Adriano Camps

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6947933/publications.pdf

Version: 2024-02-01

479 papers	9,723 citations	47006 47 h-index	64796 79 g-index
481 all docs	481 docs citations	481 times ranked	3473 citing authors

#	Article	IF	Citations
1	Deployment mechanism for a L-band helix antenna in 1-Unit Cubesat. Acta Astronautica, 2022, 196, 394-399.	3.2	4
2	Remote Sensing of Precipitation Using Reflected GNSS Signals: Response Analysis of Polarimetric Observations. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-12.	6.3	15
3	A Novel RFI Detection Method for Microwave Radiometers Using Multilag Correlators. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-12.	6.3	4
4	Phase and Amplitude Calibration of Rotating Equispaced Circular Array for Geostationary Microwave Interferometric Radiometersâ€"Simulation Results and Discussion. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-19.	6.3	0
5	An Enhanced Resolution Brightness Temperature Product for Future Conical Scanning Microwave Radiometers. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-12.	6.3	8
6	Phase and Amplitude Calibrations of Rotating Equispaced Circular Array for Geostationary Microwave Interferometric Radiometersâ€" Theory and Methods. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-15.	6.3	2
7	The Potential of Spaceborne GNSS Reflectometry for Soil Moisture, Biomass, and Freezeâ€"Thaw Monitoring: Summary of a European Space Agency-funded study. IEEE Geoscience and Remote Sensing Magazine, 2022, 10, 8-38.	9.6	12
8	Vegetation Canopy Height Retrieval Using L1 and L5 Airborne GNSS-R. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	3
9	On the Trade-Off Between Enhancement of the Spatial Resolution and Noise Amplification in Conical-Scanning Microwave Radiometers. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-14.	6.3	5
10	Orbit Design for a Satellite Swarm-Based Motion Induced Synthetic Aperture Radiometer (MISAR) in Low-Earth Orbit for Earth Observation Applications. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-16.	6.3	2
11	Architectures and Synchronization Techniques for Distributed Satellite Systems: A Survey. IEEE Access, 2022, 10, 45375-45409.	4.2	14
12	Design of a Deployable Helix Antenna at L-Band for a 1-Unit CubeSat: From Theoretical Analysis to Flight Model Results. Sensors, 2022, 22, 3633.	3.8	6
13	A Preliminary Study on Ionospheric Scintillation Anomalies Detected Using GNSS-R Data from NASA CYGNSS Mission as Possible Earthquake Precursors. Remote Sensing, 2022, 14, 2555.	4.0	7
14	On the Potential of Empirical Mode Decomposition for RFI Mitigation in Microwave Radiometry. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-10.	6.3	3
15	Impact of Incidence Angle Diversity on SMOS and Sentinel-1 Soil Moisture Retrievals at Coarse and Fine Scales. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-18.	6.3	2
16	An FFT-Based CLEAN Deconvolution Method for Interferometric Microwave Radiometers With Spatially Variable Beam Pattern. IEEE Geoscience and Remote Sensing Letters, 2021, 18, 341-345.	3.1	1
17	Airborne GNSS-R: A Key Enabling Technology for Environmental Monitoring. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 6652-6661.	4.9	9
18	Single-Pass Soil Moisture Retrieval Using GNSS-R at L1 and L5 Bands: Results from Airborne Experiment. Remote Sensing, 2021, 13, 797.	4.0	21

#	Article	IF	Citations
19	Addendum: Hu, C.; et al. Detecting Targets above the Earthâ€™s Surface Using GNSS-R Delay Doppler Maps: Results from TDS-1. Remote Sens. 2019, 11, 2327. Remote Sensing, 2021, 13, 715.	4.0	0
20	Soil Moisture Estimation Synergy Using GNSS-R and L-Band Microwave Radiometry Data from FSSCat/FMPL-2. Remote Sensing, 2021, 13, 994.	4.0	17
21	Bayesian Unsupervised Machine Learning Approach to Segment Arctic Sea Ice Using SMOS Data. Geophysical Research Letters, 2021, 48, e2020GL091285.	4.0	4
22	Towards Federated Satellite Systems and Internet of Satellites: The Federation Deployment Control Protocol. Remote Sensing, 2021, 13, 982.	4.0	10
23	Sea Ice Concentration and Sea Ice Extent Mapping with L-Band Microwave Radiometry and GNSS-R Data from the FFSCat Mission Using Neural Networks. Remote Sensing, 2021, 13, 1139.	4.0	15
24	Sea Ice Thickness Estimation Based on Regression Neural Networks Using L-Band Microwave Radiometry Data from the FSSCat Mission. Remote Sensing, 2021, 13, 1366.	4.0	6
25	Sea Surface Salinity and Wind Speed Retrievals Using GNSS-R and L-Band Microwave Radiometry Data from FMPL-2 Onboard the FSSCat Mission. Remote Sensing, 2021, 13, 3224.	4.0	15
26	A Remote Carrier Synchronization Technique for Coherent Distributed Remote Sensing Systems. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 1909-1922.	4.9	3
27	Design and Testing of a Helix Antenna Deployment System for a 1U CubeSat. IEEE Access, 2021, 9, 66103-66114.	4.2	5
28	In-Orbit Validation of the FMPL-2 Instrumentâ€"The GNSS-R and L-Band Microwave Radiometer Payload of the FSSCat Mission. Remote Sensing, 2021, 13, 121.	4.0	29
29	A Pre-Correlation RFI Mitigation Algorithm for L-Band Interferometric Radiometers. , 2021, , .		1
30	FSSCat Mission Description and First Scientific Results of the FMPL-2 Onboard 3CAT-5/A. , 2021, , .		9
31	Soil Moisture Retrieval Using the FMPL-2/FSSCat GNSS-R and Microwave Radiometry Data. , 2021, , .		1
32	In-Orbit Validation of the FMPL-2 Dual Microwave Payload Onboard the Fsscat Mission. , 2021, , .		2
33	Incidence Angle Diversity on L-Band Microwave Radiometry and Its Impact on Consistent Soil Moisture Retrievals. , 2021, , .		1
34	Possible Evidence of Earthquake Precursors Observed in Ionospheric Scintillation Events Observed from Spaceborne GNSS-R Data. , 2021, , .		6
35	A Cubesat-Ready Phase Synchronization Digital Payload for Coherent Distributed Remote Sensing Missions. , 2021, , .		1
36	Parameter Considerations for the Retrieval of Surface Soil Moisture from Spaceborne GNSS-R. , 2021, , .		0

#	Article	IF	Citations
37	Monitoring Forest Above-Ground Biomass from Multifrequency Vegetation Optical Depth: A Preliminary Study. , 2021, , .		0
38	Sea Ice Concentration and Sea Ice Extent Mapping with the Fsscat Mission: A Neural Network Approach. , 2021, , .		1
39	On-Demand Satellite Payload Execution Strategy for Natural Disasters Monitoring Using LoRa: Observation Requirements and Optimum Medium Access Layer Mechanisms. Remote Sensing, 2021, 13, 4014.	4.0	6
40	Improved GNSS-R Altimetry Methods: Theory and Experimental Demonstration Using Airborne Dual Frequency Data from the Microwave Interferometric Reflectometer (MIR). Remote Sensing, 2021, 13, 4186.	4.0	3
41	Spatial Resolution in GNSS-R Under Coherent Scattering. IEEE Geoscience and Remote Sensing Letters, 2020, 17, 32-36.	3.1	67
42	Correcting the ADCS Jitter Induced Blurring in Small Satellite Imagery. IEEE Journal on Miniaturization for Air and Space Systems, 2020, 1, 130-137.	2.7	4
43	Assessment of Satellite Contacts Using Predictive Algorithms for Autonomous Satellite Networks. IEEE Access, 2020, 8, 100732-100748.	4.2	15
44	Generic Performance Simulator of Spaceborne GNSS-Reflectometer for Land Applications. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2020, 13, 3179-3191.	4.9	27
45	First Evidences of Ionospheric Plasma Depletions Observations Using GNSS-R Data from CYGNSS. Remote Sensing, 2020, 12, 3782.	4.0	12
46	L-Band Vegetation Optical Depth Estimation Using Transmitted GNSS Signals: Application to GNSS-Reflectometry and Positioning. Remote Sensing, 2020, 12, 2352.	4.0	15
47	Mission and system architecture for an operational network of earth observation satellite nodes. Acta Astronautica, 2020, 176, 398-412.	3.2	3
48	A Novel Dissemination Protocol to Deploy Opportunistic Services in Federated Satellite Systems. IEEE Access, 2020, 8, 142348-142365.	4.2	7
49	Assessing LoRa for Satellite-to-Earth Communications Considering the Impact of Ionospheric Scintillation. IEEE Access, 2020, 8, 165570-165582.	4.2	34
50	Analyzing Spatio-Temporal Factors to Estimate the Response Time between SMOS and In-Situ Soil Moisture at Different Depths. Remote Sensing, 2020, 12, 2614.	4.0	5
51	Snow and Ice Thickness Retrievals Using GNSS-R: Preliminary Results of the MOSAiC Experiment. Remote Sensing, 2020, 12, 4038.	4.0	29
52	Analytical Computation of the Spatial Resolution in GNSS-R and Experimental Validation at L1 and L5. Remote Sensing, 2020, 12, 3910.	4.0	13
53	Implementation of a Testbed for GNSS-R Payload Performance Evaluation. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2020, 13, 2708-2715.	4.9	4
54	Phase and Baseline Calibration for Microwave Interferometric Radiometers Using Beacons. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 5242-5253.	6.3	6

