

Debra Wunch

List of Publications by Year in descending order

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129
papers

12,393
citations

41344

49
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29157

104
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203
all docs

203
docs citations

203
times ranked

7771
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | The Global Methane Budget 2000â€“2017. Earth System Science Data, 2020, 12, 1561-1623. | 9.9 | 1,199 |
| 2 | The Total Carbon Column Observing Network. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 2087-2112. | 3.4 | 884 |
| 3 | The global methane budget 2000â€“2012. Earth System Science Data, 2016, 8, 697-751. | 9.9 | 824 |
| 4 | The ACOS CO ₂ retrieval algorithm â€“ Part 1: Description and validation against synthetic observations. Atmospheric Measurement Techniques, 2012, 5, 99-121. | 3.1 | 530 |
| 5 | Calibration of the Total Carbon Column Observing Network using aircraft profile data. Atmospheric Measurement Techniques, 2010, 3, 1351-1362. | 3.1 | 441 |
| 6 | Toward accurate CO ₂ and CH ₄ observations from GOSAT. Geophysical Research Letters, 2011, 38, n/a-n/a. | 4.0 | 355 |
| 7 | The ACOS CO ₂ retrieval algorithm â€“ Part II: Global XCO ₂ data characterization. Atmospheric Measurement Techniques, 2012, 5, 687-707. | 3.1 | 320 |
| 8 | Contrasting carbon cycle responses of the tropical continents to the 2015â€“2016 El NiÃ±o. Science, 2017, 358, . | 12.6 | 307 |
| 9 | A method for evaluating bias in global measurements of CO ₂ total columns from space. Atmospheric Chemistry and Physics, 2011, 11, 12317-12337. | 4.9 | 279 |
| 10 | The on-orbit performance of the Orbiting Carbon Observatory-2 (OCO-2) instrument and its radiometrically calibrated products. Atmospheric Measurement Techniques, 2017, 10, 59-81. | 3.1 | 271 |
| 11 | Importance of secondary sources in the atmospheric budgets of formic and acetic acids. Atmospheric Chemistry and Physics, 2011, 11, 1989-2013. | 4.9 | 266 |
| 12 | Improvement of the retrieval algorithm for GOSAT SWIR XCO ₂ and XCH ₄ and their validation using TCCON data. Atmospheric Measurement Techniques, 2013, 6, 1533-1547. | 3.1 | 261 |
| 13 | Comparisons of the Orbiting Carbon Observatory-2 (OCO-2) XCO ₂ measurements with TCCON. Atmospheric Measurement Techniques, 2017, 10, 2209-2238. | | |
| 14 | Estimating global and North American methane emissions with high spatial resolution using GOSAT satellite data. Atmospheric Chemistry and Physics, 2015, 15, 7049-7069. | 4.9 | 225 |
| 15 | Preliminary validation of column-averaged volume mixing ratios of carbon dioxide and methane retrieved from GOSAT short-wavelength infrared spectra. Atmospheric Measurement Techniques, 2011, 4, 1061-1076. | 3.1 | 217 |
| 16 | Methane observations from the Greenhouse Gases Observing SATellite: Comparison to ground-based TCCON data and model calculations. Geophysical Research Letters, 2011, 38, . | 4.0 | 211 |
| 17 | Emissions of greenhouse gases from a North American megacity. Geophysical Research Letters, 2009, 36, . | 4.0 | 208 |
| 18 | Daily and 3-hourly variability in global fire emissions and consequences for atmospheric model predictions of carbon monoxide. Journal of Geophysical Research, 2011, 116, n/a-n/a. | 3.3 | 200 |

