Christian Bernhofer

List of Publications by Citations

Source: https://exaly.com/author-pdf/7689247/christian-bernhofer-publications-by-citations.pdf

Version: 2024-04-28

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.

16,546 128 48 127 h-index g-index citations papers 18,461 134 5.2 5.73 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
127	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
126	Energy balance closure at FLUXNET sites. Agricultural and Forest Meteorology, 2002, 113, 223-243	5.8	1633
125	Gap filling strategies for defensible annual sums of net ecosystem exchange. <i>Agricultural and Forest Meteorology</i> , 2001 , 107, 43-69	5.8	1381
124	Respiration as the main determinant of carbon balance in European forests. <i>Nature</i> , 2000 , 404, 861-5	50.4	1313
123	Towards a standardized processing of Net Ecosystem Exchange measured with eddy covariance technique: algorithms and uncertainty estimation. <i>Biogeosciences</i> , 2006 , 3, 571-583	4.6	994
122	CO2 balance of boreal, temperate, and tropical forests derived from a global database. <i>Global Change Biology</i> , 2007 , 13, 2509-2537	11.4	744
121	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
120	Evidence for soil water control on carbon and water dynamics in European forests during the extremely dry year: 2003. <i>Agricultural and Forest Meteorology</i> , 2007 , 143, 123-145	5.8	427
119	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
118	Gap filling strategies for long term energy flux data sets. <i>Agricultural and Forest Meteorology</i> , 2001 , 107, 71-77	5.8	417
117	Contrasting response of European forest and grassland energy exchange to heatwaves. <i>Nature Geoscience</i> , 2010 , 3, 722-727	18.3	380
116	A data-driven analysis of energy balance closure across FLUXNET research sites: The role of landscape scale heterogeneity. <i>Agricultural and Forest Meteorology</i> , 2013 , 171-172, 137-152	5.8	342
115	Dissolved carbon leaching from soil is a crucial component of the net ecosystem carbon balance. <i>Global Change Biology</i> , 2011 , 17, 1167-1185	11.4	317
114	BUBBLE [an Urban Boundary Layer Meteorology Project. <i>Theoretical and Applied Climatology</i> , 2005 , 81, 231-261	3	274
113	Partitioning European grassland net ecosystem CO2 exchange into gross primary productivity and ecosystem respiration using light response function analysis. <i>Agriculture, Ecosystems and Environment</i> , 2007 , 121, 93-120	5.7	272
112	The FLUXNET2015 dataset and the ONEFlux processing pipeline for eddy covariance data. <i>Scientific Data</i> , 2020 , 7, 225	8.2	256
111	The Energy Balance Experiment EBEX-2000. Part I: overview and energy balance. <i>Boundary-Layer Meteorology</i> , 2007 , 123, 1-28	3.4	246

