Dave Fritts

List of Publications by Year
in descending order

166 papers	11,094 citations	29994 54 h-index	32761 100 g-index
170 all docs	170 docs citations	170 times ranked	2971 citing authors

#	Article	IF	Citations
1	Gravity wave dynamics and effects in the middle atmosphere. Reviews of Geophysics, 2003, 41, .	9.0	1,958
2	Gravity wave saturation in the middle atmosphere: A review of theory and observations. Reviews of Geophysics, 1984, 22, 275-308.	9.0	532
3	Mesospheric Momentum Flux Studies at Adelaide, Australia: Observations and a Gravity Waveâ€"Tidal Interaction Model. Journals of the Atmospheric Sciences, 1987, 44, 605-619.	0.6	356
4	Convective and dynamical instabilities due to gravity wave motions in the lower and middle atmosphere: Theory and observations. Radio Science, 1985, 20, 1247-1277.	0.8	293
5	Thermospheric responses to gravity waves: Influences of increasing viscosity and thermal diffusivity. Journal of Geophysical Research, 2005, 110, .	3.3	226
6	Sources of Mesoscale Variability of Gravity Waves. Part II: Frontal, Convective, and Jet Stream Excitation. Journals of the Atmospheric Sciences, 1992, 49, 111-127.	0.6	224
7	Gravity wave initiation of equatorial spread F/plasma bubble irregularities based on observational data from the SpreadFEx campaign. Annales Geophysicae, 2009, 27, 2607-2622.	0.6	183
8	Sources of Mesoscale Variability of Gravity Waves. Part I: Topographic Excitation. Journals of the Atmospheric Sciences, 1992, 49, 101-110.	0.6	179
9	Spectral Estimates of Gravity Wave Energy and Momentum Fluxes. Part I: Energy Dissipation, Acceleration, and Constraints. Journals of the Atmospheric Sciences, 1993, 50, 3685-3694.	0.6	179
10	Mechanism for the Generation of Secondary Waves in Wave Breaking Regions. Journals of the Atmospheric Sciences, 2003, 60, 194-214.	0.6	162
11	A theory of enhanced saturation of the gravity wave spectrum due to increases in atmospheric stability. Pure and Applied Geophysics, 1989, 130, 399-420.	0.8	154
12	The Deep Propagating Gravity Wave Experiment (DEEPWAVE): An Airborne and Ground-Based Exploration of Gravity Wave Propagation and Effects from Their Sources throughout the Lower and Middle Atmosphere. Bulletin of the American Meteorological Society, 2016, 97, 425-453.	1.7	148
13	Mean and variable forcing of the middle atmosphere by gravity waves. Journal of Atmospheric and Solar-Terrestrial Physics, 2006, 68, 247-265.	0.6	145
14	Gravity wave breaking in two and three dimensions: 2. Three-dimensional evolution and instability structure. Journal of Geophysical Research, 1994, 99, 8109.	3.3	139
15	Spectral Estimates of Gravity Wave Energy and Momentum Fluxes. Part II: Parameterization of Wave Forcing and Variability. Journals of the Atmospheric Sciences, 1993, 50, 3695-3713.	0.6	128
16	Stratified shear turbulence: Evolution and statistics. Geophysical Research Letters, 1999, 26, 439-442.	1.5	127
17	Fluxes of Heat and Constituents Due to Convectively Unstable Gravity Waves. Journals of the Atmospheric Sciences, 1985, 42, 549-556.	0.6	117
18	Vorticity dynamics in a breaking internal gravity wave. Part 1. Initial instability evolution. Journal of Fluid Mechanics, 1998, 367, 27-46.	1.4	117

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19	Observational evidence of wave ducting and evanescence in the mesosphere. Journal of Geophysical Research, 1997, 102, 26301-26313.	3.3	115
20	Wave breaking signatures in OH airglow and sodium densities and temperatures: 1. Airglow imaging, Na lidar, and MF radar observations. Journal of Geophysical Research, 1997, 102, 6655-6668.	3.3	110
