

# James Russell

## List of Publications by Year in descending order

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99  
papers

5,984  
citations

87888

38  
h-index

88630

70  
g-index

118  
all docs

118  
docs citations

118  
times ranked

2631  
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	A case study of a ducted gravity wave event over northern Germany using simultaneous airglow imaging and wind-field observations. <i>Annales Geophysicae</i> , 2022, 40, 179-190.	1.6	4
3	A case study of a thermally ducted undular mesospheric bore accompanied by ripples over the western Himalayan region. <i>Advances in Space Research</i> , 2021, 68, 1425-1440.	2.6	6
4	Trends in the polar summer mesosphere temperature and pressure altitude from satellite observations. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2021, 220, 105650.	1.6	11
5	Global balanced wind derived from SABER temperature and pressure observations and its validations. <i>Earth System Science Data</i> , 2021, 13, 5643-5661.	9.9	11
6	Technical note: LIMS observations of lower stratospheric ozone in the southern polar springtime of 1978. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 3663-3668.	4.9	0
7	Radiometric Stability of the SABER Instrument. <i>Earth and Space Science</i> , 2020, 7, e2019EA001011.	2.6	9
8	Variability of the Brunt-Väisälä frequency at the OH <sup>+</sup> airglow layer height at low and midlatitudes. <i>Atmospheric Measurement Techniques</i> , 2020, 13, 6067-6093.	3.1	9
9	Investigating an Unusually Large 28-Day Oscillation in Mesospheric Temperature Over Antarctica Using Ground-Based and Satellite Measurements. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 8576-8593.	3.3	7
10	Validation of Solar Occultation for Ice Experiment (SOFIE) nitric oxide measurements. <i>Atmospheric Measurement Techniques</i> , 2019, 12, 3111-3121.	3.1	9
11	Large-Amplitude Mountain Waves in the Mesosphere Observed on 21 June 2014 During DEEPWAVE: 1. Wave Development, Scales, Momentum Fluxes, and Environmental Sensitivity. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 10364-10384.	3.3	21
12	Quasi-Biennial Oscillation of Short-Period Planetary Waves and Polar Night Jet in Winter Antarctica Observed in SABER and MERRA-2 and Mechanism Study With a Quasi-Geostrophic Model. <i>Geophysical Research Letters</i> , 2019, 46, 13526-13534.	4.0	7
13	Observations of OH airglow from ground, aircraft, and satellite: investigation of wave-like structures before a minor stratospheric warming. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 6401-6418.	4.9	12
14	The SPARC water vapour assessment II: profile-to-profile comparisons of stratospheric and lower mesospheric water vapour data sets obtained from satellites. <i>Atmospheric Measurement Techniques</i> , 2019, 12, 2693-2732.	3.1	13
15	Investigating Gravity Waves in Polar Mesospheric Clouds Using Tomographic Reconstructions of AIM Satellite Imagery. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 955-973.	2.4	8
16	Universal power law of the gravity wave manifestation in the AIM CIPS polar mesospheric cloud images. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 883-899.	4.9	6
17	Trend differences in lower stratospheric water vapour between Boulder and the zonal mean and their role in understanding fundamental observational discrepancies. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 8331-8351.	4.9	14
18	Derivation of gravity wave intrinsic parameters and vertical wavelength using a single scanning OH(3-1) airglow spectrometer. <i>Atmospheric Measurement Techniques</i> , 2018, 11, 2937-2947.	3.1	8

