

Mahta Moghaddam

List of Publications by Year in descending order

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260
papers

7,705
citations

76196

40
h-index

54797

84
g-index

261
all docs

261
docs citations

261
times ranked

5807
citing authors

#	ARTICLE	IF	CITATIONS
1	Wireless Sensor Network Informed UAV Path Planning for Soil Moisture Mapping. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-13.	2.7	8
2	Snow Depth Retrieval With an Autonomous UAV-Mounted Software-Defined Radar. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-16.	2.7	16
3	Sensitivity of Multifrequency Polarimetric SAR Data to Postfire Permafrost Changes and Recovery Processes in Arctic Tundra. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-15.	2.7	2
4	A model to characterize soil moisture and organic matter profiles in the permafrost active layer in support of radar remote sensing in Alaskan Arctic tundra. Environmental Research Letters, 2022, 17, 025011.	2.2	8
5	Validation of Soil Moisture Data Products From the NASA SMAP Mission. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2022, 15, 364-392.	2.3	62
6	A Versatile and Shelf-Stable Dielectric Coupling Medium for Microwave Imaging. IEEE Transactions on Biomedical Engineering, 2022, 69, 2701-2712.	2.5	5
7	Embedded Temporal Convolutional Networks for Essential Climate Variables Forecasting. Sensors, 2022, 22, 1851.	2.1	0
8	Potential Satellite Monitoring of Surface Organic Soil Properties in Arctic Tundra From SMAP. Water Resources Research, 2022, 58, .	1.7	6
9	GNSS-R Soil Moisture Retrieval for Flat Vegetated Surfaces Using a Physics-Based Bistatic Scattering Model and Hybrid Global/Local Optimization. Remote Sensing, 2022, 14, 3129.	1.8	5
10	Remembering Tapan Sarkar [In Memoriam]. IEEE Antennas and Propagation Magazine, 2021, 63, 156-157.	1.2	0
11	Secret Sauce Of Success [Women in Engineering]. IEEE Antennas and Propagation Magazine, 2021, 63, 144-145.	1.2	1
12	Validation of Permafrost Active Layer Estimates from Airborne SAR Observations. Remote Sensing, 2021, 13, 2876.	1.8	9
13	Initial Investigation of a GNSS-R Multiscale Rough Surface Forward Model at San Luis Valley Calibration/Validation Sites. , 2021, , .		2
14	Wearable magnetic induction-based approach toward 3D motion tracking. Scientific Reports, 2021, 11, 18905.	1.6	2
15	Matrix Element-Based Theory of Compressive Sensing and Its Application to Electromagnetic Imaging. IEEE Access, 2021, 9, 129337-129346.	2.6	0
16	Deep multi-modal satellite and in-situ observation fusion for Soil Moisture retrieval. , 2021, , .		0
17	Characterization of Clock Phase Errors for Distributed Wireless Synchronization Protocol. , 2021, , .		1
18	Permafrost Dynamics Observatory: Retrieval of Active Layer Thickness and Soil Moisture from Airborne Insar and Polsar Data. , 2021, , .		0

