Shamil Maksyutov

List of Publications by Year
in descending order

184 papers	11,141 citations	71061 41 h-index	38368 95 g-index
238 all docs	238 docs citations	238 times ranked	8325 citing authors

#	Article	IF	Citations
1	The Global Methane Budget 2000â€“2017. Earth System Science Data, 2020, 12, 1561-1623.	3.7	1,199
2	Towards robust regional estimates of CO2 sources and sinks using atmospheric transport models. Nature, 2002, 415, 626-630.	13.7	1,157
3	The global methane budget 2000â€“2012. Earth System Science Data, 2016, 8, 697-751.	3.7	824
4	Global Concentrations of CO2 and CH4 Retrieved from GOSAT: First Preliminary Results. Scientific Online Letters on the Atmosphere, 2009, 5, 160-163.	0.6	509
5	A very high-resolution (1 kmÃ—1 km) global fossil fuel CO₂ emission inventory derived using a point source database and satellite observations of nighttime lights. Atmospheric Chemistry and Physics, 2011, 11, 543-556.	1.9	437
6	TransCom 3 inversion intercomparison: Impact of transport model errors on the interannual variability of regional CO2fluxes, 1988-2003. Global Biogeochemical Cycles, 2006, 20, n/a-n/a.	1.9	417
7	The Open-source Data Inventory for Anthropogenic CO₂, version 2016 (ODIAC2016): a global monthly fossil fuel CO₂ gridded emissions data product for tracer transport simulations and surface flux inversions. Earth System Science Data, 2018, 10, 87-107.	3.7	360
8	TransCom model simulations of CH₄ and related species: linking transport, surface flux and chemical loss with CH₄ variability in the troposphere and lower stratosphere. Atmospheric Chemistry and Physics, 2011, 11, 12813-12837.	1.9	331
9	Transcom 3 inversion intercomparison: Model mean results for the estimation of seasonal carbon sources and sinks. Global Biogeochemical Cycles, 2004, 18, n/a-n/a.	1.9	312
10	TransCom 3 CO2 inversion intercomparison: 1. Annual mean control results and sensitivity to transport and prior flux information. Tellus, Series B: Chemical and Physical Meteorology, 2003, 55, 555-579.	0.8	235
11	16â€year simulation of Arctic black carbon: Transport, source contribution, and sensitivity analysis on deposition. Journal of Geophysical Research D: Atmospheres, 2013, 118, 943-964.	1.2	154
12	TransCom model simulations of hourly atmospheric CO₂: Experimental overview and diurnal cycle results for 2002. Global Biogeochemical Cycles, 2008, 22, .	1.9	142
13	Regional CO₂ flux estimates for 2009â€“2010 based on GOSAT and ground-based CO₂ observations. Atmospheric Chemistry and Physics, 2013, 13, 9351-9373.	1.9	135
14	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
15	An estimate of the terrestrial carbon budget of Russia using inventory-based, eddy covariance and inversion methods. Biogeosciences, 2012, 9, 5323-5340.	1.3	113
16	TransCom 3 CO₂ inversion intercomparison: 1. Annual mean control results and sensitivity to transport and prior flux information. Tellus, Series B: Chemical and Physical Meteorology, 2022, 55, 555.	0.8	105
17	Interannual and decadal changes in the sea-air CO2flux from atmospheric CO2inverse modeling. Global Biogeochemical Cycles, 2005, 19, n/a-n/a.	1.9	105
18	An intercomparison of inverse models for estimating sources and sinks of CO₂ using GOSAT measurements. Journal of Geophysical Research D: Atmospheres, 2015, 120, 5253-5266.	1.2	105

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19	Role of biomass burning and climate anomalies for land-atmosphere carbon fluxes based on inverse modeling of atmospheric CO2. Global Biogeochemical Cycles, 2005, 19, .	1.9	101
20	Impact of wildfire in Russia between 1998â€“2010 on ecosystems and the global carbon budget. Doklady Earth Sciences, 2011, 441, 1678-1682.	0.2	97
21	Development of a global hybrid forest mask through the synergy of remote sensing, crowdsourcing and FAO statistics. Remote Sensing of Environment, 2015, 162, 208-220.	4.6	97
22	Topâ€“down assessment of the Asian carbon budget since the mid 1990s. Nature Communications, 2016, 7, 10724.	5.8	93