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19	Understanding the Effects of Polar Mesospheric Clouds on the Environment of the Upper Mesosphere and Lower Thermosphere. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 11,705.	3.3	8
20	On Long-Term SABER CO <sub>2</sub> Trends and Effects Due to Nonuniform Space and Time Sampling. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 7958-7967.	2.4	20
21	Responses of Lower Thermospheric Temperature to the 2013 St. Patrick's Day Geomagnetic Storm. <i>Geophysical Research Letters</i> , 2018, 45, 4656-4664.	4.0	15
22	Updated SABER Night Atomic Oxygen and Implications for SABER Ozone and Atomic Hydrogen. <i>Geophysical Research Letters</i> , 2018, 45, 5735-5741.	4.0	44
23	Solar Cycle Response of CO <sub>2</sub> Over the Austral Winter Mesosphere and Lower Thermosphere Region. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 7581-7597.	2.4	2
24	Validation of SABER v2.0 Operational Temperature Data With Ground-Based Lidars in the Mesosphere-Lower Thermosphere Region (75-105 km). <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 9916-9934.	3.3	39
25	GRACILE: a comprehensive climatology of atmospheric gravity wave parameters based on satellite limb soundings. <i>Earth System Science Data</i> , 2018, 10, 857-892.	9.9	91
26	Variations of global gravity waves derived from 14 years of SABER temperature observations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 6231-6249.	3.3	50
27	Characterization of a Double Mesospheric Bore Over Europe. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 9738-9750.	2.4	20
28	New AIM/CIPS global observations of gravity waves near 50-55 km. <i>Geophysical Research Letters</i> , 2017, 44, 7044-7052.	4.0	18
29	Oblique propagation of monsoon gravity waves during the northern hemisphere 2007 summer. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 5063-5075.	3.3	17
30	Resolving the mesospheric nighttime 4.3 μm emission puzzle: comparison of the CO <sub>2</sub> and OH emission models. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 9751-9760.	4.9	19
31	Variability of the Brunt-Väisälä frequency at the OH* layer height. <i>Atmospheric Measurement Techniques</i> , 2017, 10, 4895-4903.	3.1	19
32	Ozone and temperature decadal responses to solar variability in the stratosphere and lower mesosphere, based on measurements from SABER on TIMED. <i>Annales Geophysicae</i> , 2016, 34, 801-813.	1.6	6
33	Ozone and temperature decadal responses to solar variability in the mesosphere and lower thermosphere, based on measurements from SABER on TIMED. <i>Annales Geophysicae</i> , 2016, 34, 29-40.	1.6	11
34	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
35	Mid-latitude mesospheric clouds and their environment from SOFIE observations. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2016, 149, 1-14.	1.6	24
36	Impacts of SABER CO <sub>2</sub> -based eddy diffusion coefficients in the lower thermosphere on the ionosphere/thermosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 12,080.	2.4	24

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37	Southern Hemisphere Summer Mesopause Responses to El Niño Southern Oscillation. <i>Journal of Climate</i> , 2016, 29, 6319-6328.	3.2	23
38	Satellite observations of stratospheric hydrogen fluoride and comparisons with SLIMCAT calculations. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 10501-10519.	4.9	14
39	Satellite observations of middle atmosphere gravity wave absolute momentum flux and of its vertical gradient during recent stratospheric warmings. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 9983-10019.	4.9	59
40	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
41	Ground-based assessment of the bias and long-term stability of fourteen limb and occultation ozone profile data records. , 2016, 9, 2497-2534.		9
42	Validation of the global distribution of CO <sub>2</sub> volume mixing ratio in the mesosphere and lower thermosphere from SABER. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015, 120, 12,067.	3.3	31
43	Increasing carbon dioxide concentration in the upper atmosphere observed by SABER. <i>Geophysical Research Letters</i> , 2015, 42, 7194-7199.	4.0	41
44	A combined solar and geomagnetic index for thermospheric climate. <i>Geophysical Research Letters</i> , 2015, 42, 3677-3682.	4.0	21
45	Recent Northern Hemisphere stratospheric HCl increase due to atmospheric circulation changes. <i>Nature</i> , 2014, 515, 104-107.	27.8	110
46	Atomic hydrogen in the mesopause region derived from SABER: Algorithm theoretical basis, measurement uncertainty, and results. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 3516-3526.	3.3	41
47	Gravity wave activity during recent stratospheric sudden warming events from SOFIE temperature measurements. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 8091-8103.	3.3	34
48	Gravity wave variations in the polar stratosphere and mesosphere from SOFIE/AIM temperature observations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 7368-7381.	3.3	31
49	Interaction of gravity waves with the QBO: A satellite perspective. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 2329-2355.	3.3	109
50	Concentric gravity waves in polar mesospheric clouds from the Cloud Imaging and Particle Size experiment. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 5115-5127.	3.3	21
51	Morphology of polar mesospheric clouds as seen from space. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2013, 104, 234-243.	1.6	21
52	Satellite observations of ozone in the upper mesosphere. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 5803-5821.	3.3	63
53	An observational and theoretical study of the longitudinal variation in neutral temperature induced by aurora heating in the lower thermosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 7410-7425.	2.4	32
54	Radiative and energetic constraints on the global annual mean atomic oxygen concentration in the mesopause region. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 5796-5802.	3.3	26

