Iain Reid

List of Publications by Year
in descending order

134	4,188	136950	133252
papers	citations	32 h-index	59 g-index

140	140	140	1724
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	An empirical model of the Earth's horizontal wind fields: HWM07. Journal of Geophysical Research, 2008, 113, .	3.3	448
2	HF Doppler Measurements of Mesospheric Gravity Wave Momentum Fluxes. Journals of the Atmospheric Sciences, 1983, 40, 1321-1333.	1.7	335
3	Analysis and interpretation of airglow and radar observations of quasi-monochromatic gravity waves in the upper mesosphere and lower thermosphere over Adelaide, Australia (35Â°S, 138Â°E). Journal of Atmospheric and Solar-Terrestrial Physics, 1999, 61, 461-478.	1.6	156
4	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.	3.3	148
5	Buckland Park all-sky interferometric meteor radar. Radio Science, 2004, 39, n/a-n/a.	1.6	146
6	Measurements of mesospheric gravity wave momentum fluxes and mean flow accelerations at Adelaide, Australia. Journal of Atmospheric and Solar-Terrestrial Physics, 1987, 49, 443-460.	0.9	121
7	Observations of mesospheric wind velocities: 2. Cross sections of power spectral density for 48â€“8 hours, 8â€“1 hours, and 1 hour to 10 min over 60â€“110 km for 1981. Radio Science, 1985, 20, 1383-1402.	1.6	108
8	VHF radar echoes observed in the summer and winter polar mesosphere over AndÃ¸ya, Norway. Journal of Geophysical Research, 1989, 94, 5199-5217.	3.3	86
9	A simple model of atmospheric radar backscatter: Description and application to the full correlation analysis of spaced antenna data. Radio Science, 1995, 30, 1263-1280.	1.6	78
10	Observations of mesospheric wind velocities: 1. Gravity wave horizontal scales and phase velocities determined from spaced wind observations. Radio Science, 1985, 20, 1363-1382.	1.6	74
11	Comparison of simultaneous wind measurements using colocated VHF meteor radar and MF spaced antenna radar systems. Radio Science, 1995, 30, 1245-1261.	1.6	70
12	Global-scale tidal variability during the PSMOS campaign of Juneâ€“August 1999: interaction with planetary waves. Journal of Atmospheric and Solar-Terrestrial Physics, 2002, 64, 1865-1896.	1.6	70
13	VHF radar measurements of the aspect sensitivity of the summer polar mesopause echoes over Andenes (69Â°N,16Â°E), Norway. Geophysical Research Letters, 1988, 15, 1259-1262.	4.0	64
14	Global-scale tidal structure in the mesosphere and lower thermosphere during the PSMOS campaign of Juneâ€“August 1999 and comparisons with the global-scale wave model. Journal of Atmospheric and Solar-Terrestrial Physics, 2002, 64, 1011-1035.	1.6	62
15	VHF radar measurements of momentum flux in the summer polar mesosphere over Andenes (69Â°N,16Â°E), Norway. Geophysical Research Letters, 1988, 15, 1263-1266.	4.0	56
16	Comparison of atmospheric parameters derived from meteor observations with CIRA. Radio Science, 2000, 35, 833-843.	1.6	55
17	Short-period fluctuations of the diurnal tide observed with low-latitude MF and meteor radars during CADRE: Evidence for gravity wave/tidal interactions. Journal of Geophysical Research, 1997, 102, 26225-26238.	3.3	51
18	Gravity wave motions in the upper middle atmosphere (60â€“110 km). Journal of Atmospheric and Solar-Terrestrial Physics, 1986, 48, 1057-1072.	0.9	50