#	ARTICLE	IF	CITATIONS
19	Maps of Active Layer Thickness on the North Slope of Alaska by Upscaling P-Band Polarimetric SAR Retrievals. , 2021, , .		1
20	The International Soil Moisture Network: serving Earth system science for over a decade. Hydrology and Earth System Sciences, 2021, 25, 5749-5804.	1.9	116
21	Ultrawideband Synthesis for High-Range-Resolution Software-Defined Radar. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 3789-3803.	2.4	31
22	A Comparison of Machine Learning Classifiers for Human Activity Recognition using Magnetic Induction-based Motion signals. , 2020, , .		3
23	Wireless Subnanosecond RF Synchronization for Distributed Ultrawideband Software-Defined Radar Networks. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 4787-4804.	2.9	37
24	Evaluation of SMAP Core Validation Site Representativeness Errors Using Dense Networks of <i>In Situ</i> Sensors and Random Forests. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2020, 13, 6457-6472.	2.3	6
25	What Is Our Long Play? [President's Message]. IEEE Antennas and Propagation Magazine, 2020, 62, 6-6.	1.2	0
26	Retrieving Root-Zone Soil Moisture Profile From P-Band Radar via Hybrid Global and Local Optimization. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 5400-5408.	2.7	18
27	Human activity recognition using magnetic induction-based motion signals and deep recurrent neural networks. Nature Communications, 2020, 11, 1551.	5.8	68
28	Comprehensive analysis of alternative downscaled soil moisture products. Remote Sensing of Environment, 2020, 239, 111586.	4.6	52
29	Learning-Assisted Multimodality Dielectric Imaging. IEEE Transactions on Antennas and Propagation, 2020, 68, 2356-2369.	3.1	44
30	Modeling the Effects of Topography on Delay-Doppler Maps. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2020, 13, 1740-1751.	2.3	23
31	A Tradition of Giving [President's Message]. IEEE Antennas and Propagation Magazine, 2020, 62, 6-6.	1.2	0
32	Remembering Prof. Mojgan Daneshmand and Prof. Pedram Mousavi [In Memoriam]. IEEE Antennas and Propagation Magazine, 2020, 62, 124-125.	1.2	3
33	Assessment and Validation of AirMOSS P-Band Root-Zone Soil Moisture Products. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 6181-6196.	2.7	11
34	A Culture Shift Toward Equity and Parity [President's Message]. IEEE Antennas and Propagation Magazine, 2020, 62, 6-6.	1.2	0
35	Arbitrary Nonlinear FM Waveform Construction and Ultra-Wideband Synthesis. , 2020, , .		2
36	D-SHIELD: DISTRIBUTED SPACECRAFT WITH HEURISTIC INTELLIGENCE TO ENABLE LOGISTICAL DECISIONS. , 2020, , .		4

#	ARTICLE	IF	CITATIONS
37	Mapping Tree Canopy Cover and Canopy Height with L-Band SAR Using LiDAR Data and Random Forests. , 2020, , .		1
38	Multi-Temporal Convolutional Neural Networks for Satellite-Derived Soil Moisture Observation Enhancement. , 2020, , .		5
39	SPCTOR: Sensing Policy Controller and Optimizer. , 2020, , .		0
40	Joint Retrieval of Soil Moisture and Permafrost Active Layer Thickness Using L-Band Insar and P-Band Polsar. , 2020, , .		1
41	"Collective Intelligence" for Electromagnetics Education [President's Message]. IEEE Antennas and Propagation Magazine, 2020, 62, 6-6.	1.2	0
42	Soil and Vegetation Scattering Contributions in L-Band and P-Band Polarimetric SAR Observations. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 8417-8429.	2.7	10
43	Permafrost variability over the Northern Hemisphere based on the MERRA-2 reanalysis. Cryosphere, 2019, 13, 2087-2110.	1.5	21
44	The Sensitivity of North American Terrestrial Carbon Fluxes to Spatial and Temporal Variation in Soil Moisture: An Analysis Using Radarâ€Derived Estimates of Rootâ€Zone Soil Moisture. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 3208-3231.	1.3	111
45	Retrieval of Subsurface Properties of Layered Dielectric Structures Using Hybrid Global and Local Optimization. , 2019, , .		1
46	Retrieval of Subsurface Soil Moisture Profiles from L-Band and P-Band Reflectometry. , 2019, , .		1
47	New Beginnings [Editor's Comments]. IEEE Antennas and Propagation Magazine, 2019, 61, 4-4.	1.2	0
48	Retrieval of Permafrost Active Layer Properties Using Time-Series P-Band Radar Observations. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 6037-6054.	2.7	40
49	Sensitivity of active-layer freezing process to snow cover in Arctic Alaska. Cryosphere, 2019, 13, 197-218.	1.5	26
50	Developing A Soil Inversion Model Framework for Regional Permafrost Monitoring. , 2019, , .		0
51	Duty-Cycled, Sub-GHz Wake-up Radio with -95dBm Sensitivity and Addressing Capability for Environmental Monitoring Applications. , 2019, , .		0
52	Application of Ultra-Wideband Synthesis in Software Defined Radar for UAV-based Landmine Detection. , 2019, , .		9
53	Convergence of Disciplines [Editor's Comments]. IEEE Antennas and Propagation Magazine, 2019, 61, 4-4.	1.2	0
54	Bistatic Scattering Forward Model Validation Using GNSS-R Observations. , 2019, , .		1