21	Gravity wave penetration into the thermosphere: sensitivity to solar cycle variations and mean winds. Annales Geophysicae, 2008, 26, 3841-3861.	0.6	110
22	Thermospheric responses to gravity waves arising from mesoscale convective complexes. Journal of Atmospheric and Solar-Terrestrial Physics, 2004, 66, 781-804.	0.6	108
23	Gravity wave breaking in two and three dimensions: 1. Model description and comparison of two-dimensional evolutions. Journal of Geophysical Research, 1994, 99, 8095.	3.3	107
24	Turbulence statistics of a Kelvinâ€"Helmholtz billow event observed in the night-time boundary layer during the Cooperative Atmosphereâ€"Surface Exchange Study field program. Dynamics of Atmospheres and Oceans, 2001, 34, 189-204.	0.7	102
25	Gravity Wave Instability Dynamics at High Reynolds Numbers. Part I: Wave Field Evolution at Large Amplitudes and High Frequencies. Journals of the Atmospheric Sciences, 2009, 66, 1126-1148.	0.6	101
26	Wave breaking signatures in noctilucent clouds. Geophysical Research Letters, 1993, 20, 2039-2042.	1.5	99
27	Mean Motions and Tidal and Two-Day Structure and Variability in the Mesosphere and Lower Thermosphere over Hawaii. Journals of the Atmospheric Sciences, 1994, 51, 2145-2164.	0.6	97
28	Layering accompanying turbulence generation due to shear instability and gravity-wave breaking. Journal of Geophysical Research, 2003, 108, .	3.3	97
29	Gravity Wave Radiation and Mean Responses to Local Body Forces in the Atmosphere. Journals of the Atmospheric Sciences, 2001, 58, 2249-2279.	0.6	96
30	Gravity wave and tidal influences on equatorial spread F based on observations during the Spread F Experiment (SpreadFEx). Annales Geophysicae, 2008, 26, 3235-3252.	0.6	96
31	Influence of solar variability on gravity wave structure and dissipation in the thermosphere from tropospheric convection. Journal of Geophysical Research, 2006, 111, .	3.3	95
32	Evolution and Breakdown of Kelvinâ€"Helmholtz Billows in Stratified Compressible Flows. Part I: Comparison of Two- and Three-Dimensional Flows. Journals of the Atmospheric Sciences, 1996, 53, 3173-3191.	0.6	94
33	Evidence of gravity wave saturation and local turbulence production in the summer mesosphere and lower thermosphere during the STATE experiment. Journal of Geophysical Research, 1988, 93, 7015-7025.	3.3	92
34	Vorticity dynamics in a breaking internal gravity wave. Part 2. Vortex interactions and transition to turbulence. Journal of Fluid Mechanics, 1998, 367, 47-65.	1.4	92
35	Wave Breaking and Transition to Turbulence in Stratified Shear Flows. Journals of the Atmospheric Sciences, 1996, 53, 1057-1085.	0.6	90
36	Gravity Wave Instability Dynamics at High Reynolds Numbers. Part II: Turbulence Evolution, Structure, and Anisotropy. Journals of the Atmospheric Sciences, 2009, 66, 1149-1171.	0.6	88

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37	Shear Excitation of Atmospheric Gravity Waves. Part II: Nonlinear Radiation from a Free Shear Layer. Journals of the Atmospheric Sciences, 1984, 41, 524-537.	0.6	86
38	Two-day wave coupling of the low-latitude atmosphere-ionosphere system. Journal of Geophysical Research, 2006, 111, .	3.3	84
39	Enhanced gravity-wave activity and interhemispheric coupling during the MaCWAVE/MIDAS northern summer program 2002. Annales Geophysicae, 2006, 24, 1175-1188.	0.6	80
40	Convection: the likely source of the medium-scale gravity waves observed in the OH airglow layer near Brasilia, Brazil, during the SpreadFEx campaign. Annales Geophysicae, 2009, 27, 231-259.	0.6	79
