Ralph R Ferraro

List of Publications by Year
in descending order

111 papers	11,223 citations	109321 35 h-index	33894 99 g-index
113 all docs	113 docs citations	113 times ranked	9032 citing authors

#	Article	IF	Citations
1	The Version-2 Global Precipitation Climatology Project (GPCP) Monthly Precipitation Analysis (1979â€“Present). Journal of Hydrometeorology, 2003, 4, 1147-1167.	1.9	4,508
2	The Global Precipitation Climatology Project (GPCP) Combined Precipitation Dataset. Bulletin of the American Meteorological Society, 1997, 78, 5-20.	3.3	1,521
3	The Global Precipitation Climatology Project (GPCP) Monthly Analysis (New Version 2.3) and a Review of 2017 Global Precipitation. Atmosphere, 2018, 9, 138.	2.3	494
4	GPCP Pentad Precipitation Analyses: An Experimental Dataset Based on Gauge Observations and Satellite Estimates. Journal of Climate, 2003, 16, 2197-2214.	3.2	340
5	Advanced microwave sounding unit cloud and precipitation algorithms. Radio Science, 2003, 38, n/a-n/a.	1.6	261
6	The Evolution of the Goddard Profiling Algorithm to a Fully Parametric Scheme. Journal of Atmospheric and Oceanic Technology, 2015, 32, 2265-2280.	1.3	254
7	Special sensor microwave imager derived global rainfall estimates for climatological applications. Journal of Geophysical Research, 1997, 102, 16715-16735.	3.3	242
8	The Development of SSM/I Rain-Rate Retrieval Algorithms Using Ground-Based Radar Measurements. Journal of Atmospheric and Oceanic Technology, 1995, 12, 755-770.	1.3	237
9	An Eight-Year (1987â€“1994) Time Series of Rainfall, Clouds, Water Vapor, Snow Cover, and Sea Ice Derived from SSM/I Measurements. Bulletin of the American Meteorological Society, 1996, 77, 891-905.	3.3	227
10	MiRS: An All-Weather 1DVAR Satellite Data Assimilation and Retrieval System. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 3249-3272.	6.3	188
11	NOAA operational hydrological products derived from the advanced microwave sounding unit. IEEE Transactions on Geoscience and Remote Sensing, 2005, 43, 1036-1049.	6.3	179
12	A Screening Methodology for Passive Microwave Precipitation Retrieval Algorithms. Journals of the Atmospheric Sciences, 1998, 55, 1583-1600.	1.7	152
13	Rainfall algorithms for AMSR-E. IEEE Transactions on Geoscience and Remote Sensing, 2003, 41, 204-214.	6.3	118
14	Determination of precipitable water and cloud liquid water over oceans from the NOAA 15 advanced microwave sounding unit. Journal of Geophysical Research, 2001, 106, 2943-2953.	3.3	115
15	Effects of surface conditions on rain identification using the DMSPâ€SSM/I. International Journal of Remote Sensing, 1994, 11, 195-209.	1.0	107
16	Precipitation characteristics over land from the NOAA-15 AMSU sensor. Geophysical Research Letters, 2000, 27, 2669-2672.	4.0	100
17	International Global Precipitation Measurement (GPM) Program and Mission: An Overview. , 2007, , 611-653.		100
18	Status of the TRMM 2A12 Land Precipitation Algorithm. Journal of Atmospheric and Oceanic Technology, 2010, 27, 1343-1354.	1.3	98

