

Timothy Griffis

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3406463/publications.pdf>

Version: 2024-02-01

100
papers

6,659
citations

76326

40
h-index

64796

79
g-index

106
all docs

106
docs citations

106
times ranked

7879
citing authors

#	ARTICLE	IF	CITATIONS
1	Response of nitrous oxide emissions to individual rain events and future changes in precipitation. <i>Journal of Environmental Quality</i> , 2022, 51, 312-324.	2.0	8
2	KGML-ag: a modeling framework of knowledge-guided machine learning to simulate agroecosystems: a case study of estimating N ₂ O emission using data from mesocosm experiments. <i>Geoscientific Model Development</i> , 2022, 15, 2839-2858.	3.6	13
3	Biases in open-path carbon dioxide flux measurements: Roles of instrument surface heat exchange and analyzer temperature sensitivity. <i>Agricultural and Forest Meteorology</i> , 2021, 296, 108216.	4.8	3
4	Aircraft-based inversions quantify the importance of wetlands and livestock for Upper Midwest methane emissions. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 951-971.	4.9	14
5	Evaluation of a CONUS-Wide ECOSTRESS DisALEXI Evapotranspiration Product. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2021, 14, 10117-10133.	4.9	6
6	Warming temperatures lead to reduced summer carbon sequestration in the U.S. Corn Belt. <i>Communications Earth & Environment</i> , 2021, 2, .	6.8	7
7	A Multiyear Constraint on Ammonia Emissions and Deposition Within the US Corn Belt. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL090865.	4.0	4
8	Representativeness of Eddy-Covariance flux footprints for areas surrounding AmeriFlux sites. <i>Agricultural and Forest Meteorology</i> , 2021, 301-302, 108350.	4.8	125
9	Fossil Versus Nonfossil CO Sources in the US: New Airborne Constraints From ACT-America and GEM. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL093361.	4.0	8
10	Anthropogenic and natural controls on atmospheric ¹³ C-CO ₂ variations in the Yangtze River delta: insights from a carbon isotope modeling framework. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 10015-10037.	4.9	6
11	Seasonal Variations of CH ₄ Emissions in the Yangtze River Delta Region of China Are Driven by Agricultural Activities. <i>Advances in Atmospheric Sciences</i> , 2021, 38, 1537-1551.	4.3	9
12	Long-term ecosystem carbon losses from silage maize-based forage cropping systems. <i>Agricultural and Forest Meteorology</i> , 2021, 306, 108438.	4.8	11
13	Seasonality in aerodynamic resistance across a range of North American ecosystems. <i>Agricultural and Forest Meteorology</i> , 2021, 310, 108613.	4.8	14
14	Modeling the Sources and Transport Processes During Extreme Ammonia Episodes in the U.S. Corn Belt. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2019JD031207.	3.3	7
15	Nitrogen management and air quality in China. <i>Nature Food</i> , 2020, 1, 597-598.	14.0	4
16	Hydrometeorological sensitivities of net ecosystem carbon dioxide and methane exchange of an Amazonian palm swamp peatland. <i>Agricultural and Forest Meteorology</i> , 2020, 295, 108167.	4.8	25
17	Climate Sensitivity of Peatland Methane Emissions Mediated by Seasonal Hydrologic Dynamics. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL088875.	4.0	21
18	Redefining droughts for the U.S. Corn Belt: The dominant role of atmospheric vapor pressure deficit over soil moisture in regulating stomatal behavior of Maize and Soybean. <i>Agricultural and Forest Meteorology</i> , 2020, 287, 107930.	4.8	90

