Dara Entekhabi

List of Publications by Year
in descending order

193	16,457	22099	16127
papers	citations	59 h-index	124 g-index

197	197	197	11652
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The Soil Moisture Active Passive (SMAP) Mission. Proceedings of the IEEE, 2010, 98, 704-716.	16.4	2,546
2	Recent Arctic amplification and extreme mid-latitude weather. Nature Geoscience, 2014, 7, 627-637.	5.4	1,729
3	Hydrologic Data Assimilation with the Ensemble Kalman Filter. Monthly Weather Review, 2002, 130, 103-114.	0.5	785
4	Passive microwave remote sensing of soil moisture. Journal of Hydrology, 1996, 184, 101-129.	2.3	620
5	Assessment of the SMAP Passive Soil Moisture Product. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 4994-5007.	2.7	460
6	Performance Metrics for Soil Moisture Retrievals and Application Requirements. Journal of Hydrometeorology, 2010, 11, 832-840.	0.7	391
7	Eurasian snow cover variability and northern hemisphere climate predictability. Geophysical Research Letters, 1999, 26, 345-348.	1.5	323
8	The global distribution and dynamics of surface soil moisture. Nature Geoscience, 2017, 10, 100-104.	5.4	308
9	Mutual interaction of soil moisture state and atmospheric processes. Journal of Hydrology, 1996, 184, 3-17.	2.3	307
10	Development and assessment of the SMAP enhanced passive soil moisture product. Remote Sensing of Environment, 2018, 204, 931-941.	4.6	297
11	Catchment hydrologic response with a fully distributed triangulated irregular network model. Water Resources Research, 2004, 40, .	1.7	268
12	Extended triple collocation: Estimating errors and correlation coefficients with respect to an unknown target. Geophysical Research Letters, 2014, 41, 6229-6236.	1.5	260
13	An Algorithm for Merging SMAP Radiometer and Radar Data for High-Resolution Soil-Moisture Retrieval. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 1504-1512.	2.7	244
14	Land data assimilation and estimation of soil moisture using measurements from the Southern Great Plains 1997 Field Experiment. Water Resources Research, 2002, 38, 35-1-35-18.	1.7	237
15	Analysis of evaporative fraction diurnal behaviour. Agricultural and Forest Meteorology, 2007, 143, 13-29.	1.9	233
16	The role of the Siberian high in northern hemisphere climate variability. Geophysical Research Letters, 2001, 28, 299-302.	1.5	200
17	Regionally strong feedbacks between the atmosphere and terrestrial biosphere. Nature Geoscience, 2017, 10, 410-414.	5.4	197
18	On the spatial organization of soil moisture fields. Geophysical Research Letters, 1995, 22, 2757-2760.	1.5	193

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19	Downscaling of radio brightness measurements for soil moisture estimation: A four-dimensional variational data assimilation approach. Water Resources Research, 2001, 37, 2353-2364.	1.7	180
20	The SMAP and Copernicus Sentinel 1A/B microwave active-passive high resolution surface soil moisture product. Remote Sensing of Environment, 2019, 233, 111380.	4.6	175
21	Vegetation optical depth and scattering albedo retrieval using time series of dual-polarized L-band radiometer observations. Remote Sensing of Environment, 2016, 172, 178-189.	4.6	171
22	The quasi-periodic behavior of rainfall variability in Africa and its relationship to the southern oscillation. Archives for Meteorology, Geophysics and Bioclimatology, Series A, 1986, 34, 311-348.	0.4	169
23	Preserving high-resolution surface and rainfall data in operational-scale basin hydrology: a fully-distributed physically-based approach. Journal of Hydrology, 2004, 298, 80-111.	2.3	164
24	L-band vegetation optical depth and effective scattering albedo estimation from SMAP. Remote Sensing of Environment, 2017, 198, 460-470.	4.6	160
25	Generation of Triangulated Irregular Networks Based on Hydrological Similarity. Journal of Hydrologic Engineering - ASCE, 2004, 9, 288-302.	0.8	144
