

D D Baldocchi

List of Publications by Citations

Source: <https://exaly.com/author-pdf/8854686/d-d-baldocchi-publications-by-citations.pdf>

Version: 2024-04-26

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.

383
papers

54,986
citations

120
h-index

230
g-index

498
ext. papers

61,298
ext. citations

7
avg, IF

7.73
L-index

#	Paper	IF	Citations
383	FLUXNET: A New Tool to Study the Temporal and Spatial Variability of Ecosystem Scale Carbon Dioxide, Water Vapor, and Energy Flux Densities. <i>Bulletin of the American Meteorological Society</i> , 2001 , 82, 2415-2434	6.1	2615
382	On the separation of net ecosystem exchange into assimilation and ecosystem respiration: review and improved algorithm. <i>Global Change Biology</i> , 2005 , 11, 1424-1439	11.4	2253
381	Terrestrial gross carbon dioxide uptake: global distribution and covariation with climate. <i>Science</i> , 2010 , 329, 834-8	33.3	1638
380	Energy balance closure at FLUXNET sites. <i>Agricultural and Forest Meteorology</i> , 2002 , 113, 223-243	5.8	1633
379	Assessing the eddy covariance technique for evaluating carbon dioxide exchange rates of ecosystems: past, present and future. <i>Global Change Biology</i> , 2003 , 9, 479-492	11.4	1632
378	TRY is a global database of plant traits. <i>Global Change Biology</i> , 2011 , 17, 2905-2935	11.4	1623
377	Gap filling strategies for defensible annual sums of net ecosystem exchange. <i>Agricultural and Forest Meteorology</i> , 2001 , 107, 43-69	5.8	1381
376	Spatial modelling: a comprehensive framework for principal coordinate analysis of neighbour matrices (PCNM). <i>Ecological Modelling</i> , 2006 , 196, 483-493	3	1245
375	Environmental controls over carbon dioxide and water vapor exchange of terrestrial vegetation. <i>Agricultural and Forest Meteorology</i> , 2002 , 113, 97-120	5.8	965
374	Measuring Biosphere-Atmosphere Exchanges of Biologically Related Gases with Micrometeorological Methods. <i>Ecology</i> , 1988 , 69, 1331-1340	4.6	901
373	'Breathing' of the terrestrial biosphere: lessons learned from a global network of carbon dioxide flux measurement systems. <i>Australian Journal of Botany</i> , 2008 , 56, 1	1.2	851
372	Reconciling Carbon-cycle Concepts, Terminology, and Methods. <i>Ecosystems</i> , 2006 , 9, 1041-1050	3.9	754
371	Intercomparison, interpretation, and assessment of spring phenology in North America estimated from remote sensing for 1982-2006. <i>Global Change Biology</i> , 2009 , 15, 2335-2359	11.4	710
370	Global estimates of the land-atmosphere water flux based on monthly AVHRR and ISLSCP-II data, validated at 16 FLUXNET sites. <i>Remote Sensing of Environment</i> , 2008 , 112, 901-919	13.2	608
369	The carbon balance of tropical, temperate and boreal forests. <i>Plant, Cell and Environment</i> , 1999 , 22, 715-740	5.4	599
368	Seasonality of ecosystem respiration and gross primary production as derived from FLUXNET measurements. <i>Agricultural and Forest Meteorology</i> , 2002 , 113, 53-74	5.8	540
367	A comparison of methods for determining forest evapotranspiration and its components: sap-flow, soil water budget, eddy covariance and catchment water balance. <i>Agricultural and Forest Meteorology</i> , 2001 , 106, 153-168	5.8	527

366	A Global Terrestrial Monitoring Network Integrating Tower Fluxes, Flask Sampling, Ecosystem Modeling and EOS Satellite Data. <i>Remote Sensing of Environment</i> , 1999 , 70, 108-127	13.2	517
365	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> , 2006 , 44, 1908-1925	8.1	475
364	Response of a deciduous forest to the Mount Pinatubo eruption: enhanced photosynthesis. <i>Science</i> , 2003 , 299, 2035-8	33.3	475
363	A preliminary multiple resistance routine for deriving dry deposition velocities from measured quantities. <i>Water, Air, and Soil Pollution</i> , 1987 , 36, 311-330	2.6	474
362	Seasonal variation in carbon dioxide exchange over a Mediterranean annual grassland in California. <i>Agricultural and Forest Meteorology</i> , 2004 , 123, 79-96	5.8	471
361	Biogenic Hydrocarbons in the Atmospheric Boundary Layer: A Review. <i>Bulletin of the American Meteorological Society</i> , 2000 , 81, 1537-1575	6.1	462
360	How plant functional-type, weather, seasonal drought, and soil physical properties alter water and energy fluxes of an oakgrass savanna and an annual grassland. <i>Agricultural and Forest Meteorology</i> , 2004 , 123, 13-39	5.8	439
359	Arctic and boreal ecosystems of western North America as components of the climate system.. <i>Global Change Biology</i> , 2000 , 6, 211-223	11.4	431
358	The Boreal Ecosystem Atmosphere Study (BOREAS): An Overview and Early Results from the 1994 Field Year. <i>Bulletin of the American Meteorological Society</i> , 1995 , 76, 1549-1577	6.1	420
357	Deriving a light use efficiency model from eddy covariance flux data for predicting daily gross primary production across biomes. <i>Agricultural and Forest Meteorology</i> , 2007 , 143, 189-207	5.8	417
356	Gap filling strategies for long term energy flux data sets. <i>Agricultural and Forest Meteorology</i> , 2001 , 107, 71-77	5.8	417
355	Advantages of diffuse radiation for terrestrial ecosystem productivity. <i>Journal of Geophysical Research</i> , 2002 , 107, ACL 2-1-ACL 2-23		414
354	TRY plant trait database - enhanced coverage and open access. <i>Global Change Biology</i> , 2020 , 26, 119-188	11.4	399
353	On using eco-physiological, micrometeorological and biogeochemical theory to evaluate carbon dioxide, water vapor and trace gas fluxes over vegetation: a perspective. <i>Agricultural and Forest Meteorology</i> , 1998 , 90, 1-25	5.8	397
352	Tree photosynthesis modulates soil respiration on a diurnal time scale. <i>Global Change Biology</i> , 2005 , 11, 1298-1304	11.4	388
351	Seasonal trends in photosynthetic parameters and stomatal conductance of blue oak (<i>Quercus douglasii</i>) under prolonged summer drought and high temperature. <i>Tree Physiology</i> , 2003 , 23, 865-77	4.2	385
350	CO2 Fluxes over Plant Canopies and Solar Radiation: A Review. <i>Advances in Ecological Research</i> , 1995 , 26, 1-68	4.6	371
349	BOREAS in 1997: Experiment overview, scientific results, and future directions. <i>Journal of Geophysical Research</i> , 1997 , 102, 28731-28769		367