#	ARTICLE	IF	CITATIONS
19	ECOSTRESS: NASA's Next Generation Mission to Measure Evapotranspiration From the International Space Station. <i>Water Resources Research</i> , 2020, 56, e2019WR026058.	4.2	220
20	Top-Down Constraints on Methane Point Source Emissions From Animal Agriculture and Waste Based on New Airborne Measurements in the U.S. Upper Midwest. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2020, 125, e2019JG005429.	3.0	7
21	Error characterization of methane fluxes and budgets derived from a long-term comparison of open- and closed-path eddy covariance systems. <i>Agricultural and Forest Meteorology</i> , 2019, 278, 107638.	4.8	16
22	Anthropogenic Methane Emission and Its Partitioning for the Yangtze River Delta Region of China. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2019, 124, 1148-1170.	3.0	14
23	Tall Tower Ammonia Observations and Emission Estimates in the U.S. Midwest. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2019, 124, 3432-3447.	3.0	10
24	A global database of water vapor isotopes measured with high temporal resolution infrared laser spectroscopy. <i>Scientific Data</i> , 2019, 6, 180302.	5.3	31
25	Source Partitioning of Methane Emissions and its Seasonality in the U.S. Midwest. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2018, 123, 646-659.	3.0	18
26	Top-down constraints on global N ₂ O emissions at optimal resolution: application of a new dimension reduction technique. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 735-756.	4.9	22
27	Comparing crop growth and carbon budgets simulated across AmeriFlux agricultural sites using the Community Land Model (CLM). <i>Agricultural and Forest Meteorology</i> , 2018, 256-257, 315-333.	4.8	13
28	Evaporation from a temperate closed-basin lake and its impact on present, past, and future water level. <i>Journal of Hydrology</i> , 2018, 561, 59-75.	5.4	50
29	Atmospheric Humidity. <i>Agronomy</i> , 2018, , 95-108.	0.2	0
30	Top-Down Constraints on Anthropogenic CO ₂ Emissions Within an Agricultural-Urban Landscape. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 4674-4694.	3.3	18
31	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.	4.0	31
32	Bidirectional Ecosystem-Atmosphere Fluxes of Volatile Organic Compounds Across the Mass Spectrum: How Many Matter?. <i>ACS Earth and Space Chemistry</i> , 2018, 2, 764-777.	2.7	39
33	A Modeling Study of Direct and Indirect N ₂ O Emissions From a Representative Catchment in the U.S. Corn Belt. <i>Water Resources Research</i> , 2018, 54, 3632-3653.	4.2	30
34	Influences of Root Hydraulic Redistribution on N ₂ O Emissions at AmeriFlux Sites. <i>Geophysical Research Letters</i> , 2018, 45, 5135-5143.	4.0	12
35	Multiscale analyses of solar-induced fluorescence and gross primary production. <i>Geophysical Research Letters</i> , 2017, 44, 533-541.	4.0	98
36	Investigation of the N ₂ O emission strength in the U. S. Corn Belt. <i>Atmospheric Research</i> , 2017, 194, 66-77.	4.1	13

#	ARTICLE	IF	CITATIONS
37	OCO-2 advances photosynthesis observation from space via solar-induced chlorophyll fluorescence. <i>Science</i> , 2017, 358, .	12.6	438
38	Nitrous oxide emissions are enhanced in a warmer and wetter world. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 12081-12085.	7.1	155
39	Feasibility of Recycling Excess Agricultural Nitrate with Electrodialysis. <i>Journal of Environmental Quality</i> , 2017, 46, 1528-1534.	2.0	5
40	Impact of Kura Clover Living Mulch on Nitrous Oxide Emissions in a Corn-Soybean System. <i>Journal of Environmental Quality</i> , 2016, 45, 1782-1787.	2.0	12
41	Partitioning N ₂ O emissions within the U.S. Corn Belt using an inverse modeling approach. <i>Global Biogeochemical Cycles</i> , 2016, 30, 1192-1205.	4.9	32
42	A geostatistical approach to identify and mitigate agricultural nitrous oxide emission hotspots. <i>Science of the Total Environment</i> , 2016, 572, 442-449.	8.0	20
43	Investigating the source, transport, and isotope composition of water vapor in the planetary boundary layer. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 5139-5157.	4.9	29
44	Regional-scale controls on dissolved nitrous oxide in the Upper Mississippi River. <i>Geophysical Research Letters</i> , 2016, 43, 4400-4407.	4.0	54
45	Effects of in-situ and reanalysis climate data on estimation of cropland gross primary production using the Vegetation Photosynthesis Model. <i>Agricultural and Forest Meteorology</i> , 2015, 213, 240-250.	4.8	29
46	Isoprene emissions and impacts over an ecological transition region in the U.S. Upper Midwest inferred from tall tower measurements. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015, 120, 3553-3571.	3.3	48
47	Simulation of atmospheric N ₂ O with GEOS-Chem and its adjoint: evaluation of observational constraints. <i>Geoscientific Model Development</i> , 2015, 8, 3179-3198.	3.6	15
48	Performance of Linear and Nonlinear Two-Leaf Light Use Efficiency Models at Different Temporal Scales. <i>Remote Sensing</i> , 2015, 7, 2238-2278.	4.0	23
49	Indirect nitrous oxide emissions from streams within the US Corn Belt scale with stream order. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 9839-9843.	7.1	131
50	Emissions of C ₆ -C ₈ aromatic compounds in the United States: Constraints from tall tower and aircraft measurements. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015, 120, 826-842.	3.3	44
51	Quantifying nitrous oxide fluxes on multiple spatial scales in the Upper Midwest, USA. <i>International Journal of Biometeorology</i> , 2015, 59, 299-310.	3.0	10
52	Productivity and Carbon Dioxide Exchange of Leguminous Crops: Estimates from Flux Tower Measurements. <i>Agronomy Journal</i> , 2014, 106, 545-559.	1.8	40
53	Reply to Magnani et al.: Linking large-scale chlorophyll fluorescence observations with cropland gross primary production. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, E2511.	7.1	11
54	The influence of plants on atmospheric methane in an agriculture-dominated landscape. <i>International Journal of Biometeorology</i> , 2014, 58, 819-833.	3.0	9

