Ch Jacobi

List of Publications by Year
in descending order

118 papers	2,799 citations	172207 29 h-index	243296 44 g-index
169 all docs	169 docs citations	169 times ranked	1273 citing authors

#	Article	IF	Citations
1	A global climatology of ionospheric irregularities derived from GPS radio occultation. Geophysical Research Letters, 2008, 35, .	1.5	160
2	Planetary waves in coupling the lower and upper atmosphere. Journal of Atmospheric and Solar-Terrestrial Physics, 2007, 69, 2083-2101.	0.6	124
3	Semidiurnal tidal signature in sporadic E occurrence rates derived from GPS radio occultation measurements at higher midlatitudes. Annales Geophysicae, 2009, 27, 2555-2563.	0.6	99
4	Global and Seasonal Variations of Stratospheric Gravity Wave Activity Deduced from theCHAMP/GPS Satellite. Journals of the Atmospheric Sciences, 2004, 61, 1610-1620.	0.6	92
5	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.	0.6	70
6	Planetary wave activity obtained from long-period (2â€"18 days) variations of mesopause region winds over Central Europe (52 Â°N, 15 Â°E). Journal of Atmospheric and Solar-Terrestrial Physics, 1998, 60, 81-93.	0.6	68
7	Climatology of the semidiurnal tide at 52â€"56Â°N from ground-based radar wind measurements 1985â€"1995. Journal of Atmospheric and Solar-Terrestrial Physics, 1999, 61, 975-991.	0.6	66
8	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.	0.6	62
9	Neutral air density variations during strong planetary wave activity in the mesopause region derived from meteor radar observations. Journal of Atmospheric and Solar-Terrestrial Physics, 2012, 74, 55-63.	0.6	62
10	Long-term trends and year-to-year variability of mid-latitude mesosphere/lower thermosphere winds. Journal of Atmospheric and Solar-Terrestrial Physics, 2006, 68, 1890-1901.	0.6	57
11	Comparison of mesospheric winds from a high-altitude meteorological analysis system and meteor radar observations during the boreal winters of 2009â€"2010 and 2012â€"2013. Journal of Atmospheric and Solar-Terrestrial Physics, 2017, 154, 132-166.	0.6	57
12	Variability of the quasi-2-day wave observed in the MLT region during the PSMOS campaign of Juneâ€"August 1999. Journal of Atmospheric and Solar-Terrestrial Physics, 2004, 66, 539-565.	0.6	54
13	Mesosphere/lower thermosphere prevailing wind model. Advances in Space Research, 2004, 34, 1755-1762.	1.2	52
14	6 year mean prevailing winds and tides measured by VHF meteor radar over Collm (51.3Â°N, 13.0Â°E). Journal of Atmospheric and Solar-Terrestrial Physics, 2012, 78-79, 8-18.	0.6	52
15	Enhancement of gravity wave activity observed during a major Southern Hemisphere stratospheric warming by CHAMP/GPS measurements. Geophysical Research Letters, 2004, 31, .	1.5	46
16	Exceptionally strong summer-like zonal wind reversal in the upper mesosphere during winter 2015/16. Annales Geophysicae, 2017, 35, 711-720.	0.6	46
17	Numerical simulation of tides, Rossby and Kelvin waves with the COMMA-LIM model. Advances in Space Research, 2003, 32, 863-868.	1.2	45
18	Response of the mesopause region dynamics to the February 2001 stratospheric warming. Journal of Atmospheric and Solar-Terrestrial Physics, 2003, 65, 843-855.	0.6	44

