

# A E Bourassa

## List of Publications by Year in descending order

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105  
papers

4,710  
citations

126907

33  
h-index

123424

61  
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123  
all docs

123  
docs citations

123  
times ranked

3794  
citing authors

#	ARTICLE	IF	CITATIONS
1	Assessment of the quality of ACE-FTS stratospheric ozone data. <i>Atmospheric Measurement Techniques</i> , 2022, 15, 1233-1249.	3.1	9
2	On the stratospheric chemistry of midlatitude wildfire smoke. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, e2117325119.	7.1	45
3	Accounting for the photochemical variation in stratospheric NO <sub>2</sub> in the SAGE III/ISS solar occultation retrieval. <i>Atmospheric Measurement Techniques</i> , 2021, 14, 557-566.	3.1	7
4	OMPS LP Version 2.0 multi-wavelength aerosol extinction coefficient retrieval algorithm. <i>Atmospheric Measurement Techniques</i> , 2021, 14, 1015-1036.	3.1	41
5	Overview and update of the SPARC Data Initiative: comparison of stratospheric composition measurements from satellite limb sounders. <i>Earth System Science Data</i> , 2021, 13, 1855-1903.	9.9	14
6	Systematic comparison of vectorial spherical radiative transfer models in limb scattering geometry. <i>Atmospheric Measurement Techniques</i> , 2021, 14, 3953-3972.	3.1	10
7	Adaptation of the polarimetric multi-spectral Aerosol Limb Imager for high altitude aircraft and satellite observations. <i>Applied Optics</i> , 2021, 60, 4325.	1.8	2
8	A balloon-borne imaging Fourier transform spectrometer for atmospheric trace gas profiling. <i>Review of Scientific Instruments</i> , 2021, 92, 094502.	1.3	2
9	The OH (3-1) nightglow volume emission rate retrieved from OSIRIS measurements: 2001 to 2015. <i>Earth System Science Data</i> , 2021, 13, 5115-5126.	9.9	0
10	Stratospheric Temperature and Ozone Anomalies Associated With the 2020 Australian New Year Fires. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL095898.	4.0	21
11	Biomass burning nitrogen dioxide emissions derived from space with TROPOMI: methodology and validation. <i>Atmospheric Measurement Techniques</i> , 2021, 14, 7929-7957.	3.1	27
12	The 2019/20 Australian wildfires generated a persistent smoke-charged vortex rising up to 35 km altitude. <i>Communications Earth &amp; Environment</i> , 2020, 1, .	6.8	140
13	A Method for Retrieving Stratospheric Aerosol Extinction and Particle Size from Ground-Based Rayleigh-Mie-Raman Lidar Observations. <i>Atmosphere</i> , 2020, 11, 773.	2.3	2
14	A multi-spectral polarimetric imager for atmospheric profiling of aerosol and thin cloud: Prototype design and sub-orbital performance. <i>Review of Scientific Instruments</i> , 2020, 91, 103106.	1.3	11
15	Validation of SAGE III/ISS Solar Occultation Ozone Products With Correlative Satellite and Ground-Based Measurements. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2020JD032430.	3.3	24
16	Observational evidence of moistening the lowermost stratosphere via isentropic mixing across the subtropical jet. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 5477-5486.	4.9	2
17	Trends and Variability in Stratospheric NO <sub>x</sub> Derived From Merged SAGE II and OSIRIS Satellite Observations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2019JD031798.	3.3	8
18	The Global Space-based Stratospheric Aerosol Climatology (version 2.0): 1979–2018. <i>Earth System Science Data</i> , 2020, 12, 2607-2634.	9.9	28

