

M H Cosh

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

220
papers

9,026
citations

51
h-index

90
g-index

252
ext. papers

10,785
ext. citations

6
avg, IF

6.21
L-index

#	Paper	IF	Citations
220	Analyzing Effects of Crops on SMAP Satellite-Based Soil Moisture Using a RainfallRunoff Model in the U.S. Corn Belt. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2022 , 15, 247-260	4.7	1
219	Validation of Soil Moisture Data Products From the NASA SMAP Mission. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2022 , 15, 364-392	4.7	9
218	Assessment of 24 soil moisture datasets using a new in situ network in the Shandian River Basin of China. <i>Remote Sensing of Environment</i> , 2022 , 271, 112891	13.2	5
217	Thermal hydraulic disaggregation of SMAP soil moisture over the continental United States. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2022 , 1-1	4.7	1
216	Regularized Dual-Channel Algorithm for the Retrieval of Soil Moisture and Vegetation Optical Depth from SMAP Measurements. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2021 , 1-1	4.7	1
215	Validation of SMAP Soil Moisture at Terrestrial National Ecological Observatory Network (NEON) Sites Show Potential for Soil Moisture Retrieval in Forested Areas. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2021 , 14, 10903-10918	4.7	3
214	Field-Scale Soil Moisture Retrieval Using PALSAR-2 Polarimetric Decomposition and Machine Learning. <i>Agronomy</i> , 2021 , 11, 35	3.6	2
213	From Standard Weather Stations to Virtual Micro-Meteorological Towers in Ungauged Sites: Modeling Tool for Surface Energy Fluxes, Evapotranspiration, Soil Temperature, and Soil Moisture Estimations. <i>Remote Sensing</i> , 2021 , 13, 1271	5	
212	A long term global daily soil moisture dataset derived from AMSR-E and AMSR2 (2002-2019). <i>Scientific Data</i> , 2021 , 8, 143	8.2	10
211	Understanding temporal stability: a long-term analysis of USDA ARS watersheds. <i>International Journal of Digital Earth</i> , 2021 , 14, 1243-1254	3.9	3
210	Developing a strategy for the national coordinated soil moisture monitoring network. <i>Vadose Zone Journal</i> , 2021 , 20, e20139	2.7	3
209	A roadmap for high-resolution satellite soil moisture applications [confronting product characteristics with user requirements. <i>Remote Sensing of Environment</i> , 2021 , 252, 112162	13.2	38
208	. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2021 , 18, 1530-1534	4.1	2
207	The USDA-ARS Experimental Watershed Network: Evolution, Lessons Learned, Societal Benefits, and Moving Forward. <i>Water Resources Research</i> , 2021 , 57, e2019WR026473	5.4	3
206	. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2021 , 1-5	4.1	2
205	Toward operational validation systems for global satellite-based terrestrial essential climate variables. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2021 , 95, 102240	7.3	10
204	Global Soil Moisture Retrievals From the Chinese FY-3D Microwave Radiation Imager. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2021 , 59, 4018-4032	8.1	8