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|----|--|------|-----------|
| 19 | Improved retrievals of carbon dioxide from Orbiting Carbon Observatory-2 with the version 8 ACOS algorithm. <i>Atmospheric Measurement Techniques</i> , 2018, 11, 6539-6576. | 3.1 | 188 |
| 20 | The Orbiting Carbon Observatory-2: first 18 months of science data products. <i>Atmospheric Measurement Techniques</i> , 2017, 10, 549-563. | 3.1 | 180 |
| 21 | Quantifying CO ₂ Emissions From Individual Power Plants From Space. <i>Geophysical Research Letters</i> , 2017, 44, 10,045. | 4.0 | 174 |
| 22 | The Orbiting Carbon Observatory-2 early science investigations of regional carbon dioxide fluxes. <i>Science</i> , 2017, 358, . | 12.6 | 157 |
| 23 | Retrieval of atmospheric CO ₂ with enhanced accuracy and precision from SCIAMACHY: Validation with FTS measurements and comparison with model results. <i>Journal of Geophysical Research</i> , 2011, 116, . | 3.3 | 153 |
| 24 | Four corners: The largest US methane anomaly viewed from space. <i>Geophysical Research Letters</i> , 2014, 41, 6898-6903. | 4.0 | 142 |
| 25 | Atmospheric carbon dioxide retrieved from the Greenhouse gases Observing SATellite (GOSAT): Comparison with ground-based TCCON observations and GEOS-Chem model calculations. <i>Journal of Geophysical Research</i> , 2012, 117, . | 3.3 | 139 |
| 26 | Total column CO ₂ measurements at Darwin, Australia – site description and calibration against in situ aircraft profiles. <i>Atmospheric Measurement Techniques</i> , 2010, 3, 947-958. | 3.1 | 131 |
| 27 | On the Sources of Methane to the Los Angeles Atmosphere. <i>Environmental Science & Technology</i> , 2012, 46, 9282-9289. | 10.0 | 126 |
| 28 | Calibration of TCCON column-averaged CO ₂ : the first aircraft campaign over European TCCON sites. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 10765-10777. | 4.9 | 120 |
| 29 | Inferring regional sources and sinks of atmospheric CO ₂ from COSAT XCO ₂ data. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 3703-3727. | 4.9 | 120 |
| 30 | Process evaluation of tropospheric humidity simulated by general circulation models using water vapor isotopologues: 1. Comparison between models and observations. <i>Journal of Geophysical Research</i> , 2012, 117, . | 3.3 | 114 |
| 31 | The Orbiting Carbon Observatory (OCO-2): spectrometer performance evaluation using pre-launch direct sun measurements. <i>Atmospheric Measurement Techniques</i> , 2015, 8, 301-313. | 3.1 | 113 |
| 32 | The Greenhouse Gas Climate Change Initiative (GHG-CCI): Comparison and quality assessment of near-surface-sensitive satellite-derived CO ₂ and CH ₄ global data sets. <i>Remote Sensing of Environment</i> , 2015, 162, 344-362. | 11.0 | 112 |
| 33 | A multi-year methane inversion using SCIAMACHY, accounting for systematic errors using TCCON measurements. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 3991-4012. | 4.9 | 106 |
| 34 | Methane retrieved from TROPOMI: improvement of the data product and validation of the first 2 years of measurements. <i>Atmospheric Measurement Techniques</i> , 2021, 14, 665-684. | 3.1 | 104 |
| 35 | The imprint of surface fluxes and transport on variations in total column carbon dioxide. <i>Biogeosciences</i> , 2012, 9, 875-891. | 3.3 | 98 |
| 36 | Atmospheric greenhouse gases retrieved from SCIAMACHY: comparison to ground-based FTS measurements and model results. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 1527-1540. | 4.9 | 86 |

