</b> , 499, 324-7	50.4	719
217	Sensitivity of boreal forest carbon balance to soil thaw. <i>Science</i> , <b>1998</b> , 279, 214-7	33.3	651
216	Exchange of Carbon Dioxide by a Deciduous Forest: Response to Interannual Climate Variability. <i>Science</i> , <b>1996</b> , 271, 1576-1578	33.3	595
215	Influence of spring and autumn phenological transitions on forest ecosystem productivity. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2010</b> , 365, 3227-46	5.8	594
214	Carbon in Amazon forests: unexpected seasonal fluxes and disturbance-induced losses. <i>Science</i> , <b>2003</b> , 302, 1554-7	33.3	556
213	Seasonality of ecosystem respiration and gross primary production as derived from FLUXNET measurements. <i>Agricultural and Forest Meteorology</i> , <b>2002</b> , 113, 53-74	5.8	540
212	Terrestrial biosphere models need better representation of vegetation phenology: results from the North American Carbon Program Site Synthesis. <i>Global Change Biology</i> , <b>2012</b> , 18, 566-584	11.4	481
211	Evaluation of remote sensing based terrestrial productivity from MODIS using regional tower eddy flux network observations. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>2006</b> , 44, 1908-1925	8.1	475
210	Response of a deciduous forest to the Mount Pinatubo eruption: enhanced photosynthesis. <i>Science</i> , <b>2003</b> , 299, 2035-8	33.3	475
209	Factors controlling long- and short-term sequestration of atmospheric CO2 in a mid-latitude forest. <i>Science</i> , <b>2001</b> , 294, 1688-91	33.3	472

## (2009-2014)

208	Net carbon uptake has increased through warming-induced changes in temperate forest phenology. <i>Nature Climate Change</i> , <b>2014</b> , 4, 598-604	21.4	442
207	Modelling the soil-plant-atmosphere continuum in a QuercusAcer stand at Harvard Forest: the regulation of stomatal conductance by light, nitrogen and soil/plant hydraulic properties. <i>Plant, Cell and Environment</i> , <b>1996</b> , 19, 911-927	8.4	442
206	Gap filling strategies for long term energy flux data sets. <i>Agricultural and Forest Meteorology</i> , <b>2001</b> , 107, 71-77	5.8	417
205	Observed increase in local cooling effect of deforestation at higher latitudes. <i>Nature</i> , <b>2011</b> , 479, 384-7	50.4	403
204	Factors controlling CO2 exchange on timescales from hourly to decadal at Harvard Forest. <i>Journal of Geophysical Research</i> , <b>2007</b> , 112,		388
203	A multi-site analysis of random error in tower-based measurements of carbon and energy fluxes. <i>Agricultural and Forest Meteorology</i> , <b>2006</b> , 136, 1-18	5.8	361
202	Mechanistic scaling of ecosystem function and dynamics in space and time: Ecosystem Demography model version 2. <i>Journal of Geophysical Research</i> , <b>2009</b> , 114,		336
201	Solar-induced chlorophyll fluorescence that correlates with canopy photosynthesis on diurnal and seasonal scales in a temperate deciduous forest. <i>Geophysical Research Letters</i> , <b>2015</b> , 42, 2977-2987	4.9	303
200	Physiological responses of a black spruce forest to weather. <i>Journal of Geophysical Research</i> , <b>1997</b> , 102, 28987-28996		283
199	Canopy nitrogen, carbon assimilation, and albedo in temperate and boreal forests: Functional relations and potential climate feedbacks. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2008</b> , 105, 19336-41	11.5	275
198	Influence of spring phenology on seasonal and annual carbon balance in two contrasting New England forests. <i>Tree Physiology</i> , <b>2009</b> , 29, 321-31	4.2	263
197	The FLUXNET2015 dataset and the ONEFlux processing pipeline for eddy covariance data. <i>Scientific Data</i> , <b>2020</b> , 7, 225	8.2	256
196	Scaling Gross Primary Production (GPP) over boreal and deciduous forest landscapes in support of MODIS GPP product validation. <i>Remote Sensing of Environment</i> , <b>2003</b> , 88, 256-270	13.2	245
195	A model-data comparison of gross primary productivity: Results from the North American Carbon Program site synthesis. <i>Journal of Geophysical Research</i> , <b>2012</b> , 117, n/a-n/a		239
194	Fogwater chemistry in an urban atmosphere. <i>Journal of Geophysical Research</i> , <b>1983</b> , 88, 5109-5121		238
193	Chemical composition of Acid fog. <i>Science</i> , <b>1982</b> , 218, 677-80	33.3	232
192	Nitrogen deposition to the United States: distribution, sources, and processes. <i>Atmospheric Chemistry and Physics</i> , <b>2012</b> , 12, 4539-4554	6.8	212
191	The MODIS (Collection V005) BRDF/albedo product: Assessment of spatial representativeness over forested landscapes. <i>Remote Sensing of Environment</i> , <b>2009</b> , 113, 2476-2498	13.2	208