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55	Experimental Investigation of the Coupled Hydraulic and Low-Frequency Dielectric Behavior of the Arctic Permafrost Active Layer Organic Soil. , 2019, , .		2
56	Modeling and Retrieving Soil Moisture and Organic Matter Profiles in the Active Layer of Permafrost Soils From P-Band Radar Observations. , 2019, , .		5
57	Autonomous Moisture Continuum Sensing Network: Intelligent and Energy Efficient in Situ Wireless Sensor Networks in Support of Remote Sensing Missions. , 2019, , .		0
58	Magnetic Induction-based Human Activity Recognition (MI-HAR). , 2019, , .		5
59	3-D Level Set Method for Joint Contrast and Shape Recovery in Microwave Imaging. IEEE Transactions on Computational Imaging, 2019, 5, 97-108.	2.6	6
60	Antennas for Autonomy [Editor's Comments]. IEEE Antennas and Propagation Magazine, 2018, 60, 4-4.	1.2	0
61	Characterization of vegetation and soil scattering mechanisms across different biomes using P-band SAR polarimetry. Remote Sensing of Environment, 2018, 209, 107-117.	4.6	13
62	The SMAP mission combined active-passive soil moisture product at 9â€”km and 3â€”km spatial resolutions. Remote Sensing of Environment, 2018, 211, 204-217.	4.6	59
63	A Fast Level Set Method for Multi-Material Recovery in Microwave Imaging. IEEE Transactions on Antennas and Propagation, 2018, , 1-1.	3.1	2
64	Will OAM Antennas Work at Radio Frequencies? [Editor's Comments]. IEEE Antennas and Propagation Magazine, 2018, 60, 4-4.	1.2	0
65	Theoretical Modeling and Analysis of Magnetic Induction Communication in Wireless Body Area Networks (WBANs). IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology, 2018, 2, 48-55.	2.3	21
66	Real-Time Three-Dimensional Microwave Monitoring of Interstitial Thermal Therapy. IEEE Transactions on Biomedical Engineering, 2018, 65, 528-538.	2.5	51
67	P-Band Radar Retrieval of Permafrost Active Layer Properties: Time-Series Approach and Validation with In-Situ Observations. , 2018, , .		1
68	Learning Nonlinearity of Microwave Imaging Through Deep Learning. , 2018, , .		8
69	We Want It All [Editor's Comments]. IEEE Antennas and Propagation Magazine, 2018, 60, 4-4.	1.2	0
70	Multi-parameter Microwave Inverse Scattering with Group Sparsity Constraints. , 2018, , .		2
71	Spatial and Temporal Variability of Root-Zone Soil Moisture Acquired From Hydrologic Modeling and AirMOSS P-Band Radar. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2018, 11, 4578-4590.	2.3	10
72	Not Your Parents' Antennas [Editor's Comments]. IEEE Antennas and Propagation Magazine, 2018, 60, 4-4.	1.2	0