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19	Multiple-frequency studies of the high-latitude summer mesosphere : implications for scattering processes. Journal of Atmospheric and Solar-Terrestrial Physics, 1990, 52, 907-926.	0.9	50
20	Longitudinal variations in planetary wave activity in the equatorial mesosphere. Earth, Planets and Space, 1999, 51, 665-674.	2.5	50
21	First VHF radar measurements of mesopause summer echoes at midâ€latitudes. Geophysical Research Letters, 1989, 16, 135-138.	4.0	47
22	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
23	High-Altitude (0â€“100 km) Global Atmospheric Reanalysis System: Description and Application to the 2014 Austral Winter of the Deep Propagating Gravity Wave Experiment (DEEPWAVE). Monthly Weather Review, 2018, 146, 2639-2666.	1.4	47
24	Measurements of the horizontal scales and phase velocities of short period mesospheric gravity waves at Adelaide, Australia. Journal of Atmospheric and Solar-Terrestrial Physics, 1987, 49, 1033-1048.	0.9	46
25	VHF radar observations of the dynamics of the summer polar mesopause region. Journal of Geophysical Research, 1990, 95, 10005-10016.	3.3	46
26	Mesospheric gravity waves at Saskatoon (52Â°N), Kyoto (35Â°N), and Adelaide (35Â°S). Journal of Geophysical Research, 1996, 101, 7005-7012.	3.3	45
27	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.	3.3	45
28	Antarctic mesospheric temperature estimation using the Davis mesosphere-stratosphere-troposphere radar. Journal of Geophysical Research, 2006, 111, .	3.3	43
29	Some aspects of Doppler radar measurements of the mean and fluctuating components of the wind field in the upper middle atmosphere. Journal of Atmospheric and Solar-Terrestrial Physics, 1987, 49, 467-484.	0.9	36
30	A VHF boundary layer radar: First results. Radio Science, 1998, 33, 845-860.	1.6	36
31	First polar mesosphere summer echoes observed at Davis, Antarctica (68.6Â°S). Geophysical Research Letters, 2004, 31, .	4.0	36
32	Coordinated radar observations of atmospheric diurnal tides in equatorial regions. Earth, Planets and Space, 1999, 51, 579-592.	2.5	33
33	Characteristics of the wind, temperature and PMSE field above Davis, Antarctica. Journal of Atmospheric and Solar-Terrestrial Physics, 2006, 68, 418-435.	1.6	33
34	Intraseasonal oscillations of the zonal wind near the mesopause observed with medium-frequency and meteor radars in the tropics. Journal of Geophysical Research, 2004, 109, n/a-n/a.	3.3	32
35	Antarctic meteor observations using the Davis MST and meteor radars. Advances in Space Research, 2008, 42, 143-154.	2.6	32
36	Observations of the phaseâ€locked 2 day wave over the Australian sector using mediumâ€frequency radar and airglow data. Journal of Geophysical Research, 2010, 115, .	3.3	32

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37	VHF radar observations of cat's-eye-like structures at mesopheric heights. Nature, 1987, 327, 43-45.	27.8	31
38	The new Adelaide medium frequency Doppler radar. Radio Science, 1995, 30, 1177-1189.	1.6	31
39	Mesospheric turbulent velocity estimation using the Buckland Park MF radar. Annales Geophysicae, 2001, 19, 1007-1017.	1.6	31
40	Meteor observations with an MF radar. Earth, Planets and Space, 1999, 51, 691-699.	2.5	30
41	Radar observtions of stratified layers in the mesosphere and lower thermosphere (50â€“100 km). Advances in Space Research, 1990, 10, 7-19.	2.6	29
42	Longâ€term variability of mean winds in the mesosphere and lower thermosphere at low latitudes. Journal of Geophysical Research, 2012, 117, .	3.3	29
43	A case study of the mesospheric 6.5â€day wave observed by radar systems. Journal of Geophysical Research, 2008, 113, .	3.3	27
44	The effects of deionization processes on meteor radar diffusion coefficients below 90 km. Journal of Geophysical Research D: Atmospheres, 2014, 119, 10027-10043.	3.3	27
45	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.	3.3	26
46	Gravity wave flux retrievals using meteor radars. Geophysical Research Letters, 2010, 37, .	4.0	25
47	Seasonal variations of the nighttime O(¹S) and OH (8â€3) airglow intensity at Adelaide, Australia. Journal of Geophysical Research D: Atmospheres, 2014, 119, 6991-7013.	3.3	25
48	The Buckland Park MF radar: routine observation scheme and velocity comparisons. Annales Geophysicae, 2004, 22, 3815-3828.	1.6	24
49	Interferometric meteor radar phase calibration using meteor echoes. Radio Science, 2004, 39, n/a-n/a.	1.6	24
50	MF and HF radar techniques for investigating the dynamics and structure of the 50 to 110Âkm height region: a review. Progress in Earth and Planetary Science, 2015, 2, .	3.0	24
51	MF Doppler and spaced antenna radar measurements of upper middle atmosphere winds. Journal of Atmospheric and Solar-Terrestrial Physics, 1988, 50, 117-134.	0.9	23
52	Spaced antenna analysis of atmospheric radar backscatter model data. Radio Science, 1995, 30, 1417-1433.	1.6	23
53	Comparisons of full correlation analysis (FCA) and imaging Doppler interferometry (IDI) winds using the Buckland Park MF radar. Annales Geophysicae, 2004, 22, 3829-3842.	1.6	23
54	Response of neutral mesospheric density to geomagnetic forcing. Geophysical Research Letters, 2017, 44, 8647-8655.	4.0	23