#	Article	IF	Citations
55	Experimental Evidence of Swell Signatures in Airborne L5/E5a GNSS-Reflectometry. Remote Sensing, 2020, 12, 1759.	4.0	11
56	Single-Pass Soil Moisture Retrievals Using GNSS-R: Lessons Learned. Remote Sensing, 2020, 12, 2064.	4.0	24
57	Assessment of Multi-Scale SMOS and SMAP Soil Moisture Products across the Iberian Peninsula. Remote Sensing, 2020, 12, 570.	4.0	28
58	Advanced GNSS-R Signals Processing With GPUs. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2020, 13, 1158-1163.	4.9	5
59	The Flexible Microwave Payload-2: A SDR-Based GNSS-Reflectometer and L-Band Radiometer for CubeSats. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2020, 13, 1298-1311.	4.9	27
60	Untangling the Incoherent and Coherent Scattering Components in GNSS-R and Novel Applications. Remote Sensing, 2020, 12, 1208.	4.0	16
61	Validation of SMOS L3 AND L4 Soil Moisture Products In The Remedhus (SPAIN) AND CEMADEN (BRAZIL) Networks. Revista Brasileira De Geografia Fisica, 2020, 13, 691-712.	0.1	5
62	Untangling the GNSS-R Coherent and Incoherent Components: Experimental Evidences Over the Ocean. , 2020, , .		2
63	Analysis on the Feasability of Airborne GNSS-R Receivers for Weather Nowcasting and Target Detection. , 2020, , .		0
64	Evaluation of LoRa for Data Retrieval of Ocean Monitoring Sensors with LEO Satellites. , 2020, , .		7
65	Radio-Frequency Interference Location, Detection and Classification Using Deep Neural Networks. , 2020, , .		1
66	FFSCAT Mission: Preliminary Results and Ice Products Validation with Mosaic Campaign Data. , 2020, , .		0
67	Demonstration of the Federated Satellite Systems Concept for Future Earth Observation Satellite Missions. , 2020, , .		1
68	The GRSS Standard for GNSS-Reflectometry. , 2020, , .		0
69	First Experimental Evidence of Wind and Swell Signatures in L5 GPS and E5A Galileo GNSS-R Waveforms. , 2020, , .		0
70	Sensitivity of L-band vegetation optical depth to carbon stocks in tropical forests: a comparison to higher frequencies and optical indices. Remote Sensing of Environment, 2019, 232, 111303.	11.0	40
71	Detecting Targets above the Earthâ€™s Surface Using GNSS-R Delay Doppler Maps: Results from TDS-1. Remote Sensing, 2019, 11, 2327.	4.0	12
72	Impact of Signal Quantization on the Performance of RFI Mitigation Algorithms. Remote Sensing, 2019, 11, 2023.	4.0	5

#	Article	IF	Citations
73	Selection of the Key Earth Observation Sensors and Platforms Focusing on Applications for Polar Regions in the Scope of Copernicus System 2020â€“2030. Remote Sensing, 2019, 11, 175.	4.0	6
74	Satellite Cross-Talk Impact Analysis in Airborne Interferometric Global Navigation Satellite System-Reflectometry with the Microwave Interferometric Reflectometer. Remote Sensing, 2019, 11, 1120.	4.0	14
75	The Global Navigation Satellite Systems Reflectometry (GNSS-R) Microwave Interferometric Reflectometer: Hardware, Calibration, and Validation Experiments. Sensors, 2019, 19, 1019.	3.8	9
76	Hurricane Observations with GNSS-Reflectometry from CYGNSS Mission â€“ Case Study of Hurricane Irma 2017. , 2019, , .		0
77	Architectures and Synchronization Techniques for Coherent Distributed Remote Sensing Systems. , 2019, , .		4
78	Influence of Quality Filtering Approaches in BEC SMOS L3 Soil Moisture Products. , 2019, , .		1
79	³Cat-4 Mission: A 1-Unit CubeSat for Earth Observation with a L-band Radiometer and a GNSS-Reflectometer Using Software Defined Radio. , 2019, , .		7
80	A Review of RFI Mitigation Techniques in Microwave Radiometry. Remote Sensing, 2019, 11, 3042.	4.0	25
81	Proof-of-Concept of a Federated Satellite System Between Two 6-Unit CubeSats for Distributed Earth Observation Satellite Systems. , 2019, , .		6
82	The Flexible Microwave Payload -2: Architecture and Testing of a Combined GNSS-R and L-Band Radiometer With RFI Mitigation Payload For Cubesat-Based Earth Observation Missions. , 2019, , .		3
83	Architecting Optimized Spaceborne Earth Observation Missions. , 2019, , .		0
84	Analyzing Anomalous Artefacts in TDS-1 Delay Doppler Maps. , 2019, , .		0
85	Quantization and Sampling Effects on Microwave Radiometry RFI Mitigation Algorithms. , 2019, , .		0
86	GNSS Transpolar Earth Reflectometry exploriNg System (G-TERN): Mission Concept. IEEE Access, 2018, 6, 13980-14018.	4.2	55
87	Internet of Satellites (IoSat): Analysis of Network Models and Routing Protocol Requirements. IEEE Access, 2018, 6, 20390-20411.	4.2	43
88	Spaceborne GNSS-R End-To-End Simulator: Topography and Vegetation Effects. , 2018, , .		3
89	Ionospheric Scintillation Monitoring Using GNSS-R?. , 2018, , .		8
90	Preliminary Altimetry Results of the Malygnss Instrument in the Humit Project. , 2018, , .		2

#	Article	IF	Citations
91	Microwave and Optical Data Fusion for Global Mapping of Soil Moisture at High Resolution. , 2018, , .		1
92	RFI Analysis and Mitigation in Airborne GNSS-R Campaign. , 2018, , .		1
93	3Cat-4: Combined GNSS-R, L-Band Radiometer with RFI Mitigation, and AIS Receiver for a I-Unit Cubesat Based on Software Defined Radio. , 2018, , .		13
94	3CAT-3/MOTS, an Experimental Nanosatellite for Multispectral and GNSS-R Earth Observation: Airborne Optical and GNSS-R Campaign. , 2018, , .		0
95	Determination of Sea Correlation Time at L-Band with Airborne Reflected New GNSS Signals. , 2018, , .		1
96	Fsscat, the 2017 Copernicus Mastersâ€™ â€œEsa Sentinel Small Satellite Challengeâ€•Winner: A Federated Polar and Soil Moisture Tandem Mission Based on 6U Cubesats. , 2018, , .		26
97	Sensitivity of TDS-1 GNSS-R Reflectivity to Soil Moisture: Global and Regional Differences and Impact of Different Spatial Scales. Remote Sensing, 2018, 10, 1856.	4.0	66
98	Benefits of Using Mobile Ad-Hoc Network Protocols in Federated Satellite Systems for Polar Satellite Missions. IEEE Access, 2018, 6, 56356-56367.	4.2	25
99	Improved characterization and modeling of equatorial plasma depletions. Journal of Space Weather and Space Climate, 2018, 8, A38.	3.3	18
100	Gaps Analysis and Requirements Specification for the Evolution of Copernicus System for Polar Regions Monitoring: Addressing the Challenges in the Horizon 2020â€“2030. Remote Sensing, 2018, 10, 1098.	4.0	18
101	Feasibility of precise navigation in high and low latitude regions under scintillation conditions. Journal of Space Weather and Space Climate, 2018, 8, A05.	3.3	29
102	L-band vegetation optical depth seasonal metrics for crop yield assessment. Remote Sensing of Environment, 2018, 212, 249-259.	11.0	69
103	Optimized model-based design space exploration of distributed multi-orbit multi-platform Earth observation spacecraft architectures. , 2018, , .		5
104	Design and Optimization of a Polar Satellite Mission to Complement the Copernicus System. IEEE Access, 2018, 6, 34777-34789.	4.2	18
105	Wind Direction Signatures in GNSS-R Observables from Space. Remote Sensing, 2018, 10, 198.	4.0	16
106	3Cat-3/MOTS Nanosatellite Mission for Optical Multispectral and GNSS-R Earth Observation: Concept and Analysis. Sensors, 2018, 18, 140.	3.8	8
107	Strong RFI Impact Mitigation in the Synthetic Aperture Interferometric Radiometer. , 2018, , .		11
108	A Spatially Consistent Downscaling Approach for SMOS Using an Adaptive Moving Window. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2018, 11, 1883-1894.	4.9	49

