

Robert M Yantosca

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/8991257/robert-m-yantosca-publications-by-year.pdf>

Version: 2024-04-27

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.

96
papers

12,497
citations

58
h-index

109
g-index

109
ext. papers

13,907
ext. citations

6.4
avg, IF

5.63
L-index

#	Paper	IF	Citations
96	Global methane budget and trend, 2010–2017: complementarity of inverse analyses using in situ (GLOBALVIEWplus CH ₄ ; ObsPack) and satellite (GOSAT) observations. <i>Atmospheric Chemistry and Physics</i> , 2021 , 21, 4637-4657	6.8	17
95	Simulation of radon-222 with the GEOS-Chem global model: emissions, seasonality, and convective transport. <i>Atmospheric Chemistry and Physics</i> , 2021 , 21, 1861-1887	6.8	6
94	WRF-GC: online coupling of WRF and GEOS-Chem for regional atmospheric chemistry modeling, Part 1: description of the one-way model (v1.0) 2020 ,		1
93	Enabling High-Performance Cloud Computing for Earth Science Modeling on Over a Thousand Cores: Application to the GEOS-Chem Atmospheric Chemistry Model. <i>Journal of Advances in Modeling Earth Systems</i> , 2020 , 12, e2020MS002064	7.1	10
92	WRF-GC (v1.0): online coupling of WRF (v3.9.1.1) and GEOS-Chem (v12.2.1) for regional atmospheric chemistry modeling [Part 1: Description of the one-way model. <i>Geoscientific Model Development</i> , 2020 , 13, 3241-3265	6.3	12
91	Enabling Immediate Access to Earth Science Models through Cloud Computing: Application to the GEOS-Chem Model. <i>Bulletin of the American Meteorological Society</i> , 2019 , 100, 1943-1960	6.1	6
90	GEOS-Chem High Performance (GCHP v11-02c): a next-generation implementation of the GEOS-Chem chemical transport model for massively parallel applications. <i>Geoscientific Model Development</i> , 2018 , 11, 2941-2953	6.3	27
89	Global budget of tropospheric ozone: Evaluating recent model advances with satellite (OMI), aircraft (IAGOS), and ozonesonde observations. <i>Atmospheric Environment</i> , 2017 , 167, 323-334	5.3	50
88	Sensitivity to grid resolution in the ability of a chemical transport model to simulate observed oxidant chemistry under high-isoprene conditions 2016 ,		2
87	NO _x ; emissions, isoprene oxidation pathways, vertical mixing, and implications for surface ozone in the Southeast United States 2016 ,		8
86	Observing atmospheric formaldehyde (HCHO) from space: validation and intercomparison of six retrievals from four satellites (OMI, GOME2A, GOME2B, OMPS) with SEACRS aircraft observations over the Southeast US. <i>Atmospheric Chemistry and Physics</i> , 2016 , 16, 13477-13490	6.8	75
85	Using beryllium-7 to assess cross-tropopause transport in global models. <i>Atmospheric Chemistry and Physics</i> , 2016 , 16, 4641-4659	6.8	24
84	Sensitivity to grid resolution in the ability of a chemical transport model to simulate observed oxidant chemistry under high-isoprene conditions. <i>Atmospheric Chemistry and Physics</i> , 2016 , 16, 4369-4378	6.8	45
83	Why do Models Overestimate Surface Ozone in the Southeastern United States?. <i>Atmospheric Chemistry and Physics</i> , 2016 , 16, 13561-13577	6.8	239
82	Organic nitrate chemistry and its implications for nitrogen budgets in an isoprene- and monoterpene-rich atmosphere: constraints from aircraft (SEACRS) and ground-based (SOAS) observations in the Southeast US. <i>Atmospheric Chemistry and Physics</i> , 2016 , 16, 5969-5991	6.8	129
81	Estimating numerical errors due to operator splitting in global atmospheric chemistry models: Transport and chemistry. <i>Journal of Computational Physics</i> , 2016 , 305, 372-386	4.1	4
80	Observing atmospheric formaldehyde (HCHO) from space: validation and intercomparison of six retrievals from four satellites (OMI, GOME2A, GOME2B, OMPS) with SEACRS aircraft observations over the Southeast US 2016 ,		6

