

Wade Crow

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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.

187
papers

9,976
citations

52
h-index

96
g-index

212
ext. papers

11,887
ext. citations

5.8
avg. IF

6.44
L-index

#	Paper	IF	Citations
187	The Soil Moisture Active Passive (SMAP) Mission. <i>Proceedings of the IEEE</i> , 2010 , 98, 704-716	14.3	1845
186	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
185	. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2016 , 54, 4994-5007	8.1	330
184	Performance Metrics for Soil Moisture Retrievals and Application Requirements. <i>Journal of Hydrometeorology</i> , 2010 , 11, 832-840	3.7	308
183	The assimilation of remotely sensed soil brightness temperature imagery into a land surface model using Ensemble Kalman filtering: a case study based on ESTAR measurements during SGP97. <i>Advances in Water Resources</i> , 2003 , 26, 137-149	4.7	296
182	Evaluating the Utility of Remotely Sensed Soil Moisture Retrievals for Operational Agricultural Drought Monitoring. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2010 , 3, 57-66	4.7	248
181	Development and Assessment of the SMAP Enhanced Passive Soil Moisture Product. <i>Remote Sensing of Environment</i> , 2018 , 204, 931-941	13.2	188
180	Triple Collocation-Based Merging of Satellite Soil Moisture Retrievals. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2017 , 55, 6780-6792	8.1	175
179	An adaptive ensemble Kalman filter for soil moisture data assimilation. <i>Water Resources Research</i> , 2008 , 44,	5.4	173
178	A new data assimilation approach for improving runoff prediction using remotely-sensed soil moisture retrievals. <i>Hydrology and Earth System Sciences</i> , 2009 , 13, 1-16	5.5	169
177	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
176	A land surface data assimilation framework using the land information system: Description and applications. <i>Advances in Water Resources</i> , 2008 , 31, 1419-1432	4.7	156
175	Role of Subsurface Physics in the Assimilation of Surface Soil Moisture Observations. <i>Journal of Hydrometeorology</i> , 2009 , 10, 1534-1547	3.7	145
174	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
173	Improving hydrologic predictions of a catchment model via assimilation of surface soil moisture. <i>Advances in Water Resources</i> , 2011 , 34, 526-536	4.7	139
172	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
171	Impact of Incorrect Model Error Assumptions on the Sequential Assimilation of Remotely Sensed Surface Soil Moisture. <i>Journal of Hydrometeorology</i> , 2006 , 7, 421-432	3.7	114

170	An intercomparison of available soil moisture estimates from thermal infrared and passive microwave remote sensing and land surface modeling. <i>Journal of Geophysical Research</i> , 2011 , 116,		106
169	Correcting Unintended Perturbation Biases in Hydrologic Data Assimilation. <i>Journal of Hydrometeorology</i> , 2009 , 10, 734-750	3.7	106
168	The Optimality of Potential Rescaling Approaches in Land Data Assimilation. <i>Journal of Hydrometeorology</i> , 2013 , 14, 650-660	3.7	95
167	. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2017 , 10, 489-502	4.7	93
166	Global-scale Evaluation of SMAP, SMOS and ASCAT Soil Moisture Products using Triple Collocation. <i>Remote Sensing of Environment</i> , 2018 , 214, 1-13	13.2	93
165	Improving Satellite-Based Rainfall Accumulation Estimates Using Spaceborne Surface Soil Moisture Retrievals. <i>Journal of Hydrometeorology</i> , 2009 , 10, 199-212	3.7	90
164	Correcting rainfall using satellite-based surface soil moisture retrievals: The Soil Moisture Analysis Rainfall Tool (SMART). <i>Water Resources Research</i> , 2011 , 47,	5.4	89
163	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
162	Continental-Scale Evaluation of Remotely Sensed Soil Moisture Products. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2007 , 4, 451-455	4.1	88
161	. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2017 , 10, 2285-2306	4.7	83
160	Evaluation of Assumptions in Soil Moisture Triple Collocation Analysis. <i>Journal of Hydrometeorology</i> , 2014 , 15, 1293-1302	3.7	83
159	Beyond triple collocation: Applications to soil moisture monitoring. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014 , 119, 6419-6439	4.4	82
158	Upscaling of field-scale soil moisture measurements using distributed land surface modeling. <i>Advances in Water Resources</i> , 2005 , 28, 1-14	4.7	81
157	An improved approach for estimating observation and model error parameters in soil moisture data assimilation. <i>Water Resources Research</i> , 2010 , 46,	5.4	80
156	Improving operational flood ensemble prediction by the assimilation of satellite soil moisture: comparison between lumped and semi-distributed schemes. <i>Hydrology and Earth System Sciences</i> , 2015 , 19, 1659-1676	5.5	76
155	Improved prediction of quasi-global vegetation conditions using remotely-sensed surface soil moisture. <i>Geophysical Research Letters</i> , 2012 , 39, n/a-n/a	4.9	75
154	The added value of spaceborne passive microwave soil moisture retrievals for forecasting rainfall-runoff partitioning. <i>Geophysical Research Letters</i> , 2005 , 32, n/a-n/a	4.9	75
153	Contribution of soil moisture retrievals to land data assimilation products. <i>Geophysical Research Letters</i> , 2008 , 35,	4.9	74