#	Article	IF	Citations
109	Sea Ice Detection Using U.K. TDS-1 GNSS-R Data. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 4989-5001.	6.3	130
110	Sea Target Detection Using Spaceborne GNSS-R Delay-Doppler Maps: Theory and Experimental Proof of Concept Using TDS-1 Data. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 4237-4255.	4.9	58
111	Performance Assessment of Timeâ€“Frequency RFI Mitigation Techniques in Microwave Radiometry. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 3096-3106.	4.9	22
112	Microwave Radiometry. , 2017, , 131-290.		6
113	A Generic Level 1 Simulator for Spaceborne GNSS-R Missions and Application to GEROS-ISS Ocean Reflectometry. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 4645-4659.	4.9	24
114	³Cat-1 project: a multi-payload CubeSat for scientific experiments and technology demonstrators. European Journal of Remote Sensing, 2017, 50, 125-136.	3.5	7
115	The Role of Climatic Anomalies and Soil Moisture in the Decline of Drought-Prone Forests. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 503-514.	4.9	21
116	SNR and Standard Deviation of cGNSS-R and iGNSS-R Scatterometric Measurements. Sensors, 2017, 17, 183.	3.8	6
117	MERITXELL: The Multifrequency Experimental Radiometer with Interference Tracking for Experiments over Land and Littoralâ€”Instrument Description, Calibration and Performance. Sensors, 2017, 17, 1081.	3.8	2
118	GNSS-R Altimetry Performance Analysis for the GEROS Experiment on Board the International Space Station. Sensors, 2017, 17, 1583.	3.8	14
119	Feasibility of RFI mitigation in synthetic aperture radiometery based on subspace spatial filtering. , 2017, , .		1
120	Calibration of GNSS-R receivers with PRN signal injection: Methodology and validation with the microwave interferometric reflectometer (MIR). , 2017, , .		2
121	A spatially consistent downscaling approach for SMOS using an adaptive moving window. , 2017, , .		7
122	Microwave Imaging Radiometers by Aperture Synthesis Performance Simulator (Part 2): Instrument Modeling, Calibration, and Image Reconstruction Algorithms. Journal of Imaging, 2016, 2, 18.	3.0	8
123	Surface moisture and temperature trends anticipate drought conditions linked to wildfire activity in the Iberian Peninsula. European Journal of Remote Sensing, 2016, 49, 955-971.	3.5	20
124	Microwave Imaging Radiometers by Aperture Synthesisâ€”Performance Simulator (Part 1): Radiative Transfer Module. Journal of Imaging, 2016, 2, 17.	3.0	11
125	Multi-Temporal Evaluation of Soil Moisture and Land Surface Temperature Dynamics Using in Situ and Satellite Observations. Remote Sensing, 2016, 8, 587.	4.0	44
126	Predicting the Extent of Wildfires Using Remotely Sensed Soil Moisture and Temperature Trends. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 2818-2829.	4.9	42

#	Article	IF	Citations
127	DME/TACAN Impact Analysis on GNSS Reflectometry. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 4611-4620.	4.9	15
128	Unified GNSS-R formulation including coherent and incoherent scattering components. , 2016, , .		16
129	A CubeSAT payload for in-situ monitoring of pentacene degradation due to atomic oxygen etching in LEO. Acta Astronautica, 2016, 126, 456-462.	3.2	10
130	Crosstalk Statistics and Impact in Interferometric GNSS-R. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 4621-4630.	4.9	11
131	On the Correlation Between GNSS-R Reflectivity and L-Band Microwave Radiometry. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 5862-5879.	4.9	18
132	Impact of Rain, Swell, and Surface Currents on the Electromagnetic Bias in GNSS-Reflectometry. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 4643-4649.	4.9	14
133	Comparison of real-time time-frequency RFI mitigation techniques in microwave radiometry. , 2016, , .		2
134	First Delay Doppler Maps obtained with the Microwave Inteferometric Reflectometer (MIR). , 2016, , .		1
135	GEROS-ISS: GNSS REflectometry, Radio Occultation, and Scatterometry Onboard the International Space Station. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 4552-4581.	4.9	99
136	SNR Degradation in GNSS-R Measurements Under the Effects of Radio-Frequency Interference. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 4865-4878.	4.9	21
137	Sensitivity of GNSS-R Spaceborne Observations to Soil Moisture and Vegetation. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 4730-4742.	4.9	208
138	Ionospheric Effects in GNSS-Reflectometry From Space. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 5851-5861.	4.9	33
139	Impact of day/night time land surface temperature in soil moisture disaggregation algorithms. European Journal of Remote Sensing, 2016, 49, 899-916.	3.5	28
140	Improvement of PAU/PARIS end-to-end performance simulator (P²EPS): Land scattering including topography. , 2016, , .		7
141	Can we measure vegetation water content and vegetation opacity at L-band with a single GPS receiver?. , 2016, , .		4
142	Implementation of a GNSS-R Payload Based on Software-Defined Radio for the 3CAT-2 Mission. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 4824-4833.	4.9	13
143	3Cat-2â€"An Experimental Nanosatellite for GNSS-R Earth Observation: Mission Concept and Analysis. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 4540-4551.	4.9	48
144	Nodal Sampling: A New Image Reconstruction Algorithm for SMOS. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 2314-2328.	6.3	30

#	Article	IF	Citations
145	Numerical Computation of the Electromagnetic Bias in GNSS-R Altimetry. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 489-498.	6.3	27
146	First Results of a GNSS-R Experiment From a Stratospheric Balloon Over Boreal Forests. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 2652-2663.	6.3	41
147	First Dual-Band Multiconstellation GNSS-R Scatterometry Experiment Over Boreal Forests From a Stratospheric Balloon. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 4743-4751.	4.9	17
148	Improved MUSIC-Based SMOS RFI Source Detection and Geolocation Algorithm. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 1311-1322.	6.3	49
149	An airborne GNSS-R field experiment over a vineyard for soil moisture estimation and monitoring. , 2015, , .		3
150	Airborne GNSS-R, thermal and optical data relationships for soil moisture retrievals. , 2015, , .		2
151	Ice thickness effects on Aquarius brightness temperatures over Antarctica. Journal of Geophysical Research: Oceans, 2015, 120, 2856-2868.	2.6	6
152	Empirical Results of a Surface-Level GNSS-R Experiment in a Wave Channel. Remote Sensing, 2015, 7, 7471-7493.	4.0	10
153	On the Synergy of Airborne GNSS-R and Landsat 8 for Soil Moisture Estimation. Remote Sensing, 2015, 7, 9954-9974.	4.0	36
154	Time-domain Statistics of the Electromagnetic Bias in GNSS-Reflectometry. Remote Sensing, 2015, 7, 11151-11162.	4.0	6
155	First Polarimetric GNSS-R Measurements from a Stratospheric Flight over Boreal Forests. Remote Sensing, 2015, 7, 13120-13138.	4.0	43
156	Geolocalizing SMOS RFI sources on the densely populated East Asia. , 2015, , .		3
157	Advances in the MIR instrument: Integration, control subsystem and analysis of the flight dynamics for beamsteering purposes. , 2015, , .		5
158	Assessment of back-end RFI mitigation techniques in passive remote sensing. , 2015, , .		9
159	Retrieval of Significant Wave Height and Mean Sea Surface Level Using the GNSS-R Interference Pattern Technique: Results From a Three-Month Field Campaign. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 3198-3209.	6.3	84
160	Impact of the elevation angle in the coherence time as a function of the sea wave height. , 2015, , .		1
161	High Angular Resolution RFI Localization in Synthetic Aperture Interferometric Radiometers Using Direction-of-Arrival Estimation. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 102-106.	3.1	48
162	Mitigation of Direct Signal Cross-Talk and Study of the Coherent Component in GNSS-R. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 279-283.	3.1	32

