Michael J Taylor

List of Publications by Year
in descending order

107 papers	4,006 citations	109137 35 h-index	138251 58 g-index
113 all docs	113 docs citations	113 times ranked	1430 citing authors

#	Article	IF	Citations
1	Mesosphere and Lower Thermosphere Changes Associated With the 2 July 2019 Total Eclipse in South America Over the Andes Lidar Observatory, Cerro Pachon, Chile. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	1.2	2
2	Cloud Formation From a Localized Water Release in the Upper Mesosphere: Indication of Rapid Cooling. Journal of Geophysical Research: Space Physics, 2021, 126, e2019JA027285.	0.8	7
3	Mesospheric Mountain Wave Activity in the Lee of the Southern Andes. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033268.	1.2	6
4	Evidence for Horizontal Blocking and Reflection of a Smallâ€Scale Gravity Wave in the Mesosphere. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031828.	1.2	4
5	Investigating an Unusually Large 28â€Day Oscillation in Mesospheric Temperature Over Antarctica Using Groundâ€Based and Satellite Measurements. Journal of Geophysical Research D: Atmospheres, 2019, 124, 8576-8593.	1.2	7
6	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
7	Regional Distribution of Mesospheric Smallâ€Scale Gravity Waves During DEEPWAVE. Journal of Geophysical Research D: Atmospheres, 2019, 124, 7069-7081.	1.2	12
8	First Groundâ€Based Conjugate Observations of Stable Auroral Red (SAR) Arcs. Journal of Geophysical Research: Space Physics, 2019, 124, 4658-4671.	0.8	12
9	Thermal structure of the mesopause region during the WADIS-2 rocket campaign. Atmospheric Chemistry and Physics, 2019, 19, 77-88.	1.9	3
10	Simultaneous in situ measurements of small-scale structures in neutral, plasma, and atomic oxygen densities during the WADIS sounding rocket project. Atmospheric Chemistry and Physics, 2019, 19, 11443-11460.	1.9	11
11	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
12	Retrieval of intrinsic mesospheric gravity wave parameters using lidar and airglow temperature and meteor radar wind data. Atmospheric Measurement Techniques, 2019, 12, 5997-6015.	1.2	12
13	Investigating Gravity Waves in Polar Mesospheric Clouds Using Tomographic Reconstructions of AIM Satellite Imagery. Journal of Geophysical Research: Space Physics, 2018, 123, 955-973.	0.8	8
14	Unexpected Occurrence of Mesospheric Frontal Gravity Wave Events Over South Pole (90Â°S). Journal of Geophysical Research D: Atmospheres, 2018, 123, 160-173.	1.2	13
15	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
16	First Observed Temporal Development of a Noctilucent Cloud Ice Void. Geophysical Research Letters, 2018, 45, 10,003-10,010.	1.5	3
17	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
18	Seasonal Propagation Characteristics of MSTIDs Observed at High Latitudes Over Central Alaska Using the Poker Flat Incoherent Scatter Radar. Journal of Geophysical Research: Space Physics, 2018, 123, 5717-5737.	0.8	12

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19	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
20	Secondary gravity wave generation over New Zealand during the DEEPWAVE campaign. Journal of Geophysical Research D: Atmospheres, 2017, 122, 7834-7850.	1.2	44
21	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
22	New AIM/CIPS global observations of gravity waves near 50â€"55Âkm. Geophysical Research Letters, 2017, 44, 7044-7052.	1.5	18
23	Twin mesospheric bores observed over Brazilian equatorial region. Annales Geophysicae, 2016, 34, 91-96.	0.6	8
24	Evidence of dispersion and refraction of a spectrally broad gravity wave packet in the mesopause region observed by the Na lidar and Mesospheric Temperature Mapper above Logan, Utah. Journal of Geophysical Research D: Atmospheres, 2016, 121, 579-594.	1.2	26
25	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
26	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
27	Stratospheric Gravity Wave Fluxes and Scales during DEEPWAVE. Journals of the Atmospheric Sciences, 2016, 73, 2851-2869.	0.6	58
28	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
29	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
30	Simultaneous observations of the phaseâ€locked 2 day wave at Adelaide, Cerro Pachon, and Darwin. Journal of Geophysical Research D: Atmospheres, 2015, 120, 1808-1825.	1.2	7
31	Investigating seasonal gravity wave activity in the summer polar mesosphere. Journal of Atmospheric and Solar-Terrestrial Physics, 2015, 127, 8-20.	0.6	15
32	Coordinated investigation of midlatitude upper mesospheric temperature inversion layers and the associated gravity wave forcing by Na lidar and Advanced Mesospheric Temperature Mapper in Logan, Utah. Journal of Geophysical Research D: Atmospheres, 2014, 119, 3756-3769.	1.2	27
33	Advanced mesospheric temperature mapper for high-latitude airglow studies. Applied Optics, 2014, 53, 5934.	0.9	61
34	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
35	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
36	Concentric gravity waves in polar mesospheric clouds from the Cloud Imaging and Particle Size experiment. Journal of Geophysical Research D: Atmospheres, 2014, 119, 5115-5127.	1.2	21