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19	Retrieval of daytime mesospheric ozone using OSIRIS observations of O <sub>2</sub> ( $\lambda = 213.7$ nm) emission. <i>Atmospheric Measurement Techniques</i> , 2020, 13, 6215-6236.	3.1	3
20	Satellite Limb Observations of Unprecedented Forest Fire Aerosol in the Stratosphere. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 9510-9519.	3.3	20
21	A Multiwavelength Retrieval Approach for Improved OSIRIS Aerosol Extinction Retrievals. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 7286-7307.	3.3	22
22	Stratospheric aerosol characteristics from space-borne observations: extinction coefficient and Ångström exponent. <i>Atmospheric Measurement Techniques</i> , 2019, 12, 3485-3502.	3.1	11
23	Spatial heterodyne observations of water (SHOW) from a high-altitude airplane: characterization, performance, and first results. <i>Atmospheric Measurement Techniques</i> , 2019, 12, 431-455.	3.1	6
24	Quantifying Emissions of CO and NO <sub>x</sub> Using Observations From MOPITT, OMI, TES, and OSIRIS. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 1170-1193.	3.3	9
25	Modeled and Observed Volcanic Aerosol Control on Stratospheric NO <sub>y</sub> and Cl <sub>y</sub> . <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 10283-10303.	3.3	7
26	The Atmospheric Imaging Mission for Northern Regions: AIM-North. <i>Canadian Journal of Remote Sensing</i> , 2019, 45, 423-442.	2.4	14
27	High-Resolution Mapping of Nitrogen Dioxide With TROPOMI: First Results and Validation Over the Canadian Oil Sands. <i>Geophysical Research Letters</i> , 2019, 46, 1049-1060.	4.0	209
28	Evidence for a continuous decline in lower stratospheric ozone offsetting ozone layer recovery. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 1379-1394.	4.9	214
29	Tomographic retrievals of ozone with the OMPS Limb Profiler: algorithm description and preliminary results. <i>Atmospheric Measurement Techniques</i> , 2018, 11, 2375-2393.	3.1	33
30	Validation of ozone profile retrievals derived from the OMPS LP version 2.5 algorithm against correlative satellite measurements. <i>Atmospheric Measurement Techniques</i> , 2018, 11, 2837-2861.	3.1	27
31	A study of the approaches used to retrieve aerosol extinction, as applied to limb observations made by OSIRIS and SCIAMACHY. <i>Atmospheric Measurement Techniques</i> , 2018, 11, 3433-3445.	3.1	17
32	Drift-corrected Odin-OSIRIS ozone product: algorithm and updated stratospheric ozone trends. <i>Atmospheric Measurement Techniques</i> , 2018, 11, 489-498.	3.1	33
33	Spatial Heterodyne Observations of Water (SHOW) vapour in the upper troposphere and lower stratosphere from a high altitude aircraft: Modelling and sensitivity analysis. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2018, 209, 137-149.	2.3	9
34	A global space-based stratospheric aerosol climatology: 1979–2016. <i>Earth System Science Data</i> , 2018, 10, 469-492.	9.9	141
35	Sub-orbital demonstration of the Spatial Heterodyne Observations of Water (SHOW) instrument from NASA's ER-2 remote science airplane. , 2018, , .		0
36	Variability of Stratospheric Reactive Nitrogen and Ozone Related to the QBO. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 10,103.	3.3	17

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37	An efficient algorithm for polarization in the SASKTRAN radiative transfer framework. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2017, 199, 1-11.	2.3	9
38	An update on ozone profile trends for the period 2000 to 2016. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 10675-10690.	4.9	93
39	Merged SAGE II, Ozone_cci and OMPS ozone profile dataset and evaluation of ozone trends in the stratosphere. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 12533-12552.	4.9	44
40	Variability and evolution of the midlatitude stratospheric aerosol budget from 22 years of ground-based lidar and satellite observations. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 1829-1845.	4.9	55
41	Impact of a moderate volcanic eruption on chemistry in the lower stratosphere: balloon-borne observations and model calculations. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 2229-2253.	4.9	25
42	Effect of volcanic aerosol on stratospheric NO <sub>2</sub> and N <sub>2</sub> O <sub>5</sub> from 2002 to 2014 as measured by Odin-OSIRIS and Envisat-MIPAS. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 8063-8080.	4.9	11
43	Measurement of water vapor using an imaging field-widened spatial heterodyne spectrometer. <i>Applied Optics</i> , 2017, 56, 4297.	2.1	12
44	Improved OSIRIS NO <sub>2</sub> retrieval algorithm: description and validation. <i>Atmospheric Measurement Techniques</i> , 2017, 10, 1155-1168.	3.1	10
45	The Aerosol Limb Imager: acousto-optic imaging of limb-scattered sunlight for stratospheric aerosol profiling. <i>Atmospheric Measurement Techniques</i> , 2016, 9, 1261-1277.	3.1	8
46	Ground-based assessment of the bias and long-term stability of 14 limb and occultation ozone profile data records. <i>Atmospheric Measurement Techniques</i> , 2016, 9, 2497-2534.	3.1	92
47	Limb nadir matching using non-coincident NO <sub>2</sub> observations: proof of concept and the OMI-minus-OSIRIS prototype product. <i>Atmospheric Measurement Techniques</i> , 2016, 9, 4103-4122.	3.1	9
48	Stratospheric aerosol-Observations, processes, and impact on climate. <i>Reviews of Geophysics</i> , 2016, 54, 278-335.	23.0	265
49	AerGOM, an improved algorithm for stratospheric aerosol extinction retrieval from GOMOS observations – Part 2: Intercomparisons. <i>Atmospheric Measurement Techniques</i> , 2016, 9, 4701-4718.	3.1	9
50	Validation of ACE-FTS version 3.5 NO <sub>2</sub> species profiles using correlative satellite measurements. <i>Atmospheric Measurement Techniques</i> , 2016, 9, 5781-5810.	3.1	25
51	Merging the OSIRIS and SAGE II stratospheric aerosol records. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015, 120, 8890-8904.	3.3	36
52	Sensitivity analysis of the potential impact of discrepancies in stratosphere-troposphere exchange on inferred sources and sinks of CO <sub>2</sub> . <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 11773-11788.	4.9	19
53	Intercomparison of vertically resolved merged satellite ozone data sets: interannual variability and long-term trends. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 3021-3043.	4.9	62
54	Past changes in the vertical distribution of ozone – Part 3: Analysis and interpretation of trends. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 9965-9982.	4.9	115