#	Article	IF	Citations
163	Tutorial on Remote Sensing Using GNSS Bistatic Radar of Opportunity. IEEE Geoscience and Remote Sensing Magazine, 2014, 2, 8-45.	9.6	388
164	The dual polarization GNSS-R interference pattern technique. , 2014, , .		0
165	Review of GNSS-R instruments and tools developed at the Universitat Politecnica de Catalunya-Barcelona tech. , 2014, , .		0
166	A Downscaling Approach for SMOS Land Observations: Evaluation of High-Resolution Soil Moisture Maps Over the Iberian Peninsula. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 3845-3857.	4.9	146
167	The Microwave Interferometric Reflectometer. Part I: Front-end and beamforming description. , 2014, , .		6
168	Temperature gradient sensor from pulsed power supply duty cycle in ultraâ€lowâ€power energy harvesting system. Electronics Letters, 2014, 50, 826-828.	1.0	4
169	The microwave interferometric reflectometer. Part II: Back-end and processor descriptions. , 2014, , .		7
170	A simulator for GNSS-R polarimetric observations over the ocean. , 2014, , .		4
171	Study of RFI signals in protected GNSS bands generated by common electronic devices: Effects on GNSS-R measurements. , 2014, , .		3
172	Typhoon observations using the interferometric GNSS-R technique. , 2014, , .		3
173	The light airborne reflectometer for GNSS-R observations (LARGO) instrument: Initial results from airborne and Rover field campaigns. , 2014, , .		21
174	A generic simulator for aperture synthesis radiometers: Radiative transfer module and end-to-end tests. , 2014, , .		0
175	Hyperspectral-derived indices for soil moisture estimation at very high resolution. , 2014, , .		1
176	Using DDM Asymmetry Metrics for Wind Direction Retrieval From GPS Ocean-Scattered Signals in Airborne Experiments. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 3924-3936.	6.3	55
177	Combining SMOS with visible and near/shortwave/thermal infrared satellite data for high resolution soil moisture estimates. Journal of Hydrology, 2014, 516, 273-283.	5.4	113
178	Common Mathematical Framework for Real and Synthetic Aperture by Interferometry Radiometers. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 38-50.	6.3	25
179	Consolidating the Precision of Interferometric GNSS-R Ocean Altimetry Using Airborne Experimental Data. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 4992-5004.	6.3	130
180	Analysis of Spaceborne GNSS-R Delay-Doppler Tracking. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 1481-1492.	4.9	30

#	Article	IF	Citations
181	Experimental Evaluation of GNSS-Reflectometry Altimetric Precision Using the P(Y) and C/A Signals. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 1493-1500.	4.9	33
182	An imaging algorithm for synthetic aperture interferometric radiometers with built-in RFI mitigation. , 2014, , .		16
183	Optimization and Performance Analysis of Interferometric GNSS-R Altimeters: Application to the PARIS IoD Mission. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 1436-1451.	4.9	58
184	Improving the Accuracy of Soil Moisture Retrievals Using the Phase Difference of the Dual-Polarization GNSS-R Interference Patterns. IEEE Geoscience and Remote Sensing Letters, 2014, 11, 2090-2094.	3.1	29
185	Accurate geolocation of rfi sources in smos imagery based on superresolution algorithms. , 2014, , .		5
186	Microwave interferometric radiometry in remote sensing: An invited historical review. Radio Science, 2014, 49, 415-449.	1.6	66
187	Precision Bounds in GNSS-R Ocean Altimetry. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 1416-1423.	4.9	41
188	Simulation and Analysis of GNSS-R Composite Waveforms Using GPS and Galileo Signals. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 1461-1468.	4.9	17
189	Dual-Polarization GNSS-R Interference Pattern Technique for Soil Moisture Mapping. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 1533-1544.	4.9	61
190	Modeling and Analysis of GNSS-R Waveforms Sample-to-Sample Correlation. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 1545-1559.	4.9	22
191	Cross-Correlation Waveform Analysis for Conventional and Interferometric GNSS-R Approaches. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 1560-1572.	4.9	31
192	Hyperspectral Optical, Thermal, and Microwave L-Band Observations For Soil Moisture Retrieval at Very High Spatial Resolution. Photogrammetric Engineering and Remote Sensing, 2014, 80, 745-755.	0.6	11
193	Airborne GNSS-R Wind Retrievals Using Delayâ€“Doppler Maps. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 626-641.	6.3	85
194	Real-Time RFI Detection and Mitigation System for Microwave Radiometers. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 4928-4935.	6.3	15
195	Altimetry performance and error budget of the PARIS in-orbit demonstration mission. , 2013, , .		0
196	Delay Tracking in Spaceborne GNSS-R Ocean Altimetry. IEEE Geoscience and Remote Sensing Letters, 2013, 10, 57-61.	3.1	26
197	Using GNSS-R Imaging of the Ocean Surface for Oil Slick Detection. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2013, 6, 217-223.	4.9	72
198	Wind speed maping from the ISS using GNSS-R? A simulation study. , 2013, , .		2

#	Article	IF	Citations
199	MIR: The microwave interferometric reflectometer, a new airborne sensor for GNSS-R advanced research. , 2013, , .		4
200	Experimental Study on the Performance of RFI Detection Algorithms in Microwave Radiometry: Toward an Optimum Combined Test. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 4936-4944.	6.3	9
201	Improvement of the PAU/PARIS End-to-end Performance Simulator (P²EPS) in preparation for upcoming GNSS-R missions. , 2013, , .		8
202	Comparison of GPS L1 and Galileo E1 signals for GNSS-R ocean altimetry. , 2013, , .		5
203	Land monitoring using GNSS-R techniques: A review of recent advances. , 2013, , .		3
204	Foreword to the Special Issue on Radio Frequency Interference: Identification, Mitigation, and Impact Assessment. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 4915-4917.	6.3	2
205	SAIRPS: A generic simulator for evaluation of synthetic aperture interferometric radiometers. , 2013, , .		1
206	An IBC solar cell for the UPC CubeSat-1 mission. , 2013, , .		1
207	Soil Moisture mapping using forward scattered GPS L1 signals. , 2013, , .		9
208	On the synergy of SMOS and Terra/Aqua MODIS: High resolution soil moisture maps in near real-time. , 2013, , .		3
209	GNSS-R Derived Centimetric Sea Topography: An Airborne Experiment Demonstration. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2013, 6, 1468-1478.	4.9	37
210	Ocean surface wind vector measurements from high-altitude aircraft using GPS delay-doppler maps. , 2013, , .		0
211	Digital back-end for RFI detection and mitigation in earth observation. , 2013, , .		1
212	PAU-SA: A Synthetic Aperture Interferometric Radiometer Test Bed for Potential Improvements in Future Missions. Sensors, 2012, 12, 7738-7777.	3.8	9
213	Study of radio frequency interference effects on radiometry bands in urban environments. , 2012, , .		1
214	Impact of the observation geometry on the GNSS-R direct descriptors used for sea state monitoring. , 2012, , .		2
215	A downscaling approach to combine SMOS multi-angular and full-polarimetric observations with MODIS VIS/IR data into high resolution soil moisture maps. , 2012, , .		10
216	Airborne wind retrieval using GPS delay-Doppler maps. , 2012, , .		3

#	Article	IF	Citations
217	Cubesat-based demonstrator for optical earth observation. , 2012, , .		2
218	Height precision prediction of the PARIS in orbit demonstrator based on Cramer-Rao bound analysis. , 2012, , .		2
219	Validation and experimental tests of the PAU-synthetic aperture radiometer. , 2012, , .		1
220	Digital back-end for RFI detection and mitigation in microwave radiometers. , 2012, , .		1
221	PARIS Interferometric Technique proof of concept: Sea surface altimetry measurements. , 2012, , .		22
222	Cross-correlation waveform mode: A critical review. , 2012, , .		0
223	Impact of Doppler frequency compensation errors on spaceborne GNSS-R altimetry. , 2012, , .		7
224	Submeter ocean altimetry with GPS L1 C/A signal. , 2012, , .		2
225	Interferometric GNSS-R achievable altimetric performance and compression/denoising using the wavelet transform: An experimental study. , 2012, , .		8
226	A generic simulator for aperture synthesis radiometers. , 2012, , .		2
227	Calibration, Performance, and Imaging Tests of a Fully Digital Synthetic Aperture Interferometer Radiometer. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2012, 5, 723-734.	4.9	4
228	Optimum Intercalibration Time in Synthetic Aperture Interferometric Radiometers: Application to SMOS. IEEE Geoscience and Remote Sensing Letters, 2012, 9, 774-777.	3.1	1
229	Characterization of the SMOS Instrumental Error Pattern Correction Over the Ocean. IEEE Geoscience and Remote Sensing Letters, 2012, 9, 793-797.	3.1	23
230	Retracking considerations in spaceborne GNSS-R altimetry. GPS Solutions, 2012, 16, 507-518.	4.3	26
231	PAU instrument aboard INTA MicroSat-1: Flight model tests. , 2012, , .		2
232	Preliminary performance study of different radio-frequency interference detection and mitigation algorithms in microwave radiometry. , 2012, , .		0
233	SMOS CP34 soil moisture and ocean salinity maps. , 2012, , .		1
234	Analysis of GNSS-R delay and Doppler tracking errors. , 2012, , .		2