26	Tests of the SMAP Combined Radar and Radiometer Algorithm Using Airborne Field Campaign Observations and Simulated Data. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 2018-2028.	2.7	144
27	Estimation of Surface Turbulent Fluxes through Assimilation of Radiometric Surface Temperature Sequences. Journal of Hydrometeorology, 2004, 5, 145-159.	0.7	137
28	Modeled Northern Hemisphere Winter Climate Response to Realistic Siberian Snow Anomalies. Journal of Climate, 2003, 16, 3917-3931.	1.2	136
29	The Diurnal Behavior of Evaporative Fraction in the Soilâ€“Vegetationâ€“Atmospheric Boundary Layer Continuum. Journal of Hydrometeorology, 2011, 12, 1530-1546.	0.7	111
30	An ensemble-based reanalysis approach to land data assimilation. Water Resources Research, 2005, 41, .	1.7	109
31	A Comparative Study of the SMAP Passive Soil Moisture Product With Existing Satellite-Based Soil Moisture Products. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 2959-2971.	2.7	108
32	Assessing the Performance of the Ensemble Kalman Filter for Land Surface Data Assimilation. Monthly Weather Review, 2006, 134, 2128-2142.	0.5	106
33	Mapping of Land-Atmosphere Heat Fluxes and Surface Parameters with Remote Sensing Data. Boundary-Layer Meteorology, 2003, 107, 605-633.	1.2	104
34	Land data assimilation with satellite measurements for the estimation of surface energy balance components and surface control on evaporation. Water Resources Research, 2001, 37, 1713-1722.	1.7	98
35	An initial assessment of SMAP soil moisture retrievals using highâ€resolution model simulations and in situ observations. Geophysical Research Letters, 2016, 43, 9662-9668.	1.5	97
36	A multiâ€resolution ensemble study of a tropical urban environment and its interactions with the background regional atmosphere. Journal of Geophysical Research D: Atmospheres, 2013, 118, 9804-9818.	1.2	96

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37	Variational estimation of soil and vegetation turbulent transfer and heat flux parameters from sequences of multisensor imagery. Water Resources Research, 2004, 40, .	1.7	95
38	Evolution of Atmospheric Response to Early-Season Eurasian Snow Cover Anomalies. Monthly Weather Review, 2001, 129, 2746-2760.	0.5	94
39	Hillslope and Climatic Controls on Hydrologic Fluxes. Water Resources Research, 1995, 31, 1725-1739.	1.7	91
40	Basin hydrologic response relations to distributed physiographic descriptors and climate. Journal of Hydrology, 2001, 247, 169-182.	2.3	91
41	A Wireless Soil Moisture Smart Sensor Web Using Physics-Based Optimal Control: Concept and Initial Demonstrations. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2010, 3, 522-535.	2.3	91
42	Estimation of surface heat flux and an index of soil moisture using adjoint-state surface energy balance. Water Resources Research, 1999, 35, 3115-3125.	1.7	89
43	On the effects of triangulated terrain resolution on distributed hydrologic model response. Hydrological Processes, 2005, 19, 2101-2122.	1.1	88
44	Large-Eddy Simulation of Flow and Pollutant Transport in Urban Street Canyons with Ground Heating. Boundary-Layer Meteorology, 2010, 137, 187-204.	1.2	88
45	Global characterization of surface soil moisture drydowns. Geophysical Research Letters, 2017, 44, 3682-3690.	1.5	87
46	Linking Siberian Snow Cover to Precursors of Stratospheric Variability. Journal of Climate, 2014, 27, 5422-5432.	1.2	85
47	Retrievals of soil moisture and vegetation optical depth using a multi-channel collaborative algorithm. Remote Sensing of Environment, 2021, 257, 112321.	4.6	80
48	Flow and Pollutant Transport in Urban Street Canyons of Different Aspect Ratios with Ground Heating: Large-Eddy Simulation. Boundary-Layer Meteorology, 2012, 142, 289-304.	1.2	77