190	Estimation of net ecosystem carbon exchange for the conterminous United States by combining MODIS and AmeriFlux data. <i>Agricultural and Forest Meteorology</i> , <b>2008</b> , 148, 1827-1847	5.8	191
189	Post-Field Data Quality Control <b>2004</b> , 181-208		185
188	A continuous measure of gross primary production for the conterminous United States derived from MODIS and AmeriFlux data. <i>Remote Sensing of Environment</i> , <b>2010</b> , 114, 576-591	13.2	183
187	Ozone air quality during the 2008 Beijing Olympics: effectiveness of emission restrictions. <i>Atmospheric Chemistry and Physics</i> , <b>2009</b> , 9, 5237-5251	6.8	168
186	A satellite-based biosphere parameterization for net ecosystem CO2 exchange: Vegetation Photosynthesis and Respiration Model (VPRM). <i>Global Biogeochemical Cycles</i> , <b>2008</b> , 22, n/a-n/a	5.9	167
185	Relationship of ozone and carbon monoxide over North America. <i>Journal of Geophysical Research</i> , <b>1994</b> , 99, 14565		160
184	Seasonal controls on the exchange of carbon and water in an Amazonian rain forest. <i>Journal of Geophysical Research</i> , <b>2007</b> , 112, n/a-n/a		155
183	Tracking forest phenology and seasonal physiology using digital repeat photography: a critical assessment <b>2014</b> , 24, 1478-89		153
182	Seasonality of temperate forest photosynthesis and daytime respiration. <i>Nature</i> , <b>2016</b> , 534, 680-3	50.4	147
181	CO <sub>2</sub> , CO, and CH <sub>4</sub> measurements from tall towers in the NOAA Earth System Research Laboratory@Global Greenhouse Gas Reference Network: instrumentation, uncertainty analysis, and recommendations for future high-accuracy greenhouse	4	147
180	Assessing net ecosystem carbon exchange of U.S. terrestrial ecosystems by integrating eddy covariance flux measurements and satellite observations. <i>Agricultural and Forest Meteorology</i> , <b>2011</b> , 151, 60-69	5.8	145
179	Seasonal budgets of reactive nitrogen species and ozone over the United States, and export fluxes to the global atmosphere. <i>Journal of Geophysical Research</i> , <b>1998</b> , 103, 13435-13450		142
178	Formaldehyde, glyoxal, and methylglyoxal in air and cloudwater at a rural mountain site in central Virginia. <i>Journal of Geophysical Research</i> , <b>1995</b> , 100, 9325		137
177	Phase and amplitude of ecosystem carbon release and uptake potentials as derived from FLUXNET measurements. <i>Agricultural and Forest Meteorology</i> , <b>2002</b> , 113, 75-95	5.8	136
176	Using model-data fusion to interpret past trends, and quantify uncertainties in future projections, of terrestrial ecosystem carbon cycling. <i>Global Change Biology</i> , <b>2012</b> , 18, 2555-2569	11.4	135
175	Chemical composition of fogwater collected along the California coast. <i>Environmental Science &amp; Environmental &amp; Enviro</i>	10.3	132
174	Identification of hydroxymethanesulfonate in fog water. <i>Science</i> , <b>1986</b> , 231, 247-9	33.3	131
173	Atmospheric deposition of reactive nitrogen oxides and ozone in a temperate deciduous forest and a subarctic woodland: 1. Measurements and mechanisms. <i>Journal of Geophysical Research</i> , <b>1996</b> , 101, 12639-12657		130

172	Seasonal transition from NOx- to hydrocarbon-limited conditions for ozone production over the eastern United States in September. <i>Journal of Geophysical Research</i> , <b>1995</b> , 100, 9315		123	
171	Modelling temporal variability in the carbon balance of a spruce/moss boreal forest. <i>Global Change Biology</i> , <b>1996</b> , 2, 343-366	11.4	122	
170	Seasonal Variation in Radiative and Turbulent Exchange at a Deciduous Forest in Central Massachusetts. <i>Journal of Applied Meteorology and Climatology</i> , <b>1996</b> , 35, 122-134		120	
169	Comparison of multiple models for estimating gross primary production using MODIS and eddy covariance data in Harvard Forest. <i>Remote Sensing of Environment</i> , <b>2010</b> , 114, 2925-2939	13.2	117	
168	Climate control of terrestrial carbon exchange across biomes and continents. <i>Environmental Research Letters</i> , <b>2010</b> , 5, 034007	6.2	116	
167	Comparing simple respiration models for eddy flux and dynamic chamber data. <i>Agricultural and Forest Meteorology</i> , <b>2006</b> , 141, 219-234	5.8	110	
166	Emission and long-range transport of gaseous mercury from a large-scale Canadian boreal forest fire. <i>Environmental Science &amp; Technology</i> , <b>2003</b> , 37, 4343-7	10.3	109	
165	Air-snow exchange of HNO3 and NO y at Summit, Greenland. <i>Journal of Geophysical Research</i> , <b>1998</b> , 103, 3475-3486		106	
164	CO<sub>2</sub> and its correlation with CO at a rural site near Beijing: implications for combustion efficiency in China. <i>Atmospheric Chemistry and Physics</i> , <b>2010</b> , 10, 8881-8897	6.8	103	
163	Use of change-point detection for friction Delocity threshold evaluation in eddy-covariance studies. <i>Agricultural and Forest Meteorology</i> , <b>2013</b> , 171-172, 31-45	5.8	102	
162	Environmental controls on the photosynthesis and respiration of a boreal lichen woodland: a growing season of whole-ecosystem exchange measurements by eddy correlation. <i>Oecologia</i> , <b>1995</b> , 102, 443-452	2.9	101	
161	Greenness indices from digital cameras predict the timing and seasonal dynamics of canopy-scale photosynthesis <b>2015</b> , 25, 99-115		100	
160	Carboxylic acids in the rural continental atmosphere over the eastern United States during the Shenandoah Cloud and Photochemistry Experiment. <i>Journal of Geophysical Research</i> , <b>1995</b> , 100, 9335		100	
159	Climatologies of NOxx and NOy: A comparison of data and models. <i>Atmospheric Environment</i> , <b>1997</b> , 31, 1851-1904	5.3	99	
158	ECOSTRESS: NASA@ Next Generation Mission to Measure Evapotranspiration From the International Space Station. <i>Water Resources Research</i> , <b>2020</b> , 56, e2019WR026058	5.4	98	
157	A major regional air pollution event in the northeastern United States caused by extensive forest fires in Quebec, Canada. <i>Journal of Geophysical Research</i> , <b>2004</b> , 109,		97	
156	Disentangling the role of photosynthesis and stomatal conductance on rising forest water-use efficiency. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 16909-16914	11.5	91	
155	Simulation of summertime ozone over North America. <i>Journal of Geophysical Research</i> , <b>1993</b> , 98, 14797		91	