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37	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
38	Morphology of polar mesospheric clouds as seen from space. Journal of Atmospheric and Solar-Terrestrial Physics, 2013, 104, 234-243.	0.6	21
39	Case study of an ice void structure in polar mesospheric clouds. Journal of Atmospheric and Solar-Terrestrial Physics, 2013, 104, 224-233.	0.6	13
40	Numerical and statistical evidence for longâ€range ducted gravity wave propagation over Halley, Antarctica. Geophysical Research Letters, 2013, 40, 4813-4817.	1.5	14
41	Three-dimensional tomographic reconstruction of mesospheric airglow structures using two-station ground-based image measurements. Applied Optics, 2012, 51, 963.	0.9	2
42	On the nature of shortâ€period mesospheric gravity wave propagation over Halley, Antarctica. Journal of Geophysical Research, 2012, 117, .	3.3	22
43	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
44	The evolution of a breaking mesospheric bore wave packet. Journal of Geophysical Research, 2011, 116, .	3.3	12
45	Analysis of gravity waves structures visible in noctilucent cloud images. Journal of Atmospheric and Solar-Terrestrial Physics, 2011, 73, 2082-2090.	0.6	37
46	High-Latitude Gravity Wave Measurements in Noctilucent Clouds and Polar Mesospheric Clouds. , 2011, , 93-105.		23
47	Radar, lidar, and optical observations in the polar summer mesosphere shortly after a space shuttle launch. Journal of Geophysical Research, 2010, 115, .	3.3	18
48	Mesospheric wave signatures and equatorial plasma bubbles: A case study. Journal of Geophysical Research, 2010, 115, .	3.3	22
49	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. Journal of Geophysical Research, 2010, 115, .	3.3	58
50	OH and OI airglow layer modulation by ducted shortâ€period gravity waves: Effects of trapping altitude. Journal of Geophysical Research, 2010, 115, .	3.3	32
51	Dominant winter-time mesospheric wave signatures over a low latitude station, Hawaii (20.8Â°N): An investigation. Journal of Earth System Science, 2010, 119, 259-264.	0.6	5
52	Analysis and modeling of ducted and evanescent gravity waves observed in the Hawaiian airglow. Annales Geophysicae, 2009, 27, 3213-3224.	0.6	36
53	Characteristics of mesospheric gravity waves near the magnetic equator, Brazil, during the SpreadFEx campaign. Annales Geophysicae, 2009, 27, 461-472.	0.6	62
54	Simultaneous observation of ionospheric plasma bubbles and mesospheric gravity waves during the SpreadFEx Campaign. Annales Geophysicae, 2009, 27, 1477-1487.	0.6	115