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|----|---|------|-----------|
| 37 | Global CO ₂ fluxes inferred from surface air-sample measurements and from TCCON retrievals of the CO ₂ total column. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a. | 4.0 | 85 |
| 38 | Variability and quasi-decadal changes in the methane budget over the period 2000–2012. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 11135-11161. | 4.9 | 85 |
| 39 | Atmospheric validation of high accuracy CO ₂ absorption coefficients for the OCO-2 mission. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2012, 113, 2265-2276. | 2.3 | 82 |
| 40 | Building the COllaborative Carbon Column Observing Network (COCCON): long-term stability and ensemble performance of the EM27/SUN Fourier transform spectrometer. <i>Atmospheric Measurement Techniques</i> , 2019, 12, 1513-1530. | 3.1 | 82 |
| 41 | Consistent evaluation of ACOS-GOSAT, BESD-SCIAMACHY, CarbonTracker, and MACC through comparisons to TCCON. <i>Atmospheric Measurement Techniques</i> , 2016, 9, 683-709. | 3.1 | 80 |
| 42 | Towards constraints on fossil fuel emissions from total column carbon dioxide. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 4349-4357. | 4.9 | 79 |
| 43 | Forecasting global atmospheric CO ₂ . <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 11959-11983. | 4.9 | 74 |
| 44 | A scientific algorithm to simultaneously retrieve carbon monoxide and methane from TROPOMI onboard Sentinel-5 Precursor. <i>Atmospheric Measurement Techniques</i> , 2019, 12, 6771-6802. | 3.1 | 71 |
| 45 | The Greenhouse Gas Climate Change Initiative (GHG-CCI): comparative validation of GHG-CCI SCIAMACHY/ENVISAT and TANSO-FTS/GOSAT CO ₂ and CH ₄ retrieval algorithm products with measurements from the TCCON. <i>Atmospheric Measurement Techniques</i> , 2014, 7, 1723-1744. | 3.1 | 70 |
| 46 | Water vapor isotopologue retrievals from high-resolution GOSAT shortwave infrared spectra. <i>Atmospheric Measurement Techniques</i> , 2013, 6, 263-274. | 3.1 | 58 |
| 47 | Validation of methane and carbon monoxide from Sentinel-5 Precursor using TCCON and NDACC-IRWG stations. <i>Atmospheric Measurement Techniques</i> , 2021, 14, 6249-6304. | 3.1 | 57 |
| 48 | Southern California megacity CO ₂ , CH ₄ , and CO flux estimates using ground- and space-based remote sensing and a Lagrangian model. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 16271-16291. | 4.9 | 56 |
| 49 | A decade of GOSAT Proxy satellite CH ₄ observations. <i>Earth System Science Data</i> , 2020, 12, 3383-3412. | 9.9 | 53 |
| 50 | Global satellite observations of column-averaged carbon dioxide and methane: The GHG-CCI XCO ₂ and XCH ₄ CRDP3 data set. <i>Remote Sensing of Environment</i> , 2017, 203, 276-295. | 11.0 | 52 |
| 51 | Global and Brazilian Carbon Response to El Niño Modoki 2011–2010. <i>Earth and Space Science</i> , 2017, 4, 637-660. | 2.6 | 49 |
| 52 | Modelling CO ₂ weather – why horizontal resolution matters. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 7347-7376. | 4.9 | 49 |
| 53 | Quantifying the loss of processed natural gas within California's South Coast Air Basin using long-term measurements of ethane and methane. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 14091-14105. | 4.9 | 48 |
| 54 | Effects of atmospheric light scattering on spectroscopic observations of greenhouse gases from space. Part 2: Algorithm intercomparison in the GOSAT data processing for CO ₂ retrievals over TCCON sites. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 1493-1512. | 3.3 | 46 |

