Frank Marzano

List of Publications by Year in descending order

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285 papers 4,227 citations

147566 31 h-index 197535 49 g-index

310 all docs

310 docs citations

310 times ranked

2721 citing authors

#	Article	IF	CITATIONS
1	HyMeX-SOP1: The Field Campaign Dedicated to Heavy Precipitation and Flash Flooding in the Northwestern Mediterranean. Bulletin of the American Meteorological Society, 2014, 95, 1083-1100.	1.7	262
2	On the Use of Dual-Polarized C-Band Radar for Operational Rainfall Retrieval in Mountainous Areas. Journal of Applied Meteorology and Climatology, 2012, 51, 405-425.	0.6	113
3	Temperature and humidity profile retrievals from ground-based microwave radiometers during TUC. Meteorologische Zeitschrift, 2006, 15, 45-56.	0.5	112
4	Use of Cloud Model Microphysics for Passive Microwave-Based Precipitation Retrieval: Significance of Consistency between Model and Measurement Manifolds. Journals of the Atmospheric Sciences, 1998, 55, 1644-1673.	0.6	107
5	Volcanic Ash Cloud Retrieval by Ground-Based Microwave Weather Radar. IEEE Transactions on Geoscience and Remote Sensing, 2006, 44, 3235-3246.	2.7	95
6	Bayesian estimation of precipitating cloud parameters from combined measurements of spaceborne microwave radiometer and radar. IEEE Transactions on Geoscience and Remote Sensing, 1999, 37, 596-613.	2.7	92
7	Multivariate statistical integration of Satellite infrared and microwave radiometric measurements for rainfall retrieval at the geostationary scale. IEEE Transactions on Geoscience and Remote Sensing, 2004, 42, 1018-1032.	2.7	71
8	A Neural Networks–Based Fusion Technique to Estimate Half-Hourly Rainfall Estimates at 0.1° Resolution from Satellite Passive Microwave and Infrared Data. Journal of Applied Meteorology and Climatology, 2004, 43, 576-594.	1.7	66
9	Investigating precipitation microphysics using ground-based microwave remote sensors and disdrometer data. Atmospheric Research, 2010, 97, 583-600.	1.8	64
10	Discrimination of Water Surfaces, Heavy Rainfall, and Wet Snow Using COSMO-SkyMed Observations of Severe Weather Events. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 858-869.	2.7	63
11	A Multi-Sensor Approach for Volcanic Ash Cloud Retrieval and Eruption Characterization: The 23 November 2013 Etna Lava Fountain. Remote Sensing, 2016, 8, 58.	1.8	62
12	Supervised Fuzzy-Logic Classification of Hydrometeors Using C-Band Weather Radars. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 3784-3799.	2.7	58
13	Overview of the first HyMeX Special Observation Period over Italy: observations and model results. Hydrology and Earth System Sciences, 2014, 18, 1953-1977.	1.9	58
14	Intercomparison of microwave radiative transfer models for precipitating clouds. IEEE Transactions on Geoscience and Remote Sensing, 2002, 40, 541-549.	2.7	54
15	Supervised Classification and Estimation of Hydrometeors From C-Band Dual-Polarized Radars: A Bayesian Approach. IEEE Transactions on Geoscience and Remote Sensing, 2008, 46, 85-98.	2.7	54
16	Inside Volcanic Clouds: Remote Sensing of Ash Plumes Using Microwave Weather Radars. Bulletin of the American Meteorological Society, 2013, 94, 1567-1586.	1.7	53
17	Microphysical characterization of microwave Radar reflectivity due to volcanic ash clouds. IEEE Transactions on Geoscience and Remote Sensing, 2006, 44, 313-327.	2.7	47
18	Synthetic Signatures of Volcanic Ash Cloud Particles From X-Band Dual-Polarization Radar. IEEE Transactions on Geoscience and Remote Sensing, 2012, 50, 193-211.	2.7	47