203	. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2021 , 14, 2577-2592	4.7	3
202	High-Resolution Soil-Moisture Maps Over Landslide Regions in Northern California Grassland Derived From SAR Backscattering Coefficients. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2021 , 14, 4547-4560	4.7	0
201	. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2021 , 14, 4946-4965	4.7	10
200	Surface Soil Moisture Retrievals Under Forest Canopy for L-Band SAR Observations Across a Wide Range of Incidence Angles by Inverting a Physical Scattering Model. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2021 , 14, 1741-1753	4.7	2
199	. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2021 , 59, 991-1011	8.1	3
198	Comparison between Dense L-Band and C-Band Synthetic Aperture Radar (SAR) Time Series for Crop Area Mapping over a NISAR Calibration-Validation Site. <i>Agronomy</i> , 2021 , 11, 273	3.6	2
197	L-band vegetation optical depth as an indicator of plant water potential in a temperate deciduous forest stand. <i>Biogeosciences</i> , 2021 , 18, 739-753	4.6	14
196	Evaluating NISAR's cropland mapping algorithm over the conterminous United States using Sentinel-1 data. <i>Remote Sensing of Environment</i> , 2021 , 260, 112472	13.2	1
195	Sentinel-1 soil moisture at 1km resolution: a validation study. <i>Remote Sensing of Environment</i> , 2021 , 263, 112554	13.2	9
194	Impact of vegetation water content information on soil moisture retrievals in agricultural regions: An analysis based on the SMAPVEX16-MicroWEX dataset. <i>Remote Sensing of Environment</i> , 2021 , 265, 112623	13.2	4
193	Performance Evaluation of UAVSAR and Simulated NISAR Data for Crop/Noncrop Classification Over Stoneville, MS. <i>Earth and Space Science</i> , 2021 , 8, e2020EA001363	3.1	3
192	An inverse dielectric mixing model at 50 MHz that considers soil organic carbon. <i>Hydrology and Earth System Sciences</i> , 2021 , 25, 6407-6420	5.5	1
191	SMAP Detects Soil Moisture Under Temperate Forest Canopies. <i>Geophysical Research Letters</i> , 2020 , 47, e2020GL089697	4.9	11
190	Validation practices for satellite soil moisture retrievals: What are (the) errors?. <i>Remote Sensing of Environment</i> , 2020 , 244, 111806	13.2	70
189	Studying Soil Moisture and Temperature on the Tibetan Plateau: Initial Results of an Integrated, Multiscale Observatory. <i>IEEE Geoscience and Remote Sensing Magazine</i> , 2020 , 8, 18-36	8.9	0
188	Effect of Rainfall Events on SMAP Radiometer-Based Soil Moisture Accuracy Using Core Validation Sites. <i>Journal of Hydrometeorology</i> , 2020 , 21, 255-264	3.7	3
187	Synthetic Aperture Radar (SAR) image processing for operational space-based agriculture mapping. <i>International Journal of Remote Sensing</i> , 2020 , 41, 7112-7144	3.1	15
186	Field evaluation of portable soil water content sensors in a sandy loam. <i>Vadose Zone Journal</i> , 2020 , 19, e20033	2.7	8

185	L-Band Radar Experiment and Modeling of a Corn Canopy Over a Full Growing Season. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2020 , 58, 5821-5835	8.1	8
184	. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2020 , 58, 5264-5276	8.1	11
183	. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2020 , 58, 3894-3905	8.1	32
182	Comparison of microwave remote sensing and land surface modeling for surface soil moisture climatology estimation. <i>Remote Sensing of Environment</i> , 2020 , 242, 111756	13.2	39
181	. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2020 , 58, 6181-6196	8.1	5
180	An Intercomparison Study of Algorithms for Downscaling SMAP Radiometer Soil Moisture Retrievals. <i>Journal of Hydrometeorology</i> , 2020 , 21, 1761-1775	3.7	4
179	Assessing the Impact of Soil Layer Depth Specification on the Observability of Modeled Soil Moisture and Brightness Temperature. <i>Journal of Hydrometeorology</i> , 2020 , 21, 2041-2060	3.7	2
178	Parameterization of Vegetation Scattering Albedo in the Tau-Omega Model for Soil Moisture Retrieval on Croplands. <i>Remote Sensing</i> , 2020 , 12, 2939	5	0
177	The backscattering contribution of soybean pods at L-band. <i>Remote Sensing of Environment</i> , 2020 , 248, 111977	13.2	4
176	C-band synthetic aperture radar (SAR) imagery for the classification of diverse cropping systems. <i>International Journal of Remote Sensing</i> , 2020 , 41, 9628-9649	3.1	4
175	Global scale error assessments of soil moisture estimates from microwave-based active and passive satellites and land surface models over forest and mixed irrigated/dryland agriculture regions. <i>Remote Sensing of Environment</i> , 2020 , 251, 112052	13.2	26
174	Tracking Red Palm Mite Damage in the Western Hemisphere Invasion with Landsat Remote Sensing Data. <i>Insects</i> , 2020 , 11,	2.8	1
173	. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2020 , 13, 6457-6472	4.7	3
172	Monitoring crop water content for corn and soybean fields through data fusion of MODIS and Landsat measurements in Iowa. <i>Agricultural Water Management</i> , 2020 , 227, 105844	5.9	11
171	Evaluation of Remotely-Sensed and Model-Based Soil Moisture Products According to Different Soil Type, Vegetation Cover and Climate Regime Using Station-Based Observations over Turkey. <i>Remote Sensing</i> , 2019 , 11, 1875	5	10
170	The SMAP and Copernicus Sentinel 1A/B microwave active-passive high resolution surface soil moisture product. <i>Remote Sensing of Environment</i> , 2019 , 233, 111380	13.2	88
169	Uncertainty in Soil Moisture Retrievals: an Ensemble Approach using SMOS L-Band Microwave Data. <i>Remote Sensing of Environment</i> , 2019 , 229, 133-147	13.2	9
168	Data-driven stochastic model for basin and sub-grid variability of SMAP satellite soil moisture. <i>Journal of Hydrology</i> , 2019 , 576, 85-97	6	8