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73	Analysis of Permafrost Active Layer Soil Heterogeneity in Support of Radar Retrievals. , 2018, , .		1
74	A Novel Global Optimization Technique for Microwave Imaging Based on the Simulated Annealing and Multi -Directional Search. , 2018, , .		2
75	Relationship Between Bistatic Radar Scattering Cross Sections and GPS Reflectometry Delay-Doppler Maps Over Vegetated Land in Support of Soil Moisture Retrieval. , 2018, , .		2
76	Towards Multi-Frequency Soil Moisture Retrieval Using P- and L-Band Passive Microwave Sensing Technology. , 2018, , .		4
77	Contributions of Geophysical and C-Band SAR Data for Estimation of Field Scale Soil Moisture. , 2018, , .		1
78	GNSS-R Parameter Sensitivities for Soil Moisture Retrieval. , 2018, , .		2
79	Improving the Efficiency of Magnetic Induction-Based Wireless Body Area Network (WBAN). , 2018, , .		7
80	Electromagnetic Imaging of Dielectric Objects Using a Multidirectional-Search-Based Simulated Annealing. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2018, 3, 167-175.	1.4	15
81	Ultrawideband Used to Be Impossible [Editor's Comments]. IEEE Antennas and Propagation Magazine, 2018, 60, 4-4.	1.2	0
82	Characterizing permafrost active layer dynamics and sensitivity to landscape spatial heterogeneity in Alaska. Cryosphere, 2018, 12, 145-161.	1.5	49
83	Ultra-wideband synthesis for high-range resolution software defined radar. , 2018, , .		13
84	Recovery of Soil Moisture Active Passive (SMAP) Instrument's Active Measurements via Coupled Dictionary Learning. IS&T International Symposium on Electronic Imaging, 2018, 30, 229-1-2296.	0.3	1
85	Do You Know Your Branch Cuts? [Editor's Comments]. IEEE Antennas and Propagation Magazine, 2018, 60, 4-4.	1.2	0
86	Validation of SMAP surface soil moisture products with core validation sites. Remote Sensing of Environment, 2017, 191, 215-231.	4.6	503
87	A Method for Upscaling In Situ Soil Moisture Measurements to Satellite Footprint Scale Using Random Forests. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 2663-2673.	2.3	47
88	Role of computational EM in radar remote sensing of water resources. , 2017, , .		0
89	Combined Radarâ€“Radiometer Surface Soil Moisture and Roughness Estimation. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 4098-4110.	2.7	8
90	Numerical Vector Greenâ€™s Function for S-Parameter Measurement With Waveport Excitation. IEEE Transactions on Antennas and Propagation, 2017, 65, 3645-3653.	3.1	5

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91	The Case for SmallSats [Editor's Comments]. IEEE Antennas and Propagation Magazine, 2017, 59, 4-4.	1.2	0
92	Full-Wave Electromagnetic Scattering From Rough Surfaces With Buried Inhomogeneities. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 3338-3353.	2.7	10
93	Martian Antennas [Editor's Comments]. IEEE Antennas and Propagation Magazine, 2017, 59, 4-4.	1.2	0
94	Assessment of the SMAP Level-4 Surface and Root-Zone Soil Moisture Product Using In Situ Measurements. Journal of Hydrometeorology, 2017, 18, 2621-2645.	0.7	196
95	Communication system design for magnetic induction-based Wireless Body Area Network. , 2017, , .		5
96	Antenna: Don't Drone Without It [Editor's Comments]. IEEE Antennas and Propagation Magazine, 2017, 59, 4-4.	1.2	0
97	Comparison of downscaling techniques for high resolution soil moisture mapping. , 2017, , .		2
98	Matrix norm based method for recovery of high contrast and sparse objects in microwave imaging. , 2017, , .		0
99	Super resolution for microwave imaging: A deep learning approach. , 2017, , .		23
100	Modeling and analysis of bistatic scattering from forests in support of soil moisture retrieval. , 2017, , .		5
101	WPCT CFP. IEEE Antennas and Propagation Magazine, 2017, 59, 156-157.	1.2	0
102	Free Waves [Editor's Comments]. IEEE Antennas and Propagation Magazine, 2017, 59, 4-4.	1.2	0
103	Real-time tracking of metallic treatment probe in interstitial thermal therapy. , 2017, , .		0
104	Advancing NASA's AirMOSS P-Band Radar Root Zone Soil Moisture Retrieval Algorithm via Incorporation of Richards's Equation. Remote Sensing, 2017, 9, 17.	1.8	41
105	Data Assimilation to Extract Soil Moisture Information from SMAP Observations. Remote Sensing, 2017, 9, 1179.	1.8	25
106	Microwave imaging of dielectric objects using a combination of simulated annealing and multi-directional search. , 2017, , .		3
107	Retrieval of permafrost active layer properties using P-band airmoss and L-band UAVSAR data. , 2017, , .		6
108	Retrieval of AirMOSS root-zone soil moisture profile with a richards' equation-based approach. , 2017, , .		1