152	Global Assessment of the SMAP Level-4 Surface and Root-Zone Soil Moisture Product Using Assimilation Diagnostics. <i>Journal of Hydrometeorology</i> , 2017 , 18, 3217-3237	3.7	73
151	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
150	Utility of Assimilating Surface Radiometric Temperature Observations for Evaporative Fraction and Heat Transfer Coefficient Retrieval. <i>Boundary-Layer Meteorology</i> , 2005 , 115, 105-130	3.4	68
149	An assessment of the performance of global rainfall estimates without ground-based observations. <i>Hydrology and Earth System Sciences</i> , 2017 , 21, 4347-4361	5.5	66
148	Assimilating remote sensing observations of leaf area index and soil moisture for wheat yield estimates: An observing system simulation experiment. <i>Water Resources Research</i> , 2012 , 48,	5.4	65
147	The impact of land surface temperature on soil moisture anomaly detection from passive microwave observations. <i>Hydrology and Earth System Sciences</i> , 2011 , 15, 3135-3151	5.5	64
146	The Value of Coarse-Scale Soil Moisture Observations for Regional Surface Energy Balance Modeling. <i>Journal of Hydrometeorology</i> , 2002 , 3, 467-482	3.7	64
145	An objective methodology for merging satellite- and model-based soil moisture products. <i>Water Resources Research</i> , 2012 , 48,	5.4	63
144	Towards the estimation root-zone soil moisture via the simultaneous assimilation of thermal and microwave soil moisture retrievals. <i>Advances in Water Resources</i> , 2010 , 33, 201-214	4.7	62
143	Precipitation Estimation Using L-Band and C-Band Soil Moisture Retrievals. <i>Water Resources Research</i> , 2016 , 52, 7213-7225	5.4	61
142	Comparison of prognostic and diagnostic surface flux modeling approaches over the Nile River basin. <i>Water Resources Research</i> , 2014 , 50, 386-408	5.4	60
141	L-band microwave remote sensing and land data assimilation improve the representation of pre-storm soil moisture conditions for hydrologic forecasting. <i>Geophysical Research Letters</i> , 2017 , 44, 5495-5503	4.9	59
140	Using a Microwave Emission Model to Estimate Soil Moisture from ESTAR Observations during SGP99. <i>Journal of Hydrometeorology</i> , 2004 , 5, 49-63	3.7	55
139	Estimating error cross-correlations in soil moisture data sets using extended collocation analysis. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016 , 121, 1208-1219	4.4	54
138	On the utility of land surface models for agricultural drought monitoring. <i>Hydrology and Earth System Sciences</i> , 2012 , 16, 3451-3460	5.5	53
137	Correcting Land Surface Model Predictions for the Impact of Temporally Sparse Rainfall Rate Measurements Using an Ensemble Kalman Filter and Surface Brightness Temperature Observations. <i>Journal of Hydrometeorology</i> , 2003 , 4, 960-973	3.7	53
136	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
135	Multiobjective calibration of land surface model evapotranspiration predictions using streamflow observations and spaceborne surface radiometric temperature retrievals. <i>Journal of Geophysical Research</i> , 2003 , 108,		52

134	Dual Forcing and State Correction via Soil Moisture Assimilation for Improved Rainfall Runoff Modeling. <i>Journal of Hydrometeorology</i> , 2014 , 15, 1832-1848	3.7	51
133	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
132	An ensemble Kalman filter dual assimilation of thermal infrared and microwave satellite observations of soil moisture into the Noah land surface model. <i>Water Resources Research</i> , 2012 , 48,	5.4	49
131	Diagnosing Neglected Soil Moisture Source Sink Processes via a Thermal Infrared Based Two-Source Energy Balance Model. <i>Journal of Hydrometeorology</i> , 2015 , 16, 1070-1086	3.7	48
130	Multi-scale dynamics of soil moisture variability observed during SGP97. <i>Geophysical Research Letters</i> , 1999 , 26, 3485-3488	4.9	48
129	Rainfall estimation by inverting SMOS soil moisture estimates: A comparison of different methods over Australia. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016 , 121, 12,062-12,079	4.4	48
128	A Novel Method for Quantifying Value in Spaceborne Soil Moisture Retrievals. <i>Journal of Hydrometeorology</i> , 2007 , 8, 56-67	3.7	47
127	Comparison of adaptive filtering techniques for land surface data assimilation. <i>Water Resources Research</i> , 2008 , 44,	5.4	46
126	Relevance of time-varying and time-invariant retrieval error sources on the utility of spaceborne soil moisture products. <i>Geophysical Research Letters</i> , 2005 , 32,	4.9	46
125	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
124	Dual assimilation of satellite soil moisture to improve streamflow prediction in data-scarce catchments. <i>Water Resources Research</i> , 2016 , 52, 5357-5375	5.4	44
123	Intercomparison of Soil Moisture, Evaporative Stress, and Vegetation Indices for Estimating Corn and Soybean Yields Over the U.S.. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2017 , 10, 1328-1343	4.7	43
122	The impact of vertical measurement depth on the information content of soil moisture times series data. <i>Geophysical Research Letters</i> , 2014 , 41, 4997-5004	4.9	41
121	Role of Passive Microwave Remote Sensing in Improving Flood Forecasts. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2009 , 6, 112-116	4.1	41
120	Exploiting soil moisture, precipitation and streamflow observations to evaluate soil moisture/runoff coupling in land surface models. <i>Geophysical Research Letters</i> , 2018 , 45, 4869-4878	4.9	40
119	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
118	The Sensitivity of North American Terrestrial Carbon Fluxes to Spatial and Temporal Variation in Soil Moisture: An Analysis Using Radar-Derived Estimates of Root-Zone Soil Moisture. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2019 , 124, 3208-3231	3.7	39
117	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

