Christopher Grassotti

List of Publications by Year
in descending order

41 papers	899 citations	567281 15 h-index	477307 29 g-index
41 all docs	41 docs citations	41 times ranked	806 citing authors

#	Article	IF	Citations
1	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
2	Extending the Predictability of Hydrometeorological Flood Events Using Radar Rainfall Nowcasting. Journal of Hydrometeorology, 2006, 7, 660-677.	1.9	69
3	Evaluating the effects of image filtering in short-term radar rainfall forecasting for hydrological applications. Meteorological Applications, 2006, 13, 289.	2.1	61
4	Land surface microwave emissivities derived from AMSR-E and MODIS measurements with advanced quality control. Journal of Geophysical Research, 2011, 116, .	3.3	52
5	On Differences in Radiosonde Humidity-Reporting Practices and Their Implications for Numerical Weather Prediction and Remote Sensing. Bulletin of the American Meteorological Society, 1992, 73, 1417-1423.	3.3	50
6	A physical approach for a simultaneous retrieval of sounding, surface, hydrometeor, and cryospheric parameters from SNPP/ATMS. Journal of Geophysical Research D: Atmospheres, 2013, 118, 12,600.	3.3	49
7	A Technique for Assimilating SSM/I Observations of Marine Atmospheric Storms: Tests with ECMWF Analyses. Journal of Applied Meteorology and Climatology, 1996, 35, 1177-1188.	1.7	34
8	Venus: Cloud level circulation during 1982 as determined from pioneer cloud photopolarimeter images. Icarus, 1988, 73, 193-211.	2.5	32
9	Feature calibration and alignment to represent model forecast errors: Empirical regularization. Quarterly Journal of the Royal Meteorological Society, 2003, 129, 195-218.	2.7	31
10	Surface Emissivity at Microwaves to Millimeter Waves over Polar Regions: Parameterization and Evaluation with Aircraft Experiments. Journal of Atmospheric and Oceanic Technology, 2017, 34, 1039-1059.	1.3	29
11	Multiple-Timescale Intercomparison of Two Radar Products and Rain Gauge Observations over the Arkansasâ€“Red River Basin. Weather and Forecasting, 2003, 18, 1207-1229.	1.4	28
12	Assessment of a Variational Inversion System for Rainfall Rate Over Land and Water Surfaces. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 3311-3333.	6.3	27
13	Assessment of the Impact of Simulated Satellite Lidar Wind and Retrieved 183 GHz Water Vapor Observations on a Global Data Assimilation System. Monthly Weather Review, 1990, 118, 2513-2542.	1.4	26
14	Classification-Based Rainfall Estimation Using Satellite Data and Numerical Forecast Model Fields. Journal of Applied Meteorology and Climatology, 1994, 33, 159-178.	1.7	23
15	Subsurface emission effects in AMSR-E measurements: Implications for land surface microwave emissivity retrieval. Journal of Geophysical Research, 2011, 116, .	3.3	23
16	A 4D-Var study on the potential of weather control and exigent weather forecasting. Quarterly Journal of the Royal Meteorological Society, 2005, 131, 3037-3051.	2.7	13
17	Development of a Machine Learning-Based Radiometric Bias Correction for NOAAâ€™s Microwave Integrated Retrieval System (MiRS). Remote Sensing, 2020, 12, 3160.	4.0	13
18	Toward an Objective Analysis of Rainfall Rate Combining Observations and Short-Term Forecast Model Estimates. Journal of Applied Meteorology and Climatology, 1995, 34, 1962-1977.	1.7	12

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19	The NOAA Microwave Integrated Retrieval System (MiRS): Validation of Precipitation From Multiple Polar-Orbiting Satellites. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2020, 13, 3019-3031.	4.9	12
20	SeaWinds Validation: Effect of Rain as Observed by East Coast Radars. Journal of Atmospheric and Oceanic Technology, 2004, 21, 1364-1377.	1.3	11
21	The Response of Damaging Winds of a Simulated Tropical Cyclone to Finite-Amplitude Perturbations of Different Variables. Journals of the Atmospheric Sciences, 2006, 63, 1924-1937.	1.7	11
22	GPM Products From the Microwave-Integrated Retrieval System. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 2565-2574.	4.9	11
23	Assimilation of SSM/I and GOES Humidity Retrievals with a One-Dimensional Variational Analysis Scheme. Journal of Applied Meteorology and Climatology, 1995, 34, 1536-1550.	1.7	10
24	Physically based modeling of QuikSCAT SeaWinds passive microwave measurements for rain detection. Journal of Geophysical Research, 2002, 107, AAC 15-1.	3.3	10
25	Evaluation and blending of ATMS and AMSR2 snow water equivalent retrievals over the conterminous United States. Remote Sensing of Environment, 2021, 254, 112280.	11.0	10
26	Calibration and Alignment. Journal of Applied Meteorology and Climatology, 1999, 38, 677-695.	1.7	9
27	Dynamic Inversion of Global Surface Microwave Emissivity Using a 1DVAR Approach. Remote Sensing, 2018, 10, 679.	4.0	9
28	Using 4d-VAR to Move a Simulated Tropical Cyclone in a Mesoscale Model. Computers and Mathematics With Applications, 2006, 52, 1193-1204.	2.7	6
29	How Can Microwave Observations at 23.8 GHz Help in Acquiring Water Vapor in the Atmosphere over Land?. Remote Sensing, 2021, 13, 489.	4.0	6
30	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
31	Precipitation Estimation from the Microwave Integrated Retrieval System (MiRS). Advances in Global Change Research, 2020, , 153-168.	1.6	5
32	Inâ€Depth Evaluation of MiRS Total Precipitable Water From NOAAâ€20 ATMS Using Multiple Reference Data Sets. Earth and Space Science, 2022, 9, .	2.6	5
33	Preliminary Development and Testing of an EPS-SG Microwave Sounder Proxy Data Generator Using the NOAA Microwave Integrated Retrieval System. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 3151-3161.	4.9	4
34	Improvement of MiRS Sea Surface Temperature Retrievals Using a Machine Learning Approach. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2022, 15, 1857-1868.	4.9	4
35	Development and Application of a Visibleâ€“Infrared Rain Flag for Scatterometer Data. Journal of Applied Meteorology and Climatology, 1999, 38, 665-676.	1.7	3
36	NOAA Microwave Integrated Retrieval System (MiRS) Cloud Liquid Water Retrieval and Assessment. , 2018, , .		3

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37	Experimental OMPS Radiance Assimilation through One-Dimensional Variational Analysis for Total Column Ozone in the Atmosphere. Remote Sensing, 2021, 13, 3418.	4.0	2
38	A Simulation Study of Satellite Emission Computed Tomography. Journal of Applied Meteorology and Climatology, 1989, 28, 321-342.	1.7	1
39	The MIRS GPM precipitation retrieval. , 2016, , .		1
40	A Dual Use for Space Solar Power. Water Science and Technology Library, 2006, , 87-120.	0.3	1
41	The NOAA Microwave Integrated Retrieval System Multiple Satellite Rain Rate Retrieval and Monitoring. , 2019, , .		0