41	An Investigation of the Vertical Wavenumber and Frequency Spectra of Gravity Wave Motions in the Lower Stratosphere. Journals of the Atmospheric Sciences, 1987, 44, 3610-3624.	0.6	77
42	A climatology of tides in the Antarctic mesosphere and lower thermosphere. Journal of Geophysical Research, 2006, 111, .	3.3	72
43	Measurement of Momentum Fluxes near the Summer Mesopause at Poker Flat, Alaska. Journals of the Atmospheric Sciences, 1989, 46, 2569-2579.	0.6	67
44	An estimate of strong local body forcing and gravity wave radiation based on OH airglow and meteor radar observations. Geophysical Research Letters, 2002, 29, 71-1-71-4.	1.5	67
45	An analysis of gravity wave ducting in the atmosphere: Eckart's resonances in thermal and Doppler ducts. Journal of Geophysical Research, 1989, 94, 18455-18466.	3.3	63
46	Characteristics of mesospheric gravity waves near the magnetic equator, Brazil, during the SpreadFEx campaign. Annales Geophysicae, 2009, 27, 461-472.	0.6	62
47	Southern Argentina Agile Meteor Radar: Initial assessment of gravity wave momentum fluxes. Journal of Geophysical Research, 2010, 115, .	3.3	62
48	Turbulence measurements and implications for gravity wave dissipation during the MaCWAVE/MIDAS rocket program. Geophysical Research Letters, 2004, 31, .	1.5	60
49	Mesospheric Momentum Fluxes Observed by the MST Radar at Poker Flat, Alaska. Journals of the Atmospheric Sciences, 1990, 47, 1512-1521.	0.6	58
50	Wave breaking signatures in sodium densities and OH nightglow: 2. Simulation of wave and instability structures. Journal of Geophysical Research, 1997, 102, 6669-6684.	3.3	58
51	The importance of spatial variability in the generation of secondary gravity waves from local body forces. Geophysical Research Letters, 2002, 29, 45-1-45-4.	1.5	58
52	Stratospheric Gravity Wave Fluxes and Scales during DEEPWAVE. Journals of the Atmospheric Sciences, 2016, 73, 2851-2869.	0.6	58
53	A Quasi-Linear Study of Gravity-Wave Saturation and Self-Acceleration. Journals of the Atmospheric Sciences, 1984, 41, 3272-3289.	0.6	57
54	Quantifying Kelvinâ€Helmholtz instability dynamics observed in noctilucent clouds: 1. Methods and observations. Journal of Geophysical Research D: Atmospheres, 2014, 119, 9324-9337.	1.2	56

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55	Observations of extreme temperature and wind gradients near the summer mesopause during the MaCWAVE/MIDAS rocket campaign. Geophysical Research Letters, 2004, 31, .	1.5	55
56	The MaCWAVE/MIDAS rocket and ground-based measurements of polar summer dynamics: Overview and mean state structure. Geophysical Research Letters, 2004, 31, .	1.5	55
57	Evolution and Breakdown of Kelvinâ€“Helmholtz Billows in Stratified Compressible Flows. Part II: Instability Structure, Evolution, and Energetics. Journals of the Atmospheric Sciences, 1996, 53, 3192-3212.	0.6	53
58	Influences of source conditions on mountain wave penetration into the stratosphere and mesosphere. Geophysical Research Letters, 2015, 42, 9488-9494.	1.5	51
59	Gravity Wave Structure between 60 and 90 km Inferred from Space Shuttle Reentry Data. Journals of the Atmospheric Sciences, 1989, 46, 423-434.	0.6	50
60	Gravity-Wave Excitation by Geostrophic Adjustment of the Jet Stream. Part II: Three-Dimensional Forcing. Journals of the Atmospheric Sciences, 1993, 50, 104-115.	0.6	50
61	Gravity Wave 1-leat Fluxes: A Lagrangian Approach. Journals of the Atmospheric Sciences, 1988, 45, 1770-1780.	0.6	49