110	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
109	Evapotranspiration amplifies European summer drought. <i>Geophysical Research Letters</i> , 2013 , 40, 2071-	2047.5	177
108	A decade of carbon, water and energy flux measurements of an old spruce forest at the Anchor Station Tharandt. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2007 , 59, 387-396	3.3	167
107	Quality control of CarboEurope flux data IPart 1: Coupling footprint analyses with flux data quality assessment to evaluate sites in forest ecosystems. <i>Biogeosciences</i> , 2008 , 5, 433-450	4.6	164
106	Quality analysis applied on eddy covariance measurements at complex forest sites using footprint modelling. <i>Theoretical and Applied Climatology</i> , 2005 , 80, 121-141	3	153
105	The energy balance experiment EBEX-2000. Part II: Intercomparison of eddy-covariance sensors and post-field data processing methods. <i>Boundary-Layer Meteorology</i> , 2007 , 123, 29-54	3.4	145
104	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
103	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
102	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
101	The net biome production of full crop rotations in Europe. <i>Agriculture, Ecosystems and Environment</i> , 2010 , 139, 336-345	5.7	132
100	Above-ground woody carbon sequestration measured from tree rings is coherent with net ecosystem productivity at five eddy-covariance sites. <i>New Phytologist</i> , 2014 , 201, 1289-1303	9.8	126
99	Comparison of horizontal and vertical advective CO2 fluxes at three forest sites. <i>Agricultural and Forest Meteorology</i> , 2008 , 148, 12-24	5.8	114
98	Direct advection measurements do not help to solve the night-time CO2 closure problem: Evidence from three different forests. <i>Agricultural and Forest Meteorology</i> , 2010 , 150, 655-664	5.8	108
97	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
96	Exceptional carbon uptake in European forests during the warm spring of 2007: a datamodel analysis. <i>Global Change Biology</i> , 2009 , 15, 1455-1474	11.4	96
95	Land use regulates carbon budgets in eastern Germany: From NEE to NBP. <i>Agricultural and Forest Meteorology</i> , 2010 , 150, 1016-1025	5.8	88
94	Thermal optimality of net ecosystem exchange of carbon dioxide and underlying mechanisms. <i>New Phytologist</i> , 2012 , 194, 775-783	9.8	81
93	Comparison of surface energy exchange models with eddy flux data in forest and grassland ecosystems of Germany. <i>Ecological Modelling</i> , 2005 , 188, 174-216	3	78

92	Linking flux network measurements to continental scale simulations: ecosystem carbon dioxide exchange capacity under non-water-stressed conditions. <i>Global Change Biology</i> , 2007 , 13, 734-760	11.4	74
91	A satellite-based hybrid algorithm to determine the Priestley Daylor parameter for global terrestrial latent heat flux estimation across multiple biomes. <i>Remote Sensing of Environment</i> , 2015 , 165, 216-233	13.2	71
90	Changes in temperature and precipitation extremes in Ethiopia, Kenya, and Tanzania. <i>International Journal of Climatology</i> , 2019 , 39, 18-30	3.5	69
89	Relationships between canopy transpiration, atmospheric conditions and soil water availability Analyses of long-term sap-flow measurements in an old Norway spruce forest at the Ore Mountains/Germany. <i>Agricultural and Forest Meteorology</i> , 2011 , 151, 1023-1034	5.8	65
88	Improving global terrestrial evapotranspiration estimation using support vector machine by integrating three process-based algorithms. <i>Agricultural and Forest Meteorology</i> , 2017 , 242, 55-74	5.8	64
87	Variability in carbon exchange of European croplands. <i>Agriculture, Ecosystems and Environment</i> , 2010 , 139, 325-335	5.7	63
86	Hydrologic regionalization using wavelet-based multiscale entropy method. <i>Journal of Hydrology</i> , 2016 , 538, 22-32	6	62
85	Evaluation of water-energy balance frameworks to predict the sensitivity of streamflow to climate change. <i>Hydrology and Earth System Sciences</i> , 2012 , 16, 1419-1433	5.5	61
84	Evaluation of multiple climate data sources for managing environmental resources in East Africa. <i>Hydrology and Earth System Sciences</i> , 2018 , 22, 4547-4564	5.5	61
83	Comparison of spatial interpolation methods for the estimation of precipitation distribution in Distrito Federal, Brazil. <i>Theoretical and Applied Climatology</i> , 2016 , 123, 335-348	3	58
82	Summer drought influence on CO2 and water fluxes of extensively managed grassland in Germany. <i>Agriculture, Ecosystems and Environment</i> , 2011 , 141, 67-76	5.7	52
81	Management effects on European cropland respiration. <i>Agriculture, Ecosystems and Environment</i> , 2010 , 139, 346-362	5.7	51
80	Available energy and energy balance closure at four coniferous forest sites across Europe. <i>Theoretical and Applied Climatology</i> , 2009 , 98, 397-412	3	48
79	Soil water content measurements deliver reliable estimates of water fluxes: A comparative study in a beech and a spruce stand in the Tharandt forest (Saxony, Germany). <i>Agricultural and Forest Meteorology</i> , 2009 , 149, 1994-2006	5.8	47
78	Applying simple water-energy balance frameworks to predict the climate sensitivity of streamflow over the continental United States. <i>Hydrology and Earth System Sciences</i> , 2012 , 16, 2531-2546	5.5	46
77	Climate controls over the net carbon uptake period and amplitude of net ecosystem production in temperate and boreal ecosystems. <i>Agricultural and Forest Meteorology</i> , 2017 , 243, 9-18	5.8	43
76	Regional climate projections for impact assessment studies in East Africa. <i>Environmental Research Letters</i> , 2019 , 14, 044031	6.2	41
75	Characterizing ecosystem-atmosphere interactions from short to interannual time scales. <i>Biogeosciences</i> , 2007 , 4, 743-758	4.6	39