167	A Global Assessment of Added Value in the SMAP Level 4 Soil Moisture Product Relative to Its Baseline Land Surface Model. <i>Geophysical Research Letters</i> , 2019 , 46, 6604-6613	4.9	19
166	Satellite surface soil moisture from SMAP, SMOS, AMSR2 and ESA CCI: A comprehensive assessment using global ground-based observations. <i>Remote Sensing of Environment</i> , 2019 , 231, 111215	13.2	99
165	Comparison of high-resolution airborne soil moisture retrievals to SMAP soil moisture during the SMAP validation experiment 2016 (SMAPVEX16). <i>Remote Sensing of Environment</i> , 2019 , 227, 137-150	13.2	33
164	Modeling soil temperature in a temperate region: A comparison between empirical and physically based methods in SWAT. <i>Ecological Engineering</i> , 2019 , 129, 134-143	3.9	17
163	Uncertainty of Reference Pixel Soil Moisture Averages Sampled at SMAP Core Validation Sites. <i>Journal of Hydrometeorology</i> , 2019 , 20, 1553-1569	3.7	18
162	. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2019 , 12, 3387-3397	4.7	26
161	. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2019 , 12, 3233-3246	4.7	6
160	Upscaling Gross Primary Production in Corn-Soybean Rotation Systems in the Midwest. <i>Remote Sensing</i> , 2019 , 11, 1688	5	4
159	Vegetation-soil moisture coupling metrics from dual-polarization microwave radiometry using regularization. <i>Remote Sensing of Environment</i> , 2019 , 231, 111257	13.2	6
158	. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2019 , 12, 3184-3193	4.7	2
157	Version 4 of the SMAP Level-4 Soil Moisture Algorithm and Data Product. <i>Journal of Advances in Modeling Earth Systems</i> , 2019 , 11, 3106-3130	7.1	52
156	Estimating vegetation water content during the Soil Moisture Active Passive Validation Experiment 2016. <i>Journal of Applied Remote Sensing</i> , 2019 , 13, 1	1.4	12
155	Building a One-Stop Shop for Soil Moisture Information. <i>Eos</i> , 2019 , 100,	1.5	2
154	Seasonal Dependence of SMAP Radiometer-Based Soil Moisture Performance as Observed Over Core Validation Sites 2019 ,		3
153	Self-Correction of Soil Moisture Ocean Salinity (SMOS) Soil Moisture Dry Bias. <i>Canadian Journal of Remote Sensing</i> , 2019 , 45, 814-828	1.8	3
152	The Texas Soil Observation Network: A Comprehensive Soil Moisture Dataset for Remote Sensing and Land Surface Model Validation. <i>Vadose Zone Journal</i> , 2019 , 18, 1-20	2.7	16
151	Seasonal Evaluation of SMAP Soil Moisture in the U.S. Corn Belt. <i>Remote Sensing</i> , 2019 , 11, 2488	5	18
150	An assessment of the differences between spatial resolution and grid size for the SMAP enhanced soil moisture product over homogeneous sites. <i>Remote Sensing of Environment</i> , 2018 , 207, 65-70	13.2	36