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19	Secondary Gravity Waves Generated by Breaking Mountain Waves Over Europe. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031662.	1.2	43
20	Meteor radar temperatures over Collm (51.3Â°N, 13Â°E). Advances in Space Research, 2008, 42, 1253-1258.	1.2	42
21	Comparison of mesopause region meteor radar winds, medium frequency radar winds and low frequency drifts over Germany. Advances in Space Research, 2009, 43, 247-252.	1.2	42
22	Midlatitude mesosphere/lower thermosphere meridional winds and temperatures measured with meteor radar. Advances in Space Research, 2007, 39, 1278-1283.	1.2	41
23	Quasi two-day-wave modulation of gravity wave flux and consequences for the planetary wave propagation in a simple circulation model. Journal of Atmospheric and Solar-Terrestrial Physics, 2006, 68, 283-292.	0.6	39
24	Retrieving horizontally resolved wind fields using multi-static meteor radar observations. Atmospheric Measurement Techniques, 2018, 11, 4891-4907.	1.2	36
25	Gravity wave momentum fluxes in the MLTâ€"Part I: Seasonal variation at Collm (51.3Â°N, 13.0Â°E). Journal of Atmospheric and Solar-Terrestrial Physics, 2011, 73, 904-910.	0.6	34
26	Stratospheric contraction caused by increasing greenhouse gases. Environmental Research Letters, 2021, 16, 064038.	2.2	33
27	Comparative study of interannual changes of the mean winds and gravity wave activity in the middle atmosphere over Japan, Central Europe and Canada. Journal of Atmospheric and Solar-Terrestrial Physics, 2002, 64, 1003-1010.	0.6	32
28	Meteor radar quasi 2-day wave observations over 10 years at Collm (51.3Â° N, 13.0Â° E). Atmospheric Chemistry and Physics, 2015, 15, 9917-9927.	1.9	31
29	Global distribution of the migrating terdiurnal tide seen in sporadic E occurrence frequencies obtained from GPS radio occultations. Earth, Planets and Space, 2014, 66, .	0.9	30
30	Long-term trends in the ionospheric response to solar extreme-ultraviolet variations. Annales Geophysicae, 2019, 37, 1141-1159.	0.6	30
31	Trends in MLT region winds and planetary waves, Collm (52Â° N, 15Â° E). Annales Geophysicae, 2008, 26, 1221-1232.	0.6	29
32	The quasi 2-day wave as seen from D1 LF wind measurements over central Europe (52 Â°N, 15 Â°E) at Collm. Journal of Atmospheric and Solar-Terrestrial Physics, 1997, 59, 1277-1286.	0.6	28
33	Sporadic <i>E</i> signatures revealed from multi-satellite radio occultation measurements. Advances in Radio Science, 0, 8, 225-230.	0.7	27
34	Solar EUV Irradiance Measurements by the Auto-Calibrating EUV Spectrometers (SolACES) Aboard the International Space Station (ISS). Solar Physics, 2014, 289, 1863-1883.	1.0	27
35	A long-term comparison of mesopause region wind measurements over Eastern and Central Europe. Journal of Atmospheric and Solar-Terrestrial Physics, 2005, 67, 229-240.	0.6	26
36	Dynamical response of low-latitude middle atmosphere to major sudden stratospheric warming events. Journal of Atmospheric and Solar-Terrestrial Physics, 2009, 71, 857-865.	0.6	26

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37	Structural changes in trend parameters of the MLT winds based on wind measurements at Obninsk (55Â°N, 37Â°E) and Collm (52Â°N, 15Â°E). Journal of Atmospheric and Solar-Terrestrial Physics, 2009, 71, 1547-1557.	0.6	25
38	Trends and Solar Irradiance Effects in the Mesosphere. Journal of Geophysical Research: Space Physics, 2019, 124, 1343-1360.	0.8	25
39	Semi-empirical model of middle atmosphere wind from the ground to the lower thermosphere. Advances in Space Research, 2009, 43, 239-246.	1.2	24
40	Interhemispheric differences of mesosphereâ€"lower thermosphere winds and tides investigated from three whole-atmosphere models and meteor radar observations. Atmospheric Chemistry and Physics, 2021, 21, 13855-13902.	1.9	24
41	The global distribution of gravity wave energy in the lower stratosphere derived from GPS data and gravity wave modelling: Attempt and challenges. Journal of Atmospheric and Solar-Terrestrial Physics, 2007, 69, 2238-2248.	0.6	23
42	Long-term variability of mid-latitude mesosphere-lower thermosphere winds over Collm (51Â°N, 13Â°E). Journal of Atmospheric and Solar-Terrestrial Physics, 2015, 136, 174-186.	0.6	23
43	Quarterdiurnal signature in sporadic E occurrence rates and comparison with neutral wind shear. Annales Geophysicae, 2019, 37, 273-288.	0.6	23
44	Six-day westward propagating wave in the maximum electron density of the ionosphere. Annales Geophysicae, 2003, 21, 1577-1588.	0.6	22
45	Long-term trends and decadal variability of upper mesosphere/lower thermosphere gravity waves at midlatitudes. Journal of Atmospheric and Solar-Terrestrial Physics, 2014, 118, 90-95.	0.6	22
46	Enhanced internal gravity wave activity and breaking over the northeastern Pacificâ€"eastern Asian region. Atmospheric Chemistry and Physics, 2015, 15, 13097-13112.	1.9	22
47	Heat transport pathways into the Arctic and their connections to surface air temperatures. Atmospheric Chemistry and Physics, 2019, 19, 3927-3937.	1.9	22
48	Analysis of Gravity Waves from Radio Occultation Measurements. , 2003, , 479-484.		22
49	Radar observations of the quarterdiurnal tide at midlatitudes: Seasonal and long-term variations. Journal of Atmospheric and Solar-Terrestrial Physics, 2017, 163, 70-77.	0.6	21
50	Mesosphere/lower thermosphere wind measurements over Europe in summer 1998. Journal of Atmospheric and Solar-Terrestrial Physics, 2001, 63, 1017-1031.	0.6	20
51	Long-term trends, their changes, and interannual variability of Northern Hemisphere midlatitude MLT winds. Journal of Atmospheric and Solar-Terrestrial Physics, 2012, 75-76, 81-91.	0.6	20
52	Characterization of a Double Mesospheric Bore Over Europe. Journal of Geophysical Research: Space Physics, 2017, 122, 9738-9750.	0.8	20
53	A piecewise linear model for detecting climatic trends and their structural changes with application to mesosphere/lower thermosphere winds over Collm, Germany. Journal of Geophysical Research, 2010, 115, .	3.3	19
54	EUV-TEC proxy to describe ionospheric variability using satellite-borne solar EUV measurements: First results. Advances in Space Research, 2011, 47, 1578-1584.	1.2	19