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55	Noctilucent cloud in the western Arctic in 2005: Simultaneous lidar and camera observations and analysis. Journal of Atmospheric and Solar-Terrestrial Physics, 2009, 71, 446-452.	0.6	18
56	The Aeronomy of Ice in the Mesosphere (AIM) mission: Overview and early science results. Journal of Atmospheric and Solar-Terrestrial Physics, 2009, 71, 289-299.	0.6	179
57	Gravity wave observations in the summertime polar mesosphere from the Cloud Imaging and Particle Size (CIPS) experiment on the AIM spacecraft. Journal of Atmospheric and Solar-Terrestrial Physics, 2009, 71, 392-400.	0.6	56
58	Climatology of short-period mesospheric gravity waves over Halley, Antarctica (76Â°S, 27Â°W). Journal of Atmospheric and Solar-Terrestrial Physics, 2009, 71, 991-1000.	0.6	40
59	Critical level interaction of a gravity wave with background winds driven by a largeâ€scale wave perturbation. Journal of Geophysical Research, 2009, 114, .	3.3	9
60	First observation of an undular mesospheric bore in a Doppler duct. Annales Geophysicae, 2009, 27, 1399-1406.	0.6	33
61	Doppler ducting of short-period gravity waves by midlatitude tidal wind structure. Journal of Geophysical Research, 2007, 112, n/a-n/a.	3.3	29
62	A Very Active Sprite-Producing Storm Observed Over Argentina. Eos, 2007, 88, 117.	0.1	17
63	Seasonal oscillations in mesospheric temperatures at low-latitudes. Journal of Atmospheric and Solar-Terrestrial Physics, 2007, 69, 2367-2378.	0.6	10
64	Characteristics of wave induced oscillations in mesospheric O2emission intensity and temperatures. Geophysical Research Letters, 2006, 33, n/a-n/a.	1.5	20
65	An unusual mesospheric bore event observed at high latitudes over Antarctica. Geophysical Research Letters, 2006, 33, .	1.5	37
66	A novel joint space-wavenumber analysis of an unusual Antarctic gravity wave event. Geophysical Research Letters, 2006, 33, .	1.5	15
67	Strong electric fields from positive lightning strokes in the stratosphere. Geophysical Research Letters, 2005, 32, n/a-n/a.	1.5	13
68	High frequency atmospheric gravity-wave properties using Fe-lidar and OH-imager observations. Geophysical Research Letters, 2005, 32, .	1.5	6
69	Terdiurnal wave signatures in the upper mesospheric temperature and their association with the wind fields at low latitudes (20Â°N). Journal of Geophysical Research, 2005, 110, .	3.3	29
70	Climatology of short-period gravity waves observed over northern Australia during the Darwin Area Wave Experiment (DAWEX) and their dominant source regions. Journal of Geophysical Research, 2005, 110, .	3.3	44
71	Comparison of simultaneous Na lidar and mesospheric nightglow temperature measurements and the effects of tides on the emission layer heights. Journal of Geophysical Research, 2005, 110, .	3.3	45
72	Seasonal variations of the gravity wave momentum flux in the Antarctic mesosphere and lower thermosphere. Journal of Geophysical Research, 2004, 109, .	3.3	52

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73	Thunderstorm and lightning characteristics associated with sprites in Brazil. Geophysical Research Letters, 2004, 31, n/a-n/a.	1.5	25
74	A multidiagnostic investigation of the mesospheric bore phenomenon. Journal of Geophysical Research, 2003, 108, .	3.3	83
75	An investigation of gravity wave activity in the low-latitude upper mesosphere: Propagation direction and wind filtering. Journal of Geophysical Research, 2003, 108, .	3.3	77
76	Visual and lidar observations of noctilucent clouds above Logan, Utah, at 41.7Â°N. Journal of Geophysical Research, 2002, 107, ACL 2-1.	3.3	62
77	Statistical Characteristics of Sprite Halo Events Using Coincident Photometric and Imaging Data. Geophysical Research Letters, 2002, 29, 29-1.	1.5	42
78	Multiple wavelength optical observations of a long-lived meteor trail. Geophysical Research Letters, 2001, 28, 2779-2782.	1.5	13
79	Large amplitude perturbations in mesospheric OH Meinel and 87-Km Na lidar temperatures around the autumnal equinox. Geophysical Research Letters, 2001, 28, 1899-1902.	1.5	42
80	Mesospheric planetary waves at northern hemisphere fall equinox. Geophysical Research Letters, 2001, 28, 1903-1906.	1.5	29
81	Long-period wave signatures in mesospheric OH Meinel (6,2) band intensity and rotational temperature at mid-latitudes. Advances in Space Research, 2001, 27, 1171-1179.	1.2	36
82	An unusual airglow wave event observed at Cachoeira Paulista 23Â° S. Advances in Space Research, 2001, 27, 1749-1754.	1.2	30
83	Observing gravity wave activity in the mesopause region by means of airglow tomography. Advances in Space Research, 2000, 26, 903-906.	1.2	8
84	Terdiurnal oscillations in OH Meinel rotational temperatures for fall conditions at northern mid-latitude sites. Geophysical Research Letters, 2000, 27, 1799-1802.	1.5	44
85	Comparison of terdiurnal tidal oscillations in mesospheric OH rotational temperature and Na lidar temperature measurements at mid-latitudes for fall/spring conditions. Earth, Planets and Space, 1999, 51, 877-885.	0.9	39
86	Comparison of 1998 and 1999 Leonid Light Curve Morphology and Meteoroid Structure. Earth, Moon and Planets, 1998, 82/83, 351-367.	0.3	21
87	Preliminary Data on Variations of OH Airglow during the Leonid 1999 Meteor Storm. Earth, Moon and Planets, 1998, 82/83, 525-534.	0.3	1
88	Jet-Like Structures and Wake in Mg I (518 nm) Images of 1999 Leonid Storm Meteors. Earth, Moon and Planets, 1998, 82/83, 379-389.	0.3	8
89	Possible evidence of gravity wave coupling into the mid-latitude F region ionosphere during the SEEK Campaign. Geophysical Research Letters, 1998, 25, 1801-1804.	1.5	62
90	Observational limits for lidar, radar, and airglow imager measurements of gravity wave parameters. Journal of Geophysical Research, 1998, 103, 6427-6437.	3.3	59