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109	Ready for 5G? [Editor's Comments]. IEEE Antennas and Propagation Magazine, 2017, 59, 4-4.	1.2	0
110	Microwave Selective Heating Enhancement for Cancer Hyperthermia Therapy Based on Lithographically Defined Micro/Nanoparticles. Advanced Materials Technologies, 2016, 1, 1600038.	3.0	10
111	Pinching the Energy Penny [Editor's Comments]. IEEE Antennas and Propagation Magazine, 2016, 58, 4-4.	1.2	0
112	Assessment of retrieval errors of AirMOSS root-zone soil moisture products. , 2016, , .		3
113	A time-series active layer thickness retrieval algorithm using P- and L-band SAR observations. , 2016, , .		6
114	Exploring the effect of forest spatial heterogeneity using coherent three-dimensional radar backscattering model. , 2016, , .		1
115	Holiday Cheer...with Echo? [Editor's Comments]. IEEE Antennas and Propagation Magazine, 2016, 58, 4-4.	1.2	0
116	A multi-objective optimization approach to combined radar-radiometer soil moisture estimation. , 2016, , .		2
117	Theoretical derivation of RIP-less compressive sensing for inverse scattering. , 2016, , .		0
118	Resonance [Editor's Comments]. IEEE Antennas and Propagation Magazine, 2016, 58, 4-4.	1.2	0
119	Microresonator for Microwave Cancer Therapy. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2016, 1, 36-39.	1.4	2
120	A Conformal FDTD Method With Accurate Waveport Excitation and S-Parameter Extraction. IEEE Transactions on Antennas and Propagation, 2016, 64, 4504-4509.	3.1	13
121	Joint-physics emission-scattering model for improved active-passive soil moisture estimation. , 2016, , .		0
122	Building a Better Scanner [Editor's Comments]. IEEE Antennas and Propagation Magazine, 2016, 58, 4-4.	1.2	0
123	The Penetration and Propagation of Wireless Signals [Editor's Comments]. IEEE Antennas and Propagation Magazine, 2016, 58, 4-4.	1.2	0
124	IGARSS in Beijing: Impressions from the First Days [Conference Reports]. IEEE Geoscience and Remote Sensing Magazine, 2016, 4, 61-68.	4.9	0
125	The importance of forest spatial heterogeneity: Exploring the effect of mix scenes using coherence three-dimension radar backscattering model. , 2016, , .		1
126	USNC-URSI 2016 NRSM Held 6-9 January [National Radio Science Meeting Report]. IEEE Antennas and Propagation Magazine, 2016, 58, 6-9.	1.2	0

