Alexander T Vermeulen

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6299697/publications.pdf

Version: 2024-02-01

72	4,347	117453	123241
papers	citations	34 h-index	61 g-index

96	96	96	5341
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Importance of methane and nitrous oxide for Europe's terrestrial greenhouse-gas balance. Nature Geoscience, 2009, 2, 842-850.	5.4	310
2	CO₂ surface fluxes at grid point scale estimated from a global 21 year reanalysis of atmospheric measurements. Journal of Geophysical Research, 2010, 115, .	3.3	276
3	Dry deposition of reactive nitrogen to European ecosystems: a comparison of inferential models across the NitroEurope network. Atmospheric Chemistry and Physics, 2011, 11, 2703-2728.	1.9	254
4	Seven years of recent European net terrestrial carbon dioxide exchange constrained by atmospheric observations. Global Change Biology, 2010, 16, 1317-1337.	4.2	223
5	Ubiquity of organic nitrates from nighttime chemistry in the European submicron aerosol. Geophysical Research Letters, 2016, 43, 7735-7744.	1.5	182
6	Comparing atmospheric transport models for future regional inversions over Europe â€“ Part 1: mapping the atmospheric CO₂ signals. Atmospheric Chemistry and Physics, 2007, 7, 3461-3479.	1.9	148
7	Inverse modelling of national and European CH₄ emissions using the atmospheric zoom model TM5. Atmospheric Chemistry and Physics, 2005, 5, 2431-2460.	1.9	143
8	TransCom model simulations of hourly atmospheric CO₂: Experimental overview and diurnal cycle results for 2002. Global Biogeochemical Cycles, 2008, 22, .	1.9	142
9	The importance of reducing the systematic error due to non-linearity in N2O flux measurements by static chambers. Nutrient Cycling in Agroecosystems, 2008, 82, 175-186.	1.1	141
10	Agricultural air quality in Europe and the future perspectives. Atmospheric Environment, 2008, 42, 3209-3217.	1.9	122
11	Inverse modeling of European CH₄ emissions 2001â€“2006. Journal of Geophysical Research, 2010, 115, .	3.3	120
12	TransCom model simulations of hourly atmospheric CO₂: Analysis of synopticâ€scale variations for the period 2002â€“2003. Global Biogeochemical Cycles, 2008, 22, .	1.9	119
13	Mapping atmospheric aerosols with a citizen science network of smartphone spectropolarimeters. Geophysical Research Letters, 2014, 41, 7351-7358.	1.5	119
14	Top-down estimates of European CH₄ and N₂O emissions based on four different inverse models. Atmospheric Chemistry and Physics, 2015, 15, 715-736.	1.9	92
15	Suitability of quantum cascade laser spectroscopy for CH₄ and N₂O eddy covariance flux measurements. Biogeosciences, 2007, 4, 715-728.	1.3	90
16	A historical, geographical and ecological perspective on the 2018 European summer drought. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20190505.	1.8	89
17	Importance of fossil fuel emission uncertainties over Europe for CO₂ modeling: model intercomparison. Atmospheric Chemistry and Physics, 2011, 11, 6607-6622.	1.9	87
18	The impact of canopy exchange on differences observed between atmospheric deposition and throughfall fluxes. Atmospheric Environment, 1997, 31, 387-397.	1.9	85