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19	Analysis and Synthesis of Raindrop Size Distribution Time Series From Disdrometer Data. IEEE Transactions on Geoscience and Remote Sensing, 2008, 46, 466-478.	2.7	46
20	Optimum Estimation of Rain Microphysical Parameters From X-Band Dual-Polarization Radar Observables. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 3063-3076.	2.7	42
21	Precipitation retrieval from spaceborne microwave radiometers based on maximum a a posteriori probability estimation. IEEE Transactions on Geoscience and Remote Sensing, 1996, 34, 831-846.	2.7	41
22	Combining Microwave Radiometer and Wind Profiler Radar Measurements for High-Resolution Atmospheric Humidity Profiling. Journal of Atmospheric and Oceanic Technology, 2005, 22, 949-965.	0.5	41
23	Comparison of Advanced Radar Polarimetric Techniques for Operational Attenuation Correction at C Band. Journal of Atmospheric and Oceanic Technology, 2008, 25, 1118-1135.	0.5	41
24	Performance Evaluation of a New Dual-Polarization Microphysical Algorithm Based on Long-Term X-Band Radar and Disdrometer Observations. Journal of Hydrometeorology, 2013, 14, 560-576.	0.7	40
25	Error analysis of TMI rainfall estimates over ocean for variational data assimilation. Quarterly Journal of the Royal Meteorological Society, 2002, 128, 2129-2144.	1.0	37
26	Potential of high-resolution detection and retrieval of precipitation fields from X-band spaceborne synthetic aperture radar over land. Hydrology and Earth System Sciences, 2011, 15, 859-875.	1.9	37
27	Rain field and reflectivity vertical profile reconstruction from C-band Radar volumetric data. IEEE Transactions on Geoscience and Remote Sensing, 2004, 42, 1033-1046.	2.7	36
28	Investigating a SSM/I microwave algorithm to calibrate Meteosat infrared instantaneous rainrate estimates. Meteorological Applications, 2007, 3, 5-17.	0.9	36
29	Ground-Based Measurements of the 2014–2015 Holuhraun Volcanic Cloud (Iceland). Geosciences (Switzerland), 2018, 8, 29.	1.0	35
30	A Synergistic Use of a High-Resolution Numerical Weather Prediction Model and High-Resolution Earth Observation Products to Improve Precipitation Forecast. Remote Sensing, 2019, 11, 2387.	1.8	35
31	Modeling Antenna Noise Temperature Due to Rain Clouds at Microwave and Millimeter-Wave Frequencies. IEEE Transactions on Antennas and Propagation, 2006, 54, 1305-1317.	3.1	34
32	Evidence of Rainfall Signatures on X-Band Synthetic Aperture Radar Imagery Over Land. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 950-964.	2.7	34
33	The Eyjafj \tilde{A} ¶ll explosive volcanic eruption from a microwave weather radar perspective. Atmospheric Chemistry and Physics, 2011, 11, 9503-9518.	1.9	34
34	Modeling of apparent radar reflectivity due to convective clouds at attenuating wavelengths. Radio Science, 2003, 38, 2-1-2-16.	0.8	33
35	Bayesian algorithm for microwave-based precipitation retrieval: description and application to TMI measurements over ocean. IEEE Transactions on Geoscience and Remote Sensing, 2005, 43, 778-791.	2.7	33
36	Artificial neural-network technique for precipitation nowcasting from satellite imagery. Advances in Geosciences, 0, 7, 97-103.	12.0	33