#	Article	IF	Citations
235	GNSS-R altimeter performance: Analysis of Cramer-Rao lower bounds. , 2012, , .		0
236	Spatial patterns of SMOS downscaled soil moisture maps over the remedhus network (Spain). , 2012, , .		7
237	PAU Instrument aboard INTA MicroSAT-1: Initial results of the FM model from an airborne experiment. , 2012, , .		3
238	Recent advances in land monitoring using GNSS-R techniques. , 2012, , .		3
239	SMOS L3 salinity performances at decreasing sea surface temperature. , 2012, , .		1
240	Pycaro's instrument proof of concept. , 2012, , .		5
241	Review of the CALIMAS Team Contributions to European Space Agencyâ€™s Soil Moisture and Ocean Salinity Mission Calibration and Validation. Remote Sensing, 2012, 4, 1272-1309.	4.0	11
242	Snow Thickness Monitoring Using GNSS Measurements. IEEE Geoscience and Remote Sensing Letters, 2012, 9, 1109-1113.	3.1	45
243	Altimetry with GNSS-R interferometry: first proof of concept experiment. GPS Solutions, 2012, 16, 231-241.	4.3	81
244	Vegetation Water Content Estimation Using GNSS Measurements. IEEE Geoscience and Remote Sensing Letters, 2012, 9, 282-286.	3.1	48
245	A new space technology for ocean observation: the SMOS mission. Scientia Marina, 2012, 76, 249-259.	0.6	13
246	Land Geophysical Parameters Retrieval Using the Interference Pattern GNSS-R Technique. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 71-84.	6.3	177
247	Review of crop growth and soil moisture monitoring from a groundâ€based instrument implementing the Interference Pattern GNSSâ€R Technique. Radio Science, 2011, 46, .	1.6	71
248	Improving the accuracy of sea surface salinity retrieval using GNSSâ€R data to correct the sea state effect. Radio Science, 2011, 46, .	1.6	22
249	Radio-Frequency Interference Detection and Mitigation Algorithms for Synthetic Aperture Radiometers. Algorithms, 2011, 4, 155-182.	2.1	51
250	Description and Performance of an L-Band Radiometer with Digital Beamforming. Remote Sensing, 2011, 3, 14-40.	4.0	7
251	Radio Frequency Interference Detection and Mitigation Algorithms Based on Spectrogram Analysis. Algorithms, 2011, 4, 239-261.	2.1	30
252	Radiometric Resolution of Motion-Induced Synthetic Aperture Radiometer. IEEE Geoscience and Remote Sensing Letters, 2011, 8, 715-719.	3.1	5

#	Article	IF	Citations
253	Ocean Surface's Scattering Coefficient Retrieval by Delayâ€“Doppler Map Inversion. IEEE Geoscience and Remote Sensing Letters, 2011, 8, 750-754.	3.1	50
254	Downscaling SMOS-Derived Soil Moisture Using MODIS Visible/Infrared Data. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 3156-3166.	6.3	328
255	On the Use of GNSS-R Data to Correct L-Band Brightness Temperatures for Sea-State Effects: Results of the ALBATROSS Field Experiments. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 3225-3235.	6.3	16
256	PAU instrument aboard INTA MicroSat-1: A GNSS-R demonstration mission for sea state correction in L-band radiometry. , 2011, , .		12
257	First results of the PAU-SA synthetic aperture radiometer. , 2011, , .		1
258	Airborne soil moisture determination using a data fusion approach at regional level. , 2011, , .		3
259	Preliminary error budget of a GNSS-R spaceborne mission. , 2011, , .		1
260	New approach to sea surface wind retrieval from GNSS-R measurements. , 2011, , .		13
261	Snow monitoring using GNSS-R techniques. , 2011, , .		14
262	Oil slicks detection using GNSS-R. , 2011, , .		17
263	Hardware implementation of a wavelet-based radio frequency interference mitigation algorithm for microwave radiometers. , 2011, , .		4
264	A radiometer concept to retrieve the 3-D radiometric emission from atmospheric temperature and water vapor density. , 2011, , .		0
265	Enhancing the spatial resolution of SMOS soil moisture data over Spain. , 2011, , .		0
266	Water level monitoring using the interference pattern GNSS-R technique. , 2011, , .		10
267	Experimental study of radio-frequency interference detection algorithms in microwave radiometry. , 2011, , .		4
268	Error Covariance Matrices Characterization in the Ocean Salinity Retrieval Cost Function within the SMOS Mission. Journal of Atmospheric and Oceanic Technology, 2011, 28, 1155-1166.	1.3	1
269	A General Analysis of the Impact of Digitization in Microwave Correlation Radiometers. Sensors, 2011, 11, 6066-6087.	3.8	15
270	Normality Analysis for RFI Detection in Microwave Radiometry. Remote Sensing, 2010, 2, 191-210.	4.0	46

#	Article	IF	Citations
271	SMOS: The Challenging Sea Surface Salinity Measurement From Space. Proceedings of the IEEE, 2010, 98, 649-665.	21.3	339
272	Sea-State Determination Using GNSS-R Data. IEEE Geoscience and Remote Sensing Letters, 2010, 7, 621-625.	3.1	58
273	Experimental Determination of the Sea Correlation Time Using GNSS-R Coherent Data. IEEE Geoscience and Remote Sensing Letters, 2010, 7, 675-679.	3.1	32
274	Advanced architectures for real-time Delay-Doppler Map GNSS-reflectometers: The GPS reflectometer instrument for PAU (griPAU). Advances in Space Research, 2010, 46, 196-207.	2.6	22
275	Sea surface salinity retrievals from HUT-2D L-band radiometric measurements. Remote Sensing of Environment, 2010, 114, 1756-1764.	11.0	15
276	Analysis of a Least-Squares Soil Moisture Retrieval Algorithm from L-band Passive Observations. Remote Sensing, 2010, 2, 352-374.	4.0	7
277	Design and First Results of an UAV-Borne L-Band Radiometer for Multiple Monitoring Purposes. Remote Sensing, 2010, 2, 1662-1679.	4.0	45
278	Microwave Radiometer Resolution Optimization Using Variable Observation Times. Remote Sensing, 2010, 2, 1826-1843.	4.0	20
279	End-to-end simulator for Global Navigation Satellite System Reflectometry space mission. , 2010, , .		27
280	GNSS-R Delay-Doppler Maps over land: Preliminary results of the GRAJO field experiment. , 2010, , .		7
281	On-ground tests and measurements of the Passive Advanced Unit Synthetic Aperture (PAU-SA). , 2010, , .		3
282	Altimetry study performed using an airborne GNSS-Reflectometer. , 2010, , .		2
283	Normality analysis as a radio frequency interference detection. , 2010, , .		1
284	Radio Frequency Interference detection algorithm based on spectrogram analysis. , 2010, , .		8
285	SMOS' brightness temperatures validation: First results after the commisioning phase. , 2010, , .		3
286	The proof of concept for 3-cm Altimetry using the Paris Interferometric Technique. , 2010, , .		8
287	Rfianalysis in smos imagery. , 2010, , .		26
288	Study of maize plants effects in the retrieval of soil moisture using the interference pattern GNSS-R technique. , 2010, , .		6