62	Southern Argentina Agile Meteor Radar: System design and initial measurements of largeâ€scale winds and tides. Journal of Geophysical Research, 2010, 115, .	3.3	49
63	Two-day wave structure and mean flow interactions observed by radar and High Resolution Doppler Imager. Journal of Geophysical Research, 1999, 104, 3953-3969.	3.3	47
64	The initial value problem for Kelvin vortex waves. Journal of Fluid Mechanics, 1997, 344, 181-212.	1.4	45
65	Gravity Wave Influences in the Thermosphere and Ionosphere: Observations and Recent Modeling. , 2011, , 109-130.		45
66	Momentum flux estimates accompanying multiscale gravity waves over Mount Cook, New Zealand, on 13 July 2014 during the DEEPWAVE campaign. Journal of Geophysical Research D: Atmospheres, 2015, 120, 9323-9337.	1.2	45
67	Evidence of Gravity Waveâ€“Tidal Interaction Observed near the Summer Mesopause at Poker Flat, Alaska. Journals of the Atmospheric Sciences, 1991, 48, 572-583.	0.6	44
68	Gravity Waveâ€“Fine Structure Interactions. Part I: Influences of Fine Structure Form and Orientation on Flow Evolution and Instability. Journals of the Atmospheric Sciences, 2013, 70, 3710-3734.	0.6	44
69	Secondary gravity wave generation over New Zealand during the DEEPWAVE campaign. Journal of Geophysical Research D: Atmospheres, 2017, 122, 7834-7850.	1.2	44
70	Determination of horizontal and vertical structure of an unusual pattern of short period gravity waves imaged during ALOHA-93. Geophysical Research Letters, 1995, 22, 2837-2840.	1.5	43
71	THE SOUTHERN ARGENTINA AGILE METEOR RADAR ORBITAL SYSTEM (SAAMER-OS): AN INITIAL SPORADIC METEOROID ORBITAL SURVEY IN THE SOUTHERN SKY. Astrophysical Journal, 2015, 809, 36.	1.6	43
72	Numerical Modeling of Multiscale Dynamics at a High Reynolds Number: Instabilities, Turbulence, and an Assessment of Ozmidov and Thorpe Scales. Journals of the Atmospheric Sciences, 2016, 73, 555-578.	0.6	43

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73	The Excitation of Radiating Waves and Kelvin-Helmholtz Instabilities by the Gravity Wave-Critical Level Interaction. Journals of the Atmospheric Sciences, 1979, 36, 12-23.	0.6	39
74	Regional variations of mesospheric gravity-wave momentum flux over Antarctica. Annales Geophysicae, 2006, 24, 81-88.	0.6	39
75	Selfâ€acceleration and instability of gravity wave packets: 1. Effects of temporal localization. Journal of Geophysical Research D: Atmospheres, 2015, 120, 8783-8803.	1.2	39
76	Dynamics of the Equatorial Mesosphere Observed Using the Jicamarca MST Radar during June and August 1987. Journals of the Atmospheric Sciences, 1992, 49, 2353-2371.	0.6	38
77	Dynamics of Orographic Gravity Waves Observed in the Mesosphere over the Auckland Islands during the Deep Propagating Gravity Wave Experiment (DEEPWAVE). Journals of the Atmospheric Sciences, 2016, 73, 3855-3876.	0.6	37
78	Unexpected climatological behavior of MLT gravity wave momentum flux in the lee of the Southern Andes hot spot. Geophysical Research Letters, 2017, 44, 1182-1191.	1.5	37
79	Mean Winds and Momentum Fluxes over Jicamarca, Peru, during June and August 1987. Journals of the Atmospheric Sciences, 1992, 49, 2372-2383.	0.6	35
80	Gravity wave propagation through a large semidiurnal tide and instabilities in the mesosphere and lower thermosphere during the winter 2003 MaCWAVE rocket campaign. Annales Geophysicae, 2006, 24, 1199-1208.	0.6	35
81	Gravity waveâ€"fine structure interactions: A reservoir of smallâ€scale and largeâ€scale turbulence energy. Geophysical Research Letters, 2009, 36, .	1.5	35