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55	Possible planetary wave coupling between the stratosphere and ionosphere by gravity wave modulation. Journal of Atmospheric and Solar-Terrestrial Physics, 2012, 75-76, 71-80.	0.6	19
56	On the longitudinal structure of the transient day-to-day variation of the semidiurnal tide in the mid-latitude lower thermosphere âˆ’ I. Winter season. Annales Geophysicae, 2001, 19, 545-562.	0.6	18
57	Longitude variability of the solar semidiurnal tide in the lower thermosphere through assimilation of ground- and space-based wind measurements. Journal of Geophysical Research, 2003, 108, .	3.3	18
58	Influence of the spatial distribution of gravity wave activity on the middle atmospheric dynamics. Atmospheric Chemistry and Physics, 2016, 16, 15755-15775.	1.9	18
59	Forcing mechanisms of the terdiurnal tide. Atmospheric Chemistry and Physics, 2018, 18, 15725-15742.	1.9	17
60	The winter mesopause wind field over Central Europe and its response to stratospheric warmings as measured by LF D1 wind measurements at collm, Germany. Advances in Space Research, 1997, 20, 1223-1226.	1.2	15
61	Some results of S-transform analysis of the transient planetary-scale wind oscillations in the lower thermosphere. Earth, Planets and Space, 1999, 51, 711-717.	0.9	15
62	Terdiurnal signatures in sporadic <i>E</i> layers at midlatitudes. Advances in Radio Science, 0, 11, 333-339.	0.7	15
63	Delayed response of the global total electron content to solar EUV variations. Advances in Radio Science, 0, 14, 175-180.	0.7	15
64	Quasi-two-day wave in an unstable summer atmosphere - some numerical results on excitation and propagation. Annales Geophysicae, 2004, 22, 1917-1929.	0.6	14
65	Morphology of atmospheric refraction index variations at different altitudes from GPS/MET satellite observations. Journal of Atmospheric and Solar-Terrestrial Physics, 2004, 66, 427-435.	0.6	14
66	Migrating Semidiurnal Tide During the September Equinox Transition in the Northern Hemisphere. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033822.	1.2	13
67	Delayed response of the ionosphere to solar EUV variability. Advances in Radio Science, 0, 16, 149-155.	0.7	13
68	Origin and development of vertical propagating oscillations with periods of planetary waves in the ionospheric F region. Physics and Chemistry of the Earth, Part C: Solar, Terrestrial and Planetary Science, 2001, 26, 387-393.	0.2	12
69	Mesospheric Temperature During the Extreme Midlatitude Noctilucent Cloud Event on 18/19 July 2016. Journal of Geophysical Research D: Atmospheres, 2018, 123, 13,775.	1.2	12
70	Nonlinear forcing mechanisms of the migrating terdiurnal solar tide and their impact on the zonal mean circulation. Annales Geophysicae, 2019, 37, 943-953.	0.6	12
71	Coupling From the Middle Atmosphere to the Exobase: Dynamical Disturbance Effects on Light Chemical Species. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028331.	0.8	12
72	Ionospheric response to solar EUV variations: Preliminary results. Advances in Radio Science, 0, 16, 157-165.	0.7	12