348	Seasonal and interannual variability of energy fluxes over a broadleaved temperate deciduous forest in North America. <i>Agricultural and Forest Meteorology</i> , 2000 , 100, 1-18	5.8	367
347	Strategies for measuring and modelling carbon dioxide and water vapour fluxes over terrestrial ecosystems. <i>Global Change Biology</i> , 1996 , 2, 159-168	11.4	345
346	The future of evapotranspiration: Global requirements for ecosystem functioning, carbon and climate feedbacks, agricultural management, and water resources. <i>Water Resources Research</i> , 2017 , 53, 2618-2626	5.4	344
345	A canopy stomatal resistance model for gaseous deposition to vegetated surfaces. <i>Atmospheric Environment</i> , 1987 , 21, 91-101		343
344	Isolating Individual Trees in a Savanna Woodland Using Small Footprint Lidar Data. <i>Photogrammetric Engineering and Remote Sensing</i> , 2006 , 72, 923-932	1.6	328
343	Spatial and seasonal variability of photosynthetic parameters and their relationship to leaf nitrogen in a deciduous forest. <i>Tree Physiology</i> , 2000 , 20, 565-578	4.2	326
342	CLIMATE: The Terrestrial Carbon Cycle: Implications for the Kyoto Protocol. <i>Science</i> , 1998 , 280, 1393-1394	3.3	326
341	Microbial soil respiration and its dependency on carbon inputs, soil temperature and moisture. <i>Global Change Biology</i> , 2007 , 13, 2018-2035	11.4	325
340	Inter-annual variability in carbon dioxide exchange of an oak/grass savanna and open grassland in California. <i>Agricultural and Forest Meteorology</i> , 2007 , 147, 157-171	5.8	318
339	How soil moisture, rain pulses, and growth alter the response of ecosystem respiration to temperature. <i>Global Biogeochemical Cycles</i> , 2004 , 18, n/a-n/a	5.9	308
338	Scaling carbon dioxide and water vapour exchange from leaf to canopy in a deciduous forest. II. Model testing and application. <i>Plant, Cell and Environment</i> , 1995 , 18, 1157-1173	8.4	306
337	Temporal and among-site variability of inherent water use efficiency at the ecosystem level. <i>Global Biogeochemical Cycles</i> , 2009 , 23, n/a-n/a	5.9	304
336	A new model of gross primary productivity for North American ecosystems based solely on the enhanced vegetation index and land surface temperature from MODIS. <i>Remote Sensing of Environment</i> , 2008 , 112, 1633-1646	13.2	302
335	Correction Of Eddy-Covariance Measurements Incorporating Both Advective Effects And Density Fluxes. <i>Boundary-Layer Meteorology</i> , 2000 , 97, 487-511	3.4	297
334	Land-atmosphere energy exchange in Arctic tundra and boreal forest: available data and feedbacks to climate.. <i>Global Change Biology</i> , 2000 , 6, 84-115	11.4	294
333	Measuring and modelling carbon dioxide and water vapour exchange over a temperate broad-leaved forest during the 1995 summer drought. <i>Plant, Cell and Environment</i> , 1997 , 20, 1108-1122	8.4	282
332	Measuring fluxes of trace gases and energy between ecosystems and the atmosphere - the state and future of the eddy covariance method. <i>Global Change Biology</i> , 2014 , 20, 3600-9	11.4	274
331	Protecting climate with forests. <i>Environmental Research Letters</i> , 2008 , 3, 044006	6.2	264

330	Modeling CO ₂ and water vapor exchange of a temperate broadleaved forest across hourly to decadal time scales. <i>Ecological Modelling</i> , 2001 , 142, 155-184	3	264
329	Assessing soil CO ₂ efflux using continuous measurements of CO ₂ profiles in soils with small solid-state sensors. <i>Agricultural and Forest Meteorology</i> , 2003 , 118, 207-220	5.8	256
328	The FLUXNET2015 dataset and the ONEFlux processing pipeline for eddy covariance data. <i>Scientific Data</i> , 2020 , 7, 225	8.2	256
327	Seasonal variations of CO ₂ and water vapour exchange rates over a temperate deciduous forest. <i>Global Change Biology</i> , 1996 , 2, 183-197	11.4	254
326	Integration of MODIS land and atmosphere products with a coupled-process model to estimate gross primary productivity and evapotranspiration from 1 km to global scales. <i>Global Biogeochemical Cycles</i> , 2011 , 25, n/a-n/a	5.9	251
325	Comparing nocturnal eddy covariance measurements to estimates of ecosystem respiration made by scaling chamber measurements at six coniferous boreal sites. <i>Journal of Geophysical Research</i> , 1997 , 102, 28977-28985		244
324	On Measuring Net Ecosystem Carbon Exchange Over Tall Vegetation on Complex Terrain. <i>Boundary-Layer Meteorology</i> , 2000 , 96, 257-291	3.4	238
323	Spatial-temporal variation in soil respiration in an oak-grass savanna ecosystem in California and its partitioning into autotrophic and heterotrophic components. <i>Biogeochemistry</i> , 2005 , 73, 183-207	3.8	237
322	Warm spring reduced carbon cycle impact of the 2012 US summer drought. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 5880-5	11.5	232
321	Seasonal variation of carbon dioxide exchange rates above and below a boreal jack pine forest. <i>Agricultural and Forest Meteorology</i> , 1997 , 83, 147-170	5.8	225
320	A comparison of six methods for measuring soil-surface carbon dioxide fluxes. <i>Journal of Geophysical Research</i> , 1997 , 102, 28771-28777		224
319	Objective threshold determination for nighttime eddy flux filtering. <i>Agricultural and Forest Meteorology</i> , 2005 , 128, 179-197	5.8	220
318	Reduction in carbon uptake during turn of the century drought in western North America. <i>Nature Geoscience</i> , 2012 , 5, 551-556	18.3	216
317	Climate and vegetation controls on boreal zone energy exchange.. <i>Global Change Biology</i> , 2000 , 6, 69-83	11.4	216
316	On the use of MODIS EVI to assess gross primary productivity of North American ecosystems. <i>Journal of Geophysical Research</i> , 2006 , 111,		215
315	Biophysical considerations in forestry for climate protection. <i>Frontiers in Ecology and the Environment</i> , 2011 , 9, 174-182	5.5	209
314	Leaf age affects the seasonal pattern of photosynthetic capacity and net ecosystem exchange of carbon in a deciduous forest. <i>Plant, Cell and Environment</i> , 2001 , 24, 571-583	8.4	209
313	Climate and vegetation controls on the surface water balance: Synthesis of evapotranspiration measured across a global network of flux towers. <i>Water Resources Research</i> , 2012 , 48,	5.4	202

312	OAK FOREST CARBON AND WATER SIMULATIONS: MODEL INTERCOMPARISONS AND EVALUATIONS AGAINST INDEPENDENT DATA. <i>Ecological Monographs</i> , 2004 , 74, 443-489	9	202
311	Seasonal variation of energy and water vapor exchange rates above and below a boreal jack pine forest canopy. <i>Journal of Geophysical Research</i> , 1997 , 102, 28939-28951		200
310	How to quantify tree leaf area index in an open savanna ecosystem: A multi-instrument and multi-model approach. <i>Agricultural and Forest Meteorology</i> , 2010 , 150, 63-76	5.8	198
309	A comparison of direct and indirect methods for estimating forest canopy leaf area. <i>Agricultural and Forest Meteorology</i> , 1991 , 57, 107-128	5.8	198
308	Energy and CO ₂ flux densities above and below a temperate broad-leaved forest and a boreal pine forest. <i>Tree Physiology</i> , 1996 , 16, 5-16	4.2	194
307	Estimation of net ecosystem carbon exchange for the conterminous United States by combining MODIS and AmeriFlux data. <i>Agricultural and Forest Meteorology</i> , 2008 , 148, 1827-1847	5.8	191
306	Commentary: Carbon Metabolism of the Terrestrial Biosphere: A Multitechnique Approach for Improved Understanding. <i>Ecosystems</i> , 2000 , 3, 115-130	3.9	189
305	Linking plant and ecosystem functional biogeography. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 13697-702	11.5	188
304	Filtering Airborne Laser Scanning Data with Morphological Methods. <i>Photogrammetric Engineering and Remote Sensing</i> , 2007 , 73, 175-185	1.6	185
303	A continuous measure of gross primary production for the conterminous United States derived from MODIS and AmeriFlux data. <i>Remote Sensing of Environment</i> , 2010 , 114, 576-591	13.2	183
302	Agricultural peatland restoration: effects of land-use change on greenhouse gas (CO ₂ and CH ₄) fluxes in the Sacramento-San Joaquin Delta. <i>Global Change Biology</i> , 2015 , 21, 750-65	11.4	182
301	How the environment, canopy structure and canopy physiological functioning influence carbon, water and energy fluxes of a temperate broad-leaved deciduous forest--an assessment with the biophysical model CANOAK. <i>Tree Physiology</i> , 2002 , 22, 1065-77	4.2	182
300	Turbulence structure in a deciduous forest. <i>Boundary-Layer Meteorology</i> , 1988 , 43, 345-364	3.4	181
299	A comparative study of mass and energy exchange rates over a closed C ₃ (wheat) and an open C ₄ (corn) crop: II. CO ₂ exchange and water use efficiency. <i>Agricultural and Forest Meteorology</i> , 1994 , 67, 291-321	5.8	177
298	What the towers don't see at night: nocturnal sap flow in trees and shrubs at two AmeriFlux sites in California. <i>Tree Physiology</i> , 2007 , 27, 597-610	4.2	170
297	Scaling carbon dioxide and water vapour exchange from leaf to canopy in a deciduous forest. I. Leaf model parametrization. <i>Plant, Cell and Environment</i> , 1995 , 18, 1146-1156	8.4	168
296	Eddy fluxes of CO ₂ , water vapor, and sensible heat over a deciduous forest. <i>Boundary-Layer Meteorology</i> , 1986 , 36, 71-91	3.4	168
295	Inter-annual variability of net and gross ecosystem carbon fluxes: A review. <i>Agricultural and Forest Meteorology</i> , 2018 , 249, 520-533	5.8	165