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55	Highâ€•and Middleâ€Latitude Neutral Mesospheric Density Response to Geomagnetic Storms. Geophysical Research Letters, 2018, 45, 436-444.	4.0	23
56	Trends of airglow imager observations near Adelaide, Australia. Geophysical Research Letters, 1997, 24, 587-590.	4.0	22
57	Differential absorption measurements of mesospheric and lower thermospheric electron densities using the Buckland Park MF radar. Journal of Atmospheric and Solar-Terrestrial Physics, 2002, 64, 2029-2042.	1.6	22
58	The effect of recombination and attachment on meteor radar diffusion coefficient profiles. Journal of Geophysical Research D: Atmospheres, 2013, 118, 3037-3043.	3.3	22
59	Multistatic meteor radar observations of gravity-waveâ€“tidal interaction over southern Australia. Atmospheric Measurement Techniques, 2019, 12, 4791-4812.	3.1	22
60	The 16-day waves in the mesosphere and lower thermosphere over Wuhan (30.6Â°N, 114.5Â°E) and Adelaide (35Â°S, 138Â°E). Advances in Space Research, 2005, 35, 2005-2010.	2.6	21
61	A southern hemisphere survey of meteor shower radiants and associated stream orbits using single station radar observations. Monthly Notices of the Royal Astronomical Society, 2009, 398, 350-356.	4.4	21
62	A method for estimating the height of a mesospheric density level using meteor radar. Geophysical Research Letters, 2015, 42, 6106-6111.	4.0	21
63	Some preliminary results obtained with the new Adelaide MF Doppler radar. Radio Science, 1995, 30, 1191-1203.	1.6	20
64	First observation of mesosphere response to the solar wind highâ€speed streams. Journal of Geophysical Research: Space Physics, 2017, 122, 9080-9088.	2.4	20
65	Equatorial dynamics observed by rocket, radar, and satellite during the CADRE/MALTED campaign: 2. Mean and wave structures, coherence, and variability. Journal of Geophysical Research, 1997, 102, 26191-26216.	3.3	19
66	All-sky interferometric meteor radar meteoroid speed estimation using the Fresnel transform. Annales Geophysicae, 2007, 25, 385-398.	1.6	18
67	A comparison of lower thermospheric winds derived from range spread and specular meteor trail echoes. Journal of Geophysical Research, 2012, 117, .	3.3	18
68	Stratospheric tropospheric wind profiling radars in the Australian network. Earth, Planets and Space, 2018, 70, .	2.5	18
69	VHF profiler observations of winds and waves in the troposphere during the Darwin Area Wave Experiment (DAWEX). Journal of Geophysical Research, 2004, 109, .	3.3	17
70	Meteor observations using the Davis mesosphere-stratosphere-troposphere radar. Journal of Geophysical Research, 2006, 111, .	3.3	17
71	Gravity wave generation by convection and momentum deposition in the mesosphereâ€lower thermosphere. Journal of Geophysical Research D: Atmospheres, 2013, 118, 6233-6245.	3.3	17
72	On the spaced antenna and imaging Doppler interferometer techniques. Radio Science, 1995, 30, 885-901.	1.6	16