79	Organic nitrate chemistry and its implications for nitrogen budgets in an isoprene- and monoterpene-rich atmosphere: constraints from aircraft (SEAC ⁴ RS) and ground-based (SOAS) observations in the Southeast US 2016 ,		3
78	Positive but variable sensitivity of August surface ozone to large-scale warming in the southeast United States. <i>Nature Climate Change</i> , 2015 , 5, 454-458	21.4	59
77	Impact of 2050 climate change on North American wildfire: consequences for ozone air quality. <i>Atmospheric Chemistry and Physics</i> , 2015 , 15, 10033-10055	6.8	38
76	Sources, seasonality, and trends of southeast US aerosol: an integrated analysis of surface, aircraft, and satellite observations with the GEOS-Chem chemical transport model. <i>Atmospheric Chemistry and Physics</i> , 2015 , 15, 10411-10433	6.8	168
75	Development of a grid-independent GEOS-Chem chemical transport model (v9-02) as an atmospheric chemistry module for Earth system models. <i>Geoscientific Model Development</i> , 2015 , 8, 595-602	6.3	41
74	Fifteen-year global time series of satellite-derived fine particulate matter. <i>Environmental Science & Technology</i> , 2014 , 48, 11109-18	10.3	193
73	Atmospheric peroxyacetyl nitrate (PAN): a global budget and source attribution. <i>Atmospheric Chemistry and Physics</i> , 2014 , 14, 2679-2698	6.8	194
72	HEMCO v1.0: a versatile, ESMF-compliant component for calculating emissions in atmospheric models. <i>Geoscientific Model Development</i> , 2014 , 7, 1409-1417	6.3	108
71	Factors driving mercury variability in the Arctic atmosphere and ocean over the past 30 years. <i>Global Biogeochemical Cycles</i> , 2013 , 27, 1226-1235	5.9	32
70	Public health, climate, and economic impacts of desulfurizing jet fuel. <i>Environmental Science & Technology</i> , 2012 , 46, 4275-82	10.3	66
69	Decreasing particle number concentrations in a warming atmosphere and implications. <i>Atmospheric Chemistry and Physics</i> , 2012 , 12, 2399-2408	6.8	14
68	Gas-particle partitioning of atmospheric Hg(II) and its effect on global mercury deposition. <i>Atmospheric Chemistry and Physics</i> , 2012 , 12, 591-603	6.8	282
67	Can a state-of-the-art chemistry transport model simulate Amazonian tropospheric chemistry?. <i>Journal of Geophysical Research</i> , 2011 , 116,		43
66	Evaluating a 3-D transport model of atmospheric CO ₂ using ground-based, aircraft, and space-borne data. <i>Atmospheric Chemistry and Physics</i> , 2011 , 11, 2789-2803	6.8	70
65	Sources, distribution, and acidity of sulfate-ammonium aerosol in the Arctic in winter-spring. <i>Atmospheric Environment</i> , 2011 , 45, 7301-7318	5.3	170
64	Modeling global atmospheric CO ₂ with improved emission inventories and CO ₂ production from the oxidation of other carbon species. <i>Geoscientific Model Development</i> , 2010 , 3, 689-716	6.3	95
63	Modeling global atmospheric CO ₂ with improved emission inventories and CO ₂ production from the oxidation of other carbon species 2010 ,		6
62	Modeling dust and soluble iron deposition to the South Atlantic Ocean. <i>Journal of Geophysical Research</i> , 2010 , 115,		62