294	Spatial and temporal variation in respiration in a young ponderosa pine forest during a summer drought. <i>Agricultural and Forest Meteorology</i> , 2001 , 110, 27-43	5.8	161
293	On the correct estimation of effective leaf area index: Does it reveal information on clumping effects?. <i>Agricultural and Forest Meteorology</i> , 2010 , 150, 463-472	5.8	158
292	On seeing the wood from the leaves and the role of voxel size in determining leaf area distribution of forests with terrestrial LiDAR. <i>Agricultural and Forest Meteorology</i> , 2014 , 184, 82-97	5.8	157
291	Flux Footprints Within and Over Forest Canopies. <i>Boundary-Layer Meteorology</i> , 1997 , 85, 273-292	3.4	153
290	Trace gas exchange above the floor of a deciduous forest: 1. Evaporation and CO ₂ efflux. <i>Journal of Geophysical Research</i> , 1991 , 96, 7271		153
289	Effects of diffuse radiation on canopy gas exchange processes in a forest ecosystem. <i>Journal of Geophysical Research</i> , 2008 , 113, n/a-n/a		148
288	Predicting the onset of net carbon uptake by deciduous forests with soil temperature and climate data: a synthesis of FLUXNET data. <i>International Journal of Biometeorology</i> , 2005 , 49, 377-87	3.7	148
287	A multiyear evaluation of a Dynamic Global Vegetation Model at three AmeriFlux forest sites: Vegetation structure, phenology, soil temperature, and CO ₂ and H ₂ O vapor exchange. <i>Ecological Modelling</i> , 2006 , 196, 1-31	3	147
286	What is global photosynthesis? History, uncertainties and opportunities. <i>Remote Sensing of Environment</i> , 2019 , 223, 95-114	13.2	146
285	Greenhouse gas (CO ₂ , CH ₄ , H ₂ O) fluxes from drained and flooded agricultural peatlands in the Sacramento-San Joaquin Delta. <i>Agriculture, Ecosystems and Environment</i> , 2012 , 150, 1-18	5.7	145
284	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> , 2011 , 151, 60-69	5.8	145
283	Interannual variability of evapotranspiration and energy exchange over an annual grassland in California. <i>Journal of Geophysical Research</i> , 2008 , 113,		144
282	A spectral analysis of biosphere-atmosphere trace gas flux densities and meteorological variables across hour to multi-year time scales. <i>Agricultural and Forest Meteorology</i> , 2001 , 107, 1-27	5.8	143
281	Quantifying stomatal and non-stomatal limitations to carbon assimilation resulting from leaf aging and drought in mature deciduous tree species. <i>Tree Physiology</i> , 2000 , 20, 787-797	4.2	141
280	Continuous observation of tree leaf area index at ecosystem scale using upward-pointing digital cameras. <i>Remote Sensing of Environment</i> , 2012 , 126, 116-125	13.2	139
279	Energy partitioning between latent and sensible heat flux during the warm season at FLUXNET sites. <i>Water Resources Research</i> , 2002 , 38, 30-1-30-11	5.4	139
278	The uncertain climate footprint of wetlands under human pressure. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 4594-9	11.5	138
277	A Multi-layer model for estimating sulfur dioxide deposition to a deciduous oak forest canopy. <i>Atmospheric Environment</i> , 1988 , 22, 869-884		137

276	Groundwater uptake by woody vegetation in a semiarid oak savanna. <i>Water Resources Research</i> , 2010 , 46,	5.4	136
275	Estimating parameters in a land-surface model by applying nonlinear inversion to eddy covariance flux measurements from eight FLUXNET sites. <i>Global Change Biology</i> , 2007 , 13, 652-670	11.4	136
274	Phase and amplitude of ecosystem carbon release and uptake potentials as derived from FLUXNET measurements. <i>Agricultural and Forest Meteorology</i> , 2002 , 113, 75-95	5.8	136
273	Below-canopy and soil CO ₂ fluxes in a ponderosa pine forest. <i>Agricultural and Forest Meteorology</i> , 1999 , 94, 171-188	5.8	136
272	An analytical solution for coupled leaf photosynthesis and stomatal conductance models. <i>Tree Physiology</i> , 1994 , 14, 1069-1079	4.2	135
271	Discerning the forest from the trees: an essay on scaling canopy stomatal conductance. <i>Agricultural and Forest Meteorology</i> , 1991 , 54, 197-226	5.8	135
270	Accumulated winter chill is decreasing in the fruit growing regions of California. <i>Climatic Change</i> , 2008 , 87, 153-166	4.5	133
269	Measuring and modelling seasonal variation of carbon dioxide and water vapour exchange of a <i>Pinus ponderosa</i> forest subject to soil water deficit. <i>Global Change Biology</i> , 2000 , 6, 613-630	11.4	133
268	On measuring and modeling energy fluxes above the floor of a homogeneous and heterogeneous conifer forest. <i>Agricultural and Forest Meteorology</i> , 2000 , 102, 187-206	5.8	130
267	Transpiration of a boreal pine forest measured by branch bag, sap flow and micrometeorological methods. <i>Tree Physiology</i> , 1997 , 17, 511-519	4.2	129
266	Isoprene fluxes measured by enclosure, relaxed eddy accumulation, surface layer gradient, mixed layer gradient, and mixed layer mass balance techniques. <i>Journal of Geophysical Research</i> , 1996 , 101, 18555-18567		126
265	Albedo estimates for land surface models and support for a new paradigm based on foliage nitrogen concentration. <i>Global Change Biology</i> , 2010 , 16, 696-710	11.4	123
264	Multiscale analysis of temporal variability of soil CO ₂ production as influenced by weather and vegetation. <i>Global Change Biology</i> , 2010 , 16, 1589-1605	11.4	120
263	Factors controlling evaporation and energy partitioning beneath a deciduous forest over an annual cycle. <i>Agricultural and Forest Meteorology</i> , 2000 , 102, 83-103	5.8	119
262	Partitioning forest carbon fluxes with overstory and understory eddy-covariance measurements: A synthesis based on FLUXNET data. <i>Agricultural and Forest Meteorology</i> , 2007 , 144, 14-31	5.8	118
261	Frontiers and challenges in soil respiration research: from measurements to model-data integration. <i>Biogeochemistry</i> , 2011 , 102, 1-13	3.8	116
260	What limits evaporation from Mediterranean oak woodlands ¶The supply of moisture in the soil, physiological control by plants or the demand by the atmosphere?. <i>Advances in Water Resources</i> , 2007 , 30, 2113-2122	4.7	116
259	How switches and lags in biophysical regulators affect spatial-temporal variation of soil respiration in an oak-grass savanna. <i>Journal of Geophysical Research</i> , 2006 , 111, n/a-n/a		116

