Bryan N Duncan

List of Publications by Year
in descending order

46 papers	6,330 citations	185998 28 h-index	223531 46 g-index
47 all docs	47 docs citations	47 times ranked	6371 citing authors

#	Article	IF	Citations
1	Tropospheric Aerosol Optical Thickness from the GOCART Model and Comparisons with Satellite and Sun Photometer Measurements. Journals of the Atmospheric Sciences, 2002, 59, 461-483.	0.6	1,226
2	Interannual and seasonal variability of biomass burning emissions constrained by satellite observations. Journal of Geophysical Research, 2003, 108, ACH 1-1.	3.3	609
3	Aura OMI observations of regional SO₂ and NO₂ pollution changes from 2005 to 2015. Atmospheric Chemistry and Physics, 2016, 16, 4605-4629.	1.9	521
4	Transport pathways for Asian pollution outflow over the Pacific: Interannual and seasonal variations. Journal of Geophysical Research, 2003, 108, .	3.3	331
5	Emissions estimation from satellite retrievals: A review of current capability. Atmospheric Environment, 2013, 77, 1011-1042.	1.9	323
6	A spaceâ€based, highâ€resolution view of notable changes in urban NO_x pollution around the world (2005â€“2014). Journal of Geophysical Research D: Atmospheres, 2016, 121, 976-996.	1.2	322
7	Application of OMI observations to a space-based indicator of NOx and VOC controls on surface ozone formation. Atmospheric Environment, 2010, 44, 2213-2223.	1.9	292
8	The Ozone Monitoring Instrument: overview of 14 years in space. Atmospheric Chemistry and Physics, 2018, 18, 5699-5745.	1.9	259
9	Transatlantic transport of pollution and its effects on surface ozone in Europe and North America. Journal of Geophysical Research, 2002, 107, ACH 4-1.	3.3	253
10	Estimates of the Global Burden of Ambient PM2.5, Ozone, and NO2 on Asthma Incidence and Emergency Room Visits. Environmental Health Perspectives, 2018, 126, 107004.	2.8	209
11	Satellite data of atmospheric pollution for U.S. air quality applications: Examples of applications, summary of data end-user resources, answers to FAQs, and common mistakes to avoid. Atmospheric Environment, 2014, 94, 647-662.	1.9	186
12	Interpretation of TOMS observations of tropical tropospheric ozone with a global model and in situ observations. Journal of Geophysical Research, 2002, 107, ACH 4-1.	3.3	174
13	Evaluating a Spaceâ€Based Indicator of Surface Ozoneâ€NO_xâ€VOC Sensitivity Over Midlatitude Source Regions and Application to Decadal Trends. Journal of Geophysical Research D: Atmospheres, 2017, 122, 10-461.	1.2	165
14	U.S. NO2 trends (2005â€“2013): EPA Air Quality System (AQS) data versus improved observations from the Ozone Monitoring Instrument (OMI). Atmospheric Environment, 2015, 110, 130-143.	1.9	162
15	A 3-D model analysis of the slowdown and interannual variability in the methane growth rate from 1988 to 1997. Global Biogeochemical Cycles, 2004, 18, n/a-n/a.	1.9	147
16	Intercontinental Impacts of Ozone Pollution on Human Mortality. Environmental Science & Technology, 2009, 43, 6482-6487.	4.6	126
17	A tropospheric ozone maximum over the Middle East. Geophysical Research Letters, 2001, 28, 3235-3238.	1.5	122
18	Sources of tropospheric ozone along the Asian Pacific Rim: An analysis of ozonesonde observations. Journal of Geophysical Research, 2002, 107, ACH 3-1-ACH 3-19.	3.3	121