#	Article	IF	Citations
289	SMOS measurements preliminary validation against modeled brightness temperatures and external-source salinity data. , 2010, , .		4
290	Impact of receiver's frequency response in GNSS reflectometers. , 2010, , .		7
291	Noise wave analysis of Dicke and noise injection radiometers: Complete S parameter analysis and effect of temperature gradients. Radio Science, 2010, 45, n/a-n/a.	1.6	7
292	Performance of soil moisture retrieval algorithms using multiangular L band brightness temperatures. Water Resources Research, 2010, 46, .	4.2	7
293	Soil moisture downscaling activities at the REMEDHUS Cal/Val site and its application to SMOS. , 2010, , .		14
294	Preparatory activities at the remedhus SMOS cal/val site: Characterisation of bare soils and effect of surface roughness. , 2010, , .		0
295	Brightness temperature correction of the sea state effect using GNSS-R data. , 2010, , .		3
296	Determination of the Sea Surface Salinity Error Budget in the Soil Moisture and Ocean Salinity Mission. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 1684-1693.	6.3	22
297	Numerical Simulation of the Full-Polarimetric Emissivity of Vines and Comparison with Experimental Data. Remote Sensing, 2009, 1, 300-317.	4.0	4
298	Polarimetric Emission of Rain Events: Simulation and Experimental Results at X-Band. Remote Sensing, 2009, 1, 107-121.	4.0	10
299	On the use of compact L-band Dicke radiometer (ARIEL) and UAV for soil moisture and salinity map retrieval: 2008/2009 field experiments. , 2009, , .		13
300	Experimental relationship between the sea brightness temperature changes and the GNSS-R delay-Doppler maps: Preliminary results of the albatross field experiments. , 2009, , .		16
301	Meridional variability in SMOS salinity retrievals: Trade-off between sensitivity to geophysical effects and increased temporal sampling. , 2009, , .		0
302	Preliminary results of the Passive Advanced Unit Synthetic Aperture (PAU-SA). , 2009, , .		1
303	Multifrequency experimental radiometer with interference tracking for experiments over land and littoral: Meritxell. , 2009, , .		4
304	Noise wave analysis of Dicke and noise injection radiometers: Complete S-paramater analysis and effect of temperature gradients. , 2009, , .		0
305	New Passive Instruments Developed for Ocean Monitoring at the Remote Sensing Labâ€"Universitat PolitÃ¨cnica de Catalunya. Sensors, 2009, 9, 10171-10189.	3.8	12
306	Calibration of Correlation Radiometers Using Pseudo-Random Noise Signals. Sensors, 2009, 9, 6131-6149.	3.8	23

#	Article	IF	Citations
307	Preliminary results of the advanced L-band transmission and reflection observationof the sea surface (ALBATROSS) campaign: Preparing the SMOS calibration and validation activities. , 2009, , .		1
308	Soil moisture and vegetation height retrieval using GNSS-R techniques. , 2009, , .		13
309	The GPS and RAdiometric Joint Observations experiment at the REMEDHUS site (Zamora-Salamanca) Tj ETQq1 1 0.784314 rgBT /Over		7
310	Simulated SMOS Levels 2 and 3 Products: The Effect of Introducing ARGO Data in the Processing Chain and Its Impact on the Error Induced by the Vicinity of the Coast. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 3041-3050.	6.3	20
311	On-Ground Characterization of the SMOS Payload. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 3123-3133.	6.3	30
312	Soil Moisture Retrieval Using GNSS-R Techniques: Experimental Results Over a Bare Soil Field. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 3616-3624.	6.3	184
313	A Change Detection Algorithm for Retrieving High-Resolution Soil Moisture From SMAP Radar and Radiometer Observations. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 4125-4131.	6.3	136
314	An Efficient Algorithm to the Simulation of Delayâ€“Doppler Maps of Reflected Global Navigation Satellite System Signals. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 2733-2740.	6.3	82
315	Spatial-Resolution Enhancement of SMOS Data: A Deconvolution-Based Approach. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 2182-2192.	6.3	38
316	Digital beamforming analysis and performance for a digital L-band Pseudo-correlation radiometer. , 2009, , .		4
317	On-flight characterization of the SMOS payload during the commissioning phase. , 2009, , .		1
318	Brightness-Temperature Retrieval Methods in Synthetic Aperture Radiometers. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 285-294.	6.3	48
319	RFI Mitigation in Microwave Radiometry Using Wavelets. Algorithms, 2009, 2, 1248-1262.	2.1	26
320	Topographic profile retrieval using the Interference Pattern GNSS-R technique. , 2009, , .		3
321	Improved Image Reconstruction Algorithms for Aperture Synthesis Radiometers. IEEE Transactions on Geoscience and Remote Sensing, 2008, 46, 146-158.	6.3	61
322	AMIRASâ€”An Airborne MIRAS Demonstrator. IEEE Transactions on Geoscience and Remote Sensing, 2008, 46, 705-716.	6.3	23
323	Angular and Radiometric Resolution of Y-Shaped Nonuniform Synthetic Aperture Radiometers for Earth Observation. IEEE Geoscience and Remote Sensing Letters, 2008, 5, 793-795.	3.1	15
324	Initial Results of an Airborne Light-Weight L-Band Radiometer. , 2008, , .		3

#	Article	IF	Citations
325	Determination of the sea surface emissivity at Lâ€band and application to SMOS salinity retrieval algorithms: Review of the contributions of the UPCâ€ICM. Radio Science, 2008, 43, .	1.6	14
326	Assessment of the topography impact on microwave radiometry at Lâ€band. Journal of Geophysical Research, 2008, 113, .	3.3	13
327	The impact of combining SMOS and ARGO data on the SMOS Level 2 and 3 products and effect of the vicinity of the coast. , 2008, , .		0
328	Radiometric observations of vines from the green period to the withering. , 2008, , .		2
329	Image Reconstruction Algorithms for 2D Aperture Synthesis Radiometers. , 2008, , .		3
330	Use of Pseudo-Random Noise sequences in microwave radiometer calibration. , 2008, , .		3
331	PAU in SeoSAT: A Proposed Hybrid L-band Microwave Radiometer/GPS Reflectometer to Improve Sea Surface Salinity Estimates from Space. , 2008, , .		8
332	Correction of the Sea State Impact in the L-Band Brightness Temperature by Means of Delay-Doppler Maps of Global Navigation Satellite Signals Reflected Over the Sea Surface. IEEE Transactions on Geoscience and Remote Sensing, 2008, 46, 2914-2923.	6.3	79
333	The impact of the number of bits in digital beamforming real aperture and synthetic aperture radiometers. , 2008, , .		1
334	MIRAS ground characterization. , 2008, , .		1
335	Microwave Aperture Synthesis Radiometry: Paving the Path for Sea Surface Salinity Measurement from Space. , 2008, , 223-238.		11
336	Initial Results of a Digital Radiometer with Digital Beamforming. , 2008, , .		0
337	Initials Results of the Passive Advanced Unit - Synthetic Aperture (PAU-SA). , 2008, , .		4
338	Rock Fraction Effects on the Surface Soil Moisture Estimates From L-Band Radiometric Measurements. , 2008, , .		1
339	Improving the Spatial Resolution of Synthetic Aperture Radiometer Imagery using Auxiliary Information: Application to the Smos Mission. , 2008, , .		0
340	Extended Ocean Salinity Error Budget Analysis within the SMOS Mission. , 2008, , .		4
341	Spatial Resolution Enhancement of SMOS Data: A Combined Fourier Wavelet Approach. , 2008, , .		1
342	Soil Moisture Retrieval Using GNSS-R Techniques: Measurement Campaign in a Wheat Field. , 2008, , .		9

#	Article	IF	Citations
343	Ground-Based GNSS-R Measurements with the PAU Instrument and their Application to the Sea Surface Salinity Retrieval: First Results. , 2008, , .		7
344	Brightness Temperature Retrievals from the Small Airborne MIRAS. , 2008, , .		1
345	L-Band Radiometric Observations of Sun Glint Over Land Surfaces. , 2008, , .		1
346	Contributions to the Improvement of the SMOS Level 2 Retrieval Algorithm: Optimization of the Cost Function. , 2008, , .		1
347	Fast Processing Tool for SMOS Data. , 2008, , .		27
348	Foreword to the Special Issue on the 2007 International Geoscience and Remote Sensing Symposium (IGARSS'07). IEEE Transactions on Geoscience and Remote Sensing, 2008, 46, 2767-2768.	6.3	0
349	PAU/GNSS-R: Implementation, Performance and First Results of a Real-Time Delay-Doppler Map Reflectometer Using Global Navigation Satellite System Signals. Sensors, 2008, 8, 3005-3019.	3.8	12
350	PAU/RAD: Design and Preliminary Calibration Results of a New L-Band Pseudo-Correlation Radiometer Concept. Sensors, 2008, 8, 4392-4412.	3.8	9
351	Uso de un modelo semi-empÃ‡rico de emisividad del mar para la estimaciÃ³n aproximada de la salinidad superficial a partir de medidas realizadas con un radiÃ³metro aerotransportado. Scientia Marina, 2008, 72, .	0.6	7
352	Correction to â€œA Two-Dimensional Doppler Radiometer for Earth Observationâ€• IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 4194-4194.	6.3	3
353	MIRAS In-Orbit Calibration. , 2007, , .		2
354	Calibration and performance analysis of the PAU- RAD instrument. , 2007, , .		2
355	Retrieved sea surface salinity spatial variability using high resolution data within the soil moisture and ocean salinity (SMOS) mission. , 2007, , .		0
356	Deconvolution algorithms in image reconstruction for aperture synthesis radiometers. , 2007, , .		5
357	PAU-RAD instrument web-based remote control. , 2007, , .		0
358	PAU-GNSS/R, a real-time GPS-reflectometer for earth observation applications: architecture insights and preliminary results. , 2007, , .		5
359	Synthetic Aperture PAU: a new instrument to test potential improvements for future SMOSops. , 2007, , .		9
360	PAU one-receiver ground-based and airbone instruments. , 2007, , .		1