49	Equivalent steady soil moisture profile and the time compression approximation in water balance modeling. Water Resources Research, 1994, 30, 2737-2749.	1.7	76
50	Sensitivity of atmospheric response to modeled snow anomaly characteristics. Journal of Geophysical Research, 2004, 109, n/a-n/a.	3.3	75
51	Moisture pulse-reserve in the soil-plant continuum observed across biomes. Nature Plants, 2018, 4, 1026-1033.	4.7	75
52	Probabilistic analysis of the effects of climate change on groundwater recharge. Water Resources Research, 2010, 46, .	1.7	73
53	Detecting forest response to droughts with global observations of vegetation water content. Global Change Biology, 2021, 27, 6005-6024.	4.2	73
54	Land surface state and flux estimation using the ensemble Kalman smoother during the Southern Great Plains 1997 field experiment. Water Resources Research, 2006, 42, .	1.7	70

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55	Extending the Predictability of Hydrometeorological Flood Events Using Radar Rainfall Nowcasting. Journal of Hydrometeorology, 2006, 7, 660-677.	0.7	69
56	L-band vegetation optical depth seasonal metrics for crop yield assessment. Remote Sensing of Environment, 2018, 212, 249-259.	4.6	69
57	Surface Soil Moisture Retrieval Using the L-Band Synthetic Aperture Radar Onboard the Soil Moisture Activeâ€"Passive Satellite and Evaluation at Core Validation Sites. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 1897-1914.	2.7	64
58	Improved SMAP Dual-Channel Algorithm for the Retrieval of Soil Moisture. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 3894-3905.	2.7	62
59	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
60	Evaluating the effects of image filtering in short-term radar rainfall forecasting for hydrological applications. Meteorological Applications, 2006, 13, 289.	0.9	61
61	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
62	Soil Moisture Retrieval Using L-Band Radar Observations. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 3492-3506.	2.7	58
63	Global-scale assessment and inter-comparison of recently developed/reprocessed microwave satellite vegetation optical depth products. Remote Sensing of Environment, 2021, 253, 112208.	4.6	58
64	How Many Parameters Can Be Maximally Estimated From a Set of Measurements?. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 1081-1085.	1.4	54
65	Soil and Atmospheric Controls on the Land Surface Energy Balance: A Generalized Framework for Distinguishing Moistureâ€Limited and Energyâ€Limited Evaporation Regimes. Water Resources Research, 2018, 54, 1831-1851.	1.7	54
66	Comprehensive analysis of alternative downscaled soil moisture products. Remote Sensing of Environment, 2020, 239, 111586.	4.6	52
67	Relative impacts of Siberian and North American snow anomalies on the winter Arctic Oscillation. Geophysical Research Letters, 2003, 30, .	1.5	50
68	Large-scale atmospheric patterns associated with mesoscale features leading to extreme precipitation events in Northwestern Italy. Advances in Water Resources, 2005, 28, 601-614.	1.7	49
69	A remote sensing observatory for hydrologic sciences: A genesis for scaling to continental hydrology. Water Resources Research, 2006, 42, .	1.7	49
70	Hydrological Storage Length Scales Represented by Remote Sensing Estimates of Soil Moisture and Precipitation. Water Resources Research, 2018, 54, 1476-1492.	1.7	48
71	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
72	Microwave Observatory of Subcanopy and Subsurface (MOSS): A Mission Concept for Global Deep Soil Moisture Observations. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 2630-2643.	2.7	46

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73	A long term global daily soil moisture dataset derived from AMSR-E and AMSR2 (2002â€“2019). Scientific Data, 2021, 8, 143.	2.4	44