23	Temporal changes in the emissions of CH₄ and CO from China estimated from CH₄ / CO₂ and CO / CO₂ correlations observed at Hateruma Island. Atmospheric Chemistry and Physics, 2014, 14, 1663-1677.	1.9	90
24	Variability and quasi-decadal changes in the methane budget over the period 2000â€“2012. Atmospheric Chemistry and Physics, 2017, 17, 11135-11161.	1.9	85
25	Continuous measurements of methane from a tower network over Siberia. Tellus, Series B: Chemical and Physical Meteorology, 2022, 62, 403.	0.8	83
26	WETCHIMP-WSL: intercomparison of wetland methane emissions models over West Siberia. Biogeosciences, 2015, 12, 3321-3349.	1.3	81
27	On the accuracy of the CO₂ surface fluxes to be estimated from the GOSAT observations. Geophysical Research Letters, 2009, 36, .	1.5	80
28	Simulation and assimilation of global ocean <i>p</i>CO₂ and air–sea CO₂ fluxes using ship observations of surface ocean <i>p</i>CO₂ in a simplified biogeochemical offline model. Tellus, Series B: Chemical and Physical Meteorology, 2022, 62, 821.	0.8	80
29	On error estimation in atmospheric CO2inversions. Journal of Geophysical Research, 2002, 107, ACL 10-1.	3.3	79
30	Regional methane emission from West Siberia mire landscapes. Environmental Research Letters, 2011, 6, 045214.	2.2	77
31	Errors and uncertainties in a gridded carbon dioxide emissions inventory. Mitigation and Adaptation Strategies for Global Change, 2019, 24, 1007-1050.	1.0	77
32	Comparing GOSAT observations of localized CO₂ enhancements by large emitters with inventoryâ€based estimates. Geophysical Research Letters, 2016, 43, 3486-3493.	1.5	74
33	Northern Eurasia Future Initiative (NEFI): facing the challenges and pathways of global change in the twenty-first century. Progress in Earth and Planetary Science, 2017, 4, .	1.1	69
34	Analysis and presentation of in situ atmospheric methane measurements from Cape Ochi-ishi and Hateruma Island. Journal of Geophysical Research, 2002, 107, ACH 8-1.	3.3	60
35	Mapâ€based inventory of wetland biomass and net primary production in western Siberia. Journal of Geophysical Research, 2008, 113, .	3.3	59
36	On the Benefit of GOSAT Observations to the Estimation of Regional CO₂ Fluxes. Scientific Online Letters on the Atmosphere, 2011, 7, 161-164.	0.6	59

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37	Southern California megacity CO₂, CH₄, and CO flux estimates using ground- and space-based remote sensing and a Lagrangian model. Atmospheric Chemistry and Physics, 2018, 18, 16271-16291.	1.9	56
38	Regional trends and drivers of the global methane budget. Global Change Biology, 2022, 28, 182-200.	4.2	56
39	Global monthly CO2flux inversion with a focus over North America. Tellus, Series B: Chemical and Physical Meteorology, 2007, 59, 179-190.	0.8	55
40	A multi-model intercomparison of halogenated very short-lived substances (TransCom-VSLS): linking oceanic emissions and tropospheric transport for a reconciled estimate of the stratospheric source gas injection of bromine. Atmospheric Chemistry and Physics, 2016, 16, 9163-9187.	1.9	51
41	Analysis of Four Years of Global XCO2 Anomalies as Seen by Orbiting Carbon Observatory-2. Remote Sensing, 2019, 11, 850.	1.8	51
42	Carbon flux estimation for Siberia by inverse modeling constrained by aircraft and tower CO₂ measurements. Journal of Geophysical Research D: Atmospheres, 2013, 118, 1100-1122.	1.2	49
43	The Indian summer monsoon rainfall: interplay of coupled dynamics, radiation and cloud microphysics. Atmospheric Chemistry and Physics, 2005, 5, 2181-2188.	1.9	48
44	U.S. CH₄ emissions from oil and gas production: Have recent large increases been detected?. Journal of Geophysical Research D: Atmospheres, 2017, 122, 4070-4083.	1.2	47
45	Effects of atmospheric light scattering on spectroscopic observations of greenhouse gases from space. Part 2: Algorithm intercomparison in the GOSAT data processing for CO₂ retrievals over TCCON sites. Journal of Geophysical Research D: Atmospheres, 2013, 118, 1493-1512.	1.2	46
46	Influence of differences in current GOSAT<i>X</i>_{CO}₂retrievals on surface flux estimation. Geophysical Research Letters, 2014, 41, 2598-2605.	1.5	45