258	Estimation of leaf area index in open-canopy ponderosa pine forests at different successional stages and management regimes in Oregon. <i>Agricultural and Forest Meteorology</i> , 2001 , 108, 1-14	5.8	116
257	Biosphere-atmosphere exchange of CO ₂ in relation to climate: a cross-biome analysis across multiple time scales. <i>Biogeosciences</i> , 2009 , 6, 2297-2312	4.6	115
256	Comparing laser-based open- and closed-path gas analyzers to measure methane fluxes using the eddy covariance method. <i>Agricultural and Forest Meteorology</i> , 2011 , 151, 1312-1324	5.8	113
255	Leaf area distribution and radiative transfer in open-canopy forests: implications for mass and energy exchange. <i>Tree Physiology</i> , 2001 , 21, 777-87	4.2	113
254	Solar radiation within an oak-hickory forest: an evaluation of the extinction coefficients for several radiation components during fully-leafed and leafless periods. <i>Agricultural and Forest Meteorology</i> , 1984 , 32, 307-322	5.8	109
253	Canopy Radiative Transfer Models for Spherical and Known Leaf Inclination Angle Distributions: A Test in an Oak-Hickory Forest. <i>Journal of Applied Ecology</i> , 1985 , 22, 539	5.8	109
252	On the multi-temporal correlation between photosynthesis and soil CO ₂ efflux: reconciling lags and observations. <i>New Phytologist</i> , 2011 , 191, 1006-1017	9.8	108
251	Looking deeper into the soil: biophysical controls and seasonal lags of soil CO ₂ production and efflux 2010 , 20, 1569-82		108
250	Estimating Basal Area and Stem Volume for Individual Trees from Lidar Data. <i>Photogrammetric Engineering and Remote Sensing</i> , 2007 , 73, 1355-1365	1.6	108
249	A lagrangian random-walk model for simulating water vapor, CO ₂ and sensible heat flux densities and scalar profiles over and within a soybean canopy. <i>Boundary-Layer Meteorology</i> , 1992 , 61, 113-144	3.4	108
248	A spectral and lag-correlation analysis of turbulence in a deciduous forest canopy. <i>Boundary-Layer Meteorology</i> , 1988 , 45, 31-58	3.4	108
247	Seasonal differences in carbon and water vapor exchange in young and old-growth ponderosa pine ecosystems. <i>Agricultural and Forest Meteorology</i> , 2002 , 111, 203-222	5.8	106
246	The challenges of measuring methane fluxes and concentrations over a peatland pasture. <i>Agricultural and Forest Meteorology</i> , 2012 , 153, 177-187	5.8	104
245	. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2000 , 52, 1025-1056	3.3	103
244	Greenness indices from digital cameras predict the timing and seasonal dynamics of canopy-scale photosynthesis 2015 , 25, 99-115		100
243	Global estimation of evapotranspiration using a leaf area index-based surface energy and water balance model. <i>Remote Sensing of Environment</i> , 2012 , 124, 581-595	13.2	100
242	Midday values of gross CO ₂ flux and light use efficiency during satellite overpasses can be used to directly estimate eight-day mean flux. <i>Agricultural and Forest Meteorology</i> , 2005 , 131, 1-12	5.8	99
241	ECOSTRESS: NASA's Next Generation Mission to Measure Evapotranspiration From the International Space Station. <i>Water Resources Research</i> , 2020 , 56, e2019WR026058	5.4	98

240	Using data from Landsat, MODIS, VIIRS and PhenoCams to monitor the phenology of California oak/grass savanna and open grassland across spatial scales. <i>Agricultural and Forest Meteorology</i> , 2017 , 237-238, 311-325	5.8	96
239	Modeling energy and carbon fluxes in a heterogeneous oak woodland: A three-dimensional approach. <i>Agricultural and Forest Meteorology</i> , 2012 , 152, 83-100	5.8	93
238	How eddy covariance flux measurements have contributed to our understanding of Global Change Biology. <i>Global Change Biology</i> , 2020 , 26, 242-260	11.4	93
237	Modelling the discrimination of ^{13}C above and within a temperate broad-leaved forest canopy on hourly to seasonal time scales. <i>Plant, Cell and Environment</i> , 2003 , 26, 231-244	8.4	91
236	On the temporal upscaling of evapotranspiration from instantaneous remote sensing measurements to 8-day mean daily-sums. <i>Agricultural and Forest Meteorology</i> , 2012 , 152, 212-222	5.8	90
235	The COVID-19 lockdowns: a window into the Earth System. <i>Nature Reviews Earth & Environment</i> , 2020 , 1, 470-481	30.2	90
234	Estimating the sensitivity of stomatal conductance to photosynthesis: a review. <i>Plant, Cell and Environment</i> , 2017 , 40, 1214-1238	8.4	88
233	On the differential advantages of evergreenness and deciduousness in mediterranean oak woodlands: a flux perspective 2010 , 20, 1583-97		88
232	Upscaling fluxes from tower to landscape: Overlaying flux footprints on high-resolution (IKONOS) images of vegetation cover. <i>Agricultural and Forest Meteorology</i> , 2006 , 136, 132-146	5.8	87
231	Gross ecosystem photosynthesis causes a diurnal pattern in methane emission from rice. <i>Geophysical Research Letters</i> , 2012 , 39, n/a-n/a	4.9	86
230	Latitudinal patterns of magnitude and interannual variability in net ecosystem exchange regulated by biological and environmental variables. <i>Global Change Biology</i> , 2009 , 15, 2905-2920	11.4	84
229	Scaling up flux measurements for the boreal forest using aircraft-tower combinations. <i>Journal of Geophysical Research</i> , 1997 , 102, 29125-29133		84
228	The use of relaxed eddy accumulation to measure biosphere-atmosphere exchange of isoprene and other biological trace gases. <i>Oecologia</i> , 1998 , 116, 306-315	2.9	84
227	Large Greenhouse Gas Emissions from a Temperate Peatland Pasture. <i>Ecosystems</i> , 2011 , 14, 311-325	3.9	83
226	Application of eddy covariance measurements to the temperature dependence of soil organic matter mean residence time. <i>Global Biogeochemical Cycles</i> , 2003 , 17, n/a-n/a	5.9	83
225	Biophysical controls on interannual variability in ecosystem-scale CO_2 and CH_4 exchange in a California rice paddy. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2016 , 121, 978-1001	3.7	81
224	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
223	The Physical Nature of Solar Radiation in Heterogeneous Canopies: Spatial and Temporal Attributes 1994 , 21-71		77

222	Fluxes all of the time? A primer on the temporal representativeness of FLUXNET. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2017 , 122, 289-307	3.7	76
221	On the correct estimation of gap fraction: How to remove scattered radiation in gap fraction measurements?. <i>Agricultural and Forest Meteorology</i> , 2013 , 174-175, 170-183	5.8	74
220	Dynamics of isotopic exchange of carbon dioxide in a Tennessee deciduous forest. <i>Global Biogeochemical Cycles</i> , 1999 , 13, 903-922	5.9	74
219	Data-driven diagnostics of terrestrial carbon dynamics over North America. <i>Agricultural and Forest Meteorology</i> , 2014 , 197, 142-157	5.8	73
218	Terrestrial Biosphere-Atmosphere Fluxes 2014 ,		72
217	The physics and ecology of mining carbon dioxide from the atmosphere by ecosystems. <i>Global Change Biology</i> , 2018 , 25, 1191	11.4	72
216	A comparative study of mass and energy exchange over a closed C3 (wheat) and an open C4 (corn) canopy: I. The partitioning of available energy into latent and sensible heat exchange. <i>Agricultural and Forest Meteorology</i> , 1994 , 67, 191-220	5.8	71
215	Testing the performance of a novel spectral reflectance sensor, built with light emitting diodes (LEDs), to monitor ecosystem metabolism, structure and function. <i>Agricultural and Forest Meteorology</i> , 2010 , 150, 1597-1606	5.8	70
214	How will land use affect air temperature in the surface boundary layer? Lessons learned from a comparative study on the energy balance of an oak savanna and annual grassland in California, USA. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2013 , 65, 19994	3.3	68
213	Identifying scale-emergent, nonlinear, asynchronous processes of wetland methane exchange. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2016 , 121, 188-204	3.7	67
212	Comparing independent estimates of carbon dioxide exchange over 5 years at a deciduous forest in the southeastern United States. <i>Journal of Geophysical Research</i> , 2001 , 106, 34167-34178		67
211	Causality and persistence in ecological systems: a nonparametric spectral granger causality approach. <i>American Naturalist</i> , 2012 , 179, 524-35	3.7	66
210	Turbulence in an almond orchard: Vertical variations in turbulent statistics. <i>Boundary-Layer Meteorology</i> , 1987 , 40, 127-146	3.4	66
209	A comparison of scavenging and deposition processes in global models: results from the WCRP Cambridge Workshop of 1995. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2000 , 52, 1025-1056	3.3	65
208	Modification of the relaxed eddy accumulation technique to maximize measured scalar mixing ratio differences in updrafts and downdrafts. <i>Journal of Geophysical Research</i> , 1999 , 104, 9121-9133		63
207	. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 1988 , 40B, 270-284	3.3	63
206	Widespread inhibition of daytime ecosystem respiration. <i>Nature Ecology and Evolution</i> , 2019 , 3, 407-415	12.3	60
205	An analysis of soil moisture dynamics using multi-year data from a network of micrometeorological observation sites. <i>Advances in Water Resources</i> , 2007 , 30, 1065-1081	4.7	59