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55	Atomic oxygen in the mesosphere and lower thermosphere derived from SABER: Algorithm theoretical basis and measurement uncertainty. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 5724-5735.	3.3	101
56	Absolute concentrations of highly vibrationally excited OH( $\tilde{v} = 9 + 8$ ) in the mesopause region derived from the TIMED/SABER instrument. <i>Geophysical Research Letters</i> , 2013, 40, 646-650.	4.0	9
57	Influence of El Niño/Southern Oscillation in the mesosphere. <i>Geophysical Research Letters</i> , 2013, 40, 3292-3296.	4.0	32
58	Radiative constraints on the minimum atomic oxygen concentration in the mesopause region. <i>Geophysical Research Letters</i> , 2013, 40, 3777-3780.	4.0	10
59	Validation of upper mesospheric and lower thermospheric temperatures measured by the Solar Occultation for Ice Experiment. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	34
60	Zonal mean global teleconnection from 15 to 110 km derived from SABER and WACCM. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	27
61	Implications for atmospheric dynamics derived from global observations of gravity wave momentum flux in stratosphere and mesosphere. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	203
62	Evaluation of AIM CIPS measurements of Polar Mesospheric Clouds by comparison with SBUV data. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2011, 73, 2065-2072.	1.6	18
63	High-Latitude Gravity Wave Measurements in Noctilucent Clouds and Polar Mesospheric Clouds. , 2011, , 93-105.		23
64	Polar mesospheric cloud structures observed from the cloud imaging and particle size experiment on the Aeronomy of Ice in the Mesosphere spacecraft: Atmospheric gravity waves as drivers for longitudinal variability in polar mesospheric cloud occurrence. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	58
65	Kinetic temperature and carbon dioxide from broadband infrared limb emission measurements taken from the TIMED/SABER instrument. <i>Advances in Space Research</i> , 2009, 43, 15-27.	2.6	53
66	The solar occultation for ice experiment. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2009, 71, 300-315.	1.6	123
67	Interpretation of SOFIE PMC measurements: Cloud identification and derivation of mass density, particle shape, and particle size. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2009, 71, 316-330.	1.6	91
68	Comparison of polar mesospheric cloud measurements from the Cloud Imaging and Particle Size experiment and the solar backscatter ultraviolet instrument in 2007. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2009, 71, 365-372.	1.6	39
69	SOFIE PMC observations during the northern summer of 2007. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2009, 71, 331-339.	1.6	41
70	The Aeronomy of Ice in the Mesosphere (AIM) mission: Overview and early science results. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2009, 71, 289-299.	1.6	179
71	Phase functions of polar mesospheric cloud ice as observed by the CIPS instrument on the AIM satellite. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2009, 71, 373-380.	1.6	66
72	Global ray tracing simulations of the SABER gravity wave climatology. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	120

