Frank Marzano

List of Publications by Year in descending order

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285 papers 4,227 citations

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310 all docs

310 docs citations

310 times ranked

2721 citing authors

#	Article	IF	CITATIONS
1	Investigating Spaceborne Millimeter-Wave Ice Cloud Imager Geolocation Using Landmark Targets and Frequency-Scaling Approach. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-17.	2.7	2
2	Ground-Based Remote Sensing and Uncertainty Analysis of the Mass Eruption Rate Associated With the $3a \in 5$ 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
3	Dynamical Link Budget in Satellite Communications at Ka-Band: Testing Radiometeorological Forecasts With Hayabusa2 Deep-Space Mission Support Data. IEEE Transactions on Wireless Communications, 2022, 21, 3935-3950.	6.1	4
4	Can We Use Atmospheric Targets for Geolocating Spaceborne Millimeter-Wave Ice Cloud Imager (ICI) Acquisitions?. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-22.	2.7	3
5	Mosaicking Weather Radar Retrievals from an Operational Heterogeneous Network at C and X Band for Precipitation Monitoring in Italian Central Apennines. Remote Sensing, 2022, 14, 248.	1.8	3
6	Testbed Emulator of Satellite-to-Ground FSO Downlink Affected by Atmospheric Seeing Including Scintillations and Clouds. Electronics (Switzerland), 2022, 11, 1102.	1.8	0
7	Short-term Forecast of Radiocommunication Geostationary Satellite Links coupling Weather Prediction and Radiopropagation Models. , 2022, , .		2
8	BepiColombo Mission to Mercury: Designing RadioMetOP Weather-Forecast Based Operations to Improve Satellite Data Throughput at Ka-Band., 2022,,.		0
9	Assessing the Spaceborne 183.31-GHz Radiometric Channel Geolocation Using High-Altitude Lakes, Ice Shelves, and SAR Imagery. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 4044-4061.	2.7	2
10	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
11	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
12	Weather-forecast based RMOP link-budget approach experimentation: data-transfer optimization at Ka-band with Hayabusa-2 satellite mission support. , 2021 , , .		2
13	Development and Application of Microwave Radiometric Techniques for Modeling Satellite-Earth Propagation at V and W Band. , 2021, , .		4
14	MEO Satellite Ka-band Receiving Stations for Tropospheric Propagation Impairment Analysis: Design, Architecture and Preliminary Measurements., 2021,,.		2
15	Dual-Wavelength Polarimetric Lidar Observations of the Volcanic Ash Cloud Produced during the 2016 Etna Eruption. Remote Sensing, 2021, 13, 1728.	1.8	3
16	Improving atmospheric path attenuation estimates for radio propagation applications by microwave radiometric profiling. Atmospheric Measurement Techniques, 2021, 14, 2737-2748.	1.2	2
17	Examples of Multi-Sensor Determination of Eruptive Source Parameters of Explosive Events at Mount Etna. Remote Sensing, 2021, 13, 2097.	1.8	23
18	Applicability of the Langley Method for Non-Geostationary In-Orbit Satellite Effective Isotropic Radiated Power Estimation. IEEE Transactions on Antennas and Propagation, 2021, 69, 4935-4943.	3.1	1

#	Article	IF	Citations
19	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
20	Gazing inside a giant-hail-bearing Mediterranean supercell by dual-polarization Doppler weather radar. Atmospheric Research, 2021, 264, 105852.	1.8	23
21	Satellite-Based Detection of Volcanic Plumes: Sinergy Between Thermal Infrared and Millimeter Wave Radiometric Data During the 2014 Kelud Event. , 2021, , .		2
22	Sun-Tracking Ground-Based Microwave Radiometry: Challenges and Applications. , 2021, , .		1
23	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
24	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
25	Generalized Parametric Prediction Model of the Mean Radiative Temperature for Microwave Slant Paths in All-Weather Condition. IEEE Transactions on Antennas and Propagation, 2020, 68, 1031-1043.	3.1	3
26	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
27	Multisensor Characterization of the Incandescent Jet Region of Lava Fountain-Fed Tephra Plumes. Remote Sensing, 2020, 12, 3629.	1.8	15
28	Investigating ground-based radar and spaceborne infrared radiometer synergy for lightning areal prediction in complex orography. Bulletin of Atmospheric Science and Technology, 2020, 1, 231-256.	0.4	1
29	Clear-Air Anomaly Masking Using Kalman Temporal Filter From Geostationary Multispectral Imagery. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 7908-7919.	2.7	1
30	X-Band Synthetic Aperture Radar Methods. Advances in Global Change Research, 2020, , 315-339.	1.6	0
31	Free Space Optics System Reliability inÂthe Presence of Weather-Induced Disruptions. Computer Communications and Networks, 2020, , 327-351.	0.8	6
32	Regional Precipitation Mosaicking Using Multifrequency Weather Radar Network In Complex Orography. , 2020, , .		0
33	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
34	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
35	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
36	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