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55	High-resolution and Monte Carlo additions to the SASKTRAN radiative transfer model. Atmospheric Measurement Techniques, 2015, 8, 2609-2623.	3.1	32
56	Odin OSIRIS detection of the Chelyabinsk meteor. Atmospheric Measurement Techniques, 2014, 7, 777-780.	3.1	4
57	The SPARC Data Initiative: Comparison of upper troposphere/lower stratosphere ozone climatologies from limb-viewing instruments and the nadir-viewing Tropospheric Emission Spectrometer. Journal of Geophysical Research D: Atmospheres, 2014, 119, 6971-6990.	3.3	13
58	Assessment of Odin-OSIRIS ozone measurements from 2001 to the present using MLS, GOMOS, and ozonesondes. Atmospheric Measurement Techniques, 2014, 7, 49-64.	3.1	32
59	Stratospheric aerosol particle size information in Odin-OSIRIS limb scatter spectra. Atmospheric Measurement Techniques, 2014, 7, 507-522.	3.1	25
60	Trends in stratospheric ozone derived from merged SAGE II and Odin-OSIRIS satellite observations. Atmospheric Chemistry and Physics, 2014, 14, 6983-6994.	4.9	69
61	Trend and variability in ozone in the tropical lower stratosphere over 2.5 solar cycles observed by SAGE II and OSIRIS. Atmospheric Chemistry and Physics, 2014, 14, 3479-3496.	4.9	40
62	Remote sensing of aerosols in the Arctic for an evaluation of global climate model simulations. Journal of Geophysical Research D: Atmospheres, 2014, 119, 8169-8188.	3.3	31
63	Remote sensing of aerosols in the Arctic for an evaluation of global climate model simulations. Journal of Geophysical Research D: Atmospheres, 2014, 119, 8169-8188.	3.3	5
64	First simultaneous retrievals of horizontal and vertical structures of Polar Mesospheric Clouds from Odin/OSIRIS tomography. Journal of Atmospheric and Solar-Terrestrial Physics, 2013, 104, 213-223.	1.6	21
65	Response to Comments on "Large Volcanic Aerosol Load in the Stratosphere Linked to Asian Monsoon Transport". Science, 2013, 339, 647-647.	12.6	29
66	Characterization of Odin-OSIRIS ozone profiles with the SAGE II dataset. Atmospheric Measurement Techniques, 2013, 6, 1447-1459.	3.1	25
67	Cloud discrimination in probability density functions of limb-scattered sunlight measurements. Atmospheric Measurement Techniques, 2013, 6, 3359-3368.	3.1	4
68	Harmonized dataset of ozone profiles from satellite limb and occultation measurements. Earth System Science Data, 2013, 5, 349-363.	9.9	52
69	Retrieval of subvisual cirrus cloud optical thickness from limb-scatter measurements. Atmospheric Measurement Techniques, 2013, 6, 105-119.	3.1	6
70	Absorbing aerosol radiative effects in the limb-scatter viewing geometry. Atmospheric Measurement Techniques, 2013, 6, 2761-2776.	3.1	1
71	The spring 2011 final stratospheric warming above Eureka: anomalous dynamics and chemistry. Atmospheric Chemistry and Physics, 2013, 13, 611-624.	4.9	13
72	SPARC Data Initiative: A comparison of ozone climatologies from international satellite limb sounders. Journal of Geophysical Research D: Atmospheres, 2013, 118, 12,229.	3.3	63