#	ARTICLE	IF	CITATIONS
55	Global and time-resolved monitoring of crop photosynthesis with chlorophyll fluorescence. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E1327-33.	7.1	741
56	Estimating regional greenhouse gas fluxes: an uncertainty analysis of planetary boundary layer techniques and bottom-up inventories. Atmospheric Chemistry and Physics, 2014, 14, 10705-10719.	4.9	18
57	Tracing the flow of carbon dioxide and water vapor between the biosphere and atmosphere: A review of optical isotope techniques and their application. Agricultural and Forest Meteorology, 2013, 174-175, 85-109.	4.8	97
58	Interannual, seasonal, and retrospective analysis of the methane and carbon dioxide budgets of a temperate peatland. Journal of Geophysical Research G: Biogeosciences, 2013, 118, 226-238.	3.0	82
59	Reconciling the differences between top-down and bottom-up estimates of nitrous oxide emissions for the U.S. Corn Belt. Global Biogeochemical Cycles, 2013, 27, 746-754.	4.9	71
60	North American acetone sources determined from tall tower measurements and inverse modeling. Atmospheric Chemistry and Physics, 2013, 13, 3379-3392.	4.9	29
61	Automated, Low-Power Chamber System for Measuring Nitrous Oxide Emissions. Journal of Environmental Quality, 2013, 42, 606-614.	2.0	28
62	Interannual, seasonal, and diel variability in the carbon isotope composition of respiration in a C3/C4 agricultural ecosystem. Agricultural and Forest Meteorology, 2012, 153, 144-153.	4.8	17
63	Evaluation of carbon isotope flux partitioning theory under simplified and controlled environmental conditions. Agricultural and Forest Meteorology, 2012, 153, 154-164.	4.8	17
64	A meta-analysis of water vapor deuterium excess in the midlatitude atmospheric surface layer. Global Biogeochemical Cycles, 2012, 26, .	4.9	78
65	Coupling landscape water storage and supplemental irrigation to increase productivity and improve environmental stewardship in the U.S. Midwest. Water Resources Research, 2012, 48, .	4.2	50
66	Oxygen isotope composition of evapotranspiration and its relation to C ₄ photosynthetic discrimination. Journal of Geophysical Research, 2011, 116, .	3.3	41
67	The potential of carbonyl sulfide as a proxy for gross primary production at flux tower sites. Journal of Geophysical Research, 2011, 116, .	3.3	46
68	Sources and seasonality of atmospheric methanol based on tall tower measurements in the US Upper Midwest. Atmospheric Chemistry and Physics, 2011, 11, 11145-11156.	4.9	56
69	Identification and correction of spectral contamination in ² H/ ¹ H and ¹⁸ O/ ¹⁶ O measured in leaf, stem, and soil water. Rapid Communications in Mass Spectrometry, 2011, 25, 3360-3368.	1.5	132
70	Determining the Oxygen Isotope Composition of Evapotranspiration Using Eddy Covariance. Boundary-Layer Meteorology, 2010, 137, 307-326.	2.3	57
71	Influence of C ₄ vegetation on ¹³ CO ₂ discrimination and isoforcing in the upper Midwest, United States. Global Biogeochemical Cycles, 2010, 24, .	4.9	32
72	A modeling investigation of canopy-air oxygen isotopic exchange of water vapor and carbon dioxide in a soybean field. Journal of Geophysical Research, 2010, 115, .	3.3	29