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37	Polarimetric Weather Radar Retrieval of Raindrop Size Distribution by Means of a Regularized Artificial Neural Network. IEEE Transactions on Geoscience and Remote Sensing, 2006, 44, 3262-3275.	2.7	32
38	Model-Based Weather Radar Remote Sensing of Explosive Volcanic Ash Eruption. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 3591-3607.	2.7	32
39	Snowfall retrieval at X, Ka and WÂbands: consistency of backscattering and microphysical properties using BAECC ground-based measurements. Atmospheric Measurement Techniques, 2018, 11, 3059-3079.	1.2	32
40	Cloud model-based Bayesian technique for precipitation profile retrieval from the Tropical Rainfall Measuring Mission Microwave Imager. Radio Science, 2003, 38, n/a-n/a.	0.8	31
41	Evaluation of a New Polarimetric Algorithm for Rain-Path Attenuation Correction of X-Band Radar Observations Against Disdrometer. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 1369-1380.	2.7	31
42	Neural-network approach to ground-based passive microwave estimation of precipitation intensity and extinction. Journal of Hydrology, 2006, 328, 121-131.	2.3	30
43	Model-based prediction of amplitude scintillation variance due to clear-air tropospheric turbulence on Earth-satellite microwave links. IEEE Transactions on Antennas and Propagation, 1998, 46, 1506-1518.	3.1	29
44	Rainfall Estimation from Polarimetric S-Band Radar Measurements: Validation of a Neural Network Approach. Journal of Applied Meteorology and Climatology, 2009, 48, 2022-2036.	0.6	28
45	Monitoring Subglacial Volcanic Eruption Using Ground-Based C-Band Radar Imagery. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 403-414.	2.7	28
46	Remote sensing of the Moon's subsurface with multifrequency microwave radiometers: A numerical study. Radio Science, 2011, 46, .	0.8	28
47	Microwave remote sensing of the 2011 Plinian eruption of the GrÃmsvötn Icelandic volcano. Remote Sensing of Environment, 2013, 129, 168-184.	4.6	28
48	Impact of radar data assimilation for the simulation of a heavy rainfall case in central Italy using WRF–3DVAR. Atmospheric Measurement Techniques, 2014, 7, 2919-2935.	1.2	28
49	Scattering properties of modeled complex snowflakes and mixedâ€phase particles at microwave and millimeter frequencies. Journal of Geophysical Research D: Atmospheres, 2014, 119, 9931-9947.	1.2	28
50	Active and passive remote sensing of precipitating storms during CaPE. Part II: Intercomparison of precipitation retrievals over land from AMPR radiometer and CP-2 radar. Meteorology and Atmospheric Physics, 1994, 54, 29-51.	0.9	27
51	Ground-based multifrequency microwave radiometry for rainfall remote sensing. IEEE Transactions on Geoscience and Remote Sensing, 2002, 40, 742-759.	2.7	27
52	Constrained iterative technique with embedded neural network for dual-polarization radar correction of rain path attenuation. IEEE Transactions on Geoscience and Remote Sensing, 2005, 43, 2305-2314.	2.7	27
53	Rainfall Nowcasting From Multisatellite Passive-Sensor Images Using a Recurrent Neural Network. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 3800-3812.	2.7	26
54	An Exploratory Study to Derive Precipitation over Land from X-Band Synthetic Aperture Radar Measurements. Journal of Applied Meteorology and Climatology, 2008, 47, 562-575.	0.6	26

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55	Optimizing Data Volume Return for Ka-Band Deep Space Links Exploiting Short-Term Radiometeorological Model Forecast. IEEE Transactions on Antennas and Propagation, 2016, 64, 235-250.	3.1	26
56	Hydrometeor classification from dual-polarized weather radar: extending fuzzy logic from S-band to C-band data. Advances in Geosciences, 0, 7, 109-114.	12.0	26
57	Predicting Antenna Noise Temperature Due to Rain Clouds at Microwave and Millimeter-Wave Frequencies. IEEE Transactions on Antennas and Propagation, 2007, 55, 2022-2031.	3.1	25
58	Iterative Bayesian Retrieval of Hydrometeor Content From X-Band Polarimetric Weather Radar. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 3059-3074.	2.7	25
59	Inversion of Spaceborne X-Band Synthetic Aperture Radar Measurements for Precipitation Remote Sensing Over Land. IEEE Transactions on Geoscience and Remote Sensing, 2008, 46, 3472-3487.	2.7	24
60	Modeling and Predicting Sky-Noise Temperature of Clear, Cloudy, and Rainy Atmosphere From X- to W-Band. IEEE Transactions on Antennas and Propagation, 2013, 61, 3859-3868.	3.1	24
61	Remotely sensing cloud properties from microwave radiometric observations by using a modeled cloud database. Radio Science, 1998, 33, 369-392.	0.8	23
62	Physically based statistical integration of TRMM microwave measurements for precipitation profiling. Radio Science, 2003, 38, n/a-n/a.	0.8	23
63	Simulating Topographic Effects on Spaceborne Radiometric Observations Between L and X Frequency Bands. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 273-282.	2.7	23
64	Prediction of the Error Induced by Topography in Satellite Microwave Radiometric Observations. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 3180-3188.	2.7	23
65	Examples of Multi-Sensor Determination of Eruptive Source Parameters of Explosive Events at Mount Etna. Remote Sensing, 2021, 13, 2097.	1.8	23
66	Gazing inside a giant-hail-bearing Mediterranean supercell by dual-polarization Doppler weather radar. Atmospheric Research, 2021, 264, 105852.	1.8	23
67	Flower Constellation of Millimeter-Wave Radiometers for Tropospheric Monitoring at Pseudogeostationary Scale. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 3107-3122.	2.7	22
68	Microwave Radiometric Remote Sensing of Volcanic Ash Clouds From Space: Model and Data Analysis. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 4678-4691.	2.7	22
69	Correction of Polarimetric Radar Reflectivity Measurements and Rainfall Estimates for Apparent Vertical Profile in Stratiform Rain. Journal of Applied Meteorology and Climatology, 2013, 52, 1170-1186.	0.6	22
70	Tephra Mass Eruption Rate From Ground-Based X-Band and L-Band Microwave Radars During the November 23, 2013, Etna Paroxysm. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 3314-3327.	2.7	22
71	Modeling and measurement of rainfall by ground-based multispectral microwave radiometry. IEEE Transactions on Geoscience and Remote Sensing, 2005, 43, 1000-1011.	2.7	21
72	Validation of satellite OPEMW precipitation product with ground-based weather radar and rain gauge networks. Atmospheric Measurement Techniques, 2013, 6, 3181-3196.	1.2	21