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91	Long base-line measurements of short-period mesospheric gravity waves during the SEEK Campaign. Geophysical Research Letters, 1998, 25, 1797-1800.	1.5	21
92	Observational evidence of wave ducting and evanescence in the mesosphere. Journal of Geophysical Research, 1997, 102, 26301-26313.	3.3	115
93	High resolution OI (630 nm) image measurements of F-region depletion drifts during the GuarÃ¡ Campaign. Geophysical Research Letters, 1997, 24, 1699-1702.	1.5	60
94	Two-dimensional spectral analysis of mesospheric airglow image data. Applied Optics, 1997, 36, 7374.	2.1	185
95	Image measurements of short-period gravity waves at equatorial latitudes. Journal of Geophysical Research, 1997, 102, 26283-26299.	3.3	138
96	A two-dimensional spectral analysis of short period gravity waves imaged in the OI(557.7 nm) and near infra red OH nightglow emissions over Arecibo, Puerto Rico. Geophysical Research Letters, 1995, 22, 2473-2476.	1.5	37
97	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
98	All-sky measurements of short period waves imaged in the OI(557.7 nm), Na(589.2 nm) and near infrared OH and O2(0,1) nightglow emissions during the ALOHA-93 Campaign. Geophysical Research Letters, 1995, 22, 2833-2836.	1.5	160
99	Height measurements of OI(557.7 nm) gravity wave structure over the Hawaiian Islands during ALOHA-93. Geophysical Research Letters, 1995, 22, 2881-2884.	1.5	9
100	An investigation of intrinsic gravity wave signatures using coordinated lidar and nightglow image measurements. Geophysical Research Letters, 1995, 22, 2853-2856.	1.5	53
101	Spectrometric and imaging measurements of a spectacular gravity wave event observed during the ALOHA-93 Campaign. Geophysical Research Letters, 1995, 22, 2849-2852.	1.5	115
102	Measurements of noctilucent cloud heights: a bench mark for changes in the mesosphere. Journal of Atmospheric and Solar-Terrestrial Physics, 1994, 56, 461-466.	0.9	10
103	Evidence of preferential directions for gravity wave propagation due to wind filtering in the middle atmosphere. Journal of Geophysical Research, 1993, 98, 6047-6057.	3.3	101
104	Identification of a thunderstorm as a source of short period gravity waves in the upper atmospheric nightglow emissions. Planetary and Space Science, 1988, 36, 975-985.	0.9	176
105	The effect of atmospheric screening on the visible border of noctilucent clouds. Journal of Atmospheric and Solar-Terrestrial Physics, 1984, 46, 363-372.	0.9	11
106	An Investigation of Thunderstorms as a Source of Short Period Mesospheric Gravity Waves. Geophysical Monograph Series, 0, , 177-184.	0.1	11
107	Recent progress in mesospheric gravity wave studies using nigthglow imaging system. Revista Brasileira De Geofisica, 0, 25, 49-58.	0.2	12