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19	Evaluation of Biases of Satellite Rainfall Estimation Algorithms over the Continental United States. Journal of Applied Meteorology and Climatology, 2002, 41, 1065-1080.	1.7	96
20	An Evaluation of Microwave Land Surface Emissivities Over the Continental United States to Benefit GPM-Era Precipitation Algorithms. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 378-398.	6.3	95
21	Next generation of NOAA/NESDIS TMI, SSM/I, and AMSR-E microwave land rainfall algorithms. Journal of Geophysical Research, 2003, 108, .	3.3	94
22	TRMM 2A12 Land Precipitation Product - Status and Future Plans. Journal of the Meteorological Society of Japan, 2009, 87A, 237-253.	1.8	79
23	A new snowfall detection algorithm over land using measurements from the Advanced Microwave Sounding Unit (AMSU). Geophysical Research Letters, 2003, 30, .	4.0	74
24	Cloud Liquid Water Climatology from the Special Sensor Microwave/Imager. Journal of Climate, 1997, 10, 1086-1098.	3.2	67
25	The Tropical Rainfall Potential (TRaP) Technique. Part I: Description and Examples. Weather and Forecasting, 2005, 20, 456-464.	1.4	62
26	A 1DVARâ€based snowfall rate retrieval algorithm for passive microwave radiometers. Journal of Geophysical Research D: Atmospheres, 2017, 122, 6520-6540.	3.3	56
27	Quantifying the Snowfall Detection Performance of the GPM Microwave Imager Channels over Land. Journal of Hydrometeorology, 2017, 18, 729-751.	1.9	55
28	A prototype hail detection algorithm and hail climatology developed with the advanced microwave sounding unit (AMSU). Atmospheric Research, 2015, 163, 24-35.	4.1	52
29	Using the Special Sensor Microwave Imager to Monitor Surface Wetness. Journal of Hydrometeorology, 2001, 2, 297-308.	1.9	51
30	A Comparison between Snow Cover Products Derived from Visible and Microwave Satellite Observation. Journal of Applied Meteorology and Climatology, 1996, 35, 163-177.	1.7	50
31	Evaluation and improvement of AMSU precipitation retrievals. Journal of Geophysical Research, 2007, 112, .	3.3	50
32	Studying the vertical variation of cloud droplet effective radius using ship and spaceâ€borne remote sensing data. Journal of Geophysical Research, 2008, 113, .	3.3	49
33	Impact of the Vertical Variation of Cloud Droplet Size on the Estimation of Cloud Liquid Water Path and Rain Detection. Journals of the Atmospheric Sciences, 2007, 64, 3843-3853.	1.7	47
34	Satellite Precipitation Measurements for Water Resource Monitoring¹. Journal of the American Water Resources Association, 2009, 45, 567-579.	2.4	46
35	Assessing the quality of humidity measurements from global operational radiosonde sensors. Journal of Geophysical Research D: Atmospheres, 2013, 118, 8040-8053.	3.3	43
36	Global precipitation estimations using Defense Meteorological Satellite Program F10 and F11 special sensor microwave imager data. Journal of Geophysical Research, 1994, 99, 14493.	3.3	41

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37	Microwave Rainfall Estimation over Coasts. Journal of Atmospheric and Oceanic Technology, 2005, 22, 497-512.	1.3	38
38	Classification of Geophysical Parameters Using Passive Microwave Satellite Measurements. IEEE Transactions on Geoscience and Remote Sensing, 1986, GE-24, 1008-1013.	6.3	36
39	A study of warm rain detection using A-Train satellite data. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	35
40	Correcting Geolocation Errors for Microwave Instruments Aboard NOAA Satellites. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 3625-3637.	6.3	35
41	The Influence of Surface and Precipitation Characteristics on TRMM Microwave Imager Rainfall Retrieval Uncertainty. Journal of Hydrometeorology, 2015, 16, 1596-1614.	1.9	34
42	A snowfall detection algorithm over land utilizing highâ€frequency passive microwave measurementsâ€"Application to ATMS. Journal of Geophysical Research D: Atmospheres, 2015, 120, 1918-1932.	3.3	33
43	A prototype precipitation retrieval algorithm over land using passive microwave observations stratified by surface condition and precipitation vertical structure. Journal of Geophysical Research D: Atmospheres, 2015, 120, 5295-5315.	3.3	33
44	The CrIMSS EDR Algorithm: Characterization, Optimization, and Validation. Journal of Geophysical Research D: Atmospheres, 2014, 119, 4953-4977.	3.3	31
45	A Comparison of Total Precipitable Water between Reanalyses and NVAP. Journal of Climate, 2005, 18, 1790-1807.	3.2	29
46	A New High-Resolution Satellite-Derived Precipitation Dataset for Climate Studies. Journal of Hydrometeorology, 2009, 10, 935-952.	1.9	27
47	Diurnal variation of tropospheric relative humidity in tropical regions. Atmospheric Chemistry and Physics, 2016, 16, 6913-6929.	4.9	24
48	Microwave measurements produce global climatic, hydrologic data. Eos, 1994, 75, 337.	0.1	22
49	A Prototype Precipitation Retrieval Algorithm over Land for ATMS. Journal of Hydrometeorology, 2016, 17, 1601-1621.	1.9	22
50	An Assessment of the First- and Second-Generation Navy Operational Precipitation Retrieval Algorithms. Journals of the Atmospheric Sciences, 1998, 55, 1558-1575.	1.7	21
51	A New Sea-Ice Concentration Algorithm Based on Microwave Surface Emissivitiesâ€"Application to AMSU Measurements. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 175-189.	6.3	21
52	Intercalibration and Validation of Observations From ATMS and SAPHIR Microwave Sounders. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 5915-5925.	6.3	21
53	Hailstorm Detection by Satellite Microwave Radiometers. Remote Sensing, 2020, 12, 621.	4.0	21
54	Interpretation of AMSU microwave measurements for the retrievals of snow water equivalent and snow depth. Journal of Geophysical Research, 2004, 109, .	3.3	20