82	Numerical simulation of gravity wave breaking in the lower thermosphere. Journal of Geophysical Research, 2012, 117, .	3.3	35
83	Quantifying gravity wave momentum fluxes with Mesosphere Temperature Mappers and correlative instrumentation. Journal of Geophysical Research D: Atmospheres, 2014, 119, 13,583.	1.2	35
84	Quantifying Kelvinâ€Helmholtz instability dynamics observed in noctilucent clouds: 2. Modeling and interpretation of observations. Journal of Geophysical Research D: Atmospheres, 2014, 119, 9359-9375.	1.2	35
85	High-resolution observations and modeling of turbulence sources, structures, and intensities in the upper mesosphere. Journal of Atmospheric and Solar-Terrestrial Physics, 2017, 162, 57-78.	0.6	35
86	Spectral Estimates of Gravity Wave Energy and Momentum Fluxes. Part III: Gravity Wave-Tidal Interactions. Journals of the Atmospheric Sciences, 1993, 50, 3714-3727.	0.6	34
87	Transient Gravity Wave-Critical Layer Interaction. Part I: Convective Adjustment and the Mean Zonal Acceleration. Journals of the Atmospheric Sciences, 1984, 41, 992-1007.	0.6	33
88	Improved analysis of all-sky meteor radar measurements of gravity wave variances and momentum fluxes. Annales Geophysicae, 2013, 31, 889-908.	0.6	33
89	Largeâ€amplitude mesospheric response to an orographic wave generated over the Southern Ocean Auckland Islands (50.7Â°S) during the DEEPWAVE project. Journal of Geophysical Research D: Atmospheres, 2016, 121, 1431-1441.	1.2	33
90	Numerical modeling of a multiscale gravity wave event and its airglow signatures over Mount Cook, New Zealand, during the DEEPWAVE campaign. Journal of Geophysical Research D: Atmospheres, 2017, 122, 846-860.	1.2	33

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91	Does Strong Tropospheric Forcing Cause Largeâ€Amplitude Mesospheric Gravity Waves? A DEEPWAVE Case Study. Journal of Geophysical Research D: Atmospheres, 2017, 122, 11,422.	1.2	33
92	The life cycle of instability features measured from the Andes Lidar Observatory over Cerro Pachon on 24 March 2012. Journal of Geophysical Research D: Atmospheres, 2014, 119, 8872-8898.	1.2	32
93	Major upwelling and overturning in the mid-latitude F region ionosphere. Nature Communications, 2018, 9, 3326.	5.8	32
94	Climatology of semidiurnal lunar and solar tides at middle and high latitudes: Interhemispheric comparison. Journal of Geophysical Research: Space Physics, 2017, 122, 7750-7760.	0.8	31
95	Gravity waves in the middle atmosphere during the MaCWAVE winter campaign: evidence of mountain wave critical level encounters. Annales Geophysicae, 2006, 24, 1209-1226.	0.6	30
96	Drake Antarctic Agile Meteor Radar first results: Configuration and comparison of mean and tidal wind and gravity wave momentum flux measurements with Southern Argentina Agile Meteor Radar. Journal of Geophysical Research, 2012, 117, .	3.3	30
97	Three-dimensional evolution of Kelvin-Helmholtz billows in stratified compressible flow. Geophysical Research Letters, 1994, 21, 2287-2290.	1.5	29
98	Fine-Scale Characteristics of Temperature, Wind, and Turbulence in the Lower Atmosphere (0â€"1,300 m) Over the South Peruvian Coast. Boundary-Layer Meteorology, 2013, 147, 165-178.	1.2	29
99	The MaCWAVE program to study gravity wave influences on the polar mesosphere. Annales Geophysicae, 2006, 24, 1159-1173.	0.6	29
100	Gravity wave momentum flux in the upper mesosphere derived from OH airglow imaging measurements. Earth, Planets and Space, 2007, 59, 421-428.	0.9	28