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73	Spatial and seasonal effects on the delayed ionospheric response to solar EUV changes. Annales Geophysicae, 2020, 38, 149-162.	0.6	11
74	The 8-h tide in the mesosphere and lower thermosphere over Collm (51.3Â° N; 13.0Â° E), 2004â€“2011. Advances in Radio Science, 0, 10, 265-270.	0.7	11
75	Tidal wind shear observed by meteor radar and comparison with sporadic E occurrence rates based on GPS radio occultation observations. Advances in Radio Science, 0, 17, 213-224.	0.7	11
76	Mesopause region semidiurnal tide over Europe as seen from ground-based wind measurements. Advances in Space Research, 1999, 24, 1545-1548.	1.2	10
77	Verification of the mesospheric winds within the Canadian Middle Atmosphere Model Data Assimilation System using radar measurements. Journal of Geophysical Research, 2011, 116, .	3.3	10
78	Where does the Thermospheric Ionospheric GEospheric Research (TIGER) Program go?. Advances in Space Research, 2015, 56, 1547-1577.	1.2	10
79	Forcing mechanisms of the 6â€‰h tide in the mesosphere/lower thermosphere. Advances in Radio Science, 0, 16, 141-147.	0.7	10
80	Quasi-biennial and decadal variability obtained from long-term measurements of nighttime radio wave reflection heights over Central Europe. Advances in Space Research, 2003, 32, 1701-1706.	1.2	9
81	Some anomalies of mesosphere/lower thermosphere parameters during the recent solar minimum. Advances in Radio Science, 0, 9, 343-348.	0.7	9
82	Meteor radar measurements of mean winds and tides over Collm (51.3Â° N, 13Â° E) and comparison with LF drift measurements 2005â€“2007. Advances in Radio Science, 0, 9, 335-341.	0.7	9
83	On the influence of zonal gravity wave distributions on the Southern Hemisphere winter circulation. Annales Geophysicae, 2017, 35, 785-798.	0.6	9
84	Longitudinal MLT wind structure at higher mid-latitudes as seen by meteor radars at central and Eastern Europe (13Â°E/49Â°E). Advances in Space Research, 2019, 63, 3154-3166.	1.2	9
85	Role of eddy diffusion in the delayed ionospheric response to solar flux changes. Annales Geophysicae, 2021, 39, 641-655.	0.6	9
86	Meteor heights during the recent solar minimum. Advances in Radio Science, 0, 12, 161-165.	0.7	9
87	Derivation of gravity wave intrinsic parameters and vertical wavelength using a single scanning OH(3-1) airglow spectrometer. Atmospheric Measurement Techniques, 2018, 11, 2937-2947.	1.2	8
88	Effect of latitudinally displaced gravity wave forcing in the lower stratosphere on the polar vortex stability. Annales Geophysicae, 2019, 37, 507-523.	0.6	8
89	Variability of Gravity Wave Effects on the Zonal Mean Circulation and Migrating Terdiurnal Tide as Studied With the Middle and Upper Atmosphere Model (MUAM2019) Using a Nonlinear Gravity Wave Scheme. Frontiers in Astronomy and Space Sciences, 2020, 7, .	1.1	8
90	Parameters of internal gravity waves in the mesosphere-lower thermosphere region derived from meteor radar wind measurements. Annales Geophysicae, 2005, 23, 3431-3437.	0.6	7