154	The occurrence of bisulfite-aldehyde addition products in fog- and cloudwater. <i>Journal of Atmospheric Chemistry</i> , <b>1984</b> , 1, 335-350	3.2	91
153	The H2SO4-HNO3-NH3 system at high humidities and in fogs: 1. Spatial and temporal patterns in the San Joaquin Valley of California. <i>Journal of Geophysical Research</i> , <b>1986</b> , 91, 1073		91
152	Seasonal course of isoprene emissions from a midlatitude deciduous forest. <i>Journal of Geophysical Research</i> , <b>1998</b> , 103, 31045-31056		90
151	Chlorophyll fluorescence tracks seasonal variations of photosynthesis from leaf to canopy in a temperate forest. <i>Global Change Biology</i> , <b>2017</b> , 23, 2874-2886	11.4	88
150	An intercomparison of measurement systems for vapor and particulate phase concentrations of formic and acetic acids. <i>Journal of Geophysical Research</i> , <b>1989</b> , 94, 6457		88
149	Estimating nocturnal ecosystem respiration from the vertical turbulent flux and change in storage of CO2. <i>Agricultural and Forest Meteorology</i> , <b>2009</b> , 149, 1919-1930	5.8	87
148	Climatic variability and vegetation vulnerability in Amazfiia. Geophysical Research Letters, 2005, 32,	4.9	87
147	Responses of terrestrial ecosystems and carbon budgets to current and future environmental variability. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2010</b> , 107, 8275-80	11.5	86
146	Regional budgets for nitrogen oxides from continental sources: Variations of rates for oxidation and deposition with season and distance from source regions. <i>Journal of Geophysical Research</i> , <b>1998</b> , 103, 8355-8368		85
145	Latitudinal patterns of magnitude and interannual variability in net ecosystem exchange regulated by biological and environmental variables. <i>Global Change Biology</i> , <b>2009</b> , 15, 2905-2920	11.4	84
144	ATMOSPHERIC CHEMISTRY: Enhanced: The NO2 Flux Conundrum. <i>Science</i> , <b>2000</b> , 289, 2291-2293	33.3	83
143	Thermal optimality of net ecosystem exchange of carbon dioxide and underlying mechanisms. <i>New Phytologist</i> , <b>2012</b> , 194, 775-783	9.8	81
142	A survey of thunderstorm flash rates compared to cloud top height using TRMM satellite data. Journal of Geophysical Research, <b>2001</b> , 106, 24089-24095		81
141	Chemical composition of coastal stratus clouds: Dependence on droplet size and distance from the coast. <i>Atmospheric Environment</i> , <b>1989</b> , 23, 2305-2320		79
140	Increasing background ozone in surface air over the United States. <i>Geophysical Research Letters</i> , <b>2000</b> , 27, 3465-3468	4.9	76
139	Wind-induced error in the measurement of soil respiration using closed dynamic chambers. <i>Agricultural and Forest Meteorology</i> , <b>2005</b> , 131, 225-232	5.8	72
138	Analysis of aldehydes in cloud- and fogwater samples by HPLC with a postcolumn reaction detector. <i>Environmental Science &amp; Environmental Science &amp; Env</i>	10.3	72
137	Chemistry of atmospheric precipitation in the north-central united states: Influence of sulfate, nitrate, ammonia and calcareous soil particulates. <i>Atmospheric Environment</i> , <b>1982</b> , 16, 1633-1645		69