61	An improved global model for air-sea exchange of mercury: high concentrations over the North Atlantic. <i>Environmental Science & Technology</i> , 2010 , 44, 8574-80	10.3	193
60	Spatial distributions of particle number concentrations in the global troposphere: Simulations, observations, and implications for nucleation mechanisms. <i>Journal of Geophysical Research</i> , 2010 , 115,		110
59	Nitrogen oxides and PAN in plumes from boreal fires during ARCTAS-B and their impact on ozone: an integrated analysis of aircraft and satellite observations. <i>Atmospheric Chemistry and Physics</i> , 2010 , 10, 9739-9760	6.8	188
58	Chemistry of hydrogen oxide radicals (HO _x) in the Arctic troposphere in spring. <i>Atmospheric Chemistry and Physics</i> , 2010 , 10, 5823-5838	6.8	184
57	Global estimates of CO sources with high resolution by adjoint inversion of multiple satellite datasets (MOPITT, AIRS, SCIAMACHY, TES). <i>Atmospheric Chemistry and Physics</i> , 2010 , 10, 855-876	6.8	241
56	Source attribution and interannual variability of Arctic pollution in spring constrained by aircraft (ARCTAS, ARCPAC) and satellite (AIRS) observations of carbon monoxide. <i>Atmospheric Chemistry and Physics</i> , 2010 , 10, 977-996	6.8	168
55	Exploring CO pollution episodes observed at Rishiri Island by chemical weather simulations and AIRS satellite measurements: long-range transport of burning plumes and implications for emissions inventories. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2009 , 61, 394-407	3.3	21
54	Sensitivity of photolysis frequencies and key tropospheric oxidants in a global model to cloud vertical distributions and optical properties. <i>Journal of Geophysical Research</i> , 2009 , 114,		8
53	Regional CO pollution and export in China simulated by the high-resolution nested-grid GEOS-Chem model. <i>Atmospheric Chemistry and Physics</i> , 2009 , 9, 3825-3839	6.8	182
52	Validation of OMI tropospheric NO ₂ observations during INTEX-B and application to constrain NO _x emissions over the eastern United States and Mexico. <i>Atmospheric Environment</i> , 2008 , 42, 4480-4497	5.3	158
51	Global 3-D land-ocean-atmosphere model for mercury: Present-day versus preindustrial cycles and anthropogenic enrichment factors for deposition. <i>Global Biogeochemical Cycles</i> , 2008 , 22, n/a-n/a	5.9	130
50	Global budget of ethane and regional constraints on U.S. sources. <i>Journal of Geophysical Research</i> , 2008 , 113,		134
49	Trans-Pacific transport of mercury. <i>Journal of Geophysical Research</i> , 2008 , 113,		73
48	Correction to "Global 3-D land-ocean-atmosphere model for mercury: Present-day versus preindustrial cycles and anthropogenic enrichment factors for deposition" <i>Global Biogeochemical Cycles</i> , 2008 , 22, n/a-n/a	5.9	13
47	Air-sea exchange in the global mercury cycle. <i>Global Biogeochemical Cycles</i> , 2007 , 21,	5.9	160
46	Inventory of boreal fire emissions for North America in 2004: Importance of peat burning and pyroconvective injection. <i>Journal of Geophysical Research</i> , 2007 , 112,		170
45	Why are there large differences between models in global budgets of tropospheric ozone?. <i>Journal of Geophysical Research</i> , 2007 , 112,		221
44	Chemical cycling and deposition of atmospheric mercury: Global constraints from observations. <i>Journal of Geophysical Research</i> , 2007 , 112,		294

43	Estimating fine particulate matter component concentrations and size distributions using satellite-retrieved fractional aerosol optical depth: part 2--a case study. <i>Journal of the Air and Waste Management Association</i> , 2007 , 57, 1360-9	2.4	74
42	Regional visibility statistics in the United States: Natural and transboundary pollution influences, and implications for the Regional Haze Rule. <i>Atmospheric Environment</i> , 2006 , 40, 5405-5423	5.3	201
41	Radiative effect of clouds on tropospheric chemistry in a global three-dimensional chemical transport model. <i>Journal of Geophysical Research</i> , 2006 , 111,		44
40	Transpacific transport of Asian anthropogenic aerosols and its impact on surface air quality in the United States. <i>Journal of Geophysical Research</i> , 2006 , 111,		176
39	North American pollution outflow and the trapping of convectively lifted pollution by upper-level anticyclone. <i>Journal of Geophysical Research</i> , 2005 , 110,		139
38	Evaluating the contribution of changes in isoprene emissions to surface ozone trends over the eastern United States. <i>Journal of Geophysical Research</i> , 2005 , 110,		136
37	Convective outflow of South Asian pollution: A global CTM simulation compared with EOS MLS observations. <i>Geophysical Research Letters</i> , 2005 , 32, n/a-n/a	4.9	182
36	A 3-D model analysis of the slowdown and interannual variability in the methane growth rate from 1988 to 1997. <i>Global Biogeochemical Cycles</i> , 2004 , 18, n/a-n/a	5.9	126
35	Constraints on the sources of tropospheric ozone from ^{210}Pb - ^7Be - O_3 correlations. <i>Journal of Geophysical Research</i> , 2004 , 109,		19
34	Export of NO_y from the North American boundary layer: Reconciling aircraft observations and global model budgets. <i>Journal of Geophysical Research</i> , 2004 , 109,		67
33	Improved quantification of Chinese carbon fluxes using CO_2/CO correlations in Asian outflow. <i>Journal of Geophysical Research</i> , 2004 , 109,		113
32	Natural and transboundary pollution influences on sulfate-nitrate-ammonium aerosols in the United States: Implications for policy. <i>Journal of Geophysical Research</i> , 2004 , 109,		648
31	Constraints on Asian and European sources of methane from CH_4 - C_2H_6 - CO correlations in Asian outflow. <i>Journal of Geophysical Research</i> , 2004 , 109,		35
30	A three-dimensional global model study of atmospheric methyl chloride budget and distributions. <i>Journal of Geophysical Research</i> , 2004 , 109,		44
29	A nested grid formulation for chemical transport over Asia: Applications to CO. <i>Journal of Geophysical Research</i> , 2004 , 109, n/a-n/a		118
28	Global and regional decreases in tropospheric oxidants from photochemical effects of aerosols. <i>Journal of Geophysical Research</i> , 2003 , 108, n/a-n/a		390
27	A global three-dimensional model analysis of the atmospheric budgets of HCN and CH_3CN : Constraints from aircraft and ground measurements. <i>Journal of Geophysical Research</i> , 2003 , 108,		106
26	Inverting for emissions of carbon monoxide from Asia using aircraft observations over the western Pacific. <i>Journal of Geophysical Research</i> , 2003 , 108,		157