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73	Microphysical characterization of free space optical link due to hydrometeor and fog effects. Applied Optics, 2015, 54, 6787.	2.1	21
74	Topographic Effects on the Surface Emissivity of a Mountainous Area Observed by a Spaceborne Microwave Radiometer. Sensors, 2008, 8, 1459-1474.	2.1	20
75	Interpretation of observed microwave signatures from ground dual polarization radar and space multi-frequency radiometer for the 2011 GrÃmsvötn volcanic eruption. Atmospheric Measurement Techniques, 2014, 7, 537-552.	1.2	20
76	Sun-Tracking Microwave Radiometry: All-Weather Estimation of Atmospheric Path Attenuation at \$Ka\$-, \$V\$-, and \$W\$-Band. IEEE Transactions on Antennas and Propagation, 2016, 64, 4815-4827.	3.1	20
77	Evaluation of X-Band Polarimetric-Radar Estimates of Drop-Size Distributions From Coincident S-Band Polarimetric Estimates and Measured Raindrop Spectra. IEEE Transactions on Geoscience and Remote Sensing, 2008, 46, 3067-3075.	2.7	19
78	Retrieval of Sun Brightness Temperature and Precipitating Cloud Extinction Using Ground-Based Sun-Tracking Microwave Radiometry. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 3134-3147.	2.3	19
79	Simulation of radiometric and attenuation measurements along Earth-satellite links in the 10- to 50-GHz band through horizontally finite convective rain cells. Radio Science, 1999, 34, 841-858.	0.8	18
80	Potential of combined spaceborne infrared and microwave radiometry for near real-time rainfall attenuation monitoring along earth-satellite links. International Journal of Satellite Communications and Networking, 2001, 19, 385-412.	0.6	18
81	Modeling Polarimetric Response of Spaceborne Synthetic Aperture Radar Due to Precipitating Clouds From X- to Ka-Band. IEEE Transactions on Geoscience and Remote Sensing, 2012, 50, 687-703.	2.7	18
82	Model for estimating the refractive-index structure constant in clear-air intermittent turbulence. Applied Optics, 1993, 32, 2674.	2.1	17
83	Sensitivity analysis of airborne microwave retrieval of stratiform precipitation to the melting layer parameterization. IEEE Transactions on Geoscience and Remote Sensing, 2001, 39, 75-91.	2.7	17
84	Coupling X-band dual-polarized mini-radars and hydro-meteorological forecast models: the HYDRORAD project. Natural Hazards and Earth System Sciences, 2013, 13, 1229-1241.	1.5	17
85	Forward Scatter Radar for Air Surveillance: Characterizing the Target-Receiver Transition from Far-Field to Near-Field Regions. Remote Sensing, 2017, 9, 50.	1.8	16
86	Rainfall observation from X-band, space-borne, synthetic aperture radar. Natural Hazards and Earth System Sciences, 2009, 9, 77-84.	1.5	16
87	Lunar Microwave Brightness Temperature: Model Interpretation and Inversion of Spaceborne Multifrequency Observations by a Neural Network Approach. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 3350-3358.	2.7	15
88	Multisensor Characterization of the Incandescent Jet Region of Lava Fountain-Fed Tephra Plumes. Remote Sensing, 2020, 12, 3629.	1.8	15
89	A maximum entropy approach to satellite quantitative precipitation estimation (QPE). International Journal of Remote Sensing, 2004, 25, 4629-4639.	1.3	14
90	Water vapour distribution at urban scale using high-resolution numerical weather model and spaceborne SAR interferometric data. Natural Hazards and Earth System Sciences, 2010, 10, 121-132.	1.5	14