136	Emissions of ethene, propene, and 1-butene by a midlatitude forest. <i>Journal of Geophysical Research</i> , <b>1996</b> , 101, 9149-9157		68
135	Variations of O<sub>3</sub> and CO in summertime at a rural site near Beijing. <i>Atmospheric Chemistry and Physics</i> , <b>2008</b> , 8, 6355-6363	6.8	67
134	Export of NOy from the North American boundary layer: Reconciling aircraft observations and global model budgets. <i>Journal of Geophysical Research</i> , <b>2004</b> , 109,		67
133	. Tellus, Series B: Chemical and Physical Meteorology, <b>1989</b> , 41B, 230-242	3.3	67
132	Characterizing the performance of ecosystem models across time scales: A spectral analysis of the North American Carbon Program site-level synthesis. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116,		66
131	Estimating regional carbon exchange in New England and Quebec by combining atmospheric, ground-based and satellite data. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , <b>2006</b> , 58, 344-358	3.3	65
130	Dynamics of canopy stomatal conductance, transpiration, and evaporation in a temperate deciduous forest, validated by carbonyl sulfide uptake. <i>Biogeosciences</i> , <b>2017</b> , 14, 389-401	4.6	64
129	Canopy-scale 13C of photosynthetic and respiratory CO2 fluxes: observations in forest biomes across the United States. <i>Global Change Biology</i> , <b>2005</b> , 11, 633-643	11.4	64
128	Nitric acid and ammonia at a rural northeastern U.S. site. <i>Journal of Geophysical Research</i> , <b>1999</b> , 104, 16	45-166	5164
127	Seasonal variation of the ozone production efficiency per unit NOx at Harvard Forest,		6.
	Massachusetts. Journal of Geophysical Research, <b>1996</b> , 101, 12659-12666		64
126	. Tellus, Series B: Chemical and Physical Meteorology, <b>1985</b> , 37B, 91-108	3.3	64
126		3·3 6.8	
	. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , <b>1985</b> , 37B, 91-108  Possible heterogeneous chemistry of hydroxymethanesulfonate (HMS) in northern China winter		64
125	. Tellus, Series B: Chemical and Physical Meteorology, 1985, 37B, 91-108  Possible heterogeneous chemistry of hydroxymethanesulfonate (HMS) in northern China winter haze. Atmospheric Chemistry and Physics, 2019, 19, 1357-1371  Rate my data: quantifying the value of ecological data for the development of models of the		64
125	. Tellus, Series B: Chemical and Physical Meteorology, 1985, 37B, 91-108  Possible heterogeneous chemistry of hydroxymethanesulfonate (HMS) in northern China winter haze. Atmospheric Chemistry and Physics, 2019, 19, 1357-1371  Rate my data: quantifying the value of ecological data for the development of models of the terrestrial carbon cycle 2013, 23, 273-86  Regional carbon dioxide fluxes from mixing ratio data. Tellus, Series B: Chemical and Physical	6.8	<ul><li>64</li><li>63</li><li>63</li></ul>
125 124 123	. Tellus, Series B: Chemical and Physical Meteorology, 1985, 37B, 91-108  Possible heterogeneous chemistry of hydroxymethanesulfonate (HMS) in northern China winter haze. Atmospheric Chemistry and Physics, 2019, 19, 1357-1371  Rate my data: quantifying the value of ecological data for the development of models of the terrestrial carbon cycle 2013, 23, 273-86  Regional carbon dioxide fluxes from mixing ratio data. Tellus, Series B: Chemical and Physical Meteorology, 2004, 56, 301-311  Carbon monoxide and related trace gases and aerosols over the Amazon Basin during the wet and	6.8	<ul><li>64</li><li>63</li><li>63</li><li>63</li></ul>
125 124 123	. Tellus, Series B: Chemical and Physical Meteorology, 1985, 37B, 91-108  Possible heterogeneous chemistry of hydroxymethanesulfonate (HMS) in northern China winter haze. Atmospheric Chemistry and Physics, 2019, 19, 1357-1371  Rate my data: quantifying the value of ecological data for the development of models of the terrestrial carbon cycle 2013, 23, 273-86  Regional carbon dioxide fluxes from mixing ratio data. Tellus, Series B: Chemical and Physical Meteorology, 2004, 56, 301-311  Carbon monoxide and related trace gases and aerosols over the Amazon Basin during the wet and dry seasons. Atmospheric Chemistry and Physics, 2012, 12, 6041-6065	6.8 3-3 6.8	<ul><li>64</li><li>63</li><li>63</li><li>63</li><li>62</li></ul>