149	. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2018 , 11, 209-219	4.7	35
148	The SMAP mission combined active-passive soil moisture product at 9 km and 3 km spatial resolutions. <i>Remote Sensing of Environment</i> , 2018 , 211, 204-217	13.2	45
147	Global-scale assessment and combination of SMAP with ASCAT (active) and AMSR2 (passive) soil moisture products. <i>Remote Sensing of Environment</i> , 2018 , 204, 260-275	13.2	96
146	Development and Assessment of the SMAP Enhanced Passive Soil Moisture Product. <i>Remote Sensing of Environment</i> , 2018 , 204, 931-941	13.2	188
145	Downscaling of Surface Soil Moisture Retrieval by Combining MODIS/Landsat and In Situ Measurements. <i>Remote Sensing</i> , 2018 , 10, 210	5	30
144	Incorporation of Stem Water Content into Vegetation Optical Depth for Crops and Woodlands. <i>Remote Sensing</i> , 2018 , 10, 273	5	7
143	Estimating time-dependent vegetation biases in the SMAP soil moisture product. <i>Hydrology and Earth System Sciences</i> , 2018 , 22, 4473-4489	5.5	26
142	Temporal transferability of soil moisture calibration equations. <i>Journal of Hydrology</i> , 2018 , 556, 349-3586		7
141	Multi-time scale analysis of the spatial representativeness of soil moisture data within satellite footprints. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018 , 123, 3-21	4.4	15
140	Estimating surface soil moisture from SMAP observations using a Neural Network technique. <i>Remote Sensing of Environment</i> , 2018 , 204, 43-59	13.2	59
139	Sentinel-1 & Sentinel-2 for SOIL Moisture Retrieval at Field Scale 2018 ,		7
138	Field and Laboratory Evaluation of the CS655 Soil Water Content Sensor. <i>Vadose Zone Journal</i> , 2018 , 17, 170214	2.7	24
137	Intercalibration of Low Frequency Brightness Temperature Measurements For Long-Term Soil Moisture Record 2018 ,		2
136	Physics-Based Retrieval of Surface Roughness Parameters for Bare Soils from Combined Active-Passive Microwave Signatures 2018 ,		1
135	Assessing SMAP Soil Moisture Scaling and Retrieval in the Carman (Canada) Study Site. <i>Vadose Zone Journal</i> , 2018 , 17, 180132	2.7	42
134	Evaluation of SMAP Freeze/Thaw Retrieval Accuracy at Core Validation Sites in the Contiguous United States. <i>Remote Sensing</i> , 2018 , 10, 1483	5	13
133	A Five-Year Evaluation of SMOS Level 2 Soil Moisture in the Corn Belt of the United States. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2018 , 11, 4664-4675	4.7	8
132	Assessing the performance of a physically-based soil moisture module integrated within the Soil and Water Assessment Tool. <i>Environmental Modelling and Software</i> , 2018 , 109, 329-341	5.2	21

131	. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2017 , 10, 489-502	4.7	93
130	Validation of SMAP surface soil moisture products with core validation sites. <i>Remote Sensing of Environment</i> , 2017 , 191, 215-231	13.2	352
129	A Time-Series Approach to Estimating Soil Moisture From Vegetated Surfaces Using L-Band Radar Backscatter. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2017 , 55, 3186-3193	8.1	36
128	Surface Soil Moisture Retrieval Using the L-Band Synthetic Aperture Radar Onboard the Soil Moisture Active-Passive Satellite and Evaluation at Core Validation Sites. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2017 , Volume 55, 1897-1914	8.1	46
127	Combined Radar-Radiometer Surface Soil Moisture and Roughness Estimation. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2017 , 55, 4098-4110	8.1	8
126	Validation and scaling of soil moisture in a semi-arid environment: SMAP validation experiment 2015 (SMAPVEX15). <i>Remote Sensing of Environment</i> , 2017 , 196, 101-112	13.2	49
125	Nonparametric triple collocation. <i>Water Resources Research</i> , 2017 , 53, 5516-5530	5.4	6
124	Joint Sentinel-1 and SMAP data assimilation to improve soil moisture estimates. <i>Geophysical Research Letters</i> , 2017 , 44, 6145-6153	4.9	75
123	Validation of SMAP soil moisture for the SMAPVEX15 field campaign using a hyper-resolution model. <i>Water Resources Research</i> , 2017 , 53, 3013-3028	5.4	29
122	Relating coccidioidomycosis (valley fever) incidence to soil moisture conditions. <i>GeoHealth</i> , 2017 , 1, 51-63	5.3	30
121	2017 ,		2
120	Strategies for validating satellite soil moisture products using in situ networks: Lessons from the USDA-ARS watersheds 2017 ,		2
119	Assessment of version 4 of the SMAP passive soil moisture standard product 2017 ,		3
118	Multi-frequency radiometer-based soil moisture retrieval algorithm parametrization using in situ validation sites 2017 ,		1
117	2017 ,		2
116	Assessment of the SMAP Level-4 Surface and Root-Zone Soil Moisture Product Using In Situ Measurements. <i>Journal of Hydrometeorology</i> , 2017 , 18, 2621-2645	3.7	139
115	Soil Moisture Remote Sensing: State-of-the-Science. <i>Vadose Zone Journal</i> , 2017 , 16, vzt2016.10.0105	2.7	136
114	Remote Sensing of Drivers of Spring Snowmelt Flooding in the North Central U.S.. <i>Springer Remote Sensing/photogrammetry</i> , 2017 , 21-45	0.2	9