74	Impact of Hillslope-Scale Organization of Topography, Soil Moisture, Soil Temperature, and Vegetation on Modeling Surface Microwave Radiation Emission. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 2557-2571.	2.7	43
75	Error Propagation of Radar Rainfall Nowcasting Fields through a Fully Distributed Flood Forecasting Model. Journal of Applied Meteorology and Climatology, 2007, 46, 932-940.	0.6	42
76	Hemispheric-scale climate response to Northern Eurasia land surface characteristics and snow anomalies. Global and Planetary Change, 2007, 56, 359-370.	1.6	41
77	Estimation of Landscape Soil Water Losses from Satellite Observations of Soil Moisture. Journal of Hydrometeorology, 2018, 19, 871-889.	0.7	41
78	Scale-recursive assimilation of precipitation data. Advances in Water Resources, 2001, 24, 941-953.	1.7	40
79	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.	4.6	40
80	Analysis of the Radar Vegetation Index and Potential Improvements. Remote Sensing, 2018, 10, 1776.	1.8	38
81	Terrain and Multiple-Scale Interactions as Factors in Generating Extreme Precipitation Events. Journal of Hydrometeorology, 2004, 5, 390-404.	0.7	37
82	Satelliteâ€Based Assessment of Land Surface Energy Partitioningâ€“Soil Moisture Relationships and Effects of Confounding Variables. Water Resources Research, 2019, 55, 10657-10677.	1.7	37
83	Impact of Multiresolution Active and Passive Microwave Measurements on Soil Moisture Estimation Using the Ensemble Kalman Smoother. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 1016-1028.	2.7	36
84	Sensitivity of Aquarius Active and Passive Measurements Temporal Covariability to Land Surface Characteristics. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 4700-4711.	2.7	36
85	Short-Term and Long-Term Surface Soil Moisture Memory Time Scales Are Spatially Anticorrelated at Global Scales. Journal of Hydrometeorology, 2019, 20, 1165-1182.	0.7	35
86	Satellite and Station Observations Demonstrate Water Availability's Effect on Continentalâ€Scale Evaporative and Photosynthetic Land Surface Dynamics. Water Resources Research, 2019, 55, 540-554.	1.7	34
87	SMAP Detects Soil Moisture Under Temperate Forest Canopies. Geophysical Research Letters, 2020, 47, e2020GL089697.	1.5	34
88	The NASA Soil Moisture Active Passive (SMAP) mission: Overview. , 2010, , .		33
89	The role of model dynamics in ensemble Kalman filter performance for chaotic systems. Tellus, Series A: Dynamic Meteorology and Oceanography, 2022, 63, 958.	0.8	33
90	River basin salinization as a form of aridity. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 17635-17642.	3.3	33

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91	SMAP Soil Moisture Change as an Indicator of Drought Conditions. Remote Sensing, 2018, 10, 788.	1.8	32
92	Hydrological extremes in hyperarid regions: A diagnostic characterization of intense precipitation over the Central Arabian Peninsula. Journal of Geophysical Research D: Atmospheres, 2015, 120, 1637-1650.	1.2	31
93	Uncertainty Estimates in the SMAP Combined Activeâ€“Passive Downscaled Brightness Temperature. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 640-650.	2.7	31
94	Embedding landscape processes into triangulated terrain models. International Journal of Geographical Information Science, 2005, 19, 429-457.	2.2	29
95	Using data assimilation to identify diffuse recharge mechanisms from chemical and physical data in the unsaturated zone. Water Resources Research, 2009, 45, .	1.7	29
96	Characterization of higher-order scattering from vegetation with SMAP measurements. Remote Sensing of Environment, 2018, 219, 324-338.	4.6	29
97	Uncertainty Analysis of Soil Moisture and Vegetation Indices Using Aquarius Scatterometer Observations. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 4259-4272.	2.7	28
98	Assessment of Multi-Scale SMOS and SMAP Soil Moisture Products across the Iberian Peninsula. Remote Sensing, 2020, 12, 570.	1.8	28