#	Article	IF	Citations
19	Greenhouse gas observations from Cabauw Tall Tower (1992â€“2010). Atmospheric Measurement Techniques, 2011, 4, 617-644.	1.2	82
20	Inverse modelling of European CH₄ emissions during 2006â€“2012 using different inverse models and reassessed atmospheric observations. Atmospheric Chemistry and Physics, 2018, 18, 901-920.	1.9	77
21	Uncertainties in eddy covariance flux measurements assessed from CH4 and N2O observations. Agricultural and Forest Meteorology, 2010, 150, 806-816.	1.9	75
22	Forecasting global atmospheric CO₂. Atmospheric Chemistry and Physics, 2014, 14, 11959-11983.	1.9	74
23	Monitoring and modelling of biosphere/atmosphere exchange of gases and aerosols in Europe. Environmental Pollution, 2005, 133, 403-413.	3.7	67
24	Dairy farm CH4 and N2O emissions, from one square metre to the full farm scale. Agriculture, Ecosystems and Environment, 2006, 112, 146-152.	2.5	67
25	Inverse modelling of European N₂O emissions: assimilating observations from different networks. Atmospheric Chemistry and Physics, 2011, 11, 2381-2398.	1.9	63
26	Regional inversion of CO₂ ecosystem fluxes from atmospheric measurements: reliability of the uncertainty estimates. Atmospheric Chemistry and Physics, 2013, 13, 9039-9056.	1.9	60
27	A European summertime CO2biogenic flux inversion at mesoscale from continuous in situ mixing ratio measurements. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	57
28	Measurement of dry deposition of ammonia on a forest. Environmental Pollution, 1992, 75, 25-28.	3.7	55
29	Diurnal and vertical variability of the sensible heat and carbon dioxide budgets in the atmospheric surface layer. Journal of Geophysical Research, 2008, 113, .	3.3	53
30	Fog deposition on a coniferous forest in The Netherlands. Atmospheric Environment, 1997, 31, 375-386.	1.9	51
31	TransCom N₂O model inter-comparison â€“ Part 2: Atmospheric inversion estimates of N₂O emissions. Atmospheric Chemistry and Physics, 2014, 14, 6177-6194.	1.9	49
32	Modelling CO₂ weather â€“ why horizontal resolution matters. Atmospheric Chemistry and Physics, 2019, 19, 7347-7376.	1.9	49
33	Seasonal variability of ozone dry deposition under southern European climate conditions, in Portugal. Atmospheric Environment, 2000, 34, 195-205.	1.9	47
34	Atmospheric transport and chemistry of trace gases in LMDz5B: evaluation and implications for inverse modelling. Geoscientific Model Development, 2015, 8, 129-150.	1.3	44
35	Evaluating the performance of commonly used gas analysers for methane eddy covariance flux measurements: the InGOS inter-comparison field experiment. Biogeosciences, 2014, 11, 3163-3186.	1.3	38
36	Modelling regional scale surface fluxes, meteorology and CO₂ mixing ratios for the Cabauw tower in the Netherlands. Biogeosciences, 2009, 6, 2265-2280.	1.3	38

#	Article	IF	Citations
37	Impact of optimized mixing heights on simulated regional atmospheric transport of CO₂. Atmospheric Chemistry and Physics, 2014, 14, 7149-7172.	1.9	33
38	Transport model calculations of NW-European methane emissions. Environmental Science and Policy, 1999, 2, 315-324.	2.4	32
39	The fingerprint of the summer 2018 drought in Europe on ground-based atmospheric CO₂measurements. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20190513.	1.8	31
40	The regional European atmospheric transport inversion comparison, EUROCOM: first results on European-wide terrestrial carbon fluxes for the period 2006â€“2015. Atmospheric Chemistry and Physics, 2020, 20, 12063-12091.	1.9	31
41	Evaluation of SO2 dry deposition over short vegetation in Portugal. Atmospheric Environment, 2001, 35, 3633-3643.	1.9	28
42	¹⁴CH₄ Emissions from Nuclear Power Plants in Northwestern Europe. Radiocarbon, 1995, 37, 475-483.	0.8	27
43	High resolution modelling of atmosphere-canopy exchange of acidifying and eutrophying components and carbon dioxide for European forests. Tellus, Series B: Chemical and Physical Meteorology, 2007, 59, 412-424.	0.8	27
44	Studying the spatial variability of methane flux with five eddy covariance towers of varying height. Agricultural and Forest Meteorology, 2015, 214-215, 456-472.	1.9	27
45	Reassessing the variability in atmospheric H₂ using the twoâ€way nested TM5 model. Journal of Geophysical Research D: Atmospheres, 2013, 118, 3764-3780.	1.2	26
46	A complete rethink is needed on how greenhouse gas emissions are quantified for national reporting. Atmospheric Environment, 2018, 174, 237-240.	1.9	26
47	Evaluation of the boundary layer dynamics of the TM5 model over Europe. Geoscientific Model Development, 2016, 9, 3137-3160.	1.3	25
48	Inverse carbon dioxide flux estimates for the Netherlands. Journal of Geophysical Research, 2012, 117, .	3.3	24
49	Analysis of radon origin by backward atmospheric transport modelling. Atmospheric Environment, 2010, 44, 494-502.	1.9	23
50	Towards a feasible and representative pan-African research infrastructure network for GHG observations. Environmental Research Letters, 2018, 13, 085003.	2.2	20
51	A European-wide ²²²radon and ²²²radon progeny comparison study. Atmospheric Measurement Techniques, 2017, 10, 1299-1312.	1.2	19
52	Reference Model Guided System Design and Implementation for Interoperable Environmental Research Infrastructures. , 2015, , .		18
53	ENVRI-FAIR - Interoperable Environmental FAIR Data and Services for Society, Innovation and Research. , 2019, , .		17
54	H₂ vertical profiles in the continental boundary layer: measurements at the Cabauw tall tower in The Netherlands. Atmospheric Chemistry and Physics, 2011, 11, 6425-6443.	1.9	16

