

Herman Wj Russchenberg

List of Publications by Year in descending order

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92
papers

2,057
citations

331670

21
h-index

254184

43
g-index

96
all docs

96
docs citations

96
times ranked

2323
citing authors

#	ARTICLE	IF	CITATIONS
1	Cloudnet. Bulletin of the American Meteorological Society, 2007, 88, 883-898.	3.3	477
2	RESEARCH CAMPAIGN: The Convective and Orographically Induced Precipitation Study. Bulletin of the American Meteorological Society, 2008, 89, 1477-1486.	3.3	194
3	Remote Sensing of Droplet Number Concentration in Warm Clouds: A Review of the Current State of Knowledge and Perspectives. Reviews of Geophysics, 2018, 56, 409-453.	23.0	185
4	The Convective and Orographically Induced Precipitation Study (COPS): the scientific strategy, the field phase, and research highlights. Quarterly Journal of the Royal Meteorological Society, 2011, 137, 3-30.	2.7	181
5	Retrieval of information about turbulence in rain by using Doppler-polarimetric Radar. IEEE Transactions on Microwave Theory and Techniques, 2005, 53, 444-450.	4.6	77
6	Vertical profiles of aerosol mass concentration derived by unmanned airborne in situ and remote sensing instruments during dust events. Atmospheric Measurement Techniques, 2018, 11, 2897-2910.	3.1	50
7	Backscattering by and propagation through the melting layer of precipitation: a new polarimetric model. IEEE Transactions on Geoscience and Remote Sensing, 1996, 34, 3-14.	6.3	49
8	Estimation of Specific Differential Phase and Differential Backscatter Phase From Polarimetric Weather Radar Measurements of Rain. IEEE Geoscience and Remote Sensing Letters, 2011, 8, 988-992.	3.1	45
9	Performance of high-resolution X-band radar for rainfall measurement in The Netherlands. Hydrology and Earth System Sciences, 2010, 14, 205-221.	4.9	44
10	Ground-Based Atmospheric Remote Sensing in the Netherlands: European Outlook. IEICE Transactions on Communications, 2005, E88-B, 2252-2258.	0.7	38
11	Advances in Continuously Profiling the Thermodynamic State of the Boundary Layer: Integration of Measurements and Methods. Journal of Atmospheric and Oceanic Technology, 2008, 25, 1251-1266.	1.3	36
12	Combined Observational and Model Investigations of the Z ² -LWC Relationship in Stratocumulus Clouds. Journal of Applied Meteorology and Climatology, 2008, 47, 591-606.	1.5	36
13	Coherent Scattering of Microwaves by Particles: Evidence from Clouds and Smoke. Journals of the Atmospheric Sciences, 2001, 58, 1091-1102.	1.7	35
14	Estimating effective radius and liquid water content from radar and lidar based on the CLARE98 data-set. Physics and Chemistry of the Earth, 2000, 25, 1057-1062.	0.3	33
15	Cloud effective particle size and water content profile retrievals using combined lidar and radar observations: 2. Comparison with IR radiometer and in situ measurements of ice clouds. Journal of Geophysical Research, 2001, 106, 27449-27464.	3.3	30
16	Precipitation Measurement at CESAR, the Netherlands. Journal of Hydrometeorology, 2010, 11, 1322-1329.	1.9	29
17	Effective permittivity of and scattering from wet snow and ice droplets at weather radar wavelengths. IEEE Transactions on Antennas and Propagation, 1990, 38, 1317-1325.	5.1	26
18	A New Technique to Categorize and Retrieve the Microphysical Properties of Ice Particles above the Melting Layer Using Radar Dual-Polarization Spectral Analysis. Journal of Atmospheric and Oceanic Technology, 2008, 25, 482-497.	1.3	26