99	Measurement Scheduling for Soil Moisture Sensing: From Physical Models to Optimal Control. Proceedings of the IEEE, 2010, 98, 1918-1933.	16.4	27
100	An Analogue Approach to Identify Heavy Precipitation Events: Evaluation and Application to CMIP5 Climate Models in the United States. Journal of Climate, 2014, 27, 5941-5963.	1.2	27
101	Validation of the SMAP freeze/thaw product using categorical triple collocation. Remote Sensing of Environment, 2018, 205, 329-337.	4.6	27
102	Landâ€Atmosphere Drivers of Landscapeâ€Scale Plant Water Content Loss. Geophysical Research Letters, 2020, 47, e2020GL090331.	1.5	27
103	Orographic Constraints on a Modeled Siberian Snowâ€“Troposphericâ€“Stratospheric Teleconnection Pathway. Journal of Climate, 2004, 17, 1176-1189.	1.2	26
104	Wavelet correlations to reveal multiscale coupling in geophysical systems. Journal of Geophysical Research D: Atmospheres, 2015, 120, 7555-7572.	1.2	26
105	Mapping recharge from space: roadmap to meeting the grand challenge. Hydrogeology Journal, 2007, 15, 105-116.	0.9	25
106	Vegetation Controls on Dryland Salinity. Geophysical Research Letters, 2018, 45, 11,669.	1.5	25
107	Validation of SMAP Soil Moisture Products Using Ground-Based Observations for the Paddy Dominated Tropical Region of India. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 8479-8491.	2.7	25
108	Estimation of active-passive microwave covariation using SMAP and Sentinel-1 data. Remote Sensing of Environment, 2019, 225, 458-468.	4.6	25

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109	Conditioning Stochastic Rainfall Replicates on Remote Sensing Data. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 2436-2449.	2.7	24
110	Estimation of relative canopy absorption and scattering at L-, C- and X-bands. Remote Sensing of Environment, 2019, 233, 111384.	4.6	24
111	Hydrologic data assimilation with a hillslopeâ€scaleâ€resolving model and L band radar observations: Synthetic experiments with the ensemble Kalman filter. Water Resources Research, 2012, 48, .	1.7	23
112	An entropyâ€based measure of hydrologic complexity and its applications. Water Resources Research, 2015, 51, 5145-5160.	1.7	22
113	Partitioning Evapotranspiration Over the Continental United States Using Weather Station Data. Geophysical Research Letters, 2018, 45, 9605-9613.	1.5	22
114	Landscape Water Storage and Subsurface Correlation From Satellite Surface Soil Moisture and Precipitation Observations. Water Resources Research, 2019, 55, 9111-9132.	1.7	22
115	Boundary-Layer Entrainment Estimation Through Assimilation of Radiosonde and Micrometeorological Data into a Mixed-Layer Model. Boundary-Layer Meteorology, 2004, 110, 405-433.	1.2	21
116	Patterns of plant rehydration and growth following pulses of soil moisture availability. Biogeosciences, 2021, 18, 831-847.	1.3	21
117	Parameter estimation of coupled water and energy balance models based on stationary constraints of surface states. Water Resources Research, 2011, 47, .	1.7	20
118	Effect of Radiative Transfer Uncertainty on L-Band Radiometric Soil Moisture Retrieval. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 2686-2698.	2.7	20
119	Physics-Based Modeling of Active and Passive Microwave Covariations Over Vegetated Surfaces. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 788-802.	2.7	20
120	Estimation of land surface water and energy balance parameters using conditional sampling of surface states. Water Resources Research, 2014, 50, 1805-1822.	1.7	19
121	Quantifying Precipitation Uncertainty for Land Data Assimilation Applications. Monthly Weather Review, 2015, 143, 3276-3299.	0.5	19
122	Application of a hillslope-scale soil moisture data assimilation system to military trafficability assessment. Journal of Terramechanics, 2014, 51, 53-66.	1.4	18