47	The Northern Eurasia Earth Science Partnership: An Example of Science Applied to Societal Needs. Bulletin of the American Meteorological Society, 2009, 90, 671-688.	1.7	44
48	Age of air as a diagnostic for transport timescales in global models. Geoscientific Model Development, 2018, 11, 3109-3130.	1.3	44
49	Role of simulated GOSAT total column CO₂ observations in surface CO₂ flux uncertainty reduction. Journal of Geophysical Research, 2009, 114, .	3.3	43
50	Effects of atmospheric light scattering on spectroscopic observations of greenhouse gases from space: Validation of PPDFâ€based CO₂ retrievals from GOSAT. Journal of Geophysical Research, 2012, 117, .	3.3	42
51	Simulations of column-averaged CO₂ and CH₄ using the NIES TM with a hybrid sigma-isentropic (Ïƒ-Î¸) vertical coordinate. Atmospheric Chemistry and Physics, 2013, 13, 1713-1732.	1.9	42
52	Modeling the large-scale effects of surface moisture heterogeneity on wetland carbon fluxes in the West Siberian Lowland. Biogeosciences, 2013, 10, 6559-6576.	1.3	42
53	An evaluation of CO2observations with Solar Occultation FTS for Inclined-Orbit Satellite sensor for surface source inversion. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	41
54	Atmospheric CO₂inversion validation using vertical profile measurements: Analysis of four independent inversion models. Journal of Geophysical Research, 2011, 116, .	3.3	41

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55	Mass-conserving tracer transport modelling on a reduced latitude-longitude grid with NIES-TM. Geoscientific Model Development, 2011, 4, 207-222.	1.3	41
56	Three-dimensional variations of atmospheric CO₂: aircraft measurements and multi-transport model simulations. Atmospheric Chemistry and Physics, 2011, 11, 13359-13375.	1.9	41
57	Sensitivity of inverse estimation of annual mean CO2sources and sinks to ocean-only sites versus all-sites observational networks. Geophysical Research Letters, 2006, 33, .	1.5	40
58	Interannual variability and trends in atmospheric methane over the western Pacific from 1994 to 2010. Journal of Geophysical Research, 2011, 116, .	3.3	39
59	Evaluation of methane emissions from West Siberian wetlands based on inverse modeling. Environmental Research Letters, 2011, 6, 035201.	2.2	39
60	Mapping of West Siberian taiga wetland complexes using Landsat imagery: implications for methane emissions. Biogeosciences, 2016, 13, 4615-4626.	1.3	39
61	Surface ozone at the Swiss Alpine site Arosa: the hemispheric background and the influence of large-scale anthropogenic emissions. Atmospheric Environment, 2001, 35, 5553-5566.	1.9	37
62	Decreasing anthropogenic methane emissions in Europe and Siberia inferred from continuous carbon dioxide and methane observations at Alert, Canada. Journal of Geophysical Research, 2009, 114, .	3.3	37
63	An image-based inventory of the spatial structure of West Siberian wetlands. Environmental Research Letters, 2009, 4, 045014.	2.2	36
64	Seasonal variability as a source of uncertainty in the West Siberian regional CH 4 flux upscaling. Environmental Research Letters, 2014, 9, 045008.	2.2	36
65	Analysis of atmospheric CO2 growth rates at Mauna Loa using CO2 fluxes derived from an inverse model. Tellus, Series B: Chemical and Physical Meteorology, 2005, 57, 357-365.	0.8	34
66	A global coupled Eulerian-Lagrangian model and 1 Ã— 1 km CO₂ surface flux dataset for high-resolution atmospheric CO₂ transport simulations. Geoscientific Model Development, 2012, 5, 231-243.	1.3	34
67	Inverse Modeling of CO₂ Fluxes Using GOSAT Data and Multi-Year Ground-Based Observations. Scientific Online Letters on the Atmosphere, 2013, 9, 45-50.	0.6	34
68	Design and Validation of an Offline Oceanic Tracer Transport Model for a Carbon Cycle Study. Journal of Climate, 2008, 21, 2752-2769.	1.2	33
69	Intraseasonal variability of terrestrial biospheric CO₂ fluxes over India during summer monsoons.. Journal of Geophysical Research G: Biogeosciences, 2013, 118, 752-769.	1.3	33