101	Computation of clearâ€air radar backscatter from numerical simulations of turbulence: 3. Offâ€zenith measurements and biases throughout the lifecycle of a Kelvinâ€Helmholtz instability. Journal of Geophysical Research, 2012, 117, .	3.3	28
102	Observation of a mesospheric front in a thermal-doppler duct over King George Island, Antarctica. Atmospheric Chemistry and Physics, 2011, 11, 12137-12147.	1.9	27
103	Assessment of gravity wave momentum flux measurement capabilities by meteor radars having different transmitter power and antenna configurations. Journal of Geophysical Research, 2012, 117, .	3.3	27
104	Gravity Wave Dynamics in a Mesospheric Inversion Layer: 1. Reflection, Trapping, and Instability Dynamics. Journal of Geophysical Research D: Atmospheres, 2018, 123, 626-648.	1.2	27
105	PMC Turbo: Studying Gravity Wave and Instability Dynamics in the Summer Mesosphere Using Polar Mesospheric Cloud Imaging and Profiling From a Stratospheric Balloon. Journal of Geophysical Research D: Atmospheres, 2019, 124, 6423-6443.	1.2	27
106	Intense turbulence observed above a mesospheric temperature inversion at equatorial latitude. Geophysical Research Letters, 2006, 33, .	1.5	26
107	Longâ€term observations of the quasi twoâ€day wave by Hawaii MF radar. Journal of Geophysical Research: Space Physics, 2013, 118, 7886-7894.	0.8	26
108	Largeâ€Amplitude Mountain Waves in the Mesosphere Accompanying Weak Crossâ€Mountain Flow During DEEPWAVE Research Flight RF22. Journal of Geophysical Research D: Atmospheres, 2018, 123, 9992.	1.2	26

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109	Selfâ€Acceleration and Instability of Gravity Wave Packets: 2. Twoâ€Dimensional Packet Propagation, Instability Dynamics, and Transient Flow Responses. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD030691.	1.2	26
110	Numerical simulation of bore generation and morphology in thermal and Doppler ducts. Annales Geophysicae, 2009, 27, 511-523.	0.6	25
111	Computation of clear-air radar backscatter from numerical simulations of turbulence: 2. Backscatter moments throughout the lifecycle of a Kelvin-Helmholtz instability. Journal of Geophysical Research, 2011, 116, .	3.3	25
112	Modeling the implications of Kelvinâ€Helmholtz instability dynamics for airglow observations. Journal of Geophysical Research D: Atmospheres, 2014, 119, 8858-8871.	1.2	25
113	Selfâ€Acceleration and Instability of Gravity Wave Packets: 3. Threeâ€Dimensional Packet Propagation, Secondary Gravity Waves, Momentum Transport, and Transient Mean Forcing in Tidal Winds. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD030692.	1.2	23
114	Numerical Simulation of Mountain Waves over the Southern Andes. Part I: Mountain Wave and Secondary Wave Character, Evolutions, and Breaking. Journals of the Atmospheric Sciences, 2020, 77, 4337-4356.	0.6	23
115	Dynamical and radiative forcing of the summer mesopause circulation and thermal structure: 2. Seasonal variations. Journal of Geophysical Research, 1995, 100, 3129.	3.3	22
116	On the downward bias in vertical velocity measurements by VHF radars. Geophysical Research Letters, 1995, 22, 619-622.	1.5	22
117	Gravity Waveâ€“Fine Structure Interactions. Part II: Energy Dissipation Evolutions, Statistics, and Implications. Journals of the Atmospheric Sciences, 2013, 70, 3735-3755.	0.6	21
118	Largeâ€Amplitude Mountain Waves in the Mesosphere Observed on 21 June 2014 During DEEPWAVE: 1. Wave Development, Scales, Momentum Fluxes, and Environmental Sensitivity. Journal of Geophysical Research D: Atmospheres, 2019, 124, 10364-10384.	1.2	21