123	Mean-velocity profile of smooth channel flow explained by a cospectral budget model with wall-blockage. Physics of Fluids, 2016, 28, .	1.6	18
124	Mapping land water and energy balance relations through conditional sampling of remote sensing estimates of atmospheric forcing and surface states. Water Resources Research, 2016, 52, 2737-2752.	1.7	18
125	Plant Osmoregulation as an Emergent Waterâ€Saving Adaptation. Water Resources Research, 2018, 54, 2781-2798.	1.7	18
126	Spatiotemporal Disaggregation of Remotely Sensed Precipitation for Ensemble Hydrologic Modeling and Data Assimilation. Journal of Hydrometeorology, 2006, 7, 511-533.	0.7	16

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127	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
128	Mapped Hydroclimatology of Evapotranspiration and Drainage Runoff Using SMAP Brightness Temperature Observations and Precipitation Information. Water Resources Research, 2019, 55, 3391-3413.	1.7	16
129	Impact of soil heterogeneity in a mixed-layer model of the planetary boundary layer. Hydrological Sciences Journal, 1998, 43, 633-658.	1.2	15
130	Reproducibility of soil moisture ensembles when representing soil parameter uncertainty using a Latin Hypercubeâ€“based approach with correlation control. Water Resources Research, 2010, 46, .	1.7	15
131	An alternate and robust approach to calibration for the estimation of land surface model parameters based on remotely sensed observations. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	15
132	Can Surface Soil Moisture Information Identify Evapotranspiration Regime Transitions?. Geophysical Research Letters, 2022, 49, .	1.5	15
133	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
134	Terrestrial Evaporation and Moisture Drainage in a Warmer Climate. Geophysical Research Letters, 2020, 47, e2019GL086498.	1.5	13
135	Regularized Dual-Channel Algorithm for the Retrieval of Soil Moisture and Vegetation Optical Depth From SMAP Measurements. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2022, 15, 102-114.	2.3	13
136	Identification of runoff generation spatial distribution using conventional hydrologic gauge time series. Water Resources Research, 2006, 42, .	1.7	12
137	Activeâ€“Passive Soil Moisture Retrievals During the SMAP Validation Experiment 2012. IEEE Geoscience and Remote Sensing Letters, 2016, 13, 475-479.	1.4	12
138	Landscapeâ€Scale Plant Water Content and Carbon Flux Behavior Following Moisture Pulses: From Dryland to Mesic Environments. Water Resources Research, 2021, 57, e2020WR027592.	1.7	11
139	Evaluation of Surface Melt on the Greenland Ice Sheet Using SMAP L-Band Microwave Radiometry. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 11439-11449.	2.3	11
140	Error Propagation in Microwave Soil Moisture and Vegetation Optical Depth Retrievals. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 11311-11323.	2.3	11
141	Role of large eddies in the breakdown of the Reynolds analogy in an idealized mildly unstable atmospheric surface layer. Quarterly Journal of the Royal Meteorological Society, 2017, 143, 2182-2197.	1.0	10
142	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
143	Consistency Between NASS Surveyed Soil Moisture Conditions and SMAP Soil Moisture Observations. Water Resources Research, 2019, 55, 7682-7693.	1.7	10
144	Achieving Breakthroughs in Global Hydrologic Science by Unlocking the Power of Multisensor, Multidisciplinary Earth Observations. AGU Advances, 2021, 2, e2021AV000455.	2.3	10

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145	Forward Simulation of Multi-Frequency Microwave Brightness Temperature over Desert Soils in Kuwait and Comparison with Satellite Observations. Remote Sensing, 2019, 11, 1647.	1.8	9
146	Improving Brightness Temperature Measurements Near Coastal Areas for SMAP. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2019, 12, 4578-4588.	2.3	9