113	Strengths and weaknesses of temporal stability analysis for monitoring and estimating grid-mean soil moisture in a high-intensity irrigated agricultural landscape. <i>Water Resources Research</i> , 2017 , 53, 283-301	5.4	15
112	2017 ,		1
111	Fusing microwave and optical satellite observations for high resolution soil moisture data products 2017 ,		3
110	Development and validation of the SMAP enhanced passive soil moisture product 2017 ,		3
109	Sentinel-1 high resolution soil moisture 2017 ,		3
108	Data Assimilation to extract Soil Moisture Information from SMAP Observations. <i>Remote Sensing</i> , 2017 , 9, 1179	5	25
107	Using machine learning to produce near surface soil moisture estimates from deeper in situ records at U.S. Climate Reference Network (USCRN) locations: Analysis and applications to AMSR-E satellite validation. <i>Advances in Water Resources</i> , 2016 , 98, 122-131	4.7	11
106	Evaluation of the validated Soil Moisture product from the SMAP radiometer 2016 ,		5
105	Calibration of Noah Soil Hydraulic Property Parameters Using Surface Soil Moisture from SMOS and Basinwide In Situ Observations. <i>Journal of Hydrometeorology</i> , 2016 , 17, 2275-2292	3.7	15
104	Retrieving soil moisture for non-forested areas using PALS radiometer measurements in SMAPVEX12 field campaign. <i>Remote Sensing of Environment</i> , 2016 , 184, 86-100	13.2	22
103	Soil heat flux calculation for sunlit and shaded surfaces under row crops: 2. Model test. <i>Agricultural and Forest Meteorology</i> , 2016 , 216, 129-140	5.8	11
102	Comparison of In Situ Soil Moisture Measurements: An Examination of the Neutron and Dielectric Measurements within the Illinois Climate Network. <i>Journal of Atmospheric and Oceanic Technology</i> , 2016 , 33, 1749-1758	2	1
101	The Soil Moisture Active Passive Marena, Oklahoma, In Situ Sensor Testbed (SMAP-MOISST): Testbed Design and Evaluation of In Situ Sensors. <i>Vadose Zone Journal</i> , 2016 , 15, 1-11	2.7	42
100	Assimilation of Gridded GRACE Terrestrial Water Storage Estimates in the North American Land Data Assimilation System. <i>Journal of Hydrometeorology</i> , 2016 , 17, 1951-1972	3.7	99
99	Surface soil moisture retrieval using L-band SMAP SAR data and its validation 2016 ,		1
98	SMAP soil moisture drying more rapid than observed in situ following rainfall events. <i>Geophysical Research Letters</i> , 2016 , 43, 8068-8075	4.9	63
97	Development and validation of the GCOM-W AMSR2 soil moisture product 2016 ,		1
96	. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2016 , 54, 4994-5007	8.1	330

95	SMOS disaggregated soil moisture product at 1 km resolution: Processor overview and first validation results. <i>Remote Sensing of Environment</i> , 2016 , 180, 361-376	13.2	85
94	Mapping high-resolution soil moisture and properties using distributed temperature sensing data and an adaptive particle batch smoother. <i>Water Resources Research</i> , 2016 , 52, 7690-7710	5.4	12
93	Deploying temporary networks for upscaling of sparse network stations. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2016 , 52, 433-444	7.3	7
92	Evaluation of SMOS soil moisture products over the CanEx-SM10 area. <i>Journal of Hydrology</i> , 2015 , 520, 254-267	6	36
91	Parametric exponentially correlated surface emission model for L-band passive microwave soil moisture retrieval. <i>Physics and Chemistry of the Earth</i> , 2015 , 83-84, 65-74	3	20
90	Soil Moisture Model Calibration and Validation: An ARS Watershed on the South Fork Iowa River. <i>Journal of Hydrometeorology</i> , 2015 , 16, 1087-1101	3.7	39
89	Extending the soil moisture data record of the U.S. Climate Reference Network (USCRN) and Soil Climate Analysis Network (SCAN). <i>Advances in Water Resources</i> , 2015 , 79, 80-90	4.7	14
88	Different Rates of Soil Drying after Rainfall Are Observed by the SMOS Satellite and the South Fork in situ Soil Moisture Network. <i>Journal of Hydrometeorology</i> , 2015 , 16, 889-903	3.7	40
87	Global Soil Moisture From the Aquarius/SAC-D Satellite: Description and Initial Assessment. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2015 , 12, 923-927	4.1	77
86	Refinement of SMOS Multiangular Brightness Temperature Toward Soil Moisture Retrieval and Its Analysis Over Reference Targets. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2015 , 8, 589-603	4.7	17
85	Comparing AMSR-E soil moisture estimates to the extended record of the U.S. Climate Reference Network (USCRN). <i>Advances in Water Resources</i> , 2015 , 85, 79-85	4.7	12
84	. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2015 , 53, 2784-2801	8.1	162
83	Potential of bias correction for downscaling passive microwave and soil moisture data. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015 , 120, 6460-6479	4.4	10
82	A comparison between two algorithms for the retrieval of soil moisture using AMSR-E data. <i>Frontiers in Earth Science</i> , 2015 , 3,	3.5	5
81	Evaluation of radar vegetation indices for vegetation water content estimation using data from a ground-based SMAP simulator 2015 ,		5
80	. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2015 , 8, 4345-4354	4.7	38
79	Remote monitoring of soil moisture using passive microwave-based techniques □Theoretical basis and overview of selected algorithms for AMSR-E. <i>Remote Sensing of Environment</i> , 2014 , 144, 197-213	13.2	102
78	Some Issues in Validating Satellite-Based Soil Moisture Retrievals from SMAP with in Situ Observations. <i>Geophysical Monograph Series</i> , 2014 , 245-253	1.1	