#	Article	IF	Citations
361	Towards an ocean salinity error budget estimation within the SMOS mission. , 2007, , .		3
362	Topography effects on the L-band emissivity of soils: TuRTLE 2006 field experiment. , 2007, , .		4
363	Sea surface temperature retrieval using ir-radiometry and atmospheric modeling: Simulation and experimental results using PAU-IR. , 2007, , .		2
364	Some results of the MIRAS-SMOS demonstrator campaigns. , 2007, , .		4
365	Towards a coherent sea surface salinity product from SMOS radiometric measurements and ARGO buoys. , 2007, , .		13
366	K-band radiometer designed for academic purposes: Intercomparison of performances as total power, dicke or noise injection radiometers. , 2007, , .		2
367	Empirical determination of the soil emissivity at L-band: Effects of soil moisture, soil roughness, vine canopy, and topography. , 2007, , .		3
368	Surface Topography and Mixed-Pixel Effects on the Simulated L-Band Brightness Temperatures. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 1996-2003.	6.3	27
369	Potential Synergetic Use of GNSS-R Signals to Improve the Sea-State Correction in the Sea Surface Salinity Estimation: Application to the SMOS Mission. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 2088-2097.	6.3	20
370	New Instrument Concepts for Ocean Sensing: Analysis of the PAU-Radiometer. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 3180-3192.	6.3	32
371	Denormalization of Visibilities for In-Orbit Calibration of Interferometric Radiometers. IEEE Transactions on Geoscience and Remote Sensing, 2006, 44, 2679-2686.	6.3	31
372	Impact on Sea Surface Salinity Retrieval of Different Auxiliary Data Within the SMOS Mission. IEEE Transactions on Geoscience and Remote Sensing, 2006, 44, 2769-2778.	6.3	32
373	Improved Image Reconstruction Algorithms for Aperture Synthesis Radiometers. , 2006, , .		4
374	Considerations About Antenna Pattern Measurements of 2-D Aperture Synthesis Radiometers. IEEE Geoscience and Remote Sensing Letters, 2006, 3, 259-261.	3.1	9
375	FPGA-based Implementation of a DDM-generator for GPS-reflectometry. , 2006, , .		11
376	New Radiometer Concepts for Ocean Remote Sensing: Description of the Passive Advanced Unit (PAU) for Ocean Monitoring. , 2006, , .		7
377	Design of a Compact Dual-Polarization Receiver for Pseudo-Correlation Radiometers at L-band. , 2006, , .		10
378	Roughness Effects on the L-band Emission of Bare Soils: The T-REX Field Experiment. , 2006, , .		4

#	Article	IF	Citations
379	FPGA-based Implementation of a Polarimetric Radiometer with Digital Beamforming. , 2006, , .		11
380	From the Determination of Sea Emissivity to the Retrieval of Salinity: Recent Contributions to the SMOS Mission from the UPC and ICM. , 2006, , .		3
381	Inter-Element Phase Calibration in Interferometric Radiometers. , 2006, , .		9
382	MIRAS-SMOS Demonstrator Test Campaigns at Polytechnic University of Catalonia. , 2006, , .		4
383	MIRAS end-to-end calibration: application to SMOS L1 processor. IEEE Transactions on Geoscience and Remote Sensing, 2005, 43, 1126-1134.	6.3	91
384	The emissivity of foam-covered water surface at L-band: theoretical modeling and experimental results from the FROG 2003 field experiment. IEEE Transactions on Geoscience and Remote Sensing, 2005, 43, 925-937.	6.3	72
385	Performance of sea surface salinity and soil moisture retrieval algorithms with different auxiliary datasets in 2-D L-band aperture synthesis interferometric radiometers. IEEE Transactions on Geoscience and Remote Sensing, 2005, 43, 1189-1200.	6.3	34
386	SMOS REFLEX 2003: L-band emissivity characterization of vineyards. IEEE Transactions on Geoscience and Remote Sensing, 2005, 43, 973-982.	6.3	24
387	Analysis of correlation and total power radiometer front-ends using noise waves. IEEE Transactions on Geoscience and Remote Sensing, 2005, 43, 2452-2459.	6.3	28
388	The impact of antenna pattern frequency dependence in aperture synthesis microwave radiometers. IEEE Transactions on Geoscience and Remote Sensing, 2005, 43, 2218-2224.	6.3	13
389	Polarimetric Formulation of the Visibility Function Equation Including Cross-Polar Antenna Patterns. IEEE Geoscience and Remote Sensing Letters, 2005, 2, 292-295.	3.1	41
390	Retrieving sea surface salinity with multiangular L-band brightness temperatures: Improvement by spatiotemporal averaging. Radio Science, 2005, 40, n/a-n/a.	1.6	35
391	The WISE 2000 and 2001 field experiments in support of the SMOS mission: sea surface L-band brightness temperature observations and their application to sea surface salinity retrieval. IEEE Transactions on Geoscience and Remote Sensing, 2004, 42, 804-823.	6.3	132
392	Wind speed effect on L-band brightness temperature inferred from EuroSTARRS and WISE 2001 field experiments. IEEE Transactions on Geoscience and Remote Sensing, 2004, 42, 2206-2213.	6.3	38
393	The determination of surface salinity with the European SMOS space mission. IEEE Transactions on Geoscience and Remote Sensing, 2004, 42, 2196-2205.	6.3	140
394	Determination of sea surface salinity and wind speed by L-band microwave radiometry from a fixed platform. International Journal of Remote Sensing, 2004, 25, 111-128.	2.9	34
395	A new empirical model of sea surface microwave emissivity for salinity remote sensing. Geophysical Research Letters, 2004, 31, .	4.0	63
396	Sun effects in 2-D aperture synthesis radiometry imaging and their cancelation. IEEE Transactions on Geoscience and Remote Sensing, 2004, 42, 1161-1167.	6.3	49

#	Article	IF	Citations
397	The visibility function in interferometric aperture synthesis radiometry. IEEE Transactions on Geoscience and Remote Sensing, 2004, 42, 1677-1682.	6.3	262
398	Estimation of sea surface spectrum using neural networks. , 2004, , .		0
399	Sea surface emissivity at L-band: results of the WInd and Salinity Experiments WISE 2000 and 2001 and preliminary results from FROG 2003. , 2004, , .		1
400	Study of soil moisture retrieval algorithms using multiangular L-band brightness temperatures: application to ESA's SMOS Earth Explorer Opportunity Mission. , 2004, 5232, 596.		0
401	A radar course at undergraduate level: an approach to systems engineering. IEEE Transactions on Education, 2003, 46, 497-501.	2.4	6
402	L-band sea surface emissivity: Preliminary results of the WISE-2000 campaign and its application to salinity retrieval in the SMOS mission. Radio Science, 2003, 38, n/a-n/a.	1.6	36
403	End-to-end simulator of two-dimensional interferometric radiometry. Radio Science, 2003, 38, n/a-n/a.	1.6	25
404	Noise maps in aperture synthesis radiometric images due to cross-correlation of visibility noise. Radio Science, 2003, 38, n/a-n/a.	1.6	21
405	Redundant space calibration of hexagonal and Y-shaped beamforming radars and interferometric radiometers. International Journal of Remote Sensing, 2003, 24, 5183-5196.	2.9	15
406	Sea state effect on the sea surface emissivity at l-band. IEEE Transactions on Geoscience and Remote Sensing, 2003, 41, 2307-2315.	6.3	15
407	Dynamic range and linearity trade-off in detectors for interferometric radiometers. Electronics Letters, 2003, 39, 1852.	1.0	12
408	Sea surface emissivity observations at L-band: first results of the Wind and Salinity Experiment WISE 2000. IEEE Transactions on Geoscience and Remote Sensing, 2002, 40, 2117-2130.	6.3	40
409	Optimum redundant array configurations for Earth observation aperture synthesis microwave radiometers. Electronics Letters, 2002, 38, 1205.	1.0	5
410	Specification of channel filters for an interferometric radiometer. Radio Science, 2001, 36, 97-106.	1.6	3
411	Reliability analysis in aperture synthesis interferometric radiometers: Application toLband Microwave Imaging Radiometer with Aperture Synthesis instrument. Radio Science, 2001, 36, 107-117.	1.6	8
412	Synthesis of large low-redundancy linear arrays. IEEE Transactions on Antennas and Propagation, 2001, 49, 1881-1883.	5.1	63
413	SMOS: a satellite mission to measure ocean surface salinity. , 2001, , .		7
414	<title>Receiver specifications of the MIRAS demonstrator</title>. , 2001, 4169, 291.		1