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55	The Tropical Rainfall Potential (TRaP) Technique. Part II: Validation. Weather and Forecasting, 2005, 20, 465-475.	1.4	20
56	The Fourth International Precipitation Working Group Workshop. Bulletin of the American Meteorological Society, 2010, 91, 1095-1099.	3.3	17
57	The Improved AMSU Rain-Rate Algorithm and Its Evaluation for a Cool Season Event in the Western United States. Weather and Forecasting, 2005, 20, 761-774.	1.4	16
58	Classifying Urban Rainfall Extremes Using Weather Radar Data: An Application to the Greater New York Area. Journal of Hydrometeorology, 2017, 18, 611-623.	1.9	16
59	Enhancing PMW Satellite Precipitation Estimation: Detecting Convective Class. Journal of Atmospheric and Oceanic Technology, 2019, 36, 2349-2363.	1.3	16
60	Detailed analysis of the error associated with the rainfall retrieved by the NOAA/NESDIS SSM/I algorithm: 1. Tropical oceanic rainfall. Journal of Geophysical Research, 1998, 103, 11419-11427.	3.3	15
61	Evaluating the potential of a blended passive microwave-interactive multi-sensor product for improved mapping of snow cover and estimations of snow water equivalent. Hydrological Processes, 2007, 21, 1597-1607.	2.6	15
62	A New Method for Hail Detection from the GPM Constellation: A Prospect for a Global Hailstorm Climatology. Remote Sensing, 2020, 12, 3553.	4.0	13
63	NOAA satellite-derived hydrological products prove their worth. Eos, 2002, 83, 429.	0.1	12
64	Utilization of the AMSU high frequency measurements for improved coastal rain retrievals. Geophysical Research Letters, 2007, 34, .	4.0	12
65	Improved Global Rainfall Retrieval Using the Special Sensor Microwave Imager (SSM/I). Journal of Applied Meteorology and Climatology, 2010, 49, 1032-1043.	1.5	12
66	Performance of Radiative Transfer Models in the Microwave Region. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031831.	3.3	12
67	Estimating the Probability of Rain in an SSM/I FOV Using Logistic Regression. Journal of Applied Meteorology and Climatology, 1995, 34, 2476-2480.	1.7	11
68	Cross-Scan Asymmetry of AMSU-A Window Channels: Characterization, Correction, and Verification. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 1514-1530.	6.3	11
69	Precipitation From the Advanced Microwave Scanning Radiometer 2. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 2611-2618.	4.9	11
70	Detailed analysis of the error associated with the rainfall retrieved by the NOAA/NESDIS Special Sensor Microwave/Imager algorithm 2. Rainfall over land. Journal of Geophysical Research, 2002, 107, ACL 9-1-ACL 9-7.	3.3	10
71	Global Land Cover Classification Based on Microwave Polarization and Gradient Ratio (MPGR). Lecture Notes in Geoinformation and Cartography, 2015, , 17-37.	1.0	10
72	Evaluating Instrumental Inhomogeneities in Global Radiosonde Upper Tropospheric Humidity Data Using Microwave Satellite Data. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 3615-3624.	6.3	9