77	AMSR-E Soil Moisture Disaggregation Using MODIS and NLDAS Data. <i>Geophysical Monograph Series</i> , 2014 , 277-304	1.1	3
76	Assessing Near-Surface Soil Moisture Assimilation Impacts on Modeled Root-Zone Moisture for an Australian Agricultural Landscape. <i>Geophysical Monograph Series</i> , 2014 , 305-317	1.1	1
75	Assimilation of Satellite Soil Moisture Retrievals into a Hydrologic Model for Improving River Discharge. <i>Geophysical Monograph Series</i> , 2014 , 319-329	1.1	2
74	Calibration and Validation of the COSMOS Rover for Surface Soil Moisture Measurement. <i>Vadose Zone Journal</i> , 2014 , 13, 1-8	2.7	52
73	Soil Moisture Retrieval Using Ground-Based L-Band Passive Microwave Observations in Northeastern USA. <i>Vadose Zone Journal</i> , 2014 , 13, vzt2013.06.0101	2.7	16
72	Upper washita river experimental watersheds: multiyear stability of soil water content profiles. <i>Journal of Environmental Quality</i> , 2014 , 43, 1328-33	3.4	18
71	Seasonal parameterizations of the tau-omega model using the ComRAD ground-based SMAP simulator 2014 ,		3
70	L-band radar backscattering from a mature corn canopy: Effect of cobs 2014 ,		1
69	Field-scale moisture estimates using COSMOS sensors: A validation study with temporary networks and Leaf-Area-Indices. <i>Journal of Hydrology</i> , 2014 , 519, 637-643	6	34
68	Assimilation of Remotely Sensed Soil Moisture and Snow Depth Retrievals for Drought Estimation. <i>Journal of Hydrometeorology</i> , 2014 , 15, 2446-2469	3.7	127
67	Evaluation of several calibration procedures for a portable soil moisture sensor. <i>Journal of Hydrology</i> , 2013 , 498, 335-344	6	60
66	. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2013 , 51, 347-363	8.1	62
65	L-band active / passive time series measurements over a growing season using the ComRAD ground-based SMAP simulator 2013 ,		5
64	Remote Sensing for Vadose Zone Hydrology—Synthesis from the Vantage Point. <i>Vadose Zone Journal</i> , 2013 , 12, vzt2013.07.0128	2.7	15
63	Validating the BERMS in situ Soil Water Content Data Record with a Large Scale Temporary Network. <i>Vadose Zone Journal</i> , 2013 , 12, vzt2012.0151	2.7	13
62	State of the Art in Large-Scale Soil Moisture Monitoring. <i>Soil Science Society of America Journal</i> , 2013 , 77, 1888-1919	2.5	268
61	Passive Microwave Soil Moisture Downscaling Using Vegetation Index and Skin Surface Temperature. <i>Vadose Zone Journal</i> , 2013 , 12, vzt2013.05.0089	2.7	57
60	Application of observation operators for field scale soil moisture averages and variances in agricultural landscapes. <i>Journal of Hydrology</i> , 2012 , 444-445, 34-50	6	20