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| 55 | Consistent satellite XCO ₂ retrievals from SCIAMACHY and GOSAT using the BESD algorithm. Atmospheric Measurement Techniques, 2015, 8, 2961-2980. | 3.1 | 45 |
| 56 | Assessment of errors and biases in retrievals of XCO ₂ , XCH ₄ , XCO, and XN ₂ O from a 0.5 cm ⁻¹ resolution solar-viewing spectrometer. Atmospheric Methane emissions from dairies in the Los Angeles Basin. Atmospheric Chemistry and Physics, 2017, 17, 7509-7528. | 3.1 | 45 |
| 57 | | 4.9 | 45 |
| 58 | Aircraft measurements of carbon dioxide and methane for the calibration of ground-based high-resolution Fourier Transform Spectrometers and a comparison to GOSAT data measured over Tsukuba and Moshiri. Atmospheric Measurement Techniques, 2012, 5, 2003-2012. | 3.1 | 43 |
| 59 | Effects of atmospheric light scattering on spectroscopic observations of greenhouse gases from space: Validation of PPDF-based CO ₂ retrievals from GOSAT. Journal of Geophysical Research, 2012, 117, . | 3.3 | 42 |
| 60 | The covariation of Northern Hemisphere summertime CO ₂ with surface temperature in boreal regions. Atmospheric Chemistry and Physics, 2013, 13, 9447-9459. | 4.9 | 42 |
| 61 | Simulations of column-averaged CO ₂ and CH ₄ using the NIES TM with a hybrid sigma-isentropic (σ - η) vertical coordinate. Atmospheric Chemistry and Physics, 2013, 13, 1713-1732. | 4.9 | 42 |
| 62 | Bias corrections of GOSAT SWIR XCO ₂ and XCH ₄ with TCCON data and their evaluation using aircraft measurement data. Atmospheric Measurement Techniques, 2016, 9, 3491-3512. | 3.1 | 40 |
| 63 | High-resolution inversion of methane emissions in the Southeast US using SEAC ₄ RS aircraft observations of atmospheric methane: anthropogenic and wetland sources. Atmospheric Chemistry and Physics, 2018, 18, 6483-6491. | 4.9 | 38 |
| 64 | Calibration of sealed HCl cells used for TCCON instrumental line shape monitoring. Atmospheric Measurement Techniques, 2013, 6, 3527-3537. | 3.1 | 36 |
| 65 | A method for colocating satellite XCO ₂ data to ground-based data and its application to ACOS-GOSAT and TCCON. Atmospheric Measurement Techniques, 2014, 7, 2631-2644. | 3.1 | 35 |
| 66 | The Orbiting Carbon Observatory (OCO-2) tracks 2.3 peta-gram increase in carbon release to the atmosphere during the 2014-2016 El Niño. Scientific Reports, 2017, 7, 13567. | 3.3 | 35 |
| 67 | Improved water vapour spectroscopy in the 4174-4300 cm ⁻¹ region and its impact on SCIAMACHY HDO/H ₂ O measurements. Atmospheric Measurement Techniques, 2013, 6, 879-894. | 3.1 | 30 |
| 68 | Semi-autonomous sounding selection for OCO-2. Atmospheric Measurement Techniques, 2013, 6, 2851-2864. | 3.1 | 29 |
| 69 | Improving the TROPOMI CO data product: update of the spectroscopic database and destripping of single orbits. Atmospheric Measurement Techniques, 2019, 12, 5443-5455. | 3.1 | 29 |
| 70 | Evaluation of seasonal atmosphere-biosphere exchange estimations with TCCON measurements. Atmospheric Chemistry and Physics, 2013, 13, 5103-5115. | 4.9 | 28 |
| 71 | Derivation of tropospheric methane from TCCON CH ₄ and HF total column observations. Atmospheric Measurement Techniques, 2014, 7, 2907-2918. | 3.1 | 28 |
| 72 | Simultaneous ground-based observations of O ₃ , HCl, N ₂ O, and CH ₄ over Toronto, Canada by three Fourier transform spectrometers with different resolutions. Atmospheric Chemistry and Physics, 2007, 7, 1275-1292. | 4.9 | 27 |