118	Fluxes of nitrogen oxides over a temperate deciduous forest. <i>Journal of Geophysical Research</i> , <b>2004</b> , 109,		59
117	Harvard Forest regional-scale air mass composition by Patterns in Atmospheric Transport History (PATH). <i>Journal of Geophysical Research</i> , <b>1998</b> , 103, 13181-13194		56
116	Seasonal fluxes of carbonyl sulfide in a midlatitude forest. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2015</b> , 112, 14162-7	11.5	54
115	Interannual and spatial impacts of phenological transitions, growing season length, and spring and autumn temperatures on carbon sequestration: A North America flux data synthesis. <i>Global and Planetary Change</i> , <b>2012</b> , 92-93, 179-190	4.2	54
114	What can tracer observations in the continental boundary layer tell us about surface-atmosphere fluxes?. <i>Atmospheric Chemistry and Physics</i> , <b>2006</b> , 6, 539-554	6.8	54
113	Evaluating the calculated dry deposition velocities of reactive nitrogen oxides and ozone from two community models over a temperate deciduous forest. <i>Atmospheric Environment</i> , <b>2011</b> , 45, 2663-2674	5.3	53
112	Toward a consistency cross-check of eddy covariance fluxBased and biometric estimates of ecosystem carbon balance. <i>Global Biogeochemical Cycles</i> , <b>2009</b> , 23, n/a-n/a	5.9	51
111	Root niche separation can explain avoidance of seasonal drought stress and vulnerability of overstory trees to extended drought in a mature Amazonian forest. <i>Water Resources Research</i> , <b>2012</b> , 48,	5.4	50
110	Interannual, seasonal, and diel variation in soil respiration relative to ecosystem respiration at a wetland to upland slope at Harvard Forest. <i>Journal of Geophysical Research</i> , <b>2010</b> , 115, n/a-n/a		48
109	The H2SO4-HNO3-NH3 system at high humidities and in fogs: 2. Comparison of field data with thermodynamic calculations. <i>Journal of Geophysical Research</i> , <b>1986</b> , 91, 1089		48
108	Dry Deposition of Ozone over Land: Processes, Measurement, and Modeling. <i>Reviews of Geophysics</i> , <b>2020</b> , 58, e2019RG000670	23.1	47
107	Testing a Mechanistic Model of Forest-Canopy Mass and Energy Exchange Using Eddy Correlation: Carbon Dioxide and Ozone Uptake by a Mixed Oak-Maple Stand. <i>Functional Plant Biology</i> , <b>1994</b> , 21, 623	2.7	46
106	Contribution of Hydroxymethane Sulfonate to Ambient Particulate Matter: A Potential Explanation for High Particulate Sulfur During Severe Winter Haze in Beijing. <i>Geophysical Research Letters</i> , <b>2018</b> , 45, 11,969	4.9	46
105	Emissions of isoprenoids and oxygenated biogenic volatile organic compounds from a New England mixed forest. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 4807-4831	6.8	45
104	Imaging spectroscopy- and lidar-derived estimates of canopy composition and structure to improve predictions of forest carbon fluxes and ecosystem dynamics. <i>Geophysical Research Letters</i> , <b>2014</b> , 41, 25.	3 <del>\$-</del> 254	2 <sup>44</sup>
103	Variations in Atmospheric CO2 Mixing Ratios across a Boston, MA Urban to Rural Gradient. <i>Land</i> , <b>2013</b> , 2, 304-327	3.5	44
102	Simultaneous measurements of atmospheric HONO and NO2 via absorption spectroscopy using tunable mid-infrared continuous-wave quantum cascade lasers. <i>Applied Physics B: Lasers and Optics</i> , <b>2011</b> , 102, 417-423	1.9	44
101	Fogwater chemistry at Riverside, California. <i>Atmospheric Environment Part B Urban Atmosphere</i> , <b>1990</b> , 24, 185-205		44

### (2005-2008)

100	Resolving systematic errors in estimates of net ecosystem exchange of CO2 and ecosystem respiration in a tropical forest biome. <i>Agricultural and Forest Meteorology</i> , <b>2008</b> , 148, 1266-1279	5.8	43	
99	Investigation of the nighttime decay of isoprene. <i>Journal of Geophysical Research</i> , <b>2001</b> , 106, 24335-243	46	43	
98	Representativeness of Eddy-Covariance flux footprints for areas surrounding AmeriFlux sites. <i>Agricultural and Forest Meteorology</i> , <b>2021</b> , 301-302, 108350	5.8	43	
97	Carboxylic acids in clouds at a high-elevation forested site in central Virginia. <i>Journal of Geophysical Research</i> , <b>1995</b> , 100, 9345		42	
96	Cloud water chemistry in Sequoia National Park. Atmospheric Environment, 1989, 23, 999-1007		42	
95	Interannual variability in ozone removal by a temperate deciduous forest. <i>Geophysical Research Letters</i> , <b>2017</b> , 44, 542-552	4.9	41	
94	Influence of physiological phenology on the seasonal pattern of ecosystem respiration in deciduous forests. <i>Global Change Biology</i> , <b>2015</b> , 21, 363-76	11.4	41	
93	Atmospheric deposition, CO, and change in the land carbon sink. <i>Scientific Reports</i> , <b>2017</b> , 7, 9632	4.9	41	
92	Tree-ring 🛮 3 C tracks flux tower ecosystem productivity estimates in a NE temperate forest. <i>Environmental Research Letters</i> , <b>2014</b> , 9, 074011	6.2	40	
91	The potential of carbonyl sulfide as a proxy for gross primary production at flux tower sites. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116,		40	
90	Concentrations and snow-atmosphere fluxes of reactive nitrogen at Summit, Greenland. <i>Journal of Geophysical Research</i> , <b>1999</b> , 104, 13721-13734		39	
89	Black carbon and its correlation with trace gases at a rural site in Beijing: Top-down constraints from ambient measurements on bottom-up emissions. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116, n/a-r	n/a	37	
88	Atmospheric science: Ultraviolet light and leaf emission of NO(x). <i>Nature</i> , <b>2003</b> , 422, 134	50.4	36	
87	Data assimilation of photosynthetic light-use efficiency using multi-angular satellite data: II Model implementation and validation. <i>Remote Sensing of Environment</i> , <b>2012</b> , 121, 287-300	13.2	35	
86	Estimating the net ecosystem exchange for the major forests in the northern United States by integrating MODIS and AmeriFlux data. <i>Agricultural and Forest Meteorology</i> , <b>2012</b> , 156, 75-84	5.8	35	
85	Controls on winter ecosystem respiration in temperate and boreal ecosystems. <i>Biogeosciences</i> , <b>2011</b> , 8, 2009-2025	4.6	35	
84	Atmospheric reactive nitrogen concentration and flux budgets at a Northeastern U.S. forest site. <i>Agricultural and Forest Meteorology</i> , <b>2006</b> , 136, 159-174	5.8	35	
83	Atmospheric reactive nitrogen concentration and flux budgets at a Northeastern U.S. forest site. <i>Agricultural and Forest Meteorology</i> , <b>2005</b> , 133, 210-225	5.8	33	