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73	Validation of the Aura Microwave Limb Sounder temperature and geopotential height measurements. Journal of Geophysical Research, 2008, 113, .	3.3	370
74	The evolution of the stratopause during the 2006 major warming: Satellite data and assimilated meteorological analyses. Journal of Geophysical Research, 2008, 113, .	3.3	199
75	Assessment of the quality of the Version 1.07 temperature&versus&pressure profiles of the middle atmosphere from TIMED/SABER. Journal of Geophysical Research, 2008, 113, .	3.3	369
76	Errors in Sounding of the Atmosphere using Broadband Emission Radiometry (SABER) kinetic temperature caused by non&local&thermodynamic&equilibrium model parameters. Journal of Geophysical Research, 2008, 113, .	3.3	99
77	A link between variability of the semidiurnal tide and planetary waves in the opposite hemisphere. Geophysical Research Letters, 2007, 34, .	4.0	35
78	Energetic particle precipitation effects on the Southern Hemisphere stratosphere in 1992&quot;2005. Journal of Geophysical Research, 2007, 112, .	3.3	186
79	Mesopause structure from Thermosphere, Ionosphere, Mesosphere, Energetics, and Dynamics (TIMED)/Sounding of the Atmosphere Using Broadband Emission Radiometry (SABER) observations. Journal of Geophysical Research, 2007, 112, .	3.3	72
80	Comparative study of short&term diurnal tidal variability. Journal of Geophysical Research, 2007, 112, .	3.3	49
81	A comparison of middle atmospheric water vapor as measured by WVMS, EOS&MLS, and HALOE. Journal of Geophysical Research, 2007, 112, .	3.3	25
82	Intercomparison of kinetic temperature from 15 $\hat{1}/4$ m CO2limb emissions and OH*(3,1) rotational temperature in nearly coincident air masses: SABER, GRIPS. Geophysical Research Letters, 2006, 33, .	4.0	32
83	SABER temperature observations in the summer polar mesosphere and lower thermosphere: Importance of accounting for the CO2 $\hat{1}/2$ quanta V&V exchange. Geophysical Research Letters, 2006, 33, .	4.0	68
84	Tropopause to mesopause gravity waves in August: Measurement and modeling. Journal of Atmospheric and Solar-Terrestrial Physics, 2006, 68, 1730-1751.	1.6	77
85	Observations of the 7-day Kelvin Wave in the Tropical Atmosphere During the CPEA Campaign. Journal of the Meteorological Society of Japan, 2006, 84A, 259-275.	1.8	15
86	Stratospheric effects of energetic particle precipitation in 2003&quot;2004. Geophysical Research Letters, 2005, 32, .	4.0	227
87	Validation of stratospheric temperatures measured by Michelson Interferometer for Passive Atmospheric Sounding (MIPAS) on Envisat. Journal of Geophysical Research, 2005, 110, .	3.3	16
88	SABER observations of mesospheric temperatures and comparisons with falling sphere measurements taken during the 2002 summer MacWAVE campaign. Geophysical Research Letters, 2004, 31, .	4.0	174
89	Evidence for an OH( $\hat{1}$ ...) excitation mechanism of CO24.3 $\hat{1}/4$ m nighttime emission from SABER/TIMED measurements. Journal of Geophysical Research, 2004, 109, .	3.3	31
90	An evaluation of trends in middle atmospheric water vapor as measured by HALOE, WVMS, and POAM. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	51

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91	Evidence for slowdown in stratospheric ozone loss: First stage of ozone recovery. Journal of Geophysical Research, 2003, 108, .	3.3	224
92	Long-term trends of inorganic chlorine from ground-based infrared solar spectra: Past increases and evidence for stabilization. Journal of Geophysical Research, 2003, 108, .	3.3	86
93	Retrieval of mesospheric and lower thermospheric kinetic temperature from measurements of CO <sub>2</sub> 15 Åm Earth Limb Emission under non-LTE conditions. Geophysical Research Letters, 2001, 28, 1391-1394.	4.0	241
94	Overview of the SABER experiment and preliminary calibration results. , 1999, 3756, 277.		450
95	Intercomparison of ILAS and HALOE ozone at high latitudes. Geophysical Research Letters, 1999, 26, 835-838.	4.0	12
96	HALOE observations of a slowdown in the rate of increase of HF in the lower mesosphere. Geophysical Research Letters, 1997, 24, 3217-3220.	4.0	11
97	The Seasonal and Long Term Changes in Mesospheric Water Vapor. Geophysical Research Letters, 1997, 24, 639-642.	4.0	61
98	MAHRSI observations of nitric oxide in the mesosphere and lower thermosphere. Geophysical Research Letters, 1997, 24, 3213-3216.	4.0	10
99	Severe chemical ozone loss in the Arctic during the winter of 1995â€“96. Nature, 1997, 389, 709-712.	27.8	155