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91	Retrieval of Tephra Size Spectra and Mass Flow Rate From C-Band Radar During the 2010 Eyjafjallajökull Eruption, Iceland. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 5644-5660.	2.7	14
92	C-band Dual-Polarization Radar Observations of a Massive Volcanic Eruption in South America. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 960-974.	2.3	14
93	Fuzzy-logic detection and probability of hail exploiting short-range X-band weather radar. Atmospheric Research, 2018, 201, 17-33.	1.8	14
94	Multisatellite Multisensor Observations of a Sub-Plinian Volcanic Eruption: The 2015 Calbuco Explosive Event in Chile. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 2597-2612.	2.7	14
95	EVALUATION OF STATISTICAL MODELS FOR CLEAR-AIR SCINTILLATION PREDICTION USING OLYMPUS SATELLITE MEASUREMENTS. International Journal of Satellite Communications and Networking, 1997, 15, 73-88.	0.6	13
96	Spatially-Adaptive Advection Radar Technique for Precipitation Mosaic Nowcasting. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2012, 5, 874-884.	2.3	13
97	Spectral Downscaling of Integrated Water Vapor Fields From Satellite Infrared Observations. IEEE Transactions on Geoscience and Remote Sensing, 2012, 50, 415-428.	2.7	13
98	Impact of multiple radar reflectivity data assimilation on the numerical simulation of aÂflash flood event during the HyMeX campaign. Hydrology and Earth System Sciences, 2017, 21, 5459-5476.	1.9	13
99	Snowfall Measurements by Proposed European GPM Mission. , 2007, , 655-674.		13
100	The role of the Italian scientific community in the first HyMeX SOP: an outstanding multidisciplinary experience. Meteorologische Zeitschrift, 2015, 24, 261-267.	0.5	13
101	Assessment of polarimetric features to discriminate land cover from the MAESTRO 1 campaign. International Journal of Remote Sensing, 1994, 15, 2887-2899.	1.3	12
102	Effects of Degraded Sensor Resolution upon Passive Microwave Precipitation Retrievals of Tropical Rainfall. Journals of the Atmospheric Sciences, 1998, 55, 1689-1706.	0.6	12
103	Evidence of long-term correlation between clear-air attenuation and scintillation in microwave and millimeter-wave satellite links. IEEE Transactions on Antennas and Propagation, 1999, 47, 1749-1757.	3.1	12
104	A physical-statistical approach to match passive microwave retrieval of rainfall to Mediterranean climatology. IEEE Transactions on Geoscience and Remote Sensing, 2002, 40, 2271-2284.	2.7	12
105	Rainfall rate retrieval in presence of path attenuation using C-band polarimetric weather radars. Natural Hazards and Earth System Sciences, 2006, 6, 439-450.	1.5	12
106	Modeling uncertainties for passive microwave precipitation retrieval: evaluation of a case study. IEEE Transactions on Geoscience and Remote Sensing, 2006, 44, 78-89.	2.7	12
107	Detection of floods and heavy rain using Cosmo-SkyMed data: The event in Northwestern Italy of November 2011. , 2012, , .		12
108	Validating Subglacial Volcanic Eruption Using Ground-Based C-Band Radar Imagery. IEEE Transactions on Geoscience and Remote Sensing, 2012, 50, 1266-1282.	2.7	12