59	. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2012 , 50, 1071-1084	8.1	16
58	Effective tree scattering and opacity at L-band. <i>Remote Sensing of Environment</i> , 2012 , 118, 1-9	13.2	60
57	Long term analysis of PALS soil moisture campaign measurements for global soil moisture algorithm development. <i>Remote Sensing of Environment</i> , 2012 , 121, 309-322	13.2	35
56	Multi-scale temporal stability analysis of surface and subsurface soil moisture within the Upper Cedar Creek Watershed, Indiana. <i>Catena</i> , 2012 , 95, 91-103	5.8	52
55	Field scale spatiotemporal analysis of surface soil moisture for evaluating point-scale in situ networks. <i>Geoderma</i> , 2012 , 170, 195-205	6.7	47
54	Validation of Soil Moisture and Ocean Salinity (SMOS) Soil Moisture Over Watershed Networks in the U.S.. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2012 , 50, 1530-1543	8.1	277
53	Temporal Stability of Soil Water Contents: A Review of Data and Analyses. <i>Vadose Zone Journal</i> , 2012 , 11, vzt2011.0178	2.7	142
52	Upscaling sparse ground-based soil moisture observations for the validation of coarse-resolution satellite soil moisture products. <i>Reviews of Geophysics</i> , 2012 , 50,	23.1	387
51	Monitoring water from space. <i>Eos</i> , 2012 , 93, 203-204	1.5	
50	On the discrepancy between eddy covariance and lysimetry-based surface flux measurements under strongly advective conditions. <i>Advances in Water Resources</i> , 2012 , 50, 62-78	4.7	67
49	Surface soil water content spatial organization within irrigated and non-irrigated agricultural fields. <i>Advances in Water Resources</i> , 2012 , 50, 55-61	4.7	11
48	Soil heat flux variability influenced by row direction in irrigated cotton. <i>Advances in Water Resources</i> , 2012 , 50, 31-40	4.7	15
47	Effect of dew on aircraft-based passive microwave observations over an agricultural domain. <i>Journal of Applied Remote Sensing</i> , 2012 , 6, 063571-1	1.4	10
46	The Contributions of Precipitation and Soil Moisture Observations to the Skill of Soil Moisture Estimates in a Land Data Assimilation System. <i>Journal of Hydrometeorology</i> , 2011 , 12, 750-765	3.7	117
45	. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2011 , 49, 3167-3179	8.1	61
44	SMOS Soil Moisture validation with U.S. in situ networks 2011 ,		1
43	Evaluation of SMAP level 2 soil moisture algorithms using SMOS data 2011 ,		1
42	Vegetation water content mapping in a diverse agricultural landscape: National Airborne Field Experiment 2006. <i>Journal of Applied Remote Sensing</i> , 2010 , 4, 043532	1.4	6

41	Utilization of airborne and in situ data obtained in SGP99, SMEX02, CLASIC and SMAPVEX08 Field Campaigns for SMAP Soil Moisture Algorithm Development and Validation 2010 ,		3
40	The SMAP in situ soil moisture sensor testbed: Comparing in situ sensors for satellite validation 2010 ,		7
39	Estimating Spatial Sampling Errors in Coarse-Scale Soil Moisture Estimates Derived from Point-Scale Observations. <i>Journal of Hydrometeorology</i> , 2010 , 11, 1423-1429	3.7	159
38	A Quasi-Global Evaluation System for Satellite-Based Surface Soil Moisture Retrievals. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2010 , 48, 2516-2527	8.1	71
37	Validation of Advanced Microwave Scanning Radiometer Soil Moisture Products. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2010 , 48, 4256-4272	8.1	426
36	Landslide susceptibility mapping using downscaled AMSR-E soil moisture: A case study from Cleveland Corral, California, US. <i>Remote Sensing of Environment</i> , 2010 , 114, 2624-2636	13.2	82
35	Microwave soil moisture retrieval under trees using a modified tau-omega model 2009 ,		2
34	L-Band Radar Estimation of Forest Attenuation for Active/Passive Soil Moisture Inversion. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2009 , 47, 3026-3040	8.1	20
33	Combined Passive and Active Microwave Observations of Soil Moisture During CLASIC. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2009 , 6, 644-648	4.1	55
32	Surface and profile soil moisture spatio-temporal analysis during an excessive rainfall period in the Southern Great Plains, USA. <i>Catena</i> , 2009 , 78, 159-169	5.8	66
31	Dew frequency, duration, amount, and distribution in corn and soybean during SMEX05. <i>Agricultural and Forest Meteorology</i> , 2009 , 149, 11-24	5.8	46
30	Partitioning evapotranspiration in semiarid grassland and shrubland ecosystems using time series of soil surface temperature. <i>Agricultural and Forest Meteorology</i> , 2009 , 149, 59-72	5.8	92
29	Observations of dew amount using in situ and satellite measurements in an agricultural landscape. <i>Agricultural and Forest Meteorology</i> , 2009 , 149, 1082-1086	5.8	14
28	Sub-pixel reflectance unmixing in estimating vegetation water content and dry biomass of corn and soybeans cropland using normalized difference water index (NDWI) from satellites. <i>International Journal of Remote Sensing</i> , 2009 , 30, 2075-2104	3.1	33
27	Estimation of canopy attenuation for active/passive microwave soil moisture retrieval algorithms 2008 ,		3
26	Microwave Soil Moisture Retrieval Under Trees 2008 ,		2
25	Forest Canopy Effects on the Estimation of Soil Moisture at L-Band 2008 ,		2
24	Aircraft based soil moisture retrievals under mixed vegetation and topographic conditions. <i>Remote Sensing of Environment</i> , 2008 , 112, 375-390	13.2	51