70	Incremental approach to the optimal network design for CO2surface source inversion. Geophysical Research Letters, 2002, 29, 97-1-97-4.	1.5	32
71	Variability in methane emissions from West Siberia's shallow boreal lakes on a regional scale and its environmental controls. Biogeosciences, 2017, 14, 3715-3742.	1.3	32
72	A process-based model of methane consumption by upland soils. Environmental Research Letters, 2016, 11, 075001.	2.2	31

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73	Inter-annual variability of summertime CO ₂ exchange in Northern Eurasia inferred from GOSAT XCO ₂. Environmental Research Letters, 2016, 11, 105001.	2.2	29
74	Methane Emission Estimates by the Global High-Resolution Inverse Model Using National Inventories. Remote Sensing, 2019, 11, 2489.	1.8	29
75	Analysis of atmospheric CO₂ growth rates at Mauna Loa using CO₂ fluxes derived from an inverse model. Tellus, Series B: Chemical and Physical Meteorology, 2022, 57, 357.	0.8	28
76	Methane emission from bogs in the subtaiga of Western Siberia: The development of standard model. Eurasian Soil Science, 2012, 45, 947-957.	0.5	28
77	Interannual variability of the airâ€“sea CO2 flux in the north Indian Ocean. Ocean Dynamics, 2013, 63, 165-178.	0.9	28
78	Global mapping of greenhouse gases retrieved from GOSAT Level 2 products by using a kriging method. International Journal of Remote Sensing, 2015, 36, 1509-1528.	1.3	28
79	Country-Scale Analysis of Methane Emissions with a High-Resolution Inverse Model Using GOSAT and Surface Observations. Remote Sensing, 2020, 12, 375.	1.8	28
80	Off-line algorithm for calculation of vertical tracer transport in the troposphere due to deep convection. Atmospheric Chemistry and Physics, 2013, 13, 1093-1114.	1.9	27
81	Detection of optical path in spectroscopic space-based observations of greenhouse gases: Application to GOSAT data processing. Journal of Geophysical Research, 2011, 116, .	3.3	26
82	Evaluation of Biases in JRA-25/JCDAS Precipitation and Their Impact on the Global Terrestrial Carbon Balance. Journal of Climate, 2011, 24, 4109-4125.	1.2	26
83	Global high-resolution simulations of CO₂ and CH₄ using a NIES transport model to produce a priori concentrations for use in satellite data retrievals. Geoscientific Model Development, 2013, 6, 81-100.	1.3	26
84	TransCom continuous experiment: comparison of ²²²Rn transport at hourly time scales at three stations in Germany. Atmospheric Chemistry and Physics, 2011, 11, 10071-10084.	1.9	25
85	Methane emission from mires of the West Siberian taiga. Eurasian Soil Science, 2013, 46, 1182-1193.	0.5	25
86	Effect of recent observations on Asian CO2 flux estimates by transport model inversions. Tellus, Series B: Chemical and Physical Meteorology, 2003, 55, 522-529.	0.8	24
87	The seasonal cycle amplitude of total column CO2: Factors behind the model-observation mismatch. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	24
88	Simulation of CO₂ Concentration over East Asia Using the Regional Transport Model WRF-CO₂. Journal of the Meteorological Society of Japan, 2012, 90, 959-976.	0.7	24
89	TransCom model simulations of methane: Comparison of vertical profiles with aircraft measurements. Journal of Geophysical Research D: Atmospheres, 2013, 118, 3891-3904.	1.2	24
90	Global and Regional CH₄ Emissions for 1995â€“2013 Derived From Atmospheric CH₄, Î´¹³Câ€€CH₄, and Î´Dâ€€CH₄ Observations and a Chemical Transport Model. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032903.	1.2	24

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91	A priori covariance estimation for CO₂ and CH₄ retrievals. Journal of Geophysical Research, 2010, 115, .	3.3	23
92	Technical note: A high-resolution inverse modelling technique for estimating surface CO₂ fluxes based on the NIES-TMâ€“FLEXPART coupled transport model and its adjoint. Atmospheric Chemistry and Physics, 2021, 21, 1245-1266.	1.9	23
93	Terrestrial Ecosystems and Their Change. Springer Environmental Science and Engineering, 2013, , 171-249.	0.1	22