(2013-2014)

74	Separating the effects of changes in land cover and climate: a hydro-meteorological analysis of the past 60 yr in Saxony, Germany. <i>Hydrology and Earth System Sciences</i> , 2014 , 18, 389-405	5.5	36
73	A novel approach in model-based mapping of soil water conditions at forest sites. <i>Forest Ecology and Management</i> , 2009 , 258, 2163-2174	3.9	36
72	The METCRAX II Field Experiment: A Study of Downslope Windstorm-Type Flows in Arizonal Meteor Crater. <i>Bulletin of the American Meteorological Society</i> , 2016 , 97, 217-235	6.1	35
71	Statistical analysis of regional climate trends in Saxony, Germany. <i>Climate Research</i> , 2004 , 27, 145-150	1.6	34
7°	Large-Eddy Simulation of Inhomogeneous Canopy Flows Using High Resolution Terrestrial Laser Scanning Data. <i>Boundary-Layer Meteorology</i> , 2012 , 142, 223-243	3.4	33
69	ORCHIDEE-CROP (v0), a new process-based agro-land surface model: model description and evaluation over Europe. <i>Geoscientific Model Development</i> , 2016 , 9, 857-873	6.3	33
68	GIS-based regionalisation of radiation, temperature and coupling measures in complex terrain for low mountain ranges. <i>Meteorological Applications</i> , 2005 , 12, 33-42	2.1	32
67	ORCHIDEE-PEAT (revision 4596), a model for northern peatland CO₂, water, and energy fluxes on daily to annual scales. <i>Geoscientific Model Development</i> , 2018 , 11, 497-519	6.3	32
66	Large-Eddy Simulation Study of the Effects on Flow of a Heterogeneous Forest at Sub-Tree Resolution. <i>Boundary-Layer Meteorology</i> , 2015 , 154, 27-56	3.4	28
65	Effect of grazing intensity on evapotranspiration in the semiarid grasslands of Inner Mongolia, China. <i>Journal of Arid Environments</i> , 2012 , 83, 15-24	2.5	28
64	Comparison of satellite- and ground-based NDVI above different land-use types. <i>Theoretical and Applied Climatology</i> , 2009 , 98, 171-186	3	28
63	Long term variability of the annual hydrological regime and sensitivity to temperature phase shifts in Saxony/Germany. <i>Hydrology and Earth System Sciences</i> , 2011 , 15, 1819-1833	5.5	25
62	Impacts of projected change in climate on water balance in basins of East Africa. <i>Science of the Total Environment</i> , 2019 , 682, 160-170	10.2	23
61	Thermal adaptation of net ecosystem exchange. <i>Biogeosciences</i> , 2011 , 8, 1453-1463	4.6	23
60	Estimating forest evapotranspiration at a non-ideal site. <i>Agricultural and Forest Meteorology</i> , 1992 , 60, 17-32	5.8	22
59	Estimating the components of the sensible heat budget of a tall forest canopy in complex terrain. Boundary-Layer Meteorology, 2007 , 123, 99-120	3.4	21
58	How relevant is urban planning for the thermal comfort of pedestrians? Numerical case studies in two districts of the City of Dresden (Saxony/Germany). <i>Meteorologische Zeitschrift</i> , 2013 , 22, 739-751	3.1	20
57	Effects of measurement uncertainties of meteorological data on estimates of site water balance components. <i>Journal of Hydrology</i> , 2013 , 492, 176-189	6	19