147	Observed Landscape Responsiveness to Climate Forcing. Water Resources Research, 2022, 58, .	1.7	9
148	The Soil Moisture Active and Passive Mission (SMAP): Science and applications. , 2009, , .		8
149	Combined Radarâ€“Radiometer Surface Soil Moisture and Roughness Estimation. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 4098-4110.	2.7	8
150	Relationship Between Vegetation Microwave Optical Depth and Cross-Polarized Backscatter From Multiyear Aquarius Observations. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 4493-4503.	2.3	8
151	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
152	High-resolution enhanced product based on SMAP active-passive approach using sentinel 1A and 1B SAR data. , 2017, , .		7
153	Estimating Gravimetric Moisture of Vegetation Using an Attenuation-Based Multi-Sensor Approach. , 2018, , .		7
154	Partitioning of Historical Precipitation Into Evaporation and Runoff Based on Hydrologic Dynamics Identified With Recent SMAP Satellite Measurements. Water Resources Research, 2020, 56, e2020WR027307.	1.7	7
155	Time-variations of zeroth-order vegetation absorption and scattering at L-band. Remote Sensing of Environment, 2021, 267, 112726.	4.6	7
156	Rainstorm statistics conditional on soil moisture index: Temporal and spatial characteristics. Meccanica, 1996, 31, 103-116.	1.2	6
157	Activeâ€“Passive Disaggregation of Brightness Temperatures During the SMAPVEX12 Campaign. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 6859-6867.	2.7	6
158	Evaluation of SMAP Core Validation Site Representativeness Errors Using Dense Networks of In Situ Sensors and Random Forests. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2020, 13, 6457-6472.	2.3	6
159	Soil Moisture Retrieval Using SMAP L-Band Radiometer and RISAT-1 C-Band SAR Data in the Paddy Dominated Tropical Region of India. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 10644-10664.	2.3	6
160	Structure in fluctuations of large-scale soil moisture climate due to external random forcing and internal feedbacks. Stochastic Hydrology & Hydraulics, 1997, 11, 95-114.	0.5	4
161	Multiple spaceborne water cycle observations would aid modeling. Eos, 2006, 87, 149.	0.1	4
162	Analysis of a two-year meteorological dataset produced on Italian territory with a coupling procedure between a limited area atmospheric model and a sequential MSG-SEVIRI LST assimilation scheme. International Journal of Remote Sensing, 2013, 34, 3561-3586.	1.3	4

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163	Synoptic Preconditions for Extreme Flooding during the Summer Asian Monsoon in the Mumbai Area. Journal of Hydrometeorology, 2014, 15, 229-242.	0.7	4
164	Global Patterns of Vegetation Response to Short-Term Surface Water Availability. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 8273-8286.	2.3	4
165	Satellite-Based Assessment of Meteorological and Agricultural Drought in Mainland Southeast Asia. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2022, 15, 6180-6189.	2.3	4
166	Comparison of NOWRAD, AMSU, AMSR-E, TMI, and SSM/I surface precipitation rate Retrievals over the united states great plains. , 2007, , .		3
167	Ensemble-based characterization of uncertain environmental features. Advances in Water Resources, 2014, 70, 36-50.	1.7	3
168	SMAP Validation Experiment 2019â€“2022 (SMAPVEX19-22): Detection of Soil Moisture Under Temperate Forest Canopy. , 2021, , .		3
169	The Soil Moisture Active Passive (SMAP) applications activity. , 2011, , .		2
170	Comparison of downscaling techniques for high resolution soil moisture mapping. , 2017, , .		2
171	Validation of the SMAP freeze/thaw product using categorical triple collocation. , 2017, , .		2
172	Physics-Based Retrieval of Surface Roughness Parameters for Bare Soils from Combined Active-Passive Microwave Signatures. , 2018, , .		2
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