94	Vertical distribution of greenhouse gases above Western Siberia by the long-term measurement data. Atmospheric and Oceanic Optics, 2009, 22, 316-324.	0.6	21
95	Possible interannual to interdecadal variabilities of the Indonesian throughflow water pathways in the Indian Ocean. Journal of Geophysical Research, 2010, 115, .	3.3	20
96	Airborne measurements of atmospheric methane over oil fields in western Siberia. Geophysical Research Letters, 1996, 23, 1621-1624.	1.5	19
97	Distribution of tropospheric methane over Siberia in July 1993. Journal of Geophysical Research, 1997, 102, 25371-25382.	3.3	19
98	Seasonal CO₂ rectifier effect and largeâ€scale extratropical atmospheric transport. Journal of Geophysical Research, 2008, 113, .	3.3	19
99	TransCom satellite intercomparison experiment: Construction of a bias corrected atmospheric CO₂climatology. Journal of Geophysical Research, 2011, 116, .	3.3	19
100	A window for carbon uptake in the southern subtropical Indian Ocean. Geophysical Research Letters, 2012, 39, .	1.5	19
101	Optimization of a prognostic biosphere model for terrestrial biomass and atmospheric CO₂ variability. Geoscientific Model Development, 2014, 7, 1829-1840.	1.3	19
102	Adjoint of the global Eulerianâ€“Lagrangian coupled atmospheric transport model (A-GELCA v1.0): development and validation. Geoscientific Model Development, 2016, 9, 749-764.	1.3	19
103	Statistical characterization of urban CO2 emission signals observed by commercial airliner measurements. Scientific Reports, 2020, 10, 7963.	1.6	19
104	An empirical model simulating diurnal and seasonal CO₂ flux for diverse vegetation types and climate conditions. Biogeosciences, 2009, 6, 585-599.	1.3	19
105	Interannual to Interdecadal Variabilities of the Indonesian Throughflow Source Water Pathways in the Pacific Ocean. Journal of Physical Oceanography, 2011, 41, 1921-1940.	0.7	18
106	Simulation of variability in atmospheric carbon dioxide using a global coupled Eulerian â€“ Lagrangian transport model. Geoscientific Model Development, 2011, 4, 317-324.	1.3	18
107	Analysis of Î”O₂/Î”CO₂ ratios for the pollution events observed at Hateruma Island, Japan. Atmospheric Chemistry and Physics, 2012, 12, 2713-2723.	1.9	18
108	Climate impacts on the structures of the North Pacific air-sea CO₂ flux variability. Biogeosciences, 2012, 9, 477-492.	1.3	18

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109	SEVER: A modification of the LPJ global dynamic vegetation model for daily time step and parallel computation. Environmental Modelling and Software, 2007, 22, 104-109.	1.9	17
110	Spatial and temporal variability of CO2 and CH4 concentrations in the surface atmospheric layer over West Siberia. Atmospheric and Oceanic Optics, 2009, 22, 84-93.	0.6	17
111	Optimization of the seasonal cycles of simulated CO₂ flux by fitting simulated atmospheric CO₂ to observed vertical profiles. Biogeosciences, 2009, 6, 2733-2741.	1.3	16
112	A new map of wetlands in the southern taiga of the West Siberia for assessing the emission of methane and carbon dioxide. Water Resources, 2017, 44, 297-307.	0.3	16
113	Effect of recent observations on Asian CO₂ flux estimates by transport model inversions. Tellus, Series B: Chemical and Physical Meteorology, 2022, 55, 522.	0.8	16
114	Temporal variations of atmospheric carbon dioxide in the southernmost part of Japan. Tellus, Series B: Chemical and Physical Meteorology, 2007, 59, 654-663.	0.8	15
115	Iconic CO ₂ Time Series at Risk. Science, 2012, 337, 1038-1040.	6.0	15
116	Sensitivity of optimal extension of CO2 observation networks to model transport. Tellus, Series B: Chemical and Physical Meteorology, 2003, 55, 498-511.	0.8	14
117	Relative contribution of transport/surface flux to the seasonal vertical synoptic CO₂ variability in the troposphere over Narita. Tellus, Series B: Chemical and Physical Meteorology, 2022, 64, 19138.	0.8	14
118	Disaggregation of national fossil fuel CO2 emissions using a global power plant database and DMSP nightlight data. Proceedings of the Asia-Pacific Advanced Network, 2013, 30, 219.	0.3	14