56	Another Simple Method of Spectral Correction to Obtain Robust Eddy-Covariance Results. Boundary-Layer Meteorology, 2008 , 128, 403-422	3.4	19
55	Surface characteristics of grasslands in Inner Mongolia as detected by micrometeorological measurements. <i>International Journal of Biometeorology</i> , 2008 , 52, 563-74	3.7	19
54	Urban Rainfall Modification: Observational Climatology Over Berlin, Germany. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019 , 124, 731-746	4.4	18
53	Rainfall Space-Time Organization and Orographic Control on Flash Flood Response: The Weisseritz Event of August 13, 2002. <i>Journal of Hydrologic Engineering - ASCE</i> , 2013 , 18, 183-193	1.8	18
52	Altered energy partitioning across terrestrial ecosystems in the European drought year 2018. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2020 , 375, 20190524	5.8	18
51	Differences between two climatological periods (2001\(\textbf{Q}010 \) vs. 1971\(\textbf{Q}000 \) and trend analysis of temperature and precipitation in Central Brazil. <i>Theoretical and Applied Climatology</i> , 2014 , 116, 191-202	3	17
50	Constructing wind profiles in forests from limited measurements of wind and vegetation structure. <i>Agricultural and Forest Meteorology</i> , 2010 , 150, 724-735	5.8	17
49	Climate change impact assessment on the hydrology of a large river basin in Ethiopia using a local-scale climate modelling approach. <i>Science of the Total Environment</i> , 2020 , 742, 140504	10.2	17
48	Analysis of climate variability and droughts in East Africa using high-resolution climate data products. <i>Global and Planetary Change</i> , 2020 , 186, 103130	4.2	15
47	Carbon dioxide exchange processes over the grassland ecosystems in semiarid areas of China. <i>Science China Earth Sciences</i> , 2012 , 55, 644-655	4.6	15
46	Spatiotemporal variability of grassland vegetation cover in a catchment in Inner Mongolia, China, derived from MODIS data products. <i>Plant and Soil</i> , 2011 , 340, 181-198	4.2	15
45	Grazing intensity effects on the partitioning of evapotranspiration in the semiarid typical steppe ecosystems in Inner Mongolia. <i>International Journal of Climatology</i> , 2016 , 36, 4130-4140	3.5	15
44	Trends in temperature and precipitation extremes in historical (1961¶990) and projected (2061¶090) periods in a data scarce mountain basin, northern Pakistan. <i>Stochastic Environmental Research and Risk Assessment</i> , 2020 , 34, 1441-1455	3.5	14
43	Simulating the Impact of Climate Change on the Hydrological Regimes of a Sparsely Gauged Mountainous Basin, Northern Pakistan. <i>Water (Switzerland)</i> , 2019 , 11, 2141	3	13
42	Assessment of GCM capabilities to simulate tropospheric stability on the Arabian Peninsula. <i>International Journal of Climatology</i> , 2015 , 35, 1682-1696	3.5	12
41	Circulation pattern based parameterization of a multiplicative random cascade for disaggregation of observed and projected daily rainfall time series. <i>Hydrology and Earth System Sciences</i> , 2013 , 17, 2487	⁄-2̄500	12
40	An approach to combine radar and gauge based rainfall data under consideration of their qualities in low mountain ranges of Saxony. <i>Natural Hazards and Earth System Sciences</i> , 2010 , 10, 429-446	3.9	11
39	Downscaling of CMIP5 Models Output by Using Statistical Models in a Data Scarce Mountain Environment (Mangla Dam Watershed), Northern Pakistan. <i>Asia-Pacific Journal of Atmospheric Sciences</i> , 2019 , 55, 719-735	2.1	10