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37	RTTOV-gb v1.0 – updates on sensors, absorption models, uncertainty, and availability. Geoscientific Model Development, 2019, 12, 1833-1845.	1.3	11
38	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
39	Remote Sensing of Coastal Water-quality Parameters from Sentinel-2 Satellite Data in the Tyrrhenian and Adriatic Seas. , 2019, , .		3
40	Geocalibrating Millimeter-wave Spaceborne Radiometers for Global-scale Cloud Retrieval., 2019,,.		1
41	Modeling and Predicting Down-link Tropospheric Channel above Ku Band for Interplanetary Exploration. , 2019, , .		1
42	Resilience of Deep Space FSO Communication Scenario Involving SNSPD Receiver to Atmospheric Turbulence. , $2019, , .$		0
43	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
44	Fuzzy-logic detection and probability of hail exploiting short-range X-band weather radar. Atmospheric Research, 2018, 201, 17-33.	1.8	14
45	Ingestion of Sentinel-Derived Remote Sensing Products in Numerical Weather Prediction Models: First Results of the ESA Steam Project. , 2018, , .		2
46	Clear-Air Anomaly Detection Using Modified Kalman Temporal Filter from Geostationary Multispectral Data. , 2018, , .		1
47	Predicting Mean Radiative Temperature at Millimeter Wavelengths in Continental Climate Areas. , 2018, , .		1
48	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
49	Modeling the Forward-Scatter Cross Section of 3-Dimensional Objects by Means of the Shadow Contour Theorem: An Assessment. , 2018, , .		3
50	Assessing Radiative Transfer Models Trained by Numerical Weather Forecasts Using Sun-Tracking Radiometric Measurements for Satellite Link Characterization Up to W Band. , 2018, , .		0
51	AlphaSat Aldo Paraboni Experiment Q-Band Receiving Station in Rome (Italy): Upgrades and Preliminary Scintillation Measurements. , 2018, , .		3
52	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
53	Ground-Based Measurements of the 2014–2015 Holuhraun Volcanic Cloud (Iceland). Geosciences (Switzerland), 2018, 8, 29.	1.0	35
54	Interpretation of weather radar returns from single and distributed scatterers. , 2018, , .		0

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55	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
56	Effects of atmospheric precipitations and turbulence on satellite Ka-band synthetic aperture radar. , 2018, , .		1
57	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
58	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
59	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
60	Improving weather-forecast based model chain to optimize data-volume transfer for Ka-band deep-space downlinks. , $2017, \dots$		1
61	Clear-air scintillation analysis of Q-band alphasat link at Spino d'Adda using radiosounding data. , 2017, , .		4
62	Investigating the shadow radiation of 3-dimensional radar targets in the near field. , 2017, , .		6
63	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
64	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
65	Weather radar performance monitoring using a metallic-grid ground-scatterer., 2017,,.		0
66	KydroSAT: a Ku/Ka band synthetic aperture radar space mission concept for high-resolution mapping of hydrometeorological parameters. , 2017, , .		1
67	Monitoring by forward scatter radar techniques: an improved second-order analytical model. , 2017, , .		2
68	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
69	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
70	Spaceborne microwave and infrared radiometric observations during the sub-Plinian eruption of Calbuco volcano in 2015. , 2016, , .		1
71	Ultraviolet Scattering Communication Channels. Signals and Communication Technology, 2016, , 145-170.	0.4	3
72	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