119	Interannual variability on methane emissions in monsoon Asia derived from GOSAT and surface observations. Environmental Research Letters, 2021, 16, 024040.	2.2	14
120	Inter-annual variability of the atmospheric carbon dioxide concentrations as simulated with global terrestrial biosphere models and an atmospheric transport model. Tellus, Series B: Chemical and Physical Meteorology, 2003, 55, 530-546.	0.8	13
121	Methanotrophic bacteria in cold seeps of the floodplains of northern rivers. Microbiology, 2013, 82, 743-750.	0.5	13
122	Reconciliation of top-down and bottom-up CO ₂ fluxes in Siberian larch forest. Environmental Research Letters, 2017, 12, 125012.	2.2	13
123	On what scales can GOSAT flux inversions constrain anomalies in terrestrial ecosystems?. Atmospheric Chemistry and Physics, 2019, 19, 13017-13035.	1.9	13
124	A Short Surface Pathway of the Subsurface Indonesian Throughflow Water from the Java Coast Associated with Upwelling, Ekman Transport, and Subduction. International Journal of Oceanography, 2010, 2010, 1-15.	0.2	12
125	ENSO-related variability in latitudinal distribution of annual mean atmospheric potential oxygen (APO) in the equatorial Western Pacific. Tellus, Series B: Chemical and Physical Meteorology, 2022, 67, 25869.	0.8	12
126	Relationship of methane consumption with the respiration of soil and grass-moss layers in forest ecosystems of the southern taiga in Western Siberia. Eurasian Soil Science, 2015, 48, 841-851.	0.5	12

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127	Analysis of atmospheric CH₄ in Canadian Arctic and estimation of the regional CH₄ fluxes. Atmospheric Chemistry and Physics, 2019, 19, 4637-4658.	1.9	12
128	Variations in atmospheric nitrous oxide observed at Hateruma monitoring station. Chemosphere, 2000, 2, 435-443.	1.2	11
129	Estimation of global CO2 fluxes using ground-based and satellite (GOSAT) observation data with empirical orthogonal functions. Atmospheric and Oceanic Optics, 2013, 26, 507-516.	0.6	11
130	A decadal inversion of CO₂ using the Global Eulerianâ€“Lagrangian Coupled Atmospheric model (GELCA): sensitivity to the ground-based observation network. Tellus, Series B: Chemical and Physical Meteorology, 2022, 69, 1291158.	0.8	10
131	Study of the footprints of short-term variation in XCO₂ observed by TCCON sites using NIES and FLEXPART atmospheric transport models. Atmospheric Chemistry and Physics, 2017, 17, 143-157.	1.9	10
132	Highly Dynamic Methane Emission from the West Siberian Boreal Floodplains. Wetlands, 2019, 39, 217-226.	0.7	10
133	Global to local impacts on atmospheric CO₂from the COVID-19 lockdown, biosphere and weather variabilities. Environmental Research Letters, 2022, 17, 015003.	2.2	10
134	Column-averaged CO2 concentrations in the subarctic from GOSAT retrievals and NIES transport model simulations. Polar Science, 2014, 8, 129-145.	0.5	9
135	EOF-based regression algorithm for the fast retrieval of atmospheric CO2 total column amount from the GOSAT observations. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 189, 258-266.	1.1	9
136	Climate-Induced Extreme Hydrologic Events in the Arctic. Remote Sensing, 2016, 8, 971.	1.8	7
137	Assessment of Anthropogenic Methane Emissions over Large Regions Based on GOSAT Observations and High Resolution Transport Modeling. Remote Sensing, 2017, 9, 941.	1.8	7
138	Application of process-based eco-hydrological model to broader northern Eurasia wetlands through coordinate transformation. Ecohydrology and Hydrobiology, 2018, 18, 269-277.	1.0	7
139	Quantification of Enhancement in Atmospheric CO₂ Background Due to Indian Biospheric Fluxes and Fossil Fuel Emissions. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD034545.	1.2	7
140	Impact of Fraserdale CO2observations on annual flux inversion of the North American boreal region. Tellus, Series B: Chemical and Physical Meteorology, 2005, 57, 203-209.	0.8	6
141	Enhanced Methane Emissions during Amazonian Drought by Biomass Burning. PLoS ONE, 2016, 11, e0166039.	1.1	6