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127	Closing the Loop [Editor's Comments]. IEEE Antennas and Propagation Magazine, 2016, 58, 4-4.	1.2	0
128	Design and Implementation of Low-Power and Mid-Range Magnetic-Induction-Based Wireless Underground Sensor Networks. IEEE Transactions on Instrumentation and Measurement, 2016, 65, 821-835.	2.4	30
129	Generalized Terrain Topography in Radar Scattering Models. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 3944-3952.	2.7	4
130	Inverse Scattering Using a Joint Norm-Based Regularization. IEEE Transactions on Antennas and Propagation, 2016, 64, 1373-1384.	3.1	53
131	Advances in real-time non-contact monitoring of medical thermal treatment through multistatic array microwave imaging. , 2015, , .		0
132	Evaluation of ALOS PALSAR Data for High-Resolution Mapping of Vegetated Wetlands in Alaska. Remote Sensing, 2015, 7, 7272-7297.	1.8	33
133	Theoretical Modeling and Analysis of L- and P-band Radar Backscatter Sensitivity to Soil Active Layer Dielectric Variations. Remote Sensing, 2015, 7, 9450-9472.	1.8	18
134	GRSS Publications Awards and Special Awards Presented at IGARSS 2015 Banquet [Conference Reports]. IEEE Geoscience and Remote Sensing Magazine, 2015, 3, 41-53.	4.9	0
135	Spheres...the Primal Frontier [Editor's Comments]. IEEE Antennas and Propagation Magazine, 2015, 57, 4-4.	1.2	0
136	IEEE Journal on Multiscale and Multiphysics Computational Techniques (JMMCT) Call for Papers. IEEE Antennas and Propagation Magazine, 2015, 57, 9-9.	1.2	0
137	IGARSS in Milan July 26-31, 2015 Impressions from the First Days [Conference Reports]. IEEE Geoscience and Remote Sensing Magazine, 2015, 3, 139-147.	4.9	0
138	[Editor's Comments]. IEEE Antennas and Propagation Magazine, 2015, 57, 10-10.	1.2	0
139	Multitasking Antennas [Editor's Comments]. IEEE Antennas and Propagation Magazine, 2015, 57, 4-126.	1.2	0
140	FDTD based numerical Green's function for S-parameter measurement in inverse scattering problems. , 2015, , .		0
141	L-band and P-band studies of vegetation at JPL. , 2015, , .		6
142	The Next Frontier in Wireless Information Transmittal [Editor's Comments]. IEEE Antennas and Propagation Magazine, 2015, 57, 4-4.	1.2	0
143	Experimental Verification of the Recursive T-Matrix Method Solutions at Microwave Frequencies. IEEE Transactions on Antennas and Propagation, 2015, 63, 5727-5740.	3.1	4
144	Antennas in Our Daily Life [Editor's Comments]. IEEE Antennas and Propagation Magazine, 2015, 57, 4-4.	1.2	0

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145	Case study on the reliability of unattended outdoor wireless sensor systems. , 2015, , .		0
146	A Combined Active–Passive Soil Moisture Estimation Algorithm With Adaptive Regularization in Support of SMAP. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 3312-3324.	2.7	38
147	Strategic frequency adaptation for mid-range magnetic induction-based Wireless Underground Sensor Networks. , 2015, , .		8
148	Operating frequency selection for low-power magnetic induction-based wireless underground sensor networks. , 2015, , .		11
149	The Soil Moisture Active Passive Validation Experiment 2012 (SMAPVEX12): Prelaunch Calibration and Validation of the SMAP Soil Moisture Algorithms. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 2784-2801.	2.7	206
150	P-Band Radar Retrieval of Subsurface Soil Moisture Profile as a Second-Order Polynomial: First AirMOSS Results. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 645-658.	2.7	107
151	Classification of Alaska Spring Thaw Characteristics Using Satellite L-Band Radar Remote Sensing. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 542-556.	2.7	42
152	A Python-Based Open Source System for Geographic Object-Based Image Analysis (GEOBIA) Utilizing Raster Attribute Tables. Remote Sensing, 2014, 6, 6111-6135.	1.8	59
153	A radar-radiometer soil moisture estimation framework with adaptive regularization and joint physics. , 2014, , .		0
154	Joint L1-L2 regularization for inverse scattering. , 2014, , .		2
155	A preclinical system for focused microwave thermal therapy with integrated real-time 3D microwave thermal monitoring. , 2014, , .		1
156	Generalized radar scattering model including terrain topography. , 2014, , .		2
157	The Effect of Variable Soil Moisture Profiles on P-Band Backscatter. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 6315-6325.	2.7	16
158	An optimized GPU-accelerated FDTD method for microwave imaging using a fast nonlinear inverse scattering algorithm. , 2014, , .		0
159	Self-characterization of commercial ultrasound probes in transmission acoustic inverse scattering: transducer model and volume integral formulation. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2014, 61, 467-480.	1.7	2
160	A Simulation Study of Compact Polarimetry for Radar Retrieval of Soil Moisture. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 5966-5973.	2.7	19
161	Mitigation of Faraday rotation effect for long-wavelength synthetic spaceborne radar data. , 2014, , .		2
162	Radar-radiometer soil moisture estimation with joint physics and adaptive regularization in support of SMAP. , 2014, , .		3