204	Canopy Photosynthesis and Water-Use Efficiency in a Deciduous Forest. <i>Journal of Applied Ecology</i> , 1987 , 24, 251	5.8	59
203	Are rain-induced ecosystem respiration pulses enhanced by legacies of antecedent photodegradation in semi-arid environments?. <i>Agricultural and Forest Meteorology</i> , 2012 , 154-155, 203-213	5.8	57
202	Modeling radiation and photosynthesis of a heterogeneous savanna woodland landscape with a hierarchy of model complexities. <i>Agricultural and Forest Meteorology</i> , 2008 , 148, 1005-1020	5.8	57
201	The budgets of turbulent kinetic energy and Reynolds stress within and above a deciduous forest. <i>Agricultural and Forest Meteorology</i> , 1991 , 53, 207-222	5.8	55
200	Comparison of the NCAR LSM1 land surface model with BOREAS aspen and jack pine tower fluxes. <i>Journal of Geophysical Research</i> , 1997 , 102, 29065-29075		54
199	Surface energy-balance closure over rangeland grass using the eddy covariance method and surface renewal analysis. <i>Agricultural and Forest Meteorology</i> , 2008 , 148, 1147-1160	5.8	53
198	Seasonal variations in the radiation regime within an oak-hickory forest. <i>Agricultural and Forest Meteorology</i> , 1984 , 33, 177-191	5.8	52
197	Water use efficiency in a soybean field: influence of plant water stress. <i>Agricultural and Forest Meteorology</i> , 1985 , 34, 53-65	5.8	51
196	A Biogeochemical Compromise: The High Methane Cost of Sequestering Carbon in Restored Wetlands. <i>Geophysical Research Letters</i> , 2018 , 45, 6081-6091	4.9	50
195	Plant-soil interactions and acclimation to temperature of microbial-mediated soil respiration may affect predictions of soil CO ₂ efflux. <i>Biogeochemistry</i> , 2010 , 98, 127-138	3.8	50
194	Intercomparison of techniques to model water stress effects on CO ₂ and energy exchange in temperate and boreal deciduous forests. <i>Ecological Modelling</i> , 2006 , 196, 289-312	3	50
193	Assessing the carbon and climate benefit of restoring degraded agricultural peat soils to managed wetlands. <i>Agricultural and Forest Meteorology</i> , 2019 , 268, 202-214	5.8	49
192	Does day and night sampling reduce spurious correlation between canopy photosynthesis and ecosystem respiration?. <i>Agricultural and Forest Meteorology</i> , 2015 , 207, 117-126	5.8	49
191	The effect of land cover type and structure on evapotranspiration from agricultural and wetland sites in the Sacramento-San Joaquin River Delta, California. <i>Agricultural and Forest Meteorology</i> , 2018 , 256-257, 179-195	5.8	49
190	Field-Scale Assessment of Land and Water Use Change over the California Delta Using Remote Sensing. <i>Remote Sensing</i> , 2018 , 10, 889	5	48
189	Ecological controls on net ecosystem productivity of a seasonally dry annual grassland under current and future climates: Modelling with ecosys. <i>Agricultural and Forest Meteorology</i> , 2012 , 152, 189-200	5.8	48
188	Limitations to carbon mineralization in litter and mineral soil of young and old ponderosa pine forests. <i>Forest Ecology and Management</i> , 2004 , 191, 201-213	3.9	48
187	Evaluation of forest canopy models for estimating isoprene emissions. <i>Journal of Geophysical Research</i> , 1996 , 101, 22787-22797		48

186	Turbulent transfer in a deciduous forest. <i>Tree Physiology</i> , 1989 , 5, 357-77	4.2	46
185	Biophysical controls on carbon and water vapor fluxes across a grassland climatic gradient in the United States. <i>Agricultural and Forest Meteorology</i> , 2015 , 214-215, 293-305	5.8	44
184	Tracking the structural and functional development of a perennial pepperweed (<i>Lepidium latifolium</i> L.) infestation using a multi-year archive of webcam imagery and eddy covariance measurements. <i>Agricultural and Forest Meteorology</i> , 2011 , 151, 916-926	5.8	44
183	Seasonal variation in the statistics of photosynthetically active radiation penetration in an oak-hickory forest. <i>Agricultural and Forest Meteorology</i> , 1986 , 36, 343-361	5.8	44
182	Scaling Properties of Biologically Active Scalar Concentration Fluctuations in the Atmospheric Surface Layer over a Managed Peatland. <i>Boundary-Layer Meteorology</i> , 2010 , 136, 407-430	3.4	43
181	Representativeness of Eddy-Covariance flux footprints for areas surrounding AmeriFlux sites. <i>Agricultural and Forest Meteorology</i> , 2021 , 301-302, 108350	5.8	43
180	Parsing the variability in CH ₄ flux at a spatially heterogeneous wetland: Integrating multiple eddy covariance towers with high-resolution flux footprint analysis. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2014 , 119, 1322-1339	3.7	42
179	Terrestrial Higher Plant Respiration and Net Primary Production 2001 , 33-59		41
178	Scaling Isoprene Fluxes from Leaves to Canopies: Test Cases over a Boreal Aspen and a Mixed Species Temperate Forest. <i>Journal of Applied Meteorology and Climatology</i> , 1999 , 38, 885-898		41
177	Turbulence spectra of CO ₂ , water vapor, temperature and velocity over a deciduous forest. <i>Agricultural and Forest Meteorology</i> , 1986 , 38, 81-99	5.8	41
176	Revisiting the partitioning of net ecosystem exchange of CO ₂ into photosynthesis and respiration with simultaneous flux measurements of ¹³ CO ₂ and CO ₂ , soil respiration and a biophysical model, CANVEG. <i>Agricultural and Forest Meteorology</i> , 2017 , 234-235, 149-163	5.8	40
175	Variation of energy and carbon fluxes from a restored temperate freshwater wetland and implications for carbon market verification protocols. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2016 , 121, 777-795	3.7	40
174	On estimating canopy photosynthesis and stomatal conductance in a deciduous forest with clumped foliage. <i>Tree Physiology</i> , 1986 , 2, 155-168	4.2	40
173	Gap-filling approaches for eddy covariance methane fluxes: A comparison of three machine learning algorithms and a traditional method with principal component analysis. <i>Global Change Biology</i> , 2020 , 26, 1499-1518	11.4	40
172	Slow ecosystem responses conditionally regulate annual carbon balance over 15 years in Californian oak-grass savanna. <i>Agricultural and Forest Meteorology</i> , 2016 , 228-229, 252-264	5.8	40
171	Scaling Water Vapor and Carbon Dioxide Exchange from Leaves to a Canopy: Rules and Tools 1993 , 77-114		39
170	The contribution of an overlooked transport process to a wetland's methane emissions. <i>Geophysical Research Letters</i> , 2016 , 43, 6276-6284	4.9	38
169	Effects of seasonality, transport pathway, and spatial structure on greenhouse gas fluxes in a restored wetland. <i>Global Change Biology</i> , 2017 , 23, 2768-2782	11.4	38