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109	Reflectivity and velocity radar data assimilation for two flash flood events in central Italy: A comparison between 3D and 4D variational methods. Quarterly Journal of the Royal Meteorological Society, 2020, 146, 348-366.	1.0	12
110	Coastal Water Remote Sensing From Sentinel-2 Satellite Data Using Physical, Statistical, and Neural Network Retrieval Approach. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 915-928.	2.7	12
111	Precipitation Retrieval From Spaceborne Microwave Radiometers and Combined Sensors., 2002,, 107-126.		12
112	Ground-Based Remote Sensing and Uncertainty Analysis of the Mass Eruption Rate Associated With the 3–5 December 2015 Paroxysms of Mt. Etna. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2022, 15, 504-518.	2.3	12
113	Multisensor observations during the flood event of 4–6 November, 1994 over Northern Italy. International Journal of Remote Sensing, 1996, 14, 91-117.	1.1	11
114	Cloud-induced effects on monthly averaged scintillation amplitude along millimeter-wave slant paths. IEEE Transactions on Antennas and Propagation, 2003, 51, 880-887.	3.1	11
115	Numerical investigation of intense rainfall effects on coherent and incoherent slant-path propagation at K-band and above. IEEE Transactions on Antennas and Propagation, 2003, 51, 965-977.	3.1	11
116	Maximum-Likelihood Retrieval of Modeled Convective Rainfall Patterns from Midlatitude C-Band Weather Radar Data. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 2403-2416.	2.7	11
117	Near-Real-Time Detection of Tephra Eruption Onset and Mass Flow Rate Using Microwave Weather Radar and Infrasonic Arrays. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 6292-6306.	2.7	11
118	Evaluation of High-Frequency Channels for Deep-Space Data Transmission Using Radiometeorological Model Forecast. IEEE Transactions on Antennas and Propagation, 2017, 65, 1311-1320.	3.1	11
119	Maximum-Likelihood Retrieval of Volcanic Ash Concentration and Particle Size From Ground-Based Scanning Lidar. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 5824-5842.	2.7	11
120	The Alphasat Aldo Paraboni propagation experiment: Measurement campaign at the Italian ground stations. International Journal of Satellite Communications and Networking, 2019, 37, 423-436.	1.2	11
121	RTTOV-gb v1.0 \hat{a} e" updates on sensors, absorption models, uncertainty, and availability. Geoscientific Model Development, 2019, 12, 1833-1845.	1.3	11
122	Active and passive microwave remote sensing of precipitating storms during CaPE. Part I: Advanced microwave precipitation radiometer and polarimetric radar measurements and models. Meteorology and Atmospheric Physics, 1994, 54, 3-27.	0.9	10
123	Impact of rainfall incoherent backscattering upon radar echoes above 10 GHz. Physics and Chemistry of the Earth, 2000, 25, 943-948.	0.3	10
124	Spatial characterization of raincell horizontal profiles from C-band radar measurements at mid-latitude. Advances in Geosciences, 0, 7, 285-292.	12.0	10
125	Assessment of model-based scintillation variance prediction on long-term basis using Italsat satellite measurements. International Journal of Satellite Communications and Networking, 1999, 17, 17-36.	0.6	9
126	Statistical Characterization and Modeling of Raindrop Spectra Time Series for Different Climatological Regions. IEEE Transactions on Geoscience and Remote Sensing, 2008, 46, 2778-2787.	2.7	9