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73	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
74	Detection and quantification of precipitations signatures on synthetic aperture radar imagery at X band. Proceedings of SPIE, 2016, , .	0.8	2
75	Retrieval of precipitation extinction using ground-based sun-tracking millimeter-wave radiometry. , 2016, , .		3
76	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
77	Atmospheric precipitation impact on synthetic aperture radar imagery: Numerical model at X and KA bands. , 2015 , , .		4
78	Forward scatter radar modeling: Effects of near field for canonical targets., 2015,,.		2
79	Hail detection in Naples urban area using single-polarization X-band weather radar: Preliminary results. , $2015, , .$		1
80	C-band polarimetric weather radar calibration using a fuzzy logic fusion of three techniques., 2015,,.		0
81	Performance evaluation of rain products from a polarimetric X-band radar by using a new raw data processing chain. , 2015, , .		0
82	Coupling radio propagation and weather forecast models to maximize Ka-band channel transmission rate for interplanetary missions. , 2015 , , .		0
83	Modeling ocean wave surface to simulate spaceborne scatterometer observations in presence of rain. , 2015, , .		0
84	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
85	Clear-air turbulence effects modeling on terrestrial and satellite free-space optical channels. , 2015, , .		3
86	Analysis of canonical targets in near field for Forward Scatter Radar applications. , 2015, , .		3
87	Microphysical characterization of free space optical link due to hydrometeor and fog effects. Applied Optics, 2015, 54, 6787.	2.1	21
88	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
89	Volcanic Ash Cloud Observation using Ground-based Ka-band Radar and Near-Infrared Lidar Ceilometer during the Eyjafjallajökull eruption. Annals of Geophysics, 2015, 57, .	0.5	2
90	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

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91	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
92	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
93	Modeling scintillation effects on free space optical links using radiosounding profile data. , 2014, , .		2
94	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
95	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
96	Precipitation signature on side-looking aperture radar imaging: Sensitivity analysis to surface effects at C, X and Ku band. , 2014 , , .		3
97	Exploiting microwave scanning radar for monitoring Icelandic volcanic eruption source parameters. , 2014, , .		2
98	Evaluation of deep space Ka-band data transfer using radiometeorological forecast models. , 2014, , .		3
99	Dielectric lens optimization for conical helix THz antennas. , 2014, , .		1
100	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
101	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
102	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
103	Accuracy of real-time sky status indicator (SSI) for the characterization of a satellite communication link at microwave bands. , 2014, , .		0
104	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
105	Effects of multiple scattering due to atmospheric water particles on outdoor Free Space Optical links. , 2014, , .		0
106	Modeling atmospheric precipitation impact on synthetic aperture radar imagery at X and Ka bands. , 2014, , .		2
107	Radiative Transfer, Theory. Encyclopedia of Earth Sciences Series, 2014, , 624-634.	0.1	0
108	Radiation, Multiple Scattering. Encyclopedia of Earth Sciences Series, 2014, , 585-588.	0.1	0

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109	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
110	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
111	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
112	Remote sensing of volcanic ash: Synergistic use of ash models and microwave observations of the erupting plumes. , 2013 , , .		0
113	Microwave remote sensing of the 2011 Plinian eruption of the GrÃmsvötn Icelandic volcano. Remote Sensing of Environment, 2013, 129, 168-184.	4.6	28
114	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
115	Hydrometeor scattering and stochastic modeling for free-space optical channel characterization. , 2013, , .		3
116	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
117	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
118	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
119	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
120	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
121	Radar remote sensing of ash cloud due to the Gr& $\#x00ED$; $\#x00F6$; $\#$		0
122	X-band signatures of floods and heavy rain in Cosmo SkyMed images. , 2012, , .		0
123	Detection of floods and heavy rain using Cosmo-SkyMed data: The event in Northwestern Italy of November 2011., 2012, , .		12
124	Characterization of hydrometeor scattering effects and experimental measurements using near-infrared free-space urban links. , 2012, , .		4
125	Review of radar measurements of precipitation for the characterization of propagation effects on terrestrial and slant path radio links. , 2012 , , .		1
126	Analysis of rainfall signatures on COSMO-SkyMed X-Band Synthetic Aperture Radar observations. , 2012, , .		3

