Tomohiro Oda

List of Publications by Year
in descending order

45 papers	3,322 citations	218592 26 h-index	233338 45 g-index
47 all docs	47 docs citations	47 times ranked	2987 citing authors

#	Article	IF	Citations
1	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
2	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
3	NASA's Black Marble nighttime lights product suite. Remote Sensing of Environment, 2018, 210, 113-143.	4.6	312
4	A synthesis of carbon dioxide emissions from fossil-fuel combustion. Biogeosciences, 2012, 9, 1845-1871.	1.3	271
5	Highâ€resolution atmospheric inversion of urban CO₂ emissions during the dormant season of the Indianapolis Flux Experiment (INFLUX). Journal of Geophysical Research D: Atmospheres, 2016, 121, 5213-5236.	1.2	219
6	Top-down estimate of surface flux in the Los Angeles Basin using a mesoscale inverse modeling technique: assessing anthropogenic emissions of CO, NO_x and CO₂ and their impacts. Atmospheric Chemistry and Physics, 2013, 13, 3661-3677.	1.9	142
7	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
8	Improving the temporal and spatial distribution of CO₂ emissions from global fossil fuel emission data sets. Journal of Geophysical Research D: Atmospheres, 2013, 118, 917-933.	1.2	122
9	The 2015â€“2016 carbon cycle as seen from OCO-2 and the global in situ network. Atmospheric Chemistry and Physics, 2019, 19, 9797-9831.	1.9	113
10	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
11	Assessing the recent impact of COVID-19 on carbon emissions from China using domestic economic data. Science of the Total Environment, 2021, 750, 141688.	3.9	92
12	Global impact of COVID-19 restrictions on the surface concentrations of nitrogen dioxide and ozone. Atmospheric Chemistry and Physics, 2021, 21, 3555-3592.	1.9	91
13	Errors and uncertainties in a gridded carbon dioxide emissions inventory. Mitigation and Adaptation Strategies for Global Change, 2019, 24, 1007-1050.	1.0	77
14	Comparing GOSAT observations of localized CO₂ enhancements by large emitters with inventoryâ€based estimates. Geophysical Research Letters, 2016, 43, 3486-3493.	1.5	74
15	Space-based quantification of per capita CO₂ emissions from cities. Environmental Research Letters, 2020, 15, 035004.	2.2	62
16	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
17	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
18	A Lagrangian approach towards extracting signals of urban CO₂ emissions from satellite observations of atmospheric column CO₂ (XCO₂): X-Stochastic Time-Inverted Lagrangian Transport model (â€œX-STILT v1â€). Geoscientific Model Development, 2018, 11, 4843-4871.	1.3	56

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19	Policy-Relevant Assessment of Urban CO₂ Emissions. Environmental Science & Technology, 2020, 54, 10237-10245.	4.6	52
20	Constraining Fossil Fuel CO₂ Emissions From Urban Area Using OCOâ€2 Observations of Total Column CO₂. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD030528.	1.2	48
21	Urban-focused satellite CO2 observations from the Orbiting Carbon Observatory-3: A first look at the Los Angeles megacity. Remote Sensing of Environment, 2021, 258, 112314.	4.6	48
22	Exploiting OMI NO2 satellite observations to infer fossil-fuel CO2 emissions from U.S. megacities. Science of the Total Environment, 2019, 695, 133805.	3.9	37
23	On the impact of granularity of space-based urban CO2 emissions in urban atmospheric inversions: A case study for Indianapolis, IN. Elementa, 2017, 5, 28.	1.1	34
24	Regional impacts of COVID-19 on carbon dioxide detected worldwide from space. Science Advances, 2021, 7, eabf9415.	4.7	33
25	Simulating estimation of California fossil fuel and biosphere carbon dioxide exchanges combining in situ tower and satellite column observations. Journal of Geophysical Research D: Atmospheres, 2017, 122, 3653-3671.	1.2	32
26	Investigating sources of variability and error in simulations of carbon dioxide in an urban region. Atmospheric Environment, 2019, 199, 55-69.	1.9	28
27	Daily CO2 Emission Reduction Indicates the Control of Activities to Contain COVID-19 in China. Innovation(China), 2020, 1, 100062.	5.2	25
28	A Road Map for Improving the Treatment of Uncertainties in Highâ€Resolution Regional Carbon Flux Inverse Estimates. Geophysical Research Letters, 2019, 46, 13461-13469.	1.5	23
29	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
30	Bayesian inverse estimation of urban CO2 emissions: Results from a synthetic data simulation over Salt Lake City, UT. Elementa, 2019, 7, .	1.1	20
31	A model for urban biogenic CO₂ fluxes: Solar-Induced Fluorescence for Modeling Urban biogenic Fluxes (SMUrF v1). Geoscientific Model Development, 2021, 14, 3633-3661.	1.3	18
32	A high-definition spatially explicit modelling approach for national greenhouse gas emissions from industrial processes: reducing the errors and uncertainties in global emission modelling. Mitigation and Adaptation Strategies for Global Change, 2019, 24, 907-939.	1.0	15
33	Bias-correcting carbon fluxes derived from land-surface satellite data for retrospective and near-real-time assimilation systems. Atmospheric Chemistry and Physics, 2021, 21, 9609-9628.	1.9	14
34	Far-field biogenic and anthropogenic emissions as a dominant source of variability in local urban carbon budgets: A global high-resolution model study with implications for satellite remote sensing. Remote Sensing of Environment, 2021, 262, 112473.	4.6	12
35	Fluxes of Atmospheric Greenhouseâ€Gases in Maryland (FLAGGâ€MD): Emissions of Carbon Dioxide in the Baltimore, MDâ€Washington, D.C. Area. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD032004.	1.2	11
36	Errors and uncertainties associated with the use of unconventional activity data for estimating CO₂ emissions: the case for traffic emissions in Japan. Environmental Research Letters, 2021, 16, 084058.	2.2	10

#	Article	IF	Citations
37	Global to local impacts on atmospheric CO₂from the COVID-19 lockdown, biosphere and weather variabilities. Environmental Research Letters, 2022, 17, 015003.	2.2	10
38	Examining partial-column density retrieval of lower-tropospheric CO2 from GOSAT target observations over global megacities. Remote Sensing of Environment, 2022, 273, 112966.	4.6	9
39	The impacts of fossil fuel emission uncertainties and accounting for 3-D chemical CO2 production on inverse natural carbon flux estimates from satellite and in situ data. Environmental Research Letters, 2020, 15, 085002.	2.2	7
40	An Interpolation Method to Reduce the Computational Time in the Stochastic Lagrangian Particle Dispersion Modeling of Spatially Dense XCO₂ Retrievals. Earth and Space Science, 2021, 8, e2020EA001343.	1.1	7
41	Anthropogenic Osmium in Macroalgae from Tokyo Bay Reveals Widespread Contamination from Municipal Solid Waste. Environmental Science & Technology, 2020, 54, 9356-9365.	4.6	5
42	Impact of a Regional U.S. Drought on Land and Atmospheric Carbon. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2019JG005599.	1.3	5
43	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
44	Formulating a Geolocation Bias Correction for DMSP Nighttime Lights of Global Cities. Advances in Intelligent Systems and Computing, 2021, , 383-398.	0.5	1
45	Mitigating geolocation errors in nighttime light satellite data and global CO2 emission gridded data. Mathematical Modeling and Computing, 2021, 8, 304-316.	0.4	1