25	Potential of observations from the Tropospheric Emission Spectrometer to constrain continental sources of carbon monoxide. <i>Journal of Geophysical Research</i> , 2003 , 108, n/a-n/a	67
24	Transport pathways for Asian pollution outflow over the Pacific: Interannual and seasonal variations. <i>Journal of Geophysical Research</i> , 2003 , 108,	302
23	Atmospheric budget of acetone. <i>Journal of Geophysical Research</i> , 2002 , 107, ACH 5-1-ACH 5-17	251
22	Background ozone over the United States in summer: Origin, trend, and contribution to pollution episodes. <i>Journal of Geophysical Research</i> , 2002 , 107, ACH 11-1	303
21	An improved retrieval of tropospheric nitrogen dioxide from GOME. <i>Journal of Geophysical Research</i> , 2002 , 107, ACH 9-1	293
20	Transatlantic transport of pollution and its effects on surface ozone in Europe and North America. <i>Journal of Geophysical Research</i> , 2002 , 107, ACH 4-1	220
19	Interpretation of TOMS observations of tropical tropospheric ozone with a global model and in situ observations. <i>Journal of Geophysical Research</i> , 2002 , 107, ACH 4-1	154
18	Sources of tropospheric ozone along the Asian Pacific Rim: An analysis of ozonesonde observations. <i>Journal of Geophysical Research</i> , 2002 , 107, ACH 3-1-ACH 3-19	107
17	Stratospheric versus pollution influences on ozone at Bermuda: Reconciling past analyses. <i>Journal of Geophysical Research</i> , 2002 , 107, ACH 1-1	49
16	Asian chemical outflow to the Pacific in spring: Origins, pathways, and budgets. <i>Journal of Geophysical Research</i> , 2001 , 106, 23097-23113	257
15	Global modeling of tropospheric chemistry with assimilated meteorology: Model description and evaluation. <i>Journal of Geophysical Research</i> , 2001 , 106, 23073-23095	1601
14	Air mass factor formulation for spectroscopic measurements from satellites: Application to formaldehyde retrievals from the Global Ozone Monitoring Experiment. <i>Journal of Geophysical Research</i> , 2001 , 106, 14539-14550	269
13	Constraints from ²¹⁰ Pb and ⁷ Be on wet deposition and transport in a global three-dimensional chemical tracer model driven by assimilated meteorological fields. <i>Journal of Geophysical Research</i> , 2001 , 106, 12109-12128	538
12	A tropospheric ozone maximum over the Middle East. <i>Geophysical Research Letters</i> , 2001 , 28, 3235-3238	4.9 113
11	Atmospheric hydrogen cyanide (HCN): Biomass burning source, ocean sink?. <i>Geophysical Research Letters</i> , 2000 , 27, 357-360	4.9 138
10	GPS phase fluctuations in the equatorial region during sunspot minimum. <i>Radio Science</i> , 1997 , 32, 1535-1550	79
9	Global methane budget and trend, 2010-2017: complementarity of inverse analyses using in situ (GLOBALVIEWplus CH ₄ ; ObsPack) and satellite (GOSAT) observations	2
8	Evaluating a 3-D transport model of atmospheric CO ₂ using ground-based, aircraft, and space-borne data	1

7	Gas-particle partitioning of atmospheric Hg(II) and its effect on global mercury deposition	4
6	Global estimates of CO sources with high resolution by adjoint inversion of multiple satellite datasets (MOPITT, AIRS, SCIAMACHY, TES)	7
5	Regional CO pollution in China simulated by the high-resolution nested-grid GEOS-Chem model	7
4	HEMCO v1.0: A versatile, ESMF-compliant component for calculating emissions in atmospheric models	2
3	Development of a grid-independent GEOS-chem chemical transport model as an atmospheric chemistry module for Earth System Models	1
2	Chemistry of hydrogen oxide radicals (HO _x) in the Arctic troposphere in spring	1
1	Atmospheric peroxyacetyl nitrate (PAN): a global budget and source attribution	1