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127	Microwave and optical active remote sensing signatures of volcanic ash clouds from ground. , 2012, , .		2
128	Lessons learned from using COSMO-SkyMed imagery for flood mapping: some case studies. , 2012, , .		1
129	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
130	X-band weather radar monitoring real-time products in Rome and Naples urban areas. , 2012, , .		2
131	Design and characterization of the Q-band AlphaSat receiving station in Rome. , 2012, , .		2
132	Rateless codes performance tests on terrestrial FSO time-correlated channel model., 2012,,.		3
133	Passive microwave remote sensing of Plinian eruption due to the Grímsvötn Icelandic volcano., 2012,,.		2
134	Lunar sub-surface remote sensing by spacebome microwave Interferometric Radiometers: Analysis and preliminary results. , 2012 , , .		0
135	Model analysis of hydrometeor scattering effects on free space near-infrared links. , 2012, , .		5
136	Instruments, data and techniques for the assessment of the atmospheric noise emission in Satcom ground stations. , 2012, , .		4
137	60 GHz tapered-helix antenna for WPAN applications. , 2012, , .		1
138	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
139	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
140	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
141	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
142	The NanoROLD project in the frame of the AeroClouds programme. International Journal of Remote Sensing, 2011, 32, 5303-5319.	1.3	0
143	Remote sensing of the Moon's subsurface with multifrequency microwave radiometers: A numerical study. Radio Science, 2011, 46, .	0.8	28
144	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

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145	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
146	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
147	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
148	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
149	Synergic use of EO, NWP and ground based measurements for the mitigation of vapour artefacts in SAR interferometry. , 2011 , , .		3
150	Meteorological Radar Systems. , 2011, , 33-57.		2
151	An Introduction to Rain Gauges and Disdrometers. , 2011, , 107-114.		0
152	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
153	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
154	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
155	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
156	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
157	Corrections to "Modeling Antenna Noise Temperature Due to Rain Clouds at Microwave and Millimeter-Wave Frequencies―[Apr 06 1305-1317]. IEEE Transactions on Antennas and Propagation, 2010, 58, 242-242.	3.1	0
158	Topographic effects on spaceborne radiometric observations and possible correction strategies. , 2010, , .		0
159	High-Repetition Millimeter-Wave Passive Remote Sensing of Humidity and Hydrometeor Profiles from Elliptical Orbit Constellations. Journal of Applied Meteorology and Climatology, 2010, 49, 1454-1476.	0.6	4
160	Investigating precipitation microphysics using ground-based microwave remote sensors and disdrometer data. Atmospheric Research, 2010, 97, 583-600.	1.8	64
161	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
162	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

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163	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
164	Atmospheric water vapor effects on spaceborne interferometric SAR imaging: Comparison with ground-based measurements and meteorological model simulations at different scales. , 2009, , .		7
165	FLORAD mission: Millimeter-wave atmospheric remote sensing through mini-satellites flower constellation., 2009,,.		1
166	Rainfall observation from X-band, space-borne, synthetic aperture radar. Natural Hazards and Earth System Sciences, 2009, 9, 77-84.	1.5	16
167	Characterization of atmospheric precipitation effects on spaceborne synthetic aperture radar response at X, Ku, Ka band. European Journal of Remote Sensing, 2009, , 73-88.	0.2	3
168	Advanced Techniques for Polarimetric Radar Estimation of Rainfall. Water Science and Technology Library, 2009, , 69-92.	0.2	0
169	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
170	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
171	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
172	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
173	A Simulation Study to Quantify the Relief Effects on the Observations Performed by Microwave Radiometers. , 2008, , .		3
174	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
175	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
176	Inversion techniques to retrieve high-resolution precipitation fields from satellite X-band Synthetic Aperture Radar. , 2008, , .		0
177	FLORAD: Micro-satellite flower constellation of millimeter-wave radiometers for atmospheric remote sensing., 2008,,.		4
178	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
179	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
180	Coupling a Neural Network-Based forward Model and a Bayesian Inversion Approach to Retrieve Wind Field from Spaceborne Polarimetric Radiometers. Sensors, 2008, 8, 7850-7865.	2.1	3