#	Article	IF	Citations
55	Iconic CO ₂ Time Series at Risk. Science, 2012, 337, 1038-1040.	6.0	15
56	How a European network may help with estimating methane emissions on the French national scale. Atmospheric Chemistry and Physics, 2018, 18, 3779-3798.	1.9	13
57	Feasibility study of using a "travelling" CO₂ and CH₄ instrument to validate continuous in situ measurement stations. Atmospheric Measurement Techniques, 2013, 6, 1201-1216.	1.2	11
58	Simulating carbon exchange using a regional atmospheric model coupled to an advanced land-surface model. Biogeosciences, 2010, 7, 2397-2417.	1.3	10
59	Inferring ²²²Rn soil fluxes from ambient ²²²Rn activity and eddy covariance measurements of CO₂. Atmospheric Measurement Techniques, 2016, 9, 5523-5533.	1.2	8
60	Greenhouse gas observation network design for Africa. Tellus, Series B: Chemical and Physical Meteorology, 2022, 72, 1824486.	0.8	8
61	Opportunities for an African greenhouse gas observation system. Regional Environmental Change, 2021, 21, 1.	1.4	8
62	Assessment of ²²²radon progeny loss in long tubing based on static filter measurements in the laboratory and in the field. Atmospheric Measurement Techniques, 2017, 10, 1313-1321.	1.2	6
63	Supporting Cross-Domain System-Level Environmental and Earth Science. Lecture Notes in Computer Science, 2020, , 3-16.	1.0	5
64	Methane Emission of the Amsterdam Urban Area. Water, Air, and Soil Pollution, 1998, 107, 321-333.	1.1	4
65	The Association Between the North Atlantic Oscillation and the Interannual Variability of the Tropospheric Transport Pathways in Western Europe. Geophysical Monograph Series, 2013, , 127-142.	0.1	4
66	Global nature run data with realistic high-resolution carbon weather for the year of the Paris Agreement. Scientific Data, 2022, 9, 160.	2.4	3
67	Modelling of carbon isotope discrimination by vegetation. Photosynthetica, 2009, 47, 457-470.	0.9	2
68	Observations of molecular hydrogen mixing ratio and stable isotopic composition at the Cabauw tall tower in the Netherlands. Atmospheric Environment, 2016, 147, 98-108.	1.9	2
69	Determination of European methane emissions, using concentration and isotope measurements. Environmental Monitoring and Assessment, 1994, 31-31, 197-202.	1.3	1
70	Automated Denuder Systems for Dry Deposition Studies of Acidifying Compounds. Studies in Environmental Science, 1992, 50, 537.	0.0	0
71	The contribution of canopy exchange to differences observed between atmospheric deposition and throughfall fluxes. Studies in Environmental Science, 1995, 64, 455-456.	0.0	0
72	Identification and Citation of Digital Research Resources. Lecture Notes in Computer Science, 2020, , 162-175.	1.0	0