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19	Evaluation of ground-based remotely sensed liquid water cloud properties using shortwave radiation measurements. Atmospheric Research, 2010, 96, 366-377.	4.1	24
20	A Pulse Compression Waveform for Weather Radars With Solid-State Transmitters. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 2026-2030.	3.1	23
21	First measurements with TARA; An S-Band transportable atmospheric radar. Physics and Chemistry of the Earth, 2000, 25, 995-998.	0.3	21
22	Improved Polarimetric Calibration for Atmospheric Radars. Journal of Atmospheric and Oceanic Technology, 2002, 19, 1968-1977.	1.3	21
23	UAV-Aided Weather Radar Calibration. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 10362-10375.	6.3	21
24	Observing ice particle growth along fall streaks in mixed-phase clouds using spectral polarimetric radar data. Atmospheric Chemistry and Physics, 2018, 18, 7843-7862.	4.9	20
25	Doppler-Polarimetric Weather Radar: Returns from Wide Spread Precipitation. Telecommunications and Radio Engineering (English Translation of Elektrosvyaz and Radiotekhnika), 2007, 66, 715-727.	0.4	20
26	Dual-Polarization Spectral Analysis for Retrieval of Effective Raindrop Shapes. Journal of Atmospheric and Oceanic Technology, 2006, 23, 1682-1695.	1.3	17
27	Polarimetric Bias Correction of Practical Planar Scanned Antennas for Meteorological Applications. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 1488-1504.	6.3	17
28	Application of a Simple Adaptive Estimator for an Atmospheric Doppler Radar. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 115-127.	6.3	14
29	Narrow-Band Clutter Mitigation in Spectral Polarimetric Weather Radar. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 4655-4667.	6.3	12
30	Cloud boundary height measurements using lidar and radar. Physics and Chemistry of the Earth, 2000, 25, 129-134.	0.3	11
31	Radar Target and Moving Clutter Separation Based on the Low-Rank Matrix Optimization. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 4765-4780.	6.3	11
32	A new method to separate ground clutter and atmospheric reflections in the case of similar Doppler velocities. IEEE Transactions on Geoscience and Remote Sensing, 2002, 40, 239-246.	6.3	10
33	Validation of liquid cloud property retrievals from SEVIRI using ground-based observations. Geophysical Research Letters, 2008, 35, .	4.0	10
34	Overview of Research and Networking with Ground based Remote Sensing for Atmospheric Profiling at the Cabauw Experimental Site for Atmospheric Research (CESAR) - The Netherlands. , 2008, , .		10
35	Ground-based remote sensing scheme for monitoring aerosol-cloud interactions. Atmospheric Measurement Techniques, 2016, 9, 1039-1050.	3.1	10
36	Retrieving Fall Streaks within Cloud Systems Using Doppler Radar. Journal of Atmospheric and Oceanic Technology, 2017, 34, 905-920.	1.3	10

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37	Doppler polarimetric ground clutter identification and suppression for atmospheric radars based on co-polar correlation. , 0, , .		9
38	High time resolution cloud measurements with lidar during CLARA. Physics and Chemistry of the Earth, 2000, 25, 107-113.	0.3	9
39	Radar reflection from clouds: gigahertz backscatter cross sections and Doppler spectra. IEEE Transactions on Antennas and Propagation, 2000, 48, 254-259.	5.1	9
40	Detection of Boundary Layer Water Clouds by Spaceborne Cloud Radar. Journal of Atmospheric and Oceanic Technology, 2002, 19, 1915-1927.	1.3	9
41	Monitoring aerosol-cloud interactions at the CESAR Observatory in the Netherlands. Atmospheric Measurement Techniques, 2017, 10, 1987-1997.	3.1	9
42	Adaptive and High-Resolution Estimation of Specific Differential Phase for Polarimetric X-Band Weather Radars. Journal of Atmospheric and Oceanic Technology, 2018, 35, 555-573.	1.3	9
43	Application of X- and S-band radars for rain rate estimation over an urban area. Physics and Chemistry of the Earth, 1997, 22, 259-264.	0.3	7
44	Towards a better understanding of the impact of anthropogenic aerosols in the hydrological cycle: IDRA, IRCTR drizzle radar. Physics and Chemistry of the Earth, 2009, 34, 88-92.	2.9	7
45	Investigation of the Turbulent Structure of a Cloud-Capped Mixed Layer Using Doppler Radar. Journal of Applied Meteorology and Climatology, 2010, 49, 1170-1190.	1.5	7
46	Towards the improvement of cloud microphysical retrievals using simultaneous Doppler and polarimetric radar measurements. Atmospheric Measurement Techniques, 2011, 4, 2163-2178.	3.1	7
47	Simultaneous and synergistic profiling of cloud and drizzle properties using ground-based observations. Atmospheric Measurement Techniques, 2017, 10, 4777-4803.	3.1	7
48	Object-Orientated Filter Design in Spectral Domain for Polarimetric Weather Radar. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 2725-2740.	6.3	7
49	Assessment of the rain drop inertia effect for radar-based turbulence intensity retrievals. International Journal of Microwave and Wireless Technologies, 2016, 8, 835-844.	1.9	6
50	Long-term observations of the background aerosol at Cabauw, The Netherlands. Science of the Total Environment, 2018, 625, 752-761.	8.0	6
51	Simulations of Doppler spectra in the melting layer of precipitation. Geophysical Research Letters, 2003, 30, .	4.0	5
52	Improvement of the Performance of FM-CW Radar Systems by using Direct Digital Synthesizers: Comparison with Voltage Controlled Oscillators. , 2006, , .		5
53	Outlook for a new wind field retrieval technique: The 4D-Var wind retrieval. , 2014, , .		5
54	Spectral Polarimetric Features Analysis of Wind Turbine Clutter in Weather Radar. , 2017, , .		5