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|----|--|-----|-----------|
| 73 | Characterizing model errors in chemical transport modeling of methane: impact of model resolution in versions v9-02 of GEOS-Chem and v35j of its adjoint model. <i>Geoscientific Model Development</i> , 2020, 13, 3839-3862. | 3.6 | 27 |
| 74 | CH ₄ , CO, and H ₂ O spectroscopy for the Sentinel-5 Precursor mission: an assessment with the Total Carbon Column Observing Network measurements. <i>Atmospheric Measurement Techniques</i> , 2012, 5, 1387-1398. | 3.1 | 26 |
| 75 | Vertically constrained CO ₂ retrievals from TCCON measurements. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2012, 113, 1753-1761. | 2.3 | 26 |
| 76 | Improved Constraints on Northern Extratropical CO ₂ Fluxes Obtained by Combining Surface-Based and Space-Based Atmospheric CO ₂ Measurements. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2019JD032029. | 3.3 | 26 |
| 77 | MANTRA – A Balloon Mission to Study the Odd-Nitrogen Budget of the Stratosphere. <i>Atmosphere - Ocean</i> , 2005, 43, 283-299. | 1.6 | 25 |
| 78 | Technical Note: Latitude-time variations of atmospheric column-average dry air mole fractions of CO ₂ , CH ₄ , and N ₂ O. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 7767-7777. | 4.9 | 25 |
| 79 | Toward High Precision XCO ₂ Retrievals From TanSat Observations: Retrieval Improvement and Validation Against TCCON Measurements. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2020JD032794. | 3.3 | 25 |
| 80 | GFIT2: an experimental algorithm for vertical profile retrieval from near-IR spectra. <i>Atmospheric Measurement Techniques</i> , 2016, 9, 3513-3525. | 3.1 | 24 |
| 81 | Seasonal variability of stratospheric methane: implications for constraining tropospheric methane budgets using total column observations. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 14003-14024. | 4.9 | 24 |
| 82 | Preflight Spectral Calibration of the Orbiting Carbon Observatory 2. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2017, 55, 2499-2508. | 6.3 | 24 |
| 83 | Improved retrieval of gas abundances from near-infrared solar FTIR spectra measured at the Karlsruhe TCCON station. <i>Atmospheric Measurement Techniques</i> , 2016, 9, 669-682. | 3.1 | 23 |
| 84 | Validation of Carbon Trace Gas Profile Retrievals from the NOAA-Unique Combined Atmospheric Processing System for the Cross-Track Infrared Sounder. <i>Remote Sensing</i> , 2020, 12, 3245. | 4.0 | 23 |
| 85 | Emissions and topographic effects on column CO ₂ variations, with a focus on the Southern California Megacity. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 7200-7215. | 3.3 | 22 |
| 86 | Detecting drought impact on terrestrial biosphere carbon fluxes over contiguous US with satellite observations. <i>Environmental Research Letters</i> , 2018, 13, 095003. | 5.2 | 22 |
| 87 | Quality controls, bias, and seasonality of CO ₂ columns in the boreal forest with Orbiting Carbon Observatory-2, Total Carbon Column Observing Network, and EM27/SUN measurements. <i>Atmospheric Measurement Techniques</i> , 2020, 13, 5033-5063. | 3.1 | 22 |
| 88 | Evaluating GPP and Respiration Estimates Over Northern Midlatitude Ecosystems Using Solar-Induced Fluorescence and Atmospheric CO ₂ Measurements. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2018, 123, 2976-2997. | 3.0 | 21 |
| 89 | Evaluation of MOPITT Version 7 joint TIR-NIR XCO ₂ retrievals with TCCON. <i>Atmospheric Measurement Techniques</i> , 2019, 12, 5547-5572. | 3.1 | 21 |
| 90 | Comparison of XH ₂ O Retrieved from GOSAT Short-Wavelength Infrared Spectra with Observations from the TCCON Network. <i>Remote Sensing</i> , 2016, 8, 414. | 4.0 | 20 |