142	Large XCH₄ anomaly in summer 2013 over northeast Asia observed by GOSAT. Atmospheric Chemistry and Physics, 2016, 16, 9149-9161.	1.9	6
143	Three-dimensional simulation of stratospheric gravitational separation using the NIES global atmospheric tracer transport model. Atmospheric Chemistry and Physics, 2019, 19, 5349-5361.	1.9	6
144	Spatio-temporal variations of the atmospheric greenhouse gases and their sources and sinks in the Arctic region. Polar Science, 2021, 27, 100553.	0.5	6

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145	Technical Note: A novel approach to estimation of time-variable surface sources and sinks of carbon dioxide using empirical orthogonal functions and the Kalman filter. Atmospheric Chemistry and Physics, 2011, 11, 10305-10315.	1.9	5
146	Interannual variability of CFC-11 absorption by the ocean: an offline model study. Climate Dynamics, 2011, 36, 1435-1452.	1.7	5
147	Mathematical algorithms for processing and analysis of near-infrared data from a satellite-borne Fourier transform spectrometer. Russian Physics Journal, 2012, 55, 330-335.	0.2	5
148	Rectifier effect in an atmospheric model with daily biospheric fluxes: impact on inversion calculation. Tellus, Series B: Chemical and Physical Meteorology, 2006, 58, 447-462.	0.8	4
149	Simulation of contribution of continental anthropogenic sources to variations in the CO2 concentration during winter period on Hateruma Island. Atmospheric and Oceanic Optics, 2013, 26, 35-40.	0.6	4
150	Retrievals of atmospheric CO2, CH4and optical path modifications from the GOSAT observations. , 2013, , .		4
151	Methane emission from West Siberian forest-steppe and subtaiga reed fens. Russian Meteorology and Hydrology, 2016, 41, 37-42.	0.2	4
152	Inter-annual variability of the atmospheric carbon dioxide concentrations as simulated with global terrestrial biosphere models and an atmospheric transport model. Tellus, Series B: Chemical and Physical Meteorology, 2003, 55, 530-546.	0.8	3
153	HCFCâ€22 flux estimates over East Asia by inverse modeling from hourly observations at Hateruma monitoring station. Journal of Geophysical Research, 2010, 115, .	3.3	3
154	Using the landscape map to assess the productivity of geosystems in the southern taiga of Western Siberia. Geography and Natural Resources, 2013, 34, 278-284.	0.1	3
155	The Use of a High-Resolution Emission Data Set in a Global Eulerian-Lagrangian Coupled Model. Geophysical Monograph Series, 2013, , 173-184.	0.1	3
156	Measurements of methane and carbon dioxide fluxes on the Bakchar bog in warm season. Proceedings of SPIE, 2015, , .	0.8	3
157	The spatial variability of methane emission from subtaiga and forestâ€“steppe grassâ€“moss fens of Western Siberia. Biology Bulletin, 2016, 43, 162-168.	0.1	3
158	Estimating by inverse modeling the release of radioactive substances (133Xe, 131I, and 137Cs) into the atmosphere from Fukushima Daiichi nuclear disaster. Russian Meteorology and Hydrology, 2016, 41, 335-343.	0.2	3
159	Relationships between CO₂ Flux Estimated by Inverse Analysis and Land Surface Elements in South America and Africa. Journal of the Meteorological Society of Japan, 2016, 94, 415-430.	0.7	3
160	Thermal self-ignition of previously unmixed gases. Combustion, Explosion and Shock Waves, 1982, 18, 407-411.	0.3	2
161	Estimation of regional surface CO2fluxes with GOSAT observations using two inverse modeling approaches. , 2012, , .		2
162	Technical Note: An efficient method for accelerating the spin-up process for process-based biogeochemistry models. Biogeosciences, 2018, 15, 3967-3973.	1.3	2

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163	TransCom 3 inversion intercomparison: Impact of transport model errors on the interannual variability of regional CO2fluxes, 1988-2003. Global Biogeochemical Cycles, 2006, 20, n/a-n/a.	1.9	2
164	Meteorological control of subtropical South American methane emissions estimated from GOSAT observations. Scientific Online Letters on the Atmosphere, 2021, , .	0.6	2
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