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73	Occurrence characteristics of medium-scale gravity waves observed in OH and OI nightglow over Adelaide (34.5Â°S, 138.5Â°E). Journal of Geophysical Research, 2004, 109, .	3.3	16
74	Physical principles demonstrate that the biceps femoris muscle relative to the other hamstring muscles exerts the most force: implications for hamstring muscle strain injuries. Muscles, Ligaments and Tendons Journal, 2014, 4, 371-7.	0.3	16
75	Collision frequencies in the D-region. Journal of Atmospheric and Solar-Terrestrial Physics, 2002, 64, 2043-2054.	1.6	15
76	Mesospheric radar wind comparisons at high and middle southern latitudes. Earth, Planets and Space, 2018, 70, .	2.5	15
77	Momentum Flux Spectra of a Mountain Wave Event Over New Zealand. Journal of Geophysical Research D: Atmospheres, 2018, 123, 9980-9991.	3.3	15
78	Modeling and observing the effect of aerosols on meteor radar measurements of the atmosphere. Geophysical Research Letters, 2008, 35, .	4.0	14
79	An intense traveling airglow front in the upper mesosphereâ€“lower thermosphere with characteristics of a bore observed over Alice Springs, Australia, during a strong 2 day wave episode. Journal of Geophysical Research, 2012, 117, .	3.3	14
80	Climatology of the mesopause relative density using a global distribution of meteor radars. Atmospheric Chemistry and Physics, 2019, 19, 7567-7581.	4.9	14
81	Interferometer angleâ€ofâ€arrival determination using precalculated phases. Radio Science, 2017, 52, 1058-1066.	1.6	13
82	Observations and Modeling of Traveling Ionospheric Disturbance Signatures From an Australian Network of Oblique Angleâ€ofâ€Arrival Sounders. Radio Science, 2018, 53, 1089-1107.	1.6	13
83	On the measurement of gravity waves, tides and mean winds in the low and middle latitude mesosphere and thermosphere with MF radar. Advances in Space Research, 1996, 18, 131-140.	2.6	12
84	An investigation of biases in the full correlation analysis technique. Advances in Space Research, 1997, 20, 1269-1272.	2.6	12
85	Long-Period wind oscillations in the mesosphere and lower thermosphere at Yamagawa (32Â°N,131Â°E), Pontianak (0Â°N,109Â°E) and Christmas Island (2Â°N,157Â°W). Journal of Atmospheric and Solar-Terrestrial Physics, 2002, 64, 1055-1067.	1.6	12
86	Estimation of Mesospheric Densities at Low Latitudes Using the Kunming Meteor Radar Together With SABER Temperatures. Journal of Geophysical Research: Space Physics, 2018, 123, 3183-3195.	2.4	12
87	A comparison of meteor radar systems at Buckland Park. Radio Science, 1996, 31, 1313-1329.	1.6	11
88	Lunar tidal winds in the mesosphere over Wuhan and Adelaide. Advances in Space Research, 2005, 36, 2218-2222.	2.6	11
89	The variability of 558nm OI nightglow intensity measured over Adelaide, Australia. Advances in Space Research, 2007, 39, 1237-1247.	2.6	11
90	The possibility of using all-sky meteor radar to observe ionospheric E-region field-aligned irregularities. Science China Technological Sciences, 2019, 62, 1431-1437.	4.0	11

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91	Long-term variations of atmospheric wave activity in the mesosphere and lower thermosphere region over the equatorial Pacific. Journal of Atmospheric and Solar-Terrestrial Physics, 2002, 64, 1123-1129.	1.6	10
92	Observations of the new Camelopardalids meteor shower using a 38.9MHz radar at Mohe, China. Icarus, 2015, 253, 25-30.	2.5	10
93	First Observations of Antarctic Mesospheric Tidal Wind Responses to Recurrent Geomagnetic Activity. Geophysical Research Letters, 2021, 48, e2020GL089957.	4.0	10
94	Structural evolution of longâ€duration meteor trail irregularities driven by neutral wind. Journal of Geophysical Research: Space Physics, 2014, 119, 10,348.	2.4	9
95	Seasonal MLT-region nightglow intensities, temperatures, and emission heights at a Southern Hemisphere midlatitude site. Annales Geophysicae, 2017, 35, 567-582.	1.6	9
96	Trends and Variability in Vertical Winds in the Southern Hemisphere Summer Polar Mesosphere and Lower Thermosphere. Journal of Geophysical Research D: Atmospheres, 2019, 124, 11070-11085.	3.3	8
97	Design of Meteor and Ionospheric Irregularity Observation System and First Results. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	8
98	A comparison of tropospheric VHF Doppler beam steering and full correlation analysis measurements of aspect sensitivity. Radio Science, 2001, 36, 955-964.	1.6	7
99	Three-field photometer observations of short-period gravity wave intrinsic parameters in the 80 to 100 km height region. Journal of Geophysical Research, 2005, 110, .	3.3	7
100	Mutual coupling of antennas in a meteor radar interferometer. Radio Science, 2013, 48, 118-121.	1.6	7
101	Bias correction and overall performance of a VHF Spaced Antenna boundary layer profiler for operational weather forecasting. Journal of Atmospheric and Solar-Terrestrial Physics, 2014, 118, 16-24.	1.6	7
102	Observational evidence of highâ€altitude meteor trail from radar interferometer. Geophysical Research Letters, 2014, 41, 6583-6589.	4.0	7
103	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.	3.3	7
104	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.	3.3	7
105	Low Earth Orbit Object Observations Using the Buckland Park VHF Radar. Radio Science, 2020, 55, e2019RS006873.	1.6	7
106	Evidence of tilted layers in angle of arrival and Doppler beam steering power measurements. Radio Science, 2000, 35, 983-997.	1.6	6
107	Meteor radar response function: Application to the interpretation of meteor backscatter at medium frequency. Journal of Geophysical Research, 2004, 109, .	3.3	6
108	Mount Gambier (38Â°S, 141Â°E) prototype VHF wind profiler. Radio Science, 2005, 40, n/a-n/a.	1.6	6