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19	Anthropogenic emissions of highly reactive volatile organic compounds in eastern Texas inferred from oversampling of satellite (OMI) measurements of HCHO columns. Environmental Research Letters, 2014, 9, 114004.	2.2	95
20	Chemical nonlinearities in relating intercontinental ozone pollution to anthropogenic emissions. Geophysical Research Letters, 2009, 36, .	1.5	63
21	Description of the NASA GEOS Composition Forecast Modeling System GEOSâ€CF v1.0. Journal of Advances in Modeling Earth Systems, 2021, 13, e2020MS002413.	1.3	52
22	Frequency and impact of summertime stratospheric intrusions over Maryland during DISCOVERâ€AQ (2011): New evidence from NASA's GEOSâ€5 simulations. Journal of Geophysical Research D: Atmospheres, 2016, 121, 3687-3706.	1.2	49
23	Chemical Mechanisms and Their Applications in the Goddard Earth Observing System (GEOS) Earth System Model. Journal of Advances in Modeling Earth Systems, 2017, 9, 3019-3044.	1.3	47
24	Influence of the 2006 Indonesian biomass burning aerosols on tropical dynamics studied with the GEOSâ€5 AGCM. Journal of Geophysical Research, 2010, 115, .	3.3	42
25	A methodology to constrain carbon dioxide emissions from coal-fired power plants using satellite observations of co-emitted nitrogen dioxide. Atmospheric Chemistry and Physics, 2020, 20, 99-116.	1.9	40
26	Spaceâ€Based Observations for Understanding Changes in the Arcticâ€Boreal Zone. Reviews of Geophysics, 2020, 58, e2019RG000652.	9.0	39
27	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
28	Temperature dependence of factors controlling isoprene emissions. Geophysical Research Letters, 2009, 36, .	1.5	36
29	Interpreting space-based trends in carbon monoxide with multiple models. Atmospheric Chemistry and Physics, 2016, 16, 7285-7294.	1.9	31
30	Air Pollution Monitoring for Health Research and Patient Care. An Official American Thoracic Society Workshop Report. Annals of the American Thoracic Society, 2019, 16, 1207-1214.	1.5	25
31	Using Satellites to Track Indicators of Global Air Pollution and Climate Change Impacts: Lessons Learned From a NASAâ€Supported Scienceâ€Stakeholder Collaborative. GeoHealth, 2020, 4, e2020GH000270.	1.9	25
32	Satellite Monitoring for Air Quality and Health. Annual Review of Biomedical Data Science, 2021, 4, 417-447.	2.8	25
33	A machine learning examination of hydroxyl radical differences among model simulations for CCMI-1. Atmospheric Chemistry and Physics, 2020, 20, 1341-1361.	1.9	24
34	A decade of changes in nitrogen oxides over regions of oil and natural gas activity in the United States. Elementa, 2017, 5, .	1.1	21
35	Strong sensitivity of the isotopic composition of methane to the plausible range of tropospheric chlorine. Atmospheric Chemistry and Physics, 2020, 20, 8405-8419.	1.9	21
36	An observationally constrained evaluation of the oxidative capacity in the tropical western Pacific troposphere. Journal of Geophysical Research D: Atmospheres, 2016, 121, 7461-7488.	1.2	18

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37	Spatial and temporal variability in the hydroxyl (OH) radical: understanding the role of large-scale climate features and their influence on OH through its dynamical and photochemical drivers. Atmospheric Chemistry and Physics, 2021, 21, 6481-6508.	1.9	15
38	Earth Observations and Integrative Models in Support of Food and Water Security. Remote Sensing in Earth Systems Sciences, 2019, 2, 18-38.	1.1	11
39	Global O₃â€“CO correlations in a chemistry and transport model during Julyâ€“August: evaluation with TES satellite observations and sensitivity to input meteorological data and emissions. Atmospheric Chemistry and Physics, 2017, 17, 8429-8452.	1.9	10
40	Potential improvements in global carbon flux estimates from a network of laser heterodyne radiometer measurements of column carbon dioxide. Atmospheric Measurement Techniques, 2019, 12, 2579-2594.	1.2	10
41	Communicating respiratory health risk among children using a global air quality index. Environment International, 2022, 159, 107023.	4.8	10
42	Sensitivity of photolysis frequencies and key tropospheric oxidants in a global model to cloud vertical distributions and optical properties. Journal of Geophysical Research, 2009, 114, .	3.3	9
43	The description and validation of the computationally Efficient CH₄â€“COâ€“OH (ECCOHv1.01) chemistry module for 3-D model applications. Geoscientific Model Development, 2016, 9, 799-822.	1.3	9
44	The benefits of lower ozone due to air pollution emission reductions (2002â€“2011) in the Eastern United States during extreme heat. Journal of the Air and Waste Management Association, 2020, 70, 193-205.	0.9	6
45	Augmenting the Standard Operating Procedures of Health and Air Quality Stakeholders With NASA Resources. GeoHealth, 2021, 5, e2021GH000451.	1.9	4
46	Peroxy acetyl nitrate (PAN) measurements at northern midlatitude mountain sites in April: a constraint on continental sourceâ€“receptor relationships. Atmospheric Chemistry and Physics, 2018, 18, 15345-15361.	1.9	3