38	Exploring Eddy-Covariance Measurements Using a Spatial Approach: The Eddy Matrix. <i>Boundary-Layer Meteorology</i> , 2016 , 161, 1-17	3.4	10
37	Spatial precipitation and evapotranspiration in the typical steppe of Inner Mongolia, China IA model based approach using MODIS data. <i>Journal of Arid Environments</i> , 2013 , 88, 184-193	2.5	10
36	Testing different decoupling coefficients with measurements and models of contrasting canopies and soil water conditions. <i>Annales Geophysicae</i> , 2008 , 26, 1977-1992	2	10
35	Introducing Gradient Boosting as a universal gap filling tool for meteorological time series. <i>Meteorologische Zeitschrift</i> , 2018 , 27, 369-376	3.1	10
34	Effect of a coupled soil waterplant gas exchange on forest energy fluxes: Simulations with the coupled vegetationBoundary layer model HIRVAC. <i>Ecological Modelling</i> , 2008 , 214, 75-82	3	8
33	Evaluation the Performance of Several Gridded Precipitation Products over the Highland Region of Yemen for Water Resources Management. <i>Remote Sensing</i> , 2020 , 12, 2984	5	8
32	Simulating the net ecosystem CO2 exchange and its components over winter wheat cultivation sites across a large climate gradient in Europe using the ORCHIDEE-STICS generic model. <i>Agriculture, Ecosystems and Environment</i> , 2016 , 226, 1-17	5.7	7
31	How to predict hydrological effects of local land use change: how the vegetation parameterisation for short rotation coppices influences model results. <i>Hydrology and Earth System Sciences</i> , 2015 , 19, 34	.5 7 -347	′4 ⁶
30	Non-turbulent fluxes of carbon dioxide and sensible heat a comparison of three forested sites. <i>Agricultural and Forest Meteorology</i> , 2011 , 151, 692-708	5.8	6
29	Use of past precipitation data for regionalisation of hourly rainfall in the low mountain ranges of Saxony, Germany. <i>Natural Hazards and Earth System Sciences</i> , 2010 , 10, 353-370	3.9	6
28	Global BROOK90 R Package: An Automatic Framework to Simulate the Water Balance at Any Location. <i>Water (Switzerland)</i> , 2020 , 12, 2037	3	6
27	Extreme rainfall indices in Distrito Federal, Brazil: Trends and links with El Niö southern oscillation and Madden Dulian oscillation. <i>International Journal of Climatology</i> , 2018 , 38, 4550-4567	3.5	6
26	Extended predictor screening, application and added value of statistical downscaling of a CMIP5 ensemble for single-site projections in Distrito Federal, Brazil. <i>International Journal of Climatology</i> , 2017 , 37, 46-65	3.5	5
25	Winter respiratory C losses provide explanatory power for net ecosystem productivity. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2017 , 122, 243-260	3.7	5
24	Comparison of different approaches to fit log-normal mixtures on radar-derived precipitation data. <i>Meteorological Applications</i> , 2014 , 21, 743-754	2.1	5
23	Grazing effects on seasonal dynamics and interannual variabilities of spectral reflectance in semi-arid grassland in Inner Mongolia. <i>Plant and Soil</i> , 2011 , 340, 169-180	4.2	5
22	Uncovering the critical soil moisture thresholds of plant water stress for European ecosystems <i>Global Change Biology</i> , 2021 ,	11.4	5
21	Response of carbon dioxide exchange to grazing intensity over typical steppes in a semi-arid area of Inner Mongolia. <i>Theoretical and Applied Climatology</i> , 2017 , 128, 719-730	3	4