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55	A Critical Evaluation of the Adequacy of the Gamma Model for Representing Raindrop Size Distributions. Journal of Atmospheric and Oceanic Technology, 2020, 37, 1765-1779.	1.3	5
56	Attenuation of co- and cross-polarized electric fields of waves through a layer of dielectric spheroids. IEEE Transactions on Antennas and Propagation, 1991, 39, 204-210.	5.1	4
57	Simplified analysis of line-of-sight propagation through rain at 5-90 GHz. IEEE Transactions on Antennas and Propagation, 1992, 40, 912-919.	5.1	4
58	Validation of cloud parameter retrieval methods with objective ground based measurements. Physics and Chemistry of the Earth, 1999, 24, 173-176.	0.3	4
59	Radar observations and modeling of fog at 35 GHz. , 2014, , .		4
60	Observations and modeling of fog by cloud radar and optical sensors. , 2014, , .		4
61	Modelling of particle distribution in the melting layer. IEE Proceedings H: Microwaves, Antennas and Propagation, 1990, 137, 389.	0.2	4
62	Light scattering by arbitrarily oriented rotationally symmetric particles. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2002, 19, 1583.	1.5	3
63	IDRA: A new instrument for drizzle monitoring. , 2007, , .		3
64	IDRA, IRCTR drizzle radar: First results. , 2008, , .		3
65	Cross-polarized radar reflections from wet snow and ice droplets at weather radar wavelengths. IEEE Transactions on Antennas and Propagation, 1990, 38, 1843-1847.	5.1	2
66	Combining radar and microwave radiometer for cloud liquid water retrieval. , 1998, , .		2
67	Estimate of the incoherent-scattering contribution to lidar backscatter from clouds. Applied Optics, 1999, 38, 585.	2.1	2
68	Clear-air scattering observations: Downdraft and angels. Physics and Chemistry of the Earth, 2000, 25, 1123-1128.	0.3	2
69	IDRA: IRCTR Drizzle Radar. , 2006, , .		2
70	Target-to-clutter contrast enhancement using radar Doppler polarimetry. , 0, , .		1
71	Dual-Polarized Planar Phased Array Analysis for Meteorological Applications. International Journal of Antennas and Propagation, 2015, 2015, 1-12.	1.2	1
72	Turbulence intensity estimation using advanced radar methods. , 2015, , .		1

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73	Radio Frequency Interference Characterization and Mitigation for Polarimetric Weather Radar: A Study Case. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-16.	6.3	1
74	On the use of spectral polarimetry to observe ice cloud microphysics with radar. , 2008, , 285-312.		1
75	Model of drop canting in microwave remote sensing of rain. , 0, , .		1
76	Deriving the linear depolarisation ratio of precipitation from copolar radar measurements. Electronics Letters, 1993, 29, 1051.	1.0	0
77	Estimation of supersaturation in a stratocumulus cloud from combined airborne and ground measurements. Journal of Aerosol Science, 1998, 29, S715-S716.	3.8	0
78	The influence of the antenna pattern on cross polarization measurements of atmospheric targets. Physics and Chemistry of the Earth, 2000, 25, 843-848.	0.3	0
79	<title>Radar Doppler polarimetry: a new approach for characterization of radar targets</title>. , 2000, , .		0
80	Some new relationships between observables of Doppler-polarimetric radar and rain parameters. , 0, , .		0
81	Observations and modeling of fog by cloud radar and optical sensors. , 2014, , .		0
82	Analysis of microphysical processes in fog. Proceedings of SPIE, 2014, , .	0.8	0
83	A theoretical accuracy analysis of dual-polarization planar phased array for meteorological applications in ATSR mode. , 2014, , .		0
84	Correction of polarization error in scanned array weather radar antennas. , 2014, , .		0
85	Retrieval of fog microphysical properties from cloud radar and optical sensors. , 2015, , .		0
86	Implementation of wind vector and turbulence intensity retrievals: Application to fast scanning X-band radar. , 2016, , .		0
87	A Novel Radar-Based Visibility Estimator. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 3150-3168.	6.3	0
88	Improved Estimation of the Specific Attenuation and Backscatter Differential Phase over Short Rain Paths. Journal of Atmospheric and Oceanic Technology, 2018, 35, 2359-2381.	1.3	0
89	Surface Remote Sensing of Liquid Water Cloud Properties. , 2018, , 189-209.		0
90	Radar Sensor Synergy for Cloud Studies; Case Study of Water Clouds. Physics of Earth and Space Environments, 2004, , 235-254.	0.5	0

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91	Ground-Based Atmospheric Remote Sensing in the Netherlands. Telecommunications and Radio Engineering (English Translation of Elektrosvyaz and Radiotekhnika), 2007, 66, 1591-1602.	0.4	0
92	Attenuation correction for a high-resolution polarimetric X-band weather radar. Advances in Radio Science, 0, 8, 279-284.	0.7	0