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|-----|--|------|-----------|
| 91 | Using a speed-dependent Voigt line shape to retrieve O ₂ from Total Carbon Column Observing Network solar spectra to improve measurements of XCO ₂ . Atmospheric Measurement Techniques, 2019, 12, 35-50. | 3.1 | 20 |
| 92 | Climatology and predictability of the late summer stratospheric zonal wind turnaround over Vanscoy, Saskatchewan. Atmosphere - Ocean, 2005, 43, 301-313. | 1.6 | 18 |
| 93 | Drivers of column-average CO ₂ variability at Southern Hemispheric Total Carbon Column Observing Network sites. Atmospheric Chemistry and Physics, 2014, 14, 9883-9901. | 4.9 | 18 |
| 94 | Profiling tropospheric CO ₂ using Aura TES and TCCON instruments. Atmospheric Measurement Techniques, 2013, 6, 63-79. | 3.1 | 17 |
| 95 | Evaluation and Analysis of the Seasonal Cycle and Variability of the Trend from GOSAT Methane Retrievals. Remote Sensing, 2019, 11, 882. | 4.0 | 17 |
| 96 | Investigation of the Spatial Distribution of Methane Sources in the Greater Toronto Area Using Mobile Gas Monitoring Systems. Environmental Science & Technology, 2020, 54, 15671-15679. | 10.0 | 17 |
| 97 | An 11-year record of XCO ₂ estimates derived from GOSAT measurements using the NASA ACOS version 9 retrieval algorithm. Earth System Science Data, 2022, 14, 325-360. | 9.9 | 17 |
| 98 | Intercomparability of X _{CO₂} and X _{CH₄} from the United States TCCON sites. Atmospheric Measurement Techniques, 2017, 10, 1481-1493. | 3.1 | 16 |
| 99 | Simultaneous retrieval of atmospheric CO ₂ and light path modification from space-based spectroscopic observations of greenhouse gases: methodology and application to GOSAT measurements over TCCON sites. Applied Optics, 2013, 52, 1339. | 1.8 | 15 |
| 100 | The Atmospheric Imaging Mission for Northern Regions: AIM-North. Canadian Journal of Remote Sensing, 2019, 45, 423-442. | 2.4 | 14 |
| 101 | Retrieval of atmospheric CO ₂ vertical profiles from ground-based near-infrared spectra. Atmospheric Measurement Techniques, 2021, 14, 3087-3118. | 3.1 | 14 |
| 102 | Characterizing model errors in chemical transport modeling of methane: using GOSAT XCH ₄ data with weak-constraint four-dimensional variational data assimilation. Atmospheric Chemistry and Physics, 2021, 21, 9545-9572. | 4.9 | 14 |
| 103 | Scanning the Earth's Limb from a High-Altitude Balloon: The Development and Flight of a New Balloon-Based Pointing System. Journal of Atmospheric and Oceanic Technology, 2002, 19, 618-632. | 1.3 | 12 |
| 104 | A Geostatistical Framework for Quantifying the Imprint of Mesoscale Atmospheric Transport on Satellite Trace Gas Retrievals. Journal of Geophysical Research D: Atmospheres, 2019, 124, 9773-9795. | 3.3 | 12 |
| 105 | Improving atmospheric CO ₂ retrievals using line mixing and speed-dependence when fitting high-resolution ground-based solar spectra. Journal of Molecular Spectroscopy, 2016, 323, 15-27. | 1.2 | 10 |
| 106 | Study of the footprints of short-term variation in XCO ₂ observed by TCCON sites using NIES and FLEXPART atmospheric transport models. Atmospheric Chemistry and Physics, 2017, 17, 143-157. | 4.9 | 10 |
| 107 | Emissions of methane in Europe inferred by total column measurements. Atmospheric Chemistry and Physics, 2019, 19, 3963-3980. | 4.9 | 10 |
| 108 | Monitoring Urban Greenhouse Gases Using Open-Path Fourier Transform Spectroscopy. Atmosphere - Ocean, 2020, 58, 25-45. | 1.6 | 10 |

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|-----|--|------|-----------|
| 109 | Regional and Urban Column CO Trends and Anomalies as Observed by MOPITT Over 16 Years. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2020JD033967. | 3.3 | 10 |
| 110 | Spatial distributions of CO_2 seasonal cycle amplitude and phase over northern high-latitude regions. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 16661-16687. | 4.9 | 10 |
| 111 | Improved calibration procedures for the EM27/SUN spectrometers of the COllaborative Carbon Column Observing Network (COCCON). <i>Atmospheric Measurement Techniques</i> , 2022, 15, 2433-2463. | 3.1 | 10 |
| 112 | Using high-resolution laboratory and ground-based solar spectra to assess CH_4 absorption coefficient calculations. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2017, 190, 48-59. | 2.3 | 9 |
| 113 | Corrigendum to "The ACOS CO_2 retrieval algorithm" Part 1: Description and validation against synthetic observations" published in <i>Atmos. Meas. Tech.</i> , 5, 99-121, 2012. <i>Atmospheric Measurement Techniques</i> , 2012, 5, 193-193. | 3.1 | 8 |
| 114 | Intercomparison of ground-based ozone and NO_2 measurements during the MANTRA 2004 campaign. <i>Atmospheric Chemistry and Physics</i> , 2007, 7, 5489-5499. | 4.9 | 7 |
| 115 | Inference for Errors-in-Variables Models in the Presence of Systematic Errors with an Application to a Satellite Remote Sensing Campaign. <i>Technometrics</i> , 2019, 61, 187-201. | 1.9 | 7 |
| 116 | The impact of spectral resolution on satellite retrieval accuracy of CO_2 and CH_4 . <i>Atmospheric Measurement Techniques</i> , 2014, 7, 1105-1119. | 3.1 | 6 |
| 117 | Validation of GOSAT SWIR XCO_2 and XCH_4 Retrieved by PPDF-S Method and Comparison with Full Physics Method. <i>Scientific Online Letters on the Atmosphere</i> , 2017, 13, 168-173. | 1.4 | 6 |
| 118 | Response to Comment on "Contrasting carbon cycle responses of the tropical continents to the 2015-2016 El Niño". <i>Science</i> , 2018, 362, . | 12.6 | 6 |
| 119 | The concentration profile of nitric acid and other species over Saskatchewan in August 1998: Retrieval from data recorded by thermal emission radiometry. <i>Atmosphere - Ocean</i> , 2005, 43, 361-376. | 1.6 | 5 |
| 120 | Fourier transform spectrometer remote sensing of O_2 A-band electric quadrupole transitions. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2012, 113, 1043-1050. | 2.3 | 4 |
| 121 | Statistical properties of atmospheric greenhouse gas measurements: Looking down from space and looking up from the ground. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2017, 162, 214-222. | 3.5 | 4 |
| 122 | The Facility Level and Area Methane Emissions inventory for the Greater Toronto Area (FLAME-GTA). <i>Atmospheric Environment</i> , 2021, 252, 118319. | 4.1 | 4 |
| 123 | Assessing the feasibility of using a neural network to filter Orbiting Carbon Observatory-2 (OCO-2) retrievals at northern high latitudes. <i>Atmospheric Measurement Techniques</i> , 2021, 14, 7511-7524. | 3.1 | 4 |
| 124 | Balloon-borne radiometer measurements of Northern Hemisphere mid-latitude stratospheric HNO_3 profiles spanning 12 years. <i>Atmospheric Chemistry and Physics</i> , 2007, 7, 6075-6084. | 4.9 | 3 |
| 125 | Solar Occultation FTIR Spectrometry at Mars for Trace Gas Detection: A Sensitivity Study. <i>Earth and Space Science</i> , 2019, 6, 836-860. | 2.6 | 3 |
| 126 | Bias Correction of the Ratio of Total Column CH_4 to CO_2 Retrieved from GOSAT Spectra. <i>Remote Sensing</i> , 2020, 12, 3155. | 4.0 | 2 |

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|-----|--|-----|-----------|
| 127 | Methane Growth Rate Estimation and Its Causes in Western Canada Using Satellite Observations. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033948. | 3.3 | 1 |
| 128 | Laboratory procedure for simulating nadir measurements with the ACE-FTS. Canadian Journal of Remote Sensing, 2008, 34, 601-607. | 2.4 | 0 |
| 129 | Nitrous Oxide Profiling from Infrared Radiances (NOPIR): Algorithm Description, Application to 10 Years of IASI Observations and Quality Assessment. Remote Sensing, 2022, 14, 1810. | 4.0 | 0 |