#	Article	IF	Citations
181	Ground-based radar remote sensing of explosive volcanic ash eruptions: Numerical models and quantitative applications. , 2008, , .		1
182	Model-oriented hydrometeor classification and water content estimate using dual-polarized weather radars. , 2008 , , .		0
183	An Independent Overview of the National Weather Service in Italy. Bulletin of the American Meteorological Society, 2008, 89, 1279-1284.	1.7	6
184	Topographic Effects on the Surface Emissivity of a Mountainous Area Observed by a Spaceborne Microwave Radiometer. Sensors, 2008, 8, 1459-1474.	2.1	20
185	Microwave radar remote sensing of Plinian volcanic ash clouds for aviation hazard and civil protection applications., 2007,,.		0
186	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
187	Evaluation of X-band polarimetric radar estimates of drop size distributions from coincident S-band polarimetric estimates and measured raindrop spectra. , 2007, , .		0
188	Impact of topography on microwave emissivity retrieval from satellite radiometers., 2007,,.		0
189	Remote sensing of the Moon sub-surface from a spaceborne microwawe radiometer aboard the European Student Moon Orbiter (ESMO). , 2007, , .		4
190	Potential of X-band spaceborne synthetic aperture radar for precipitation retrieval over land. , 2007, , .		6
191	Bayesian classification of hydrometeors from polarimetric radars at S- and X- bands: algorithm design and experimental comparisons. , 2007, , .		1
192	Processing disdrometer raindrop spectra time series from various climatological regions using estimation and autoregressive methods., 2007,,.		2
193	Microwave modelling of rain attenuation fields using disdrometer measurements and stochastic methods. , 2007, , .		0
194	Foreword to the Special Issue on the 9th Specialist Meeting on Microwave Radiometry and Remote Sensing Applications (MicroRad '06). IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 1903-1906.	2.7	0
195	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
196	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
197	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
198	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

#	Article	IF	CITATIONS
199	Investigating a SSM/I microwave algorithm to calibrate Meteosat infrared instantaneous rainrate estimates. Meteorological Applications, 2007, 3, 5-17.	0.9	36
200	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
201	Multivariate Probability Matching for Microwave Infrared Combined Rainfall Algorithm (MICRA)., 2007,, 269-279.		1
202	Snowfall Measurements by Proposed European GPM Mission. , 2007, , 655-674.		13
203	Neural Network tools for Satellite Rainfall Estimation. , 2007, , 149-161.		1
204	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
205	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
206	Volcanic Ash Cloud Retrieval by Ground-Based Microwave Weather Radar. IEEE Transactions on Geoscience and Remote Sensing, 2006, 44, 3235-3246.	2.7	95
207	A model to predict cloud density from midlatitude atmospheric soundings for microwave radiative transfer applications. Radio Science, 2006, 41, n/a-n/a.	0.8	4
208	Neural-network approach to ground-based passive microwave estimation of precipitation intensity and extinction. Journal of Hydrology, 2006, 328, 121-131.	2.3	30
209	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
210	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
211	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
212	Temperature and humidity profile retrievals from ground-based microwave radiometers during TUC. Meteorologische Zeitschrift, 2006, 15, 45-56.	0.5	112
213	Emission and scattering by clouds and precipitation. , 2006, , 101-224.		6
214	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
215	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
216	Foreword to the Special Issue on the 8th Specialist Meeting on Microwave Radiometry and Remote Sensing Applications (MicroRadO4). IEEE Transactions on Geoscience and Remote Sensing, 2005, 43, 919-923.	2.7	0

#	Article	IF	Citations
217	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
218	Generalized Eddington analytical model for azimuthally dependent radiance simulation in stratified media. Applied Optics, 2005, 44, 6032.	2.1	6
219	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
220	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
221	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
222	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
223	A maximum entropy approach to satellite quantitative precipitation estimation (QPE). International Journal of Remote Sensing, 2004, 25, 4629-4639.	1.3	14
224	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
225	Modeling of apparent radar reflectivity due to convective clouds at attenuating wavelengths. Radio Science, 2003, 38, 2-1-2-16.	0.8	33
226	Physically based statistical integration of TRMM microwave measurements for precipitation profiling. Radio Science, 2003, 38, n/a-n/a.	0.8	23
227	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
228	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
229	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
230	Relation between weather radar equation and first-order backscattering theory. Atmospheric Chemistry and Physics, 2003, 3, 813-821.	1.9	6
231	Intercomparison of microwave radiative transfer models for precipitating clouds. IEEE Transactions on Geoscience and Remote Sensing, 2002, 40, 541-549.	2.7	54
232	Ground-based multifrequency microwave radiometry for rainfall remote sensing. IEEE Transactions on Geoscience and Remote Sensing, 2002, 40, 742-759.	2.7	27
233	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
234	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

#	Article	IF	CITATIONS
235	Precipitation Retrieval From Spaceborne Microwave Radiometers and Combined Sensors., 2002,, 107-126.		12
236	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
237	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
238	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
239	Impact of rainfall incoherent backscattering upon radar echoes above 10 GHz. Physics and Chemistry of the Earth, 2000, 25, 943-948.	0.3	10
240	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
241	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
242	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
243	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
244	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
245	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
246	Remotely sensing cloud properties from microwave radiometric observations by using a modeled cloud database. Radio Science, 1998, 33, 369-392.	0.8	23
247	Using coincident SSM/I and infrared geostationary satellite data for rapid updates of rainfall. , 1998, , .		3
248	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
249	<title>Inversion of electromagnetic models for estimating bare soil parameters from radar multifrequency and multipolarization data</title> ., 1998, 3497, 67.		2
250	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
251	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
252	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