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91	Mesospheric wind diurnal tides within the Canadian Middle Atmosphere Model Data Assimilation System. Journal of Atmospheric and Solar-Terrestrial Physics, 2012, 74, 24-43.	0.6	7
92	Behaviour of monthly tides from meteor radar winds at 22.7Â°S during declining phases of 23 and 24 solar cycles. Journal of Atmospheric and Solar-Terrestrial Physics, 2020, 205, 105298.	0.6	7
93	Ionospheric response to solar extreme ultraviolet radiation variations: comparison based on CTIPe model simulations and satellite measurements. Annales Geophysicae, 2021, 39, 341-355.	0.6	7
94	Diverse Dynamical Response to Orographic Gravity Wave Drag Hotspotsâ€"A Zonal Mean Perspective. Geophysical Research Letters, 2021, 48, e2021GL093305.	1.5	7
95	Forcing mechanisms of the migrating quarterdiurnal tide. Annales Geophysicae, 2020, 38, 527-544.	0.6	7
96	On the intermittency of orographic gravity wave hotspots and its importance for middle atmosphere dynamics. Weather and Climate Dynamics, 2020, 1, 481-495.	1.2	7
97	Long-term studies of mesosphere and lower-thermosphere summer length definitions based on mean zonal wind features observed for more than one solar cycle at middle and high latitudes in the Northern Hemisphere. Annales Geophysicae, 2022, 40, 23-35.	0.6	7
98	A possible connection of mid-latitude mesosphere/lower thermosphere zonal winds and the southern oscillation. Physics and Chemistry of the Earth, 2002, 27, 571-577.	1.2	6
99	Impact of local gravity wave forcing in the lower stratosphere on the polar vortex stability: effect of longitudinal displacement. Annales Geophysicae, 2020, 38, 95-108.	0.6	5
100	Mesospheric Q2DW Interactions With Four Migrating Tides at 53Â°N Latitude: Zonal Wavenumber Identification Through Dualâ€Station Approaches. Geophysical Research Letters, 2021, 48, e2020GL092237.	1.5	5
101	The year-to-year variability of the autumn transition dates in the mesosphere/lower thermosphere wind regime and its coupling with the dynamics of the stratosphere and troposphere. Journal of Atmospheric and Solar-Terrestrial Physics, 2015, 122, 9-17.	0.6	4
102	Horizontal Temperature Fluxes in the Arctic in CMIP5 Model Results Analyzed with Self-Organizing Maps. Atmosphere, 2020, 11, 251.	1.0	4
103	A case study of a ducted gravity wave event over northern Germany using simultaneous airglow imaging and wind-field observations. Annales Geophysicae, 2022, 40, 179-190.	0.6	4
104	Frequency spectra of horizontal winds in the mesosphere and lower thermosphere region from multistatic specular meteor radar observations during the SIMONe 2018 campaign. Earth, Planets and Space, 2022, 74, .	0.9	4
105	Some features of the day-to-day MLT wind variability in winter 2017â€"2018 as seen with a European/Siberian meteor radar network. Advances in Space Research, 2020, 65, 1529-1543.	1.2	3
106	EUV-TEC proxy to describe ionospheric variability using satellite-borne solar EUV measurements. Advances in Radio Science, 0, 10, 259-263.	0.7	3
107	El NiÃ±o influence on the mesosphere/lower thermosphere circulation at midlatitudes as seen by a VHF meteor radar at Collm (51.3 Â°â€¯N, 13 Â°â€¯E). Advances in Radio Science, 0, 15, 199-206.	0.7	3
108	Connection between the length of day and wind measurements in the mesosphere and lower thermosphere at mid- and high latitudes. Annales Geophysicae, 2019, 37, 1-14.	0.6	2

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109	Amplitude modulation of the semidiurnal tide based on MLT wind measurements with a European/Siberian meteor radar network in October â€“ December 2017. Advances in Space Research, 2020, 66, 631-645.	1.2	2
110	Seasonal and inter-annual variability of the quasi 2 day wave over Collm (51.3Â° N, 13Â° E) as obtained from VHF meteor radar measurements. Advances in Radio Science, 0, 12, 205-210.	0.7	2
111	Meteor radar observations of mesopause region long-period temperature oscillations. Advances in Radio Science, 0, 14, 169-174.	0.7	2
112	Statistical Parameter Estimation for Observation Error Modelling: Application to Meteor Radars. , 2022, , 185-213.		2
113	Long-period meteor radar temperature variations over Collm (51Â°N, 13Â°E) and Kazan (56Â°N, 49Â°E). Advances in Space Research, 2021, 67, 3250-3259.	1.2	1
114	Modeling Of The Delayed Ionospheric Response With The TIE-GCM Model. , 2020, , .		1
115	Delayed ionospheric response to solar extreme ultraviolet radiation variations: A modeling approach. Advances in Space Research, 2022, 69, 2460-2476.	1.2	1
116	Influence of geomagnetic disturbances on mean winds and tides in the mesosphere/lower thermosphere at midlatitudes. Advances in Radio Science, 0, 19, 185-193.	0.7	1
117	Mutual Interference of Local Gravity Wave Forcings in the Stratosphere. Atmosphere, 2020, 11, 1249.	1.0	0
118	Extreme ultraviolet (EUV) solar spectral irradiance (SSI) for ionospheric application â€“ history and contemporary state-of-art. Advances in Radio Science, 0, 12, 251-260.	0.7	0