168	Are temporal variations of leaf traits responsible for seasonal and inter-annual variability in ecosystem CO ₂ exchange?. <i>Functional Ecology</i> , 2011 , 25, 258-270	5.6	38
167	Ecosystem CO ₂ fluxes of arbuscular and ectomycorrhizal dominated vegetation types are differentially influenced by precipitation and temperature. <i>New Phytologist</i> , 2010 , 185, 226-36	9.8	38
166	A fuel dryness index for grassland fire-danger assessment. <i>Agricultural and Forest Meteorology</i> , 2006 , 139, 1-11	5.8	38
165	The Boardman Regional Flux Experiment. <i>Bulletin of the American Meteorological Society</i> , 1992 , 73, 1785-1795	17.95	38
164	Drought Influences the Accuracy of Simulated Ecosystem Fluxes: A Model-Data Meta-analysis for Mediterranean Oak Woodlands. <i>Ecosystems</i> , 2013 , 16, 749-764	3.9	37
163	Invasion of non-native grasses causes a drop in soil carbon storage in California grasslands. <i>Environmental Research Letters</i> , 2011 , 6, 044001	6.2	37
162	Observations and stochastic modeling of soil moisture control on evapotranspiration in a Californian oak savanna. <i>Water Resources Research</i> , 2008 , 44,	5.4	36
161	Photodegradation leads to increased carbon dioxide losses from terrestrial organic matter. <i>Global Change Biology</i> , 2009 , 16, no-no	11.4	33
160	Drought-induced nitrous oxide flux dynamics in an enclosed tropical forest. <i>Global Change Biology</i> , 2005 , 11, 1247-1257	11.4	33
159	Terrestrial Carbon Cycle Variability. <i>F1000Research</i> , 2016 , 5,	3.6	33
158	The impact of expanding flooded land area on the annual evaporation of rice. <i>Agricultural and Forest Meteorology</i> , 2016 , 223, 181-193	5.8	33
157	Interoperability of ECOSTRESS and Landsat for mapping evapotranspiration time series at sub-field scales. <i>Remote Sensing of Environment</i> , 2021 , 252, 112189	13.2	33
156	Using digital camera and Landsat imagery with eddy covariance data to model gross primary production in restored wetlands. <i>Agricultural and Forest Meteorology</i> , 2017 , 237-238, 233-245	5.8	32
155	Outgoing Near-Infrared Radiation From Vegetation Scales With Canopy Photosynthesis Across a Spectrum of Function, Structure, Physiological Capacity, and Weather. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2020 , 125, e2019JG005534	3.7	32
154	Reactive hydrocarbon flux footprints during canopy senescence. <i>Agricultural and Forest Meteorology</i> , 2004 , 127, 159-173	5.8	32
153	Intra-field variability of scalar flux densities across a transition between a desert and an irrigated potato field. <i>Boundary-Layer Meteorology</i> , 1995 , 76, 109-136	3.4	32
152	Modeling gross primary production of paddy rice cropland through analyses of data from CO ₂ eddy flux tower sites and MODIS images. <i>Remote Sensing of Environment</i> , 2017 , 190, 42-55	13.2	31
151	Shallow cumulus rooted in photosynthesis. <i>Geophysical Research Letters</i> , 2014 , 41, 1796-1802	4.9	31

150	A New Data Set to Keep a Sharper Eye on Land-Air Exchanges. <i>Eos</i> , 2017 ,	1.5	31
149	Canopy Photosynthesis: History, Measurements, and Models 2001 , 9-31		30
148	Mass and Energy Exchanges of a Soybean Canopy under Various Environmental Regimes1. <i>Agronomy Journal</i> , 1981 , 73, 706-710	2.2	30
147	Evaluation of a hierarchy of models reveals importance of substrate limitation for predicting carbon dioxide and methane exchange in restored wetlands. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2017 , 122, 145-167	3.7	29
146	Coarse root distribution of a semi-arid oak savanna estimated with ground penetrating radar. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2013 , 118, 135-147	3.7	29
145	Diurnal centroid of ecosystem energy and carbon fluxes at FLUXNET sites. <i>Journal of Geophysical Research</i> , 2003 , 108,		29
144	Leaf Pubescence Effects on the Mass and Energy Exchange Between Soybean Canopies and the Atmosphere1. <i>Agronomy Journal</i> , 1983 , 75, 537-543	2.2	29
143	Phenology of Vegetation Photosynthesis. <i>Tasks for Vegetation Science</i> , 2003 , 467-485	0.9	29
142	A Synthesis of Forest Evaporation Fluxes [From Days to Years]as Measured with Eddy Covariance. <i>Ecological Studies</i> , 2011 , 101-116	1.1	29
141	Seeing the Fields and Forests: Application of Surface-Layer Theory and Flux-Tower Data to Calculating Vegetation Canopy Height. <i>Boundary-Layer Meteorology</i> , 2016 , 158, 165-182	3.4	28
140	Characterizing the Seasonal Dynamics of Plant Community Photosynthesis Across a Range of Vegetation Types 2009 , 35-58		28
139	Trace gas exchange above the floor of a deciduous forest: 2. SO ₂ and O ₃ deposition. <i>Journal of Geophysical Research</i> , 1993 , 98, 12631		28
138	Characteristics of air flow above and within soybean canopies. <i>Boundary-Layer Meteorology</i> , 1983 , 25, 43-54	3.4	28
137	Environmental effects on the CO ₂ flux and CO ₂ Water flux ratio of Alfalfa. <i>Agricultural Meteorology</i> , 1981 , 24, 175-184		27
136	Pollutant Deposition to Individual Leaves and Plant Canopies: Sites of Regulation and Relationship to Injury 1988 , 227-257		27
135	Winter fog is decreasing in the fruit growing region of the Central Valley of California. <i>Geophysical Research Letters</i> , 2014 , 41, 3251-3256	4.9	26
134	Eddy-Correlation Measurements of Carbon Dioxide Efflux from the Floor of a Deciduous Forest. <i>Journal of Applied Ecology</i> , 1986 , 23, 967	5.8	26
133	A numerical model for simulating the radiation regime within a deciduous forest canopy. <i>Agricultural and Forest Meteorology</i> , 1989 , 46, 313-337	5.8	25

132	Soil properties and sediment accretion modulate methane fluxes from restored wetlands. <i>Global Change Biology</i> , 2018 , 24, 4107-4121	11.4	24
131	Using imaging spectroscopy to detect variation in terrestrial ecosystem productivity across a water-stressed landscape 2018 , 28, 1313-1324		24
130	Comment on Vickers et al.: Self-correlation between assimilation and respiration resulting from flux partitioning of eddy-covariance CO ₂ fluxes. <i>Agricultural and Forest Meteorology</i> , 2010 , 150, 312-314	5.8	24
129	Measurement and modeling of the dry deposition of peroxides. <i>Atmospheric Environment</i> , 1999 , 33, 577-589	5.9	24
128	Influence of Water Stress on the Diurnal Exchange of Mass and Energy between the Atmosphere and a Soybean Canopy ¹ . <i>Agronomy Journal</i> , 1983 , 75, 543-548	2.2	24
127	Seasonal trends in photosynthesis and electron transport during the Mediterranean summer drought in leaves of deciduous oaks. <i>Tree Physiology</i> , 2015 , 35, 485-500	4.2	23
126	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
125	A Unique Combination of Aerodynamic and Surface Properties Contribute to Surface Cooling in Restored Wetlands of the Sacramento-San Joaquin Delta, California. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2018 , 123, 2072-2090	3.7	22
124	Energy transfer over crop canopies: simulation and experimental verification. <i>Agricultural and Forest Meteorology</i> , 1992 , 61, 129-149	5.8	22
123	The International Soil Moisture Network: serving Earth system science for over a decade. <i>Hydrology and Earth System Sciences</i> , 2021 , 25, 5749-5804	5.5	22
122	COSORE: A community database for continuous soil respiration and other soil-atmosphere greenhouse gas flux data. <i>Global Change Biology</i> , 2020 , 26, 7268-7283	11.4	22
121	Temporal Dynamics of Aerodynamic Canopy Height Derived From Eddy Covariance Momentum Flux Data Across North American Flux Networks. <i>Geophysical Research Letters</i> , 2018 , 45, 9275-9287	4.9	21
120	Seasonal and diurnal variation in the co ₂ flux and co ₂ /water flux ratio of alfalfa. <i>Agricultural Meteorology</i> , 1981 , 23, 231-244		21
119	. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2005 , 57, 175-188	3.3	20
118	The effects of extreme turbulent events on the estimation of aerodynamic variables in a deciduous forest canopy. <i>Agricultural and Forest Meteorology</i> , 1989 , 48, 117-134	5.8	20
117	Photosynthetic responses to temperature across leaf-canopy-ecosystem scales: a 15-year study in a Californian oak-grass savanna. <i>Photosynthesis Research</i> , 2017 , 132, 277-291	3.7	19
116	Wildfire-Smoke Aerosols Lead to Increased Light Use Efficiency Among Agricultural and Restored Wetland Land Uses in California's Central Valley. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2020 , 125, e2019JG005380	3.7	19
115	Ideas and perspectives: Strengthening the biogeosciences in environmental research networks. <i>Biogeosciences</i> , 2018 , 15, 4815-4832	4.6	19