82	Automated in-situ monitoring of atmospheric non-methane hydrocarbon concentrations and gradients. <i>Journal of Atmospheric Chemistry</i> , <b>1995</b> , 21, 43-59	3.2	33
81	Canopy-scale biophysical controls of transpiration and evaporation in the Amazon Basin. <i>Hydrology and Earth System Sciences</i> , <b>2016</b> , 20, 4237-4264	5.5	32
80	Long-term eddy covariance measurements of the isotopic composition of the ecosystem through the ecosystem and Forest Meteorology, <b>2013</b> , 181, 69-84	5.8	31
79	Urban measurements of atmospheric nitrous acid: A caveat on the interpretation of the HONO photostationary state. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2013</b> , 118, 12,274-12,281	4.4	30
78	What are the instrumentation requirements for measuring the isotopic composition of net ecosystem exchange of CO2 using eddy covariance methods?. <i>Isotopes in Environmental and Health Studies</i> , <b>2006</b> , 42, 115-33	1.5	29
77	What have we learned from intensive atmospheric sampling field programmes of CO2?. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , <b>2006</b> , 58, 331-343	3.3	28
76	Intercomparison of field measurements of nitrous acid (HONO) during the SHARP campaign. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2014</b> , 119, 5583-5601	4.4	27
75	Modeling the carbon balance of Amazonian rain forests: resolving ecological controls on net ecosystem productivity. <i>Ecological Monographs</i> , <b>2009</b> , 79, 445-463	9	27
74	Anthropogenic emissions of nonmethane hydrocarbons in the northeastern United States: Measured seasonal variations from 199211996 and 199912001. <i>Journal of Geophysical Research</i> , <b>2006</b> , 111,		26
73	A season of heat, water vapor, total hydrocarbon, and ozone fluxes at a subarctic fen. <i>Journal of Geophysical Research</i> , <b>1994</b> , 99, 1937		26
72	Carbon budget of the Harvard Forest Long-Term Ecological Research site: pattern, process, and response to global change. <i>Ecological Monographs</i> , <b>2020</b> , 90, e01423	9	26
71	An ecosystem-scale perspective of the net land methanol flux: synthesis of micrometeorological flux measurements. <i>Atmospheric Chemistry and Physics</i> , <b>2015</b> , 15, 2577-2613	6.8	25
70	Evaluating the agreement between measurements and models of net ecosystem exchange at different times and timescales using wavelet coherence: an example using data from the North American Carbon Program Site-Level Interim Synthesis. <i>Biogeosciences</i> , <b>2013</b> , 10, 6893-6909	4.6	25
69	Increased water yield due to the hemlock woolly adelgid infestation in New England. <i>Geophysical Research Letters</i> , <b>2017</b> , 44, 2327-2335	4.9	24
68	A comparison of two cloudwater/fogwater collectors: The rotating arm collector and the caltech active strand cloudwater collector. <i>Atmospheric Environment Part A General Topics</i> , <b>1990</b> , 24, 1685-1692	<u>.</u>	24
67	Reactive nitrogen oxides and ozone above a taiga woodland. <i>Journal of Geophysical Research</i> , <b>1994</b> , 99, 1927		23
66	Top-down estimate of China@ black carbon emissions using surface observations: Sensitivity to observation representativeness and transport model error. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2013</b> , 118, 5781-5795	4.4	22
65	Quantification of terrestrial ecosystem carbon dynamics in the conterminous United States combining a process-based biogeochemical model and MODIS and AmeriFlux data. <i>Biogeosciences</i> , <b>2011</b> , 8, 2665-2688	4.6	22