119	Gravity wave effects on postsunset equatorial <i>F</i> region stability. Journal of Geophysical Research: Space Physics, 2014, 119, 5847-5860.	0.8	20
120	Investigation of a mesospheric gravity wave ducting event using coordinated sodium lidar and Mesospheric Temperature Mapper measurements at ALOMAR, Norway (69Â°N). Journal of Geophysical Research D: Atmospheres, 2014, 119, 9765-9778.	1.2	19
121	Observations of the Breakdown of Mountain Waves Over the Andes Lidar Observatory at Cerro Pachon on 8/9 July 2012. Journal of Geophysical Research D: Atmospheres, 2018, 123, 276-299.	1.2	19
122	QBO modulation of the mesopause gravity wave momentum flux over Tierra del Fuego. Geophysical Research Letters, 2016, 43, 4049-4055.	1.5	18
123	Equatorial dynamics observed by rocket, radar, and satellite during the CADRE/MALTED campaign: 1. Programmatics and small-scale fluctuations. Journal of Geophysical Research, 1997, 102, 26179-26190.	3.3	17
124	Stratospheric imaging of polar mesospheric clouds: A new window on small-scale atmospheric dynamics. Geophysical Research Letters, 2015, 42, 6058-6065.	1.5	17
125	Fine Structure, Instabilities, and Turbulence in the Lower Atmosphere: High-Resolution In Situ Slant-Path Measurements with the DataHawk UAV and Comparisons with Numerical Modeling. Journal of Atmospheric and Oceanic Technology, 2018, 35, 619-642.	0.5	17
126	Mesospheric Bore Evolution and Instability Dynamics Observed in PMC Turbo Imaging and Rayleigh Lidar Profiling Over Northeastern Canada on 13 July 2018. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD032037.	1.2	17

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127	Long-term observations of the wind field in the Antarctic and Arctic mesosphere and lower-thermosphere at conjugate latitudes. Journal of Geophysical Research, 2011, 116, .	3.3	15
128	Gravity Wave Dynamics in a Mesospheric Inversion Layer: 2. Instabilities, Turbulence, Fluxes, and Mixing. Journal of Geophysical Research D: Atmospheres, 2018, 123, 649-670.	1.2	15
129	Momentum Flux Spectra of a Mountain Wave Event Over New Zealand. Journal of Geophysical Research D: Atmospheres, 2018, 123, 9980-9991.	1.2	15
130	Largeâ€Amplitude Mountain Waves in the Mesosphere Observed on 21 June 2014 During DEEPWAVE: 2. Nonlinear Dynamics, Wave Breaking, and Instabilities. Journal of Geophysical Research D: Atmospheres, 2019, 124, 10006-10032.	1.2	15
131	Kelvinâ€Helmholtz Billow Interactions and Instabilities in the Mesosphere Over the Andes Lidar Observatory: 1. Observations. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033414.	1.2	15
132	Seasonal evolution of winds, atmospheric tides, and Reynolds stress components in the Southern Hemisphere mesosphereâ€“lower thermosphere in 2019. Annales Geophysicae, 2021, 39, 1-29.	0.6	15
133	Observations of inertia-gravity wave motions in the stratosphere over Jicamarca, Peru. Geophysical Research Letters, 1995, 22, 3239-3242.	1.5	14
134	Kelvin twist waves in the transition to turbulence. European Journal of Mechanics, B/Fluids, 1998, 17, 595-604.	1.2	14
135	Modeling Responses of Polar Mesospheric Clouds to Gravity Wave and Instability Dynamics and Induced Largeâ€Scale Motions. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD034643.	1.2	13
136	A conjugate study of mean winds and planetary waves employing enhanced meteor radars at Rio Grande, Argentina (53.8Â°S) and Juliusruh, Germany (54.6Â°N). Journal of Geophysical Research, 2012, 117, .	3.3	12