20	The TurbEFA Field Experiment Measuring the Influence of a Forest Clearing on the Turbulent Wind Field. <i>Boundary-Layer Meteorology</i> , 2016 , 160, 397-423	3.4	4
19	A method to adapt radar-derived precipitation fields for climatological applications. <i>Meteorological Applications</i> , 2015 , 22, 636-649	2.1	4
18	Detection of potential areas of changing climatic conditions at a regional scale until 2100 for Saxony, Germany. <i>Meteorology Hydrology and Water Management</i> , 2015 , 3, 17-26	2.2	4
17	Rainfall Threshold for Flash Flood Warning Based on Model Output of Soil Moisture: Case Study Wernersbach, Germany. <i>Water (Switzerland)</i> , 2021 , 13, 1061	3	4
16	An analysis of temporal scaling behaviour of extreme rainfall in Germany based on radar precipitation QPE data. <i>Natural Hazards and Earth System Sciences</i> , 2021 , 21, 1195-1207	3.9	3
15	Applicability of satellite-based rainfall algorithms for estimating flood-related rainfall events in the mid-latitudes. Part I: spatial integration. <i>Journal of Flood Risk Management</i> , 2011 , 4, 176-188	3.1	2
14	A Season of Eddy-Covariance Fluxes Above an Extensive Water Body Based on Observations from a Floating Platform. <i>Boundary-Layer Meteorology</i> , 2020 , 174, 433-464	3.4	2
13	Relative importance of climatic variables, soil properties and plant traits to spatial variability in net CO2 exchange across global forests and grasslands. <i>Agricultural and Forest Meteorology</i> , 2021 , 307, 108	85 0 8	2
12	Assessment of Regional and Historical Climate Records for a Water Budget Approach in Eastern Colombia. <i>Water (Switzerland)</i> , 2020 , 12, 42	3	1
11	Applicability of satellite-based rainfall algorithms for estimating flood-related rainfall events in the mid-latitudes. Part II: temporal integration. <i>Journal of Flood Risk Management</i> , 2012 , 5, 175-186	3.1	1
10	Characteristics of Momentum and Heat Transfer over Semiarid Grasslands with Different Grazing Intensities in Inner Mongolia, China. <i>Atmospheric and Oceanic Science Letters</i> , 2011 , 4, 264-269	1.4	1
9	Multivariate non-parametric Euclidean distance model for hourly disaggregation of daily climate data. <i>Theoretical and Applied Climatology</i> , 2021 , 143, 241-265	3	1
8	The Namib Turbulence Experiment: Investigating SurfaceAtmosphere Heat Transfer in Three Dimensions. <i>Bulletin of the American Meteorological Society</i> , 2022 , 103, E741-E760	6.1	1
7	Linking different drought types in a small catchment from a statistical perspective Case study of the Wernersbach catchment, Germany. <i>Journal of Hydrology X</i> , 2022 , 15, 100122	4.6	O
6	Pseudo-Spatially-Distributed Modeling of Water Balance Components in the Free State of Saxony. <i>Hydrology</i> , 2020 , 7, 84	2.8	0
5	Climate change projections and extremes for Costa Rica using tailored predictors from CORDEX model output through statistical downscaling with artificial neural networks. <i>International Journal of Climatology</i> , 2021 , 41, 211-232	3.5	O
4	Energy balance closure and advective fluxes at ADVEX sites. <i>Theoretical and Applied Climatology</i> , 2021 , 143, 761-779	3	О
3	Assessment of TOPKAPI-X Applicability for Flood Events Simulation in Two Small Catchments in Saxony. <i>Hydrology</i> , 2021 , 8, 109	2.8	O

- REAL-Fog part 2: A novel approach to calculate high resoluted spatio-temporal fog deposition: A daily fog deposition data set for entire Germany for 1949\(\mathbb{D}\)018. Journal of Hydrology, 2021, 599, 126360 \(^6\)
 - Traceflux: a small-scale tracer experiment at a forested site. *International Journal of Environment and Pollution*, **2005**, 25, 25

0.7