114	Carbon dioxide exchange of a pepperweed (<i>Lepidium latifolium</i> L.) infestation: How do flowering and mowing affect canopy photosynthesis and autotrophic respiration?. <i>Journal of Geophysical Research</i> , 2011 , 116,		19
113	. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 1994 , 46, 159-171	3.3	19
112	Turbulence in an almond orchard: Spatial variations in spectra and coherence. <i>Boundary-Layer Meteorology</i> , 1988 , 42, 293-311	3.4	19
111	Convergence of potential net ecosystem production among contrasting C3 grasslands. <i>Ecology Letters</i> , 2013 , 16, 502-12	10	18
110	The role of trace gas flux networks in the biogeosciences. <i>Eos</i> , 2012 , 93, 217-218	1.5	18
109	Microclimate-plant architectural interactions: Influence of leaf width on the mass and energy exchange of a soybean canopy?. <i>Agricultural and Forest Meteorology</i> , 1985 , 35, 1-20	5.8	18
108	Environment. Environmental monitoring network for India. <i>Science</i> , 2007 , 316, 204-5	33.3	17
107	A Comparison of a Hierarchy of Models for Determining Energy Balance Components over Vegetation Canopies. <i>Journal of Applied Meteorology and Climatology</i> , 1995 , 34, 2182-2196		17
106	Moving beyond the incorrect but useful paradigm: reevaluating big-leaf and multilayer plant canopies to model biosphere-atmosphere fluxes in a review. <i>Agricultural and Forest Meteorology</i> , 2021 , 306, 108435	5.8	17
105	How Much Water Is Evaporated Across California? A Multiyear Assessment Using a Biophysical Model Forced With Satellite Remote Sensing Data. <i>Water Resources Research</i> , 2019 , 55, 2722-2741	5.4	16
104	Methane emissions reduce the radiative cooling effect of a subtropical estuarine mangrove wetland by half. <i>Global Change Biology</i> , 2020 , 26, 4998-5016	11.4	16
103	Inferring CO2 fertilization effect based on global monitoring land-atmosphere exchange with a theoretical model. <i>Environmental Research Letters</i> , 2020 , 15, 084009	6.2	16
102	A comparison of new and existing equations for estimating sensible heat flux using surface renewal and similarity concepts. <i>Water Resources Research</i> , 2006 , 42,	5.4	16
101	ECOSTRESS estimates gross primary production with fine spatial resolution for different times of day from the International Space Station. <i>Remote Sensing of Environment</i> , 2021 , 258, 112360	13.2	15
100	Canopy and climate controls of gross primary production of Mediterranean-type deciduous and evergreen oak savannas. <i>Agricultural and Forest Meteorology</i> , 2016 , 226-227, 132-147	5.8	15
99	Forest Meteorology. <i>Springer Advanced Texts in Life Sciences</i> , 1989 , 21-95		15
98	Gross fluxes of methyl chloride and methyl bromide in a California oak-savanna woodland. <i>Atmospheric Environment</i> , 2010 , 44, 2054-2061	5.3	14
97	Evaluation of Density Corrections to Methane Fluxes Measured by Open-Path Eddy Covariance over Contrasting Landscapes. <i>Boundary-Layer Meteorology</i> , 2017 , 165, 197-210	3.4	13

96	Impact of Insolation Data Source on Remote Sensing Retrievals of Evapotranspiration over the California Delta. <i>Remote Sensing</i> , 2019 , 11, 216	5	13
95	Database Maintenance, Data Sharing Policy, Collaboration 2012 , 399-424		13
94	Comparison of In-Canopy Flux Footprints between Large-Eddy Simulation and the Lagrangian Simulation. <i>Journal of Applied Meteorology and Climatology</i> , 2008 , 47, 2115-2128	2.7	13
93	Productive wetlands restored for carbon sequestration quickly become net CO ₂ sinks with site-level factors driving uptake variability. <i>PLoS ONE</i> , 2021 , 16, e0248398	3.7	13
92	Modeled Microbial Dynamics Explain the Apparent Temperature Sensitivity of Wetland Methane Emissions. <i>Global Biogeochemical Cycles</i> , 2020 , 34, e2020GB006678	5.9	12
91	Influence of sun zenith angle on canopy clumping and the resulting impacts on photosynthesis. <i>Agricultural and Forest Meteorology</i> , 2020 , 291, 108065	5.8	12
90	Predicting landscape-scale CO ₂ flux at a pasture and rice paddy with long-term hyperspectral canopy reflectance measurements. <i>Biogeosciences</i> , 2015 , 12, 4577-4594	4.6	12
89	The Role of Biodiversity on the Evaporation of Forests 2005 , 131-148		12
88	Microclimate in the soybean canopy. <i>Agricultural Meteorology</i> , 1983 , 28, 321-337		12
87	Modelling dry deposition of SO ₂ . <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 1994 , 46, 159-171	3.3	12
86	Effect of Drought-Induced Salinization on Wetland Methane Emissions, Gross Ecosystem Productivity, and Their Interactions. <i>Ecosystems</i> , 2020 , 23, 675-688	3.9	12
85	The water footprint of carbon capture and storage technologies. <i>Renewable and Sustainable Energy Reviews</i> , 2021 , 138, 110511	16.2	12
84	A comparison of models for deriving dry deposition fluxes of O ₃ and SO ₂ to a forest canopy. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 1988 , 40, 270-284	3.3	11
83	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
82	Remotely sensed phenological heterogeneity of restored wetlands: linking vegetation structure and function. <i>Agricultural and Forest Meteorology</i> , 2021 , 296, 108215	5.8	11
81	Spatial heterogeneity of fine root biomass and soil carbon in a California oak savanna illuminates plant functional strategy across periods of high and low resource supply. <i>Ecohydrology</i> , 2015 , 8, 294-308	2.5	10
80	Experimental harvesting of wetland plants to evaluate trade-offs between reducing methane emissions and removing nutrients accumulated to the biomass in constructed wetlands. <i>Science of the Total Environment</i> , 2020 , 715, 136960	10.2	10
79	Assessing the interplay between canopy energy balance and photosynthesis with cellulose δ : large-scale patterns and independent ground-truthing. <i>Oecologia</i> , 2018 , 187, 995-1007	2.9	10

78	A statistical method for estimating wood thermal diffusivity and probe geometry using in situ heat response curves from sap flow measurements. <i>Tree Physiology</i> , 2012 , 32, 1458-70	4.2	10
77	Canopy Control of Trace Gas Emissions 1991 , 293-333		10
76	Where old meets new: An ecosystem study of methanogenesis in a reflooded agricultural peatland. <i>Global Change Biology</i> , 2020 , 26, 772-785	11.4	10
75	Substantial hysteresis in emergent temperature sensitivity of global wetland CH emissions. <i>Nature Communications</i> , 2021 , 12, 2266	17.4	10
74	Integrating continuous atmospheric boundary layer and tower-based flux measurements to advance understanding of land-atmosphere interactions. <i>Agricultural and Forest Meteorology</i> , 2021 , 307, 108509	5.8	10
73	An Ecosystem-Scale Flux Measurement Strategy to Assess Natural Climate Solutions. <i>Environmental Science & Technology</i> , 2021 , 55, 3494-3504	10.3	9
72	Transpiration and evaporation in a Californian oak-grass savanna: Field measurements and partitioning model results. <i>Agricultural and Forest Meteorology</i> , 2020 , 295, 108204	5.8	8
71	On the inter- and intra-annual variability of ecosystem evapotranspiration and water use efficiency of an oak savanna and annual grassland subjected to booms and busts in rainfall. <i>Global Change Biology</i> , 2021 , 27, 359-375	11.4	8
70	The three major axes of terrestrial ecosystem function. <i>Nature</i> , 2021 , 598, 468-472	50.4	8
69	Impact of Air Pollution Controls on Radiation Fog Frequency in the Central Valley of California. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019 , 124, 5889	4.4	7
68	Measurement of Fluxes Over Land: Capabilities, Origins, and Remaining Challenges. <i>Boundary-Layer Meteorology</i> , 2020 , 177, 365-394	3.4	7
67	Inputs of trace gases, particles and cloud droplets to terrestrial surfaces. <i>Proceedings of the Royal Society of Edinburgh Section B Biological Sciences</i> , 1990 , 97, 35-59		7
66	Cross-biome synthesis of source versus sink limits to tree growth.. <i>Science</i> , 2022 , 376, 758-761	33.3	7
65	Including soil water stress in process-based ecosystem models by scaling down maximum carboxylation rate using accumulated soil water deficit. <i>Agricultural and Forest Meteorology</i> , 2019 , 276-277, 107649	5.8	6
64	Evaporation in the Boreal Zone During Summer <i>Physics and Vegetation</i> 2001 , 151-165		6
63	Evaluation of Atmospheric Boundary Layer Height From Wind Profiling Radar and Slab Models and Its Responses to Seasonality of Land Cover, Subsidence, and Advection. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021 , 126, e2020JD033775	4.4	6
62	Is foliage clumping an outcome of resource limitations within forests?. <i>Agricultural and Forest Meteorology</i> , 2020 , 295, 108185	5.8	5
61	Soil thawing regulates the spring growth onset in tundra and alpine biomes. <i>Science of the Total Environment</i> , 2020 , 742, 140637	10.2	5