137	Tsunamiâ€driven gravity waves in the presence of vertically varying background and tidal wind structures. Journal of Geophysical Research D: Atmospheres, 2017, 122, 5076-5096.	1.2	12
138	Kelvinâ€Helmholtz Billow Interactions and Instabilities in the Mesosphere Over the Andes Lidar Observatory: 2. Modeling and Interpretation. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033412.	1.2	12
139	Numerical Simulation of Mountain Waves over the Southern Andes. Part II: Momentum Fluxes and Waveâ€“Mean-Flow Interactions. Journals of the Atmospheric Sciences, 2021, 78, 3069-3088.	0.6	12
140	Mean winds and tidal and planetary wave motions over Hawaii during airborne lidar and observations of Hawaiian Airglow ALOHA-93. Geophysical Research Letters, 1995, 22, 2821-2824.	1.5	11
141	Interhemispheric structure and variability of the 5-day planetary wave from meteor radar wind measurements. Annales Geophysicae, 2015, 33, 1349-1359.	0.6	11
142	Observations of Reduced Turbulence and Wave Activity in the Arctic Middle Atmosphere Following the January 2015 Sudden Stratospheric Warming. Journal of Geophysical Research D: Atmospheres, 2018, 123, 13259-13276.	1.2	11
143	Computation of clear-air radar backscatter from numerical simulations of turbulence: 1. Numerical methods and evaluation of biases. Journal of Geophysical Research, 2011, 116, .	3.3	10
144	Gravity Waveâ€Induced Ionospheric Irregularities in the Postsunset Equatorial Valley Region. Journal of Geophysical Research: Space Physics, 2017, 122, 11,579.	0.8	10

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145	The vorticity dynamics of instability and turbulence in a breaking internal gravity wave. Earth, Planets and Space, 1999, 51, 457-473.	0.9	9
146	Multi-scale dynamics of Kelvinâ€“Helmholtz instabilities. Part 1. Secondary instabilities and the dynamics of tubes and knots. Journal of Fluid Mechanics, 2022, 941, .	1.4	9
147	Mesospheric front observations by the OH airglow imager carried out at Ferraz Station on King George Island, Antarctic Peninsula, in 2011. Annales Geophysicae, 2018, 36, 253-264.	0.6	8
148	Stratospheric Gravity Wave Products from Satellite Infrared Nadir Radiances in the Planning, Execution, and Validation of Aircraft Measurements during DEEPWAVE. Journal of Applied Meteorology and Climatology, 2019, 58, 2049-2075.	0.6	8
149	Comparison of MLT Momentum Fluxes Over the Andes at Four Different Latitudinal Sectors Using Multistatic Radar Configurations. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	1.2	8
150	Structure, Variability, and Meanâ€Flow Interactions of the January 2015 Quasiâ€2â€Day Wave at Middle and High Southern Latitudes. Journal of Geophysical Research D: Atmospheres, 2019, 124, 5981-6008.	1.2	7
151	The PMC Turbo Balloon Mission to Measure Gravity Waves and Turbulence in Polar Mesospheric Clouds: Camera, Telemetry, and Software Performance. Earth and Space Science, 2020, 7, e2020EA001238.	1.1	7
152	Convectively Generated Gravity Waves During Solstice and Equinox Conditions. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031582.	1.2	6
153	Mesospheric Mountain Wave Activity in the Lee of the Southern Andes. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033268.	1.2	6
154	The instability of a vortex tube in a weak external shear and strain. Physics of Fluids, 1998, 10, 530-532.	1.6	5
155	Comparisons of predicted bore evolutions by the Benjamin-Davis-Ono and Navier-Stokes equations for idealized mesopause thermal ducts. Journal of Geophysical Research, 2011, 116, .	3.3	5
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