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73	The Performance of Hydrological Monthly Products Using SSM/Iâ€“SSMI/S Sensors. Journal of Hydrometeorology, 2013, 14, 266-274.	1.9	8
74	Updated Screening Procedures for GPROF2010 over Land: Utilization for AMSR-E. Journal of Atmospheric and Oceanic Technology, 2015, 32, 1015-1028.	1.3	8
75	A hybrid snowfall detection method from satellite passive microwave measurements and global forecast weather models. Quarterly Journal of the Royal Meteorological Society, 2018, 144, 120-132.	2.7	8
76	The AMSU-Based Hydrological Bundle Climate Data Recordâ€”Description and Comparison with Other Data Sets. Remote Sensing, 2018, 10, 1640.	4.0	8
77	Prototyping a Generic, Unified Land Surface Classification and Screening Methodology for GPM-Era Microwave Land Precipitation Retrieval Algorithms. Journal of Applied Meteorology and Climatology, 2011, 50, 1200-1211.	1.5	7
78	Retrieving Layer-Averaged Tropospheric Humidity From Advanced Technology Microwave Sounder Water Vapor Channels. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 6675-6688.	6.3	7
79	Intercomparison and Validation of MIRS, MSPPS, and IMS Snow Cover Products. Advances in Meteorology, 2020, 2020, 1-10.	1.6	7
80	Microwave Sensors, Imagers and Sounders. Advances in Global Change Research, 2020, , 63-81.	1.6	7
81	Inference of Oceanic Rainfall Properties from the Nimbus 7 SMMR. Journal of Applied Meteorology and Climatology, 1990, 29, 551-560.	1.7	6
82	Satellite tools to monitor and predict Hurricane Sandy (2012): Current and emerging products. Atmospheric Research, 2015, 166, 165-181.	4.1	6
83	Requirements for a robust precipitation constellation. , 2016, , .		6
84	The Instantaneous Retrieval of Precipitation Over Land by Temporal Variation at 19ÂGHz. Journal of Geophysical Research D: Atmospheres, 2018, 123, 9279-9295.	3.3	6
85	Comparison of TRMM Microwave Imager Rainfall Datasets from NASA and JAXA. Journal of Hydrometeorology, 2020, 21, 377-397.	1.9	6
86	Application of GCOM-W AMSR2 and S-NPP ATMS Hydrological Products to a Flooding Event in the United States. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 3884-3891.	4.9	5
87	Northern Hemisphere Snow Variations with Season and Elevation Using GIS and AMSR-E Data. Journal of Earth Science & Climatic Change, 2013, s12, .	0.2	4
88	Radiometric correction of observations from microwave humidity sounders. Atmospheric Measurement Techniques, 2018, 11, 6617-6626.	3.1	4
89	Past, Present and Future of Microwave Operational Rainfall Algorithms. , 2007, , 189-198.		4
90	Estimation of midlatitude rainfall parameters from satellite microwave radiometers using the area-time integral concept. Radio Science, 1998, 33, 317-333.	1.6	3

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91	Adequacy of Using a 1/3-Degree Special Sensor Microwave Imager Dataset to Estimate Climate-Scale Rainfall. Journal of Applied Meteorology and Climatology, 2000, 39, 680-685.	1.7	3
92	A Study of Two Impactful Heavy Rainfall Events in the Southern Appalachian Mountains during Early 2020, Part I; Societal Impacts, Synoptic Overview, and Historical Context. Remote Sensing, 2021, 13, 2452.	4.0	3
93	Satellite Observations of North American Climate Change. Regional Climate Studies, 2014, , 95-165.	1.2	3
94	Ground-based Assessment of Snowfall Detection over Land Using Polarimetric High Frequency Microwave Measurements. Remote Sensing, 2020, 12, 3441.	4.0	2
95	Raindrop Signature from Microwave Radiometer Over Deserts. Geophysical Research Letters, 2020, 47, e2020GL088656.	4.0	2
96	The Global Precipitation Climatology Project. , 2007, , 25-35.		2
97	A 1DVAR-Based Snowfall Rate Algorithm for Passive Microwave Radiometers. Advances in Global Change Research, 2020, , 297-313.	1.6	2
98	Satellite-Based Climatologies Related to the Water Cycle. , 2004, , .		1
99	Use of AMSR-E microwave satellite data for land surface characteristics and snow cover variation. Data in Brief, 2016, 9, 1077-1089.	1.0	1
100	Superensemble Statistical Forecasting of Monthly Precipitation over the Contiguous United States, with Improvements from Ocean-Area Precipitation Predictors. Journal of Hydrometeorology, 2016, 17, 2699-2711.	1.9	1
101	Inter-Calibration of AMSU-A Window Channels. Remote Sensing, 2020, 12, 2988.	4.0	1
102	A Study of Two Impactful Heavy Rainfall Events in the Southern Appalachian Mountains During Early 2020, Part II; Regional Overview, Rainfall Evolution, and Satellite QPE Utility. Remote Sensing, 2021, 13, 2500.	4.0	1
103	An Adaptive Calibration Window for Noise Reduction of Satellite Microwave Radiometers. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-16.	6.3	1
104	Results from AMSR-E and Version 6 TMI microwave land rainfall estimation algorithms. , 2003, 4894, 150.		0
105	<title>The current status of passive microwave precipitation retrievals at NOAA/NESDIS</title>. , 2004, , .		0
106	Accounting for surface ice and snow in the goddard profiling algorithm rain rate retrievals. , 2015, , .		0
107	An overview of NOAA's GCOM-W1/AMSR-2 product processing and utilization. , 2017, , .		0
108	JPSS Precipitation Products in the Hydrology Initiative. , 2019, , .		0

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109	Global Precipitation Monitoring. , 2013, , 81-93.		0
110	Rainfall. Encyclopedia of Earth Sciences Series, 2014, , 640-653.	0.1	0
111	An Operational Satellite Snowfall Rate Product at NOAA. , 2020, , .		0