116	The Auto-Tuned Land Data Assimilation System (ATLAS). <i>Water Resources Research</i> , 2014 , 50, 371-385	5.4	35
115	Evaluation of Satellite-Based Precipitation Products from IMERG V04A and V03D, CMORPH and TMPA with Gauged Rainfall in Three Climatologic Zones in China. <i>Remote Sensing</i> , 2018 , 10, 30	5	34
114	The Impact of Local Acquisition Time on the Accuracy of Microwave Surface Soil Moisture Retrievals over the Contiguous United States. <i>Remote Sensing</i> , 2015 , 7, 13448-13465	5	34
113	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
112	An integrated error parameter estimation and lag-aware data assimilation scheme for real-time flood forecasting. <i>Journal of Hydrology</i> , 2014 , 519, 2722-2736	6	32
111	Correcting satellite-based precipitation products through SMOS soil moisture data assimilation in two land-surface models of different complexity: API and SURFEX. <i>Remote Sensing of Environment</i> , 2017 , 200, 295-310	13.2	32
110	Estimating precipitation errors using spaceborne surface soil moisture retrievals. <i>Geophysical Research Letters</i> , 2007 , 34,	4.9	31
109	Impact of Tile Drainage on Evapotranspiration in South Dakota, USA, Based on High Spatiotemporal Resolution Evapotranspiration Time Series From a Multisatellite Data Fusion System. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2017 , 10, 2550-2564	4.7	29
108	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
107	Benchmarking a Soil Moisture Data Assimilation System for Agricultural Drought Monitoring. <i>Journal of Hydrometeorology</i> , 2014 , 15, 1117-1134	3.7	29
106	. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2019 , 12, 3387-3397	4.7	26
105	The error structure of the SMAP single and dual channel soil moisture retrievals. <i>Geophysical Research Letters</i> , 2018 , 45, 758-765	4.9	25
104	Stand-alone error characterisation of microwave satellite soil moisture using a Fourier method. <i>Remote Sensing of Environment</i> , 2014 , 154, 115-126	13.2	25
103	Robust estimates of soil moisture and latent heat flux coupling strength obtained from triple collocation. <i>Geophysical Research Letters</i> , 2015 , 42, 8415-8423	4.9	25
102	The Impact of Vertical Measurement Depth on the Information Content of Soil Moisture for Latent Heat Flux Estimation. <i>Journal of Hydrometeorology</i> , 2016 , 17, 2419-2430	3.7	25
101	Triple collocation: Beyond three estimates and separation of structural/non-structural errors. <i>Remote Sensing of Environment</i> , 2015 , 171, 299-310	13.2	24
100	Data Assimilation of High-Resolution Thermal and Radar Remote Sensing Retrievals for Soil Moisture Monitoring in a Drip-Irrigated Vineyard. <i>Remote Sensing of Environment</i> , 2020 , 239,	13.2	24
99	Comprehensive Evaluation of GPM-IMERG, CMORPH, and TMPA Precipitation Products with Gauged Rainfall over Mainland China. <i>Advances in Meteorology</i> , 2018 , 2018, 1-18	1.7	24

98	The potential of 2D Kalman filtering for soil moisture data assimilation. <i>Remote Sensing of Environment</i> , 2015 , 171, 137-148	13.2	23
97	Intercomparison of Spatially Distributed Models for Predicting Surface Energy Flux Patterns during SMACEX. <i>Journal of Hydrometeorology</i> , 2005 , 6, 941-953	3.7	23
96	Impact of Soil Moisture Aggregation on Surface Energy Flux Prediction During SGP97. <i>Geophysical Research Letters</i> , 2002 , 29, 8-1	4.9	23
95	Microwave implementation of two-source energy balance approach for estimating evapotranspiration. <i>Hydrology and Earth System Sciences</i> , 2018 , 22, 1351-1369	5.5	23
94	The Added Value of Assimilating Remotely Sensed Soil Moisture for Estimating Summertime Soil Moisture-Air Temperature Coupling Strength. <i>Water Resources Research</i> , 2018 , 54, 6072-6084	5.4	22
93	Estimating Basin-Scale Water Budgets with SMAP Soil Moisture Data. <i>Water Resources