#	Article	IF	CITATIONS
253	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
254	Microwave radiometry of the atmosphere: an experiment from a sea-based platform during ERS-1 altimeter calibration. International Journal of Remote Sensing, 1995, 16, 2341-2356.	1.3	4
255	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
256	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
257	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
258	Model for estimating the refractive-index structure constant in clear-air intermittent turbulence. Applied Optics, 1993, 32, 2674.	2.1	17
259	Simulation study of a microwave radiometric temperature profiler for the Antarctic atmosphere. , 0, , .		2
260	Microwave multisensor rainfall retrieval applied to TOGA-COARE observations. , 0, , .		3
261	Rain retrieval algorithms for passive microwave observations: a comparison and a choice. , 0, , .		2
262	Comparison of GPR field results from a stratified limestone terrain with model simulations. , 0 , , .		1
263	Classification of multifrequency radar polarimetric data: role and contribution of vectorial filters. , $0, , .$		2
264	The role of a priori information in designing retrieval algorithms for microwave radiometric profiling of the atmosphere. , 0, , .		0
265	Mapping of precipitable water vapour by integrating measurements of ground-based GPS receivers and satellite-based microwave radiometers. , 0, , .		1
266	Empirical algorithms to retrieve surface rain-rate from Special Sensor Microwave Imager over a mid-latitude basin. , 0 , , .		1
267	Statistical integration of satellite passive microwave and infrared data for high-temporal sampling retrieval of rainfall. , 0, , .		1
268	Passive calibration of the backscattering coefficient of the ENVISAT RA-2: evaluation of radiative models for sea and land. , 0 , , .		0
269	Sensitivity analysis of self-consistent polarimetric rain retrieval to C-Band radar observables. , 0, , .		2
270	Use of second order statistics of observed and synthetic outgoing long-wave radiation spectra datasets for testing Global Circulation Models. , 0, , .		0

#	Article	IF	CITATIONS
271	Empirical evaluation of four microwave radiative forward models based on ground-based radiometer data near 20 and 30 GHz., 0, , .		3
272	Characterization of rainfall signature due to multispectral microwave radiometric data from ground. , 0, , .		1
273	Multivariate probability matching of satellite infrared and microwave radiometric measurements for rainfall retrieval at the geostationary scale., 0,,.		0
274	Small-catchment flood forecasting and drainage network extraction using computational intelligence. , 0, , .		0
275	Reconstruction of reflectivity vertical profiles and data quality control for C-band radar rainfall estimation. Advances in Geosciences, 0, 2, 209-215.	12.0	1
276	3DVAR assimilation of SSM/I data over the sea for the IOP2b MAP case. Advances in Geosciences, 0, 2, 229-235.	12.0	9
277	Satellite radiometric remote sensing of rainfall fields: multi-sensor retrieval techniques at geostationary scale. Advances in Geosciences, 0, 2, 267-272.	12.0	5
278	Model-based iterative approach to polarimetric radar rainfall estimation in presence of path attenuation. Advances in Geosciences, 0, 2, 51-57.	12.0	5
279	Simulations of deep convection in the Mediterranean area using 3DVAR of conventional and non-conventional data. Advances in Geosciences, 0, 2, 65-71.	12.0	2
280	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
281	Evaluation of radiative transfer schemes for mesoscale model data assimilation: a case study. Advances in Geosciences, 0, 7, 193-198.	12.0	3
282	Spatial characterization of raincell horizontal profiles from C-band radar measurements at mid-latitude. Advances in Geosciences, 0, 7, 285-292.	12.0	10
283	Artificial neural-network technique for precipitation nowcasting from satellite imagery. Advances in Geosciences, 0, 7, 97-103.	12.0	33
284	Flower elliptical-orbit constellation exploiting millimetre-wave radiometry and radio occultation for meteo-climatological applications. Advances in Geosciences, 0, 25, 167-177.	12.0	1
285	Coastal Water Quality: Hydrometeorological Impact of River Overflow and High-resolution Mapping from Sentinel-2 Satellite. , 0, , .		O