### (2020-2018)

64	Warming-Induced Earlier Greenup Leads to Reduced Stream Discharge in a Temperate Mixed Forest Catchment. <i>Journal of Geophysical Research G: Biogeosciences</i> , <b>2018</b> , 123, 1960-1975	3.7	22	
63	A novel correction for biases in forest eddy covariance carbon balance. <i>Agricultural and Forest Meteorology</i> , <b>2018</b> , 250-251, 90-101	5.8	21	
62	A nonparametric method for separating photosynthesis and respiration components in CO2 flux measurements. <i>Geophysical Research Letters</i> , <b>2004</b> , 31, n/a-n/a	4.9	21	
61	Influence of Dynamic Ozone Dry Deposition on Ozone Pollution. <i>Journal of Geophysical Research D:</i> Atmospheres, <b>2020</b> , 125, e2020JD032398	4.4	19	
60	A modified micrometeorological gradient method for estimating O<sub>3</sub> dry depositions over a forest canopy. <i>Atmospheric Chemistry and Physics</i> , <b>2015</b> , 15, 7487-7496	6.8	19	
59	Measurement, Tower, and Site Design Considerations <b>2012</b> , 21-58		18	
58	CO <sub>2</sub> , CO and CH <sub>4</sub> measurements from the NOAA Earth System Research Laboratory@ Tall Tower Greenhouse Gas Observing Network: instrumentation, uncertainty analysis and recommendations for future high-accuracy greenhouse		18	
57	gas monitoring efforts <b>2013</b> , Measurements of nitrous acid in commercial aircraft exhaust at the Alternative Aviation Fuel Experiment. <i>Environmental Science &amp; Experiment (Environmental Science &amp; Experimental Environmental Enviro</i>	10.3	18	
56	A new model of net ecosystem carbon exchange for the deciduous-dominated forest by integrating MODIS and flux data. <i>Ecological Engineering</i> , <b>2011</b> , 37, 1567-1571	3.9	18	
55	Balloon-borne measurements of CLO, NO, and O3 in a volcanic cloud: An analysis of heterogeneous chemistry between 20 and 30 km. <i>Geophysical Research Letters</i> , <b>1993</b> , 20, 2527-2530	4.9	18	
54	Carbonyl sulfide in the planetary boundary layer: Coastal and continental influences. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2013</b> , 118, 8001-8009	4.4	17	
53	A field investigation of physical and chemical mechanisms affecting pollutant concentrations in fog droplets. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , <b>1984</b> , 36, 272-285	3.3	17	
52	Bayesian calibration of terrestrial ecosystem models: a study of advanced Markov chain Monte Carlo methods. <i>Biogeosciences</i> , <b>2017</b> , 14, 4295-4314	4.6	16	
51	Spatiotemporal Controls on Observed Daytime Ozone Deposition Velocity Over Northeastern U.S. Forests During Summer. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2019</b> , 124, 5612-5628	4.4	16	
50	Limited effect of ozone reductions on the 20-year photosynthesis trend at Harvard forest. <i>Global Change Biology</i> , <b>2016</b> , 22, 3750-3759	11.4	15	
49	Ecosystem fluxes of hydrogen: a comparison of flux-gradient methods. <i>Atmospheric Measurement Techniques</i> , <b>2014</b> , 7, 2787-2805	4	14	
48	Continental-scale variations in precipitation chemistry. <i>Environmental Science &amp; Emp; Technology</i> , <b>1983</b> , 17, 32A-42A	10.3	14	
47	Global Importance of Hydroxymethanesulfonate in Ambient Particulate Matter: Implications for Air Quality. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2020</b> , 125, e2020JD032706	4.4	14	

46	Synthetic ozone deposition and stomatal uptake at flux tower sites. <i>Biogeosciences</i> , <b>2018</b> , 15, 5395-54	1 <b>3</b> 4.6	14
45	Effective line strengths of trans-nitrous acid near 1275 cml and cis-nitrous acid at 1660 cml. Journal of Quantitative Spectroscopy and Radiative Transfer, 2012, 113, 1905-1912	2.1	13
44	Nitrogen deposition to the United States: distribution, sources, and processes		13
43	Ozone air quality during the 2008 Beijing Olympics leffectiveness of emission restrictions		13
42	A Deep Learning Parameterization for Ozone Dry Deposition Velocities. <i>Geophysical Research Letters</i> , <b>2019</b> , 46, 983-989	4.9	12
41	Carbon exchange in an Amazon forest: from hours to years. <i>Biogeosciences</i> , <b>2018</b> , 15, 4833-4848	4.6	11
40	Ecosystem fluxes of hydrogen in a mid-latitude forest driven by soil microorganisms and plants. <i>Global Change Biology</i> , <b>2017</b> , 23, 906-919	11.4	11
39	Year round measurements of O3 and CO at a rural site near Beijing: variations in their correlations. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , <b>2010</b> , 62, 228-241	3.3	11
38	Regional carbon dioxide fluxes from mixing ratio data. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , <b>2004</b> , 56, 301-311	3.3	11
37	Previously unaccounted atmospheric mercury deposition in a midlatitude deciduous forest. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2021</b> , 118,	11.5	11
36	Seasonal variation of source contributions to eddy-covariance CO2 measurements in a mixed hardwood-conifer forest. <i>Agricultural and Forest Meteorology</i> , <b>2018</b> , 253-254, 71-83	5.8	10
35	Assessing the interplay between canopy energy balance and photosynthesis with cellulose <b>D</b> : large-scale patterns and independent ground-truthing. <i>Oecologia</i> , <b>2018</b> , 187, 995-1007	2.9	10
34	Phenology of Forest-Atmosphere Carbon Exchange for Deciduous and Coniferous Forests in Southern and Northern New England <b>2009</b> , 119-141		10
33	Carboxylic acids and carbonyl compounds in southern California clouds and fogs. <i>Tellus, Series B:</i> Chemical and Physical Meteorology, <b>1989</b> , 41, 230-242	3.3	10
32	Chemical characterization of stratus cloudwater and its role as a vector for pollutant deposition in a Los Angeles pine forest. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , <b>1985</b> , 37, 91-108	3.3	10
31	Precipitation extremes influence patterns and partitioning of evapotranspiration and transpiration in a deciduous boreal larch forest. <i>Agricultural and Forest Meteorology</i> , <b>2020</b> , 287, 107936	5.8	9
30	Integrating a model with remote sensing observations by a data assimilation approach to improve the model simulation accuracy of carbon flux and evapotranspiration at two flux sites. <i>Science China Earth Sciences</i> , <b>2016</b> , 59, 337-348	4.6	7
	Combining tower mixing ratio and community model data to estimate regional-scale net ecosystem		