#	Article	IF	Citations
415	<title>WISE 2000 campaign: sea surface salinity and wind retrievals from L-band radiometry</title>. , 2000, 4172, 65.		0
416	Analysis of noise-injection networks for interferometric-radiometer calibration. IEEE Transactions on Microwave Theory and Techniques, 2000, 48, 545-552.	4.6	36
417	The correlation of visibility noise and its impact on the radiometric resolution of an aperture synthesis radiometer. IEEE Transactions on Geoscience and Remote Sensing, 2000, 38, 2423-2426.	6.3	21
418	Remote sensing of hydrometeors by means of interferometric radiometry: Theory and experimental results. Radio Science, 2000, 35, 799-812.	1.6	2
419	Automatic calibration of channels frequency response in interferometric radiometers. Electronics Letters, 1999, 35, 115.	1.0	30
420	Radiometric sensitivity computation in aperture synthesis interferometric radiometry. IEEE Transactions on Geoscience and Remote Sensing, 1998, 36, 680-685.	6.3	105
421	Angular resolution of two-dimensional, hexagonally sampled interferometric radiometers. Radio Science, 1998, 33, 1459-1473.	1.6	58
422	Mutual coupling effects on antenna radiation pattern: An experimental study applied to interferometric radiometers. Radio Science, 1998, 33, 1543-1552.	1.6	18
423	Experimental validation of radiometric sensitivity in correlation radiometers. Electronics Letters, 1998, 34, 2377.	1.0	6
424	Extension of Kirchhoff method under stationary phase approximation to determination of polarimetric thermal emission of the sea. Electronics Letters, 1998, 34, 1501.	1.0	3
425	Extension of the Clean Technique To the Microwave Imaging of Continuous Thermal Sources By Means of Aperture Synthesis Radiometers - Abstract. Journal of Electromagnetic Waves and Applications, 1998, 12, 311-313.	1.6	8
426	Corrections To "Radiometric Sensitivity Computation In Aperture Synthesis Interferometric Radiometry". IEEE Transactions on Geoscience and Remote Sensing, 1998, 36, 1835-1835.	6.3	4
427	<title>Millimeter-wave aperture synthesis for remote sensing of the Earth</title>. , 1998, 3498, 82.		0
428	<title>Modeling the radiometric signatures of the Earth from space: a tool to study the performance of new radiometers</title>. , 1998, 3498, 484.		0
429	Extension of the Clean Technique to the Microwave Imaging of Continuous Thermal Sources by Means of Aperture Synthesis Radiometers. Progress in Electromagnetics Research, 1998, 18, 67-83.	4.4	53
430	<title>New calibration technique for interferometric radiometers</title>. , 1998, , .		9
431	Threshold and timing errors of 1 bit/2 level digital correlators in Earth observation synthetic aperture radiometry. Electronics Letters, 1997, 33, 812.	1.0	14
432	<title>Evaluation of MIRAS spaceborne instrument performance: snapshot radiometric accuracy and its improvement by means of pixel averaging</title>. , 1997, , .		2

#	Article	IF	Citations
433	Calibration and experimental results of a two-dimensional interferometric radiometer laboratory prototype. Radio Science, 1997, 32, 1821-1832.	1.6	16
434	Impact of receiver errors on the radiometric resolution of large two-dimensional aperture synthesis radiometers. Radio Science, 1997, 32, 629-641.	1.6	44
435	Impact of antenna errors on the radiometric accuracy of large aperture synthesis radiometers. Radio Science, 1997, 32, 657-668.	1.6	48
436	The processing of hexagonally sampled signals with standard rectangular techniques: application to 2-D large aperture synthesis interferometric radiometers. IEEE Transactions on Geoscience and Remote Sensing, 1997, 35, 183-190.	6.3	138
437	On-board phase and modulus calibration of large aperture synthesis radiometers: study applied to MIRAS. IEEE Transactions on Geoscience and Remote Sensing, 1996, 34, 1000-1009.	6.3	72
438	Sea surface salinity retrieval using multi-angular L-band radiometry: numerical study using the SMOS End-to-end Performance Simulator. , 0, , .		9
439	Measurements and simulations of a doppler radiometer in an anechoic chamber. , 0, , .		3
440	Ocean salinity observations with SMOS mission. , 0, , .		7
441	New radiometers: SMOS-a dual pol L-band 2D aperture synthesis radiometer. , 0, , .		18
442	Polarimetric emissivity of vegetation-covered soils: simulation results. , 0, , .		1
443	Sea surface emissivity observations at L-band: first preliminary results of the WInd and Salinity Experiment WISE-2000. , 0, , .		4
444	Emissivity of the sea surface roughened by rain: simulation results. , 0, , .		4
445	Full polarimetric emissivity of vegetation-covered soils: vegetation structure effects. , 0, , .		6
446	Sea state influence on L-band emissivity in various fetch conditions. , 0, , .		0
447	The EuroSTARRS campaign in support of the Soil Moisture and Ocean Salinity mission. , 0, , .		3
448	SMOS performance simulation analysis. , 0, , .		3
449	L-band sea surface emissivity radiometric observations under high winds: Preliminary results of the Wind and Salinity Experiment WISE-2001. , 0, , .		4
450	Soil moisture retrieval by SMOS: a global feasibility study. , 0, , .		0

#	Article	IF	Citations
451	Sea surface emissivity at L-band: swell effects. , 0, , .		8
452	A 3 GPS-channels Doppler-delay receiver for remote sensing applications. , 0, , .		6
453	Sea foam effects on the brightness temperature at L-band. , 0, , .		8
454	The SMOS end-to-end performance simulator: description and scientific applications. , 0, , .		42
455	MIRAS imaging validation. , 0, , .		4
456	Errors on the retrieved sea surface salinity from microwave radiometry due to inaccuracies in the ancillary data. , 0, , .		0
457	Estimation of sea surface spectrum under non-stationary conditions. , 0, , .		0
458	Passive polarimetric remote sensing of the ocean surface during the Rough Evaporation Duct experiment (RED 2001). , 0, , .		3
459	Inter-comparison study of asymptotic models for sea surface emissivity simulation at L-band. , 0, , .		5
460	Three-antenna two-dimensional imaging correlation radiometer: concept and preliminary results. , 0, , .		4
461	Systematic noise analysis of a correlation radiometer front-end. , 0, , .		0
462	SMOS radiometric performance evaluation using SEPS: evaluation of thermal drifts. , 0, , .		2
463	Sea surface brightness temperature at L-band: impact of surface currents. , 0, , .		4
464	External calibration in L-band 2D synthetic aperture radiometers: application to sea surface salinity retrieval. , 0, , .		1
465	Impact and compensation of diffuse sun scattering in 2D aperture synthesis radiometers imagery. , 0, , .		9
466	Baseline calibration of interferometric radiometers: experimental results. , 0, , .		4
467	Time-dependent sea surface numerical generation for remote sensing applications. , 0, , .		5
468	Design and test of the L-band automatic radiometer (LAURA) temperature control. , 0, , .		4

#	Article	IF	Citations
469	Soil moisture retrieval errors using l-band radiometry induced by the soil type variability. , 0, , .		5
470	L-band dielectric properties of different soil types collected during the mouse 2004 field experiment. , 0, , .		12
471	Impact on sea surface salinity retrieval of multi-source auxiliary data within the SMOS mission. , 0, , .		2
472	Denormalization of visibilities for in-orbit calibration of interferometric radiometers. , 0, , .		1
473	Soil Moisture Retrieval Using L-band Radiometry: Dependence on Soil Type and Moisture Profiles. , 0, , .		9
474	Retrieved Sea Surface Salinity Dependence on Multisource Auxiliary Data within the SMOS mission. , 0, , .		1
475	Surface Topography and Mixed Pixel Effects on the Simulated L-band Brightness Temperatures. , 0, , .		5
476	Sea Surface Salinity Retrieval from Space: Potential Synergetic Use of GNSS-R Signals to Improve the Sea State Correction and Application to the SMOS Mission. , 0, , .		10
477	Nanosatellites and Applications to Commercial and Scientific Missions. , 0, , .		14
478	From Monolithic Satellites to the Internet of Satellites Paradigm: When Space, Air, and Ground Networks Become Interconnected. , 0, , .		4
479	Integration of MIRAS breadboard and future activities. , 0, , .		5