#	ARTICLE	IF	CITATIONS
73	A simple, accurate, field-portable mixing ratio generator and Rayleigh distillation device. <i>Agricultural and Forest Meteorology</i> , 2010, 150, 1607-1611.	4.8	6
74	Evaluating the potential use of winter cover crops in corn-soybean systems for sustainable co-production of food and fuel. <i>Agricultural and Forest Meteorology</i> , 2009, 149, 2120-2132.	4.8	45
75	Influence of Phenology and Land Management on Biosphere-Atmosphere Isotopic CO ₂ Exchange. , 2009, , 143-166.		2
76	$\delta^{18}\text{O}$ of water vapour, evapotranspiration and the sites of leaf water evaporation in a soybean canopy. <i>Plant, Cell and Environment</i> , 2008, 31, 1214-1228.	5.7	136
77	Direct measurement of biosphere-atmosphere isotopic CO ₂ exchange using the eddy covariance technique. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	67
78	Climatic controls on the carbon and water balances of a boreal aspen forest, 1994-2003. <i>Global Change Biology</i> , 2007, 13, 561-576.	9.5	238
79	Tillage and soil carbon sequestration-What do we really know?. <i>Agriculture, Ecosystems and Environment</i> , 2007, 118, 1-5.	5.3	971
80	Determining carbon isotope signatures from micrometeorological measurements: Implications for studying biosphere-atmosphere exchange processes. <i>Boundary-Layer Meteorology</i> , 2007, 123, 295-316.	2.3	50
81	Response of Net Ecosystem Productivity of Three Boreal Forest Stands to Drought. <i>Ecosystems</i> , 2007, 10, 1039-1055.	3.4	74
82	Using continuous stable isotope measurements to partition net ecosystem CO ₂ exchange. <i>Plant, Cell and Environment</i> , 2006, 29, 483-496.	5.7	51
83	Response of Net Ecosystem Productivity of Three Boreal Forest Stands to Drought. <i>Ecosystems</i> , 2006, 9, 1128-1144.	3.4	129
84	Seasonal dynamics and partitioning of isotopic CO ₂ exchange in a C ₃ /C ₄ managed ecosystem. <i>Agricultural and Forest Meteorology</i> , 2005, 132, 1-19.	4.8	45
85	Feasibility of quantifying ecosystem-atmosphere C ₁₈ O ₁₆ O exchange using laser spectroscopy and the flux-gradient method. <i>Agricultural and Forest Meteorology</i> , 2005, 135, 44-60.	4.8	55
86	Sensitivity and uncertainty of the carbon balance of a Pacific Northwest Douglas-fir forest during an El Niño/La Niña cycle. <i>Agricultural and Forest Meteorology</i> , 2004, 123, 201-219.	4.8	254
87	Measuring field-scale isotopic CO ₂ fluxes with tunable diode laser absorption spectroscopy and micrometeorological techniques. <i>Agricultural and Forest Meteorology</i> , 2004, 124, 15-29.	4.8	115
88	Seasonal variation and partitioning of ecosystem respiration in a southern boreal aspen forest. <i>Agricultural and Forest Meteorology</i> , 2004, 125, 207-223.	4.8	158
89	Year-round observations of the energy and water vapour fluxes above a boreal black spruce forest. <i>Hydrological Processes</i> , 2003, 17, 3581-3600.	2.6	77
90	Seasonality in the Surface Energy Balance of Tundra in the Lower Mackenzie River Basin. <i>Journal of Hydrometeorology</i> , 2003, 4, 673-679.	1.9	5

#	ARTICLE	IF	CITATIONS
91	Comparing the carbon budgets of boreal and temperate deciduous forest stands. Canadian Journal of Forest Research, 2002, 32, 813-822.	1.7	136
92	The Annual Carbon Budget for Fen and Forest in a Wetland at Arctic Treeline. Arctic, 2002, 55, .	0.4	17
93	Interannual Variability in Net Ecosystem CO ₂ Exchange at the Arctic Treeline. Arctic, Antarctic, and Alpine Research, 2001, 33, 149.	1.1	24
94	Modelling the interannual variability of net ecosystem CO ₂ exchange at a subarctic sedge fen. Global Change Biology, 2001, 7, 511-530.	9.5	33
95	Scaling net ecosystem CO ₂ exchange from the community to landscape-level at a subarctic fen. Global Change Biology, 2000, 6, 459-473.	9.5	47
96	SYNOPTIC AND SURFACE CLIMATOLOGY INTERACTIONS IN THE CENTRAL CANADIAN SUBARCTIC: NORMAL AND EL NIÑO SEASONS. Physical Geography, 2000, 21, 368-383.	1.4	5
97	CONTROLS ON ENERGY AND CARBON FLUXES FROM SELECT HIGH-LATITUDE TERRESTRIAL SURFACES. Physical Geography, 2000, 21, 345-367.	1.4	11
98	Interannual variability of net ecosystem CO ₂ exchange at a subarctic fen. Global Biogeochemical Cycles, 2000, 14, 1109-1121.	4.9	112
99	Carbon dioxide fluxes in a northern fen during a hot, dry summer. Global Biogeochemical Cycles, 1998, 12, 729-740.	4.9	49
100	METEOROLOGICAL ANALYSIS OF DAILY MAXIMUM GROUND-LEVEL OZONE FOR THE NIAGARA REGION. Physical Geography, 1996, 17, 371-399.	1.4	1