28	Quantification of terrestrial ecosystem carbon dynamics in the conterminous United States combining a process-based biogeochemical model and MODIS and AmeriFlux data		7
27	Modelling bidirectional fluxes of methanol and acetaldehyde with the FORCAsT canopy exchange model. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 15461-15484	6.8	6
26	Atmospheric measurements of the terrestrial O<sub>2</sub>exchange ratio of a midlatitude forest. Atmospheric Chemistry and Physics, <b>2019</b> , 19, 8687-8701	6.8	6
25	Preface to special section on New Approaches to Quantifying Exchanges of Carbon and Energy Across a Range of Scales. <i>Journal of Geophysical Research</i> , <b>2006</b> , 111,		6
24	Assessing biotic contributions to CO<sub>2</sub> fluxes in northern China using the Vegetation, Photosynthesis and Respiration Model (VPRM-CHINA) and observations from 2005 to 2009. <i>Biogeosciences</i> , <b>2018</b> , 15, 6713-6729	4.6	6
23	Atmospheric variability and emissions of halogenated trace gases near New York City. <i>Atmospheric Environment</i> , <b>2012</b> , 47, 533-540	5.3	5
22	On the ability of a global atmospheric inversion to constrain variations of CO<sub>2</sub> fluxes over Amazonia. <i>Atmospheric Chemistry and Physics</i> , <b>2015</b> , 15, 8423-84	438 <sup>8</sup>	5
21	Science to Commerce: A Commercial-Scale Protocol for Carbon Trading Applied to a 28-Year Record of Forest Carbon Monitoring at the Harvard Forest. <i>Land</i> , <b>2021</b> , 10, 163	3.5	5
20	Keenan et al. reply. <i>Nature</i> , <b>2014</b> , 507, E2-3	50.4	4
19	An ecosystem-scale perspective of the net land methanol flux: synthesis of micrometeorological flux measurements <b>2015</b> , 15, 2577-2613		4
18	Selected breakpoints of net forest carbon uptake at four eddy-covariance sites. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , <b>2021</b> , 73, 1-12	3.3	4
17	Listening to the Forest: An Artificial Neural Network-Based Model of Carbon Uptake at Harvard Forest. <i>Journal of Geophysical Research G: Biogeosciences</i> , <b>2019</b> , 124, 461-478	3.7	3
16	Evaluating the agreement between measurements and models of net ecosystem exchange at different times and time scales using wavelet coherence: an example using data from the North American Carbon Program Site-Level Interim Synthesis		3
15	Direct measurement forest carbon protocol: a commercial system-of-systems to incentivize forest restoration and management. <i>PeerJ</i> , <b>2020</b> , 8, e8891	3.1	3
14	Evaluating China@anthropogenic CO<sub>2</sub> emissions inventories: alhorthern China case study using continuous surface observations from 2005 to 2009. <i>Atmospheric Chemistry and Physics</i> , <b>2020</b> , 20, 3569-3588	6.8	2
13	Shenandoah Cloud and Photochemistry Experiment (SCAPE): Overview. <i>Journal of Geophysical Research</i> , <b>1995</b> , 100, 9313		2
12	Pollutant Deposition in Radiation Fog. ACS Symposium Series, 1987, 250-257	0.4	2
11	A modified micrometeorological gradient method for estimating O <sub>3</sub> dry deposition over a forest canopy		2

10	Possible heterogeneous hydroxymethanesulfonate (HMS) chemistry in northern China winter haze and implications for rapid sulfate formation <b>2018</b> ,		2
9	Peak radial growth of diffuse-porous species occurs during periods of lower water availability than for ring-porous and coniferous trees. <i>Tree Physiology</i> , <b>2021</b> ,	4.2	2
8	Comparison of net ecosystem carbon exchange estimation in a mixed temperate forest using field eddy covariance and MODIS data. <i>SpringerPlus</i> , <b>2016</b> , 5, 491		1
7	Reactive Chemistry in Aircraft Exhaust: Implications for Air Quality. <i>Transportation Research Record</i> , <b>2011</b> , 2206, 19-23	1.7	1
6	Ground-Based Platforms. <i>Springer Handbooks</i> , <b>2021</b> , 155-182	1.3	1
5	Carbon monoxide and related trace gases and aerosols over the Amazon Basin during the wet and dry seasons		1
4	Variations of O <sub>3</sub> and CO in summertime at a rural site near Beijing		1
3	Ecosystem fluxes of hydrogen: a comparison of flux-gradient methods		1
2	The changing carbon balance of tundra ecosystems: results from a vertically-resolved peatland biosphere model. <i>Environmental Research Letters</i> , <b>2022</b> , 17, 014019	6.2	1
1	Using multi-source data from lidar, radar, imaging spectroscopy, and national forest inventories to simulate forest carbon fluxes. <i>International Journal of Remote Sensing</i> , <b>2017</b> , 38, 5464-5486	3.1	