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163	Models of L-Band Radar Backscattering Coefficients Over Global Terrain for Soil Moisture Retrieval. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 1381-1396.	2.7	110
164	Real-time Microwave Imaging of Differential Temperature for Thermal Therapy Monitoring. IEEE Transactions on Biomedical Engineering, 2014, 61, 1787-1797.	2.5	90
165	On the Accuracy of Averaging Radar Backscattering Coefficients for Bare Soils Using the Finite-Element Method. IEEE Geoscience and Remote Sensing Letters, 2014, 11, 1345-1349.	1.4	4
166	Effects of fine-scale soil moisture and canopy heterogeneity on energy and water fluxes in a northern temperate mixed forest. Agricultural and Forest Meteorology, 2014, 184, 243-256.	1.9	25
167	IGARSS in Quebec July 14-18, 2014 Impressions from the First Days [Conference Report]. IEEE Geoscience and Remote Sensing Magazine, 2014, 2, 58-65.	4.9	0
168	The Future of Wireless Underground Sensing Networks Considering Physical Layer Aspects. Signals and Communication Technology, 2014, , 451-484.	0.4	7
169	Emerging Technologies, Sensor Web. Encyclopedia of Earth Sciences Series, 2014, , 190-196.	0.1	0
170	Canadian Experiment for Soil Moisture in 2010 (CanEx-SM10): Overview and Preliminary Results. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 347-363.	2.7	71
171	Coherent scattering of electromagnetic waves from layered rough surfaces within the Kirchhoff regime. , 2013, , .		0
172	WSN-SA: Design foundations for situational awareness systems based on sensor networks. , 2013, , .		7
173	Bistatic Vector 3-D Scattering From Layered Rough Surfaces Using Stabilized Extended Boundary Condition Method. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 2722-2733.	2.7	24
174	Three-and-a-half Decades of Progress in Monitoring Soils and Soil Hydraulic Properties. Procedia Environmental Sciences, 2013, 19, 384-393.	1.3	4
175	Coherent Scattering of Electromagnetic Waves From Two-Layer Rough Surfaces Within the Kirchhoff Regime. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 3943-3953.	2.7	32
176	Temporal dynamics of soil moisture in a northern temperate mixed successional forest after a prescribed intermediate disturbance. Agricultural and Forest Meteorology, 2013, 180, 22-33.	1.9	45
177	An Adaptive Energy-Management Framework for Sensor Nodes with Constrained Energy Scavenging Profiles. International Journal of Distributed Sensor Networks, 2013, 9, 272849.	1.3	8
178	A radar-radiometer surface soil moisture retrieval algorithm for SMAP. , 2013, , .		2
179	GPU accelerated 3D nonlinear time domain inversion of realistic breast phantoms with multiparameter optimization. , 2013, , .		1
180	Scaling analysis of heterogeneity in support of soil moisture retrieval at landscape level for low-frequency radars. , 2013, , .		0

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181	Airborne Microwave Observatory of Subcanopy and Subsurface radar retrieval of root zone soil moisture: Preliminary results. , 2013, , .		2
182	Ripple-2. Mobile Computing and Communications Review, 2013, 17, 55-60.	1.7	4
183	Report on the 2012 IEEE International Symposium on Antennas and Propagation and USNC-URSI Radio Science Meeting July 8-14, 2012, Chicago, Il, USA. IEEE Antennas and Propagation Magazine, 2013, 55, 178-180.	1.2	0
184	Microwave Breast Imaging System Prototype with Integrated Numerical Characterization. International Journal of Biomedical Imaging, 2012, 2012, 1-18.	3.0	42
185	ADvances in radar forward and inverse scattering models of subsurface and subcanopy soil moisture and their role for the AirMOSS mission. , 2012, , .		1
186	An integrated active-passive soil moisture retrieval algorithm for SMAP for bare surfaces. , 2012, , .		0
187	A generalized radar scattering model for multispecies forests with multilayer subsurface soil. , 2012, , .		5
188	Ripple-2. , 2012, , .		4
189	Potential of L-Band Radar for Retrieval of Canopy and Subcanopy Parameters of Boreal Forests. IEEE Transactions on Geoscience and Remote Sensing, 2012, 50, 2150-2160.	2.7	21
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