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109	Australian Lidar Measurements of Aerosol Layers Associated with the 2015 Calbuco Eruption. Atmosphere, 2020, 11, 124.	2.3	6
110	Comparison between the Mesospheric Winds Observed by Two Collocated Meteor Radars at Low Latitudes. Remote Sensing, 2022, 14, 2354.	4.0	6
111	Meteor shower velocity estimates from single-station meteor radar: accuracy and precision. Monthly Notices of the Royal Astronomical Society, 2012, 425, 1473-1478.	4.4	5
112	Simulation of lidar measurements of gravity waves in the mesosphere. Journal of Geophysical Research, 1996, 101, 9509-9522.	3.3	4
113	MF radar measurements of sub-scale mesospheric momentum flux. Geophysical Research Letters, 2004, 31, n/a-n/a.	4.0	4
114	Global tidal mapping from observations of a radar campaign. Advances in Space Research, 2017, 60, 130-143.	2.6	4
115	VHF radar measurements of momentum flux using summer polar mesopause echoes. Earth, Planets and Space, 2018, 70, .	2.5	4
116	Climatology of Interhemispheric Mesopause Temperatures Using the Highâ€Łatitude and Middleâ€Łatitude Meteor Radars. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034301.	3.3	4
117	Australian Antarctic lidar facility. , 1994, , .		3
118	The spatial correlation analysis revisited. Advances in Space Research, 1997, 20, 1281-1284.	2.6	3
119	The diffusion of multiple ionic species in meteor trails. Journal of Atmospheric and Solar-Terrestrial Physics, 2014, 118, 119-123.	1.6	3
120	Atmospheric radar for the 0.5-110 km region. , 0, , .		2
121	On the Use of 50-MHz RASS in Thunderstorms. Journal of Atmospheric and Oceanic Technology, 2003, 20, 936-943.	1.3	2
122	A low-cost digital holographic imager for calibration and validation of cloud microphysics remote sensing. Proceedings of SPIE, 2016, , .	0.8	2
123	Mesospheric gravity wave momentum flux estimation using hybrid Doppler interferometry. Annales Geophysicae, 2017, 35, 733-750.	1.6	2
124	Error analyses of a multistatic meteor radar system to obtain a three-dimensional spatial-resolution distribution. Atmospheric Measurement Techniques, 2021, 14, 3973-3988.	3.1	2
125	Meteor radar observations of polar mesospheric summer echoes over Svalbard. Atmospheric Measurement Techniques, 2021, 14, 5015-5027.	3.1	2
126	Statistical Parameter Estimation for Observation Error Modelling: Application to Meteor Radars. , 2022, , 185-213.		2

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127	Reply [to â€œComment on Paper: â€˜Trends of airglow imager observations near Adelaide, Australiaâ€˜ by J. H. Hecht, R. E. Walterscheid, J. Woithe, L. Campbell, R. A. Vincent, and I. M. Reidâ€]. Geophysical Research Letters, 1998, 25, 23-23.	4.0	1
128	Observations of atmospheric waves in the tropical Pacific with radars and radiosondes. Advances in Space Research, 1999, 24, 1591-1600.	2.6	1
129	Mesospheric and lower thermospheric observations using the Buckland Park medium frequency radar. , 0, , .		1
130	Rainfall studies using co-located VHF and UHF wind profiling radars. , 2013, , .		1
131	A stratospheric tropospheric wind profiling radar for use in operational weather forecasting. , 2014, , .		1
132	Reply to Comment by Tsurutani et al. on â€œFirst Observation of Mesosphere Response to the Solar Wind Highâ€Speed Streamsâ€• Journal of Geophysical Research: Space Physics, 2019, 124, 8169-8171.	2.4	1
133	Response of a Polarimetric Antenna to Ionospherically Propagated Signals. IEEE Transactions on Antennas and Propagation, 2021, 69, 7846-7854.	5.1	1
134	Analysis of RF Signatures for Space Domain Awareness using VHF radar. , 2022, , .		1