60	A randomization method for efficiently and accurately processing fine roots, and separating them from debris, in the laboratory. <i>Plant and Soil</i> , 2013 , 363, 383-398	4.2	5
59	Current Micrometeorological Flux Methodologies with Applications in Agriculture. <i>Agronomy</i> , 381-396	0.8	5
58	Gap-filling eddy covariance methane fluxes: Comparison of machine learning model predictions and uncertainties at FLUXNET-CH4 wetlands. <i>Agricultural and Forest Meteorology</i> , 2021 , 308-309, 108528	5.8	5
57	Must we incorporate soil moisture information when applying light use efficiency models with satellite remote sensing information?. <i>New Phytologist</i> , 2018 , 218, 1293-1294	9.8	4
56	Next-Generation Terrestrial Carbon Monitoring. <i>Geophysical Monograph Series</i> , 2009 , 49-69	1.1	4
55	The BEMA-project: A North American perspective. <i>Atmospheric Environment</i> , 1997 , 31, 251-255	5.3	4
54	A Wind Tunnel Study to Design Large, Open-top Chambers for Whole-tree Pollutant Exposure Experiments. <i>Japca</i> , 1989 , 39, 1549-1556		4
53	Biosphere-atmosphere exchange of CO ₂ in relation to climate: a cross-biome analysis across multiple time scales		4
52	The International Soil Moisture Network: serving Earth system science for over a decade		4
51	Fluxes of biogenic volatile compounds between plants and the atmosphere 395-414		3
50	Seasonality in aerodynamic resistance across a range of North American ecosystems. <i>Agricultural and Forest Meteorology</i> , 2021 , 310, 108613	5.8	3
49	Measuring surface temperatures in a woodland savanna: Opportunities and challenges of thermal imaging in an open-canopy ecosystem. <i>Agricultural and Forest Meteorology</i> , 2021 , 310, 108484	5.8	3
48	Restoring wetlands on intensive agricultural lands modifies nitrogen cycling microbial communities and reduces NO production potential. <i>Journal of Environmental Management</i> , 2021 , 299, 113562	7.9	3
47	FLUXNET-CH4: A global, multi-ecosystem dataset and analysis of methane seasonality from freshwater wetlands		3
46	Confronting the water potential information gap.. <i>Nature Geoscience</i> , 2022 , 15, 158-164	18.3	3
45	Leaf structure and function 173-202		2
44	The need for spatially and functionally integrated models of ozone deposition to Sierra Nevada forests. <i>Developments in Environmental Science</i> , 2003 , 2, 325-357		2
43	Carbon Flux Trajectories and Site Conditions from Restored Impounded Marshes in the Sacramento-San Joaquin Delta. <i>Geophysical Monograph Series</i> , 2021 , 247-271	1.1	2

42	A remote sensing-based three-source energy balance model to improve global estimations of evapotranspiration in semi-arid tree-grass ecosystems. <i>Global Change Biology</i> , 2021 ,	11.4	2
41	Wet/dry Daisyworld—a conceptual tool for quantifying the spatial scaling of heterogeneous landscapes and its impact on the subgrid variability of energy fluxes. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2005 , 57, 175-188	3.3	2
40	Theoretical Examination of Keeling-plot Relationships for Carbon Dioxide in a Temperate Broadleaved Forest with a Biophysical Model, <i>CANISOTOPE</i> 2005 , 109-124		2
39	Vertical structure heterogeneity in broadleaf forests: Effects on light interception and canopy photosynthesis. <i>Agricultural and Forest Meteorology</i> , 2021 , 307, 108525	5.8	2
38	Matching high resolution satellite data and flux tower footprints improves their agreement in photosynthesis estimates. <i>Agricultural and Forest Meteorology</i> , 2022 , 316, 108878	5.8	2
37	Spectral sensitivity of radiative transfer inversion for seasonal canopy pigments estimation from aviris data in a woodland savanna ecosystem 2016 ,		1
36	Boundary layer and stomatal control over leaf fluxes136-172		1
35	Ecosystem Services of Energy Exchange and Regulation 2013 , 81-92		1
34	Leaf to Landscape. <i>Ecological Studies</i> , 2004 , 133-168	1.1	1
33	Tidal and Nontidal Marsh Restoration: A Trade-Off Between Carbon Sequestration, Methane Emissions, and Soil Accretion. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2021 , 126, e2021JG006373	3.7	1
32	Looking deeper into the soil: biophysical controls and seasonal lags of soil CO ₂ production and efflux 2010 , 20, 1569		1
31	Scaling up to the ecosystem level. <i>Tree Physiology</i> , 2002 , 229-242		1
30	Predicting landscape-scale CO ₂ flux at a pasture and rice paddy with long-term hyperspectral canopy reflectance measurements		1
29	Life and the five biological laws. Lessons for global change models and sustainability. <i>Ecological Complexity</i> , 2019 , 38, 11-14	2.6	1
28	Evaluation of a CONUS-wide ECOSTRESS DisALEXI evapotranspiration product. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2021 , 1-1	4.7	1
27	Evaluating a UAV-based mobile sensing system designed to quantify ecosystem-based methane		1
26	Natural carbon solutions are not large or fast enough. <i>Global Change Biology</i> , 2019 , 25, e5	11.4	0
25	Canopy structure and radiative transfer244-279		0

- 24 Atmospheric humidity deficits tell us how soil moisture deficits down-regulate ecosystem evaporation. *Advances in Water Resources*, **2022**, 159, 104100 4.7 ○
- 23 What lies beneath: Vertical temperature heterogeneity in a Mediterranean woodland savanna. *Remote Sensing of Environment*, **2022**, 274, 112950 13.2 ○
- 22 The general nature of biosphere-atmosphere fluxes1-14
- 21 Thermodynamics, work, and energy15-37
- 20 Chemical reactions, enzyme catalysts, and stable isotopes38-63
- 19 Control over metabolic fluxes64-88
- 18 Modeling the metabolic CO₂ flux89-110
- 17 Diffusion and continuity111-135
- 16 Water transport within the soil-plant-atmosphere continuum203-221
- 15 Leaf and canopy energy budgets222-243
- 14 Vertical structure and mixing of the atmosphere280-295
- 13 Wind and turbulence296-326
- 12 Observations of turbulent fluxes327-351
- 11 Modeling of fluxes at the canopy and landscape scales352-372
- 10 Soil fluxes of CO₂, CH₄, and NO_x373-394
- 9 Stable isotope variants as tracers for studying biosphere-atmosphere exchange415-433
- 8 Peer review report 2 On Assessment of foliage clumping effects on evapotranspiration estimates in forested ecosystems *Agricultural and Forest Meteorology*, **2015**, 201, 679 5.8
- 7 Peer review report 2 On Assessment of foliage clumping effects on evapotranspiration estimates in forested ecosystems *Agricultural and Forest Meteorology*, **2015**, 201, 709 5.8

- 6 Integrating and scaling carbon, water, and energy fluxes with optical measurements. *Eos*, **2011**, 92, 377-377
- 5 Rudolf Geiger, Robert H. Aron, and Paul Todhunter, The Climate Near the Ground. *Climatic Change*, **1997**, 37, 441-442 4.5
- 4 Modeling plant history. *Trends in Ecology and Evolution*, **2002**, 17, 444 10.9
- 3 FLUXNET Evaluates Breathing patterns of diverse ecosystems. *Eos*, **2000**, 81, 565 1.5
- 2 Agricultural ecosystem effects on trace gases and global climate change. *Agricultural and Forest Meteorology*, **1993**, 67, 148-150 5.8
- 1 Multiscale Assessment of Agricultural Consumptive Water Use in California's Central Valley. *Water Resources Research*, **2021**, 57, e2020WR028876 5.4