23	Modeling and assimilation of root zone soil moisture using remote sensing observations in Walnut Gulch Watershed during SMEX04. <i>Remote Sensing of Environment</i> , 2008 , 112, 415-429	13.2	66
22	Temporal persistence and stability of surface soil moisture in a semi-arid watershed. <i>Remote Sensing of Environment</i> , 2008 , 112, 304-313	13.2	180
21	The USDA Natural Resources Conservation Service Soil Climate Analysis Network (SCAN). <i>Journal of Atmospheric and Oceanic Technology</i> , 2007 , 24, 2073-2077	2	297
20	Scaled spatial variability of soil moisture fields. <i>Geophysical Research Letters</i> , 2007 , 34,	4.9	51
19	Evolution of the variability of surface temperature and vegetation density in the great plains. <i>Advances in Water Resources</i> , 2007 , 30, 1094-1104	4.7	1
18	ComRAD active / passive microwave measurement of tree canopies 2007 ,		7
17	Validation of AMSR-E soil moisture algorithms with ground based networks 2007 ,		6
16	Surface Soil Moisture Temporal Persistence and Stability in a Semi-Arid Watershed 2006 ,		1
15	2006 ,		5
14	Temporal stability of surface soil moisture in the Little Washita River watershed and its applications in satellite soil moisture product validation. <i>Journal of Hydrology</i> , 2006 , 323, 168-177	6	156
13	Temporal stability of soil moisture profile. <i>Journal of Hydrology</i> , 2006 , 324, 400-411	6	106
12	Calibration of an impedance probe for estimation of surface soil water content over large regions. <i>Journal of Hydrology</i> , 2005 , 311, 49-58	6	82
11	Vegetation water content mapping using Landsat data derived normalized difference water index for corn and soybeans. <i>Remote Sensing of Environment</i> , 2004 , 92, 475-482	13.2	505
10	Watershed scale temporal and spatial stability of soil moisture and its role in validating satellite estimates. <i>Remote Sensing of Environment</i> , 2004 , 92, 427-435	13.2	212
9	Deriving land surface temperature from Landsat 5 and 7 during SMEX02/SMACEX. <i>Remote Sensing of Environment</i> , 2004 , 92, 521-534	13.2	153
8	Variability of surface soil moisture at the watershed scale. <i>Water Resources Research</i> , 2004 , 40,	5.4	25
7	Time changes in spatial structure of surface variability in the Southern Great Plains. <i>Advances in Water Resources</i> , 2003 , 26, 407-415	4.7	5
6	Microscale structural aspects of vegetation density variability. <i>Journal of Hydrology</i> , 2003 , 276, 128-136	6	14

5	Soil moisture mapping using ESTAR under dry conditions from the Southern Great Plains Experiment (SGP99). <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2003 , 41, 2392-2397	8.1	11
4	Satellite remote sensing of land surface temperatures: Application of the atmospheric correction method and split-window technique to data of ARM-SGP site. <i>International Journal of Remote Sensing</i> , 2002 , 23, 5177-5192	3.1	10
3	Aspects of soil moisture variability in the Washita #2 study region. <i>Journal of Geophysical Research</i> , 1999 , 104, 19751-19757		33
2	Soil moisture experiments 2004 (SMEX04) polarimetric scanning radiometer, AMSR-E and heterogeneous landscapes		2
1	A global 1-km downscaled SMAP soil moisture product based on thermal inertia theory. <i>Vadose Zone Journal</i> ,	2.7	5