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127	Bayesian statistical analysis of ground-clutter for the relative calibration of dual polarization weather radars. European Journal of Remote Sensing, 2016, 49, 933-953.	1.7	9
128	Optimal Stochastic Prediction and Verification of Signal-to-Noise Ratio and Data Rate for Ka-Band Spaceborne Telemetry Using Weather Forecasts. IEEE Transactions on Antennas and Propagation, 2021, 69, 1065-1077.	3.1	9
129	3DVAR assimilation of SSM/I data over the sea for the IOP2b MAP case. Advances in Geosciences, 0, 2, 229-235.	12.0	9
130	On The Effect of Atmospheric Emission upon the Passive Microwave Polarimetric Response of an Azimuthally Anisotropic Sea Surface. Progress in Electromagnetics Research, 2000, 26, 223-248.	1.6	8
131	Assessment and Uncertainty Estimation of Weather-Forecast Driven Data Transfer for Space Exploration at <i>Ka</i> - and \$X\$ -Band. IEEE Transactions on Antennas and Propagation, 2019, 67, 3308-3322.	3.1	8
132	Retrieving atmospheric temperature profiles by microwave radiometry using a priori information on atmospheric spatial-temporal evolution. IEEE Transactions on Geoscience and Remote Sensing, 2001, 39, 1896-1905.	2.7	7
133	Intercomparison of inversion algorithms to retrieve rain rate from SSM/I by using an extended validation set over the Mediterranean area. IEEE Transactions on Geoscience and Remote Sensing, 2004, 42, 2226-2239.	2.7	7
134	Modeling Microwave Fully Polarimetric Passive Observations of the Sea Surface: A Neural Network Approach. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 2098-2107.	2.7	7
135	Threeâ€dimensional variational assimilation of Special Sensor Microwave/Imager data into a mesoscale weatherâ€prediction model: A case study. Quarterly Journal of the Royal Meteorological Society, 2007, 133, 1295-1307.	1.0	7
136	Flood forecast in complex orography coupling distributed hydro-meteorological models and in-situ and remote sensing data. Meteorology and Atmospheric Physics, 2008, 101, 267-285.	0.9	7
137	Atmospheric water vapor effects on spaceborne interferometric SAR imaging: Comparison with ground-based measurements and meteorological model simulations at different scales. , 2009, , .		7
138	Weather Radar Data Processing and Atmospheric Applications: An Overview of Tools for Monitoring Clouds and Detecting Wind Shear. IEEE Signal Processing Magazine, 2019, 36, 85-97.	4.6	7
139	Relation between weather radar equation and first-order backscattering theory. Atmospheric Chemistry and Physics, 2003, 3, 813-821.	1.9	6
140	Generalized Eddington analytical model for azimuthally dependent radiance simulation in stratified media. Applied Optics, 2005, 44, 6032.	2.1	6
141	Potential of X-band spaceborne synthetic aperture radar for precipitation retrieval over land., 2007,,		6
142	An Independent Overview of the National Weather Service in Italy. Bulletin of the American Meteorological Society, 2008, 89, 1279-1284.	1.7	6
143	Overview: Tropospheric profiling: state of the art and future challenges – introduction to the AMT special issue. Atmospheric Measurement Techniques, 2014, 7, 2981-2986.	1.2	6
144	Investigating Hector Convective Development and Microphysical Structure Using High-Resolution Model Simulations, Ground-Based Radar Data, and TRMM Satellite Data. Journals of the Atmospheric Sciences, 2014, 71, 1353-1370.	0.6	6

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145	Investigating the shadow radiation of 3-dimensional radar targets in the near field., 2017, , .		6
146	Atmospheric Gas Absorption Knowledge in the Submillimeter: Modeling, Field Measurements, and Uncertainty Quantification. Bulletin of the American Meteorological Society, 2019, 100, ES291-ES295.	1.7	6
147	A Closed-Form Model for Long- and Short-Range Forward Scatter Radar Signals From Rectangular Conductive Targets. IEEE Transactions on Aerospace and Electronic Systems, 2020, 56, 1370-1390.	2.6	6
148	Emission and scattering by clouds and precipitation. , 2006, , 101-224.		6
149	Free Space Optics System Reliability inÂthe Presence of Weather-Induced Disruptions. Computer Communications and Networks, 2020, , 327-351.	0.8	6
150	Remote Sensing of Volcanic Ash Cloud During Explosive Eruptions Using Ground-Based Weather RADAR Data Processing [In the Spotlight]. IEEE Signal Processing Magazine, 2011, 28, 128-126.	4.6	5
151	Model analysis of hydrometeor scattering effects on free space near-infrared links. , 2012, , .		5
152	Exploiting Tropospheric Measurements From Sun-Tracking Radiometer for Radiopropagation Models at Centimeter and Millimeter Wave. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2019, 12, 1697-1708.	2.3	5
153	Investigating 3D and 4D variational rapid-update-cycling assimilation of weather radar reflectivity for a heavy rain event in central Italy. Natural Hazards and Earth System Sciences, 2021, 21, 2849-2865.	1.5	5
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