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73	Using FTIR measurements of stratospheric composition to identify midlatitude polar vortex intrusions over Toronto. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 12,766.	3.3	6
74	Validation of stratospheric and mesospheric ozone observed by SMILES from International Space Station. <i>Atmospheric Measurement Techniques</i> , 2013, 6, 2311-2338.	3.1	28
75	OSIRIS: A Decade of Scattered Light. <i>Bulletin of the American Meteorological Society</i> , 2012, 93, 1845-1863.	3.3	28
76	Odin-OSIRIS stratospheric aerosol data product and SAGE III intercomparison. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 605-614.	4.9	56
77	A comparison of atmospheric dispersion model predictions with observations of SO <sub>2</sub> and sulphate aerosol from volcanic eruptions. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	26
78	Properties of Sarychev sulphate aerosols over the Arctic. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	36
79	Precision estimate for Odin-OSIRIS limb scatter retrievals. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	23
80	Large Volcanic Aerosol Load in the Stratosphere Linked to Asian Monsoon Transport. <i>Science</i> , 2012, 337, 78-81.	12.6	208
81	Photon conservation in scattering by large ice crystals with the SASKTRAN radiative transfer model. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2012, 113, 582-593.	2.3	5
82	Simulation and observations of stratospheric aerosols from the 2009 Sarychev volcanic eruption. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	45
83	Mesopause temperatures during the polar mesospheric cloud season. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	4.0	18
84	Major influence of tropical volcanic eruptions on the stratospheric aerosol layer during the last decade. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	4.0	303
85	SCIAMACHY stratospheric aerosol extinction profile retrieval using the OMPS/LP algorithm. <i>Atmospheric Measurement Techniques</i> , 2011, 4, 547-556.	3.1	35
86	Fast NO <sub>2</sub> retrievals from Odin-OSIRIS limb scatter measurements. <i>Atmospheric Measurement Techniques</i> , 2011, 4, 965-972.	3.1	34
87	A Systematic Error in Plane-Parallel Radiative Transfer Calculations. <i>Journals of the Atmospheric Sciences</i> , 2010, 67, 1695-1699.	1.7	8
88	Evolution of the stratospheric aerosol enhancement following the eruptions of Okmok and Kasatochi: Odin-OSIRIS measurements. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	54
89	Negligible climatic effects from the 2008 Okmok and Kasatochi volcanic eruptions. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	39
90	H Balmer lines in terrestrial aurora: Historical record and new observations by OSIRIS on Odin. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	3

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91	Observations of the eruption of the Sarychev volcano and simulations using the HadGEM2 climate model. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	128
92	Temperatures in the upper mesosphere and lower thermosphere from OSIRIS observations of O <sub>2</sub> A-band emission spectra. <i>Canadian Journal of Physics</i> , 2010, 88, 919-925.	1.1	45
93	Observation of the 557.7Ånm to 297.2Ånm brightness ratio in the auroral spectrum with OSIRIS on Odin. <i>Canadian Journal of Physics</i> , 2009, 87, 1133-1137.	1.1	18
94	Validation of ozone measurements from the Atmospheric Chemistry Experiment (ACE). <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 287-343.	4.9	134
95	Evolution of stratospheric ozone and water vapour time series studied with satellite measurements. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 6055-6075.	4.9	98
96	Limb scatter ozone retrieval from 10 to 60 km using a multiplicative algebraic reconstruction technique. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 6521-6529.	4.9	93
97	SASKTRAN: A spherical geometry radiative transfer code for efficient estimation of limb scattered sunlight. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2008, 109, 52-73.	2.3	91
98	Aerosol extinction profiles at 525 nm and 1020 nm derived from ACE imager data: comparisons with GOMOS, SAGE II, SAGE III, POAM III, and OSIRIS. <i>Atmospheric Chemistry and Physics</i> , 2008, 8, 2027-2037.	4.9	17
99	Retrieval of stratospheric aerosol size information from OSIRIS limb scattered sunlight spectra. <i>Atmospheric Chemistry and Physics</i> , 2008, 8, 6375-6380.	4.9	32
100	The impact of sea-glint upon limb radiance. <i>Canadian Journal of Physics</i> , 2007, 85, 1159-1176.	1.1	0
101	The retrieval of vertical profiles of the ozone number density using Chappuis band absorption information and a multiplicative algebraic reconstruction technique. <i>Canadian Journal of Physics</i> , 2007, 85, 1225-1243.	1.1	34
102	An evaluation of Odin/OSIRIS limb pointing and stratospheric ozone through comparisons with ozonesondes. <i>Canadian Journal of Physics</i> , 2007, 85, 1125-1141.	1.1	13
103	Stratospheric aerosol retrieval with optical spectrograph and infrared imaging system limb scatter measurements. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	92
104	Observations of mesospheric ozone depletion during the October 28, 2003 solar proton event by OSIRIS. <i>Geophysical Research Letters</i> , 2005, 32, .	4.0	37
105	The OSIRIS instrument on the Odin spacecraft. <i>Canadian Journal of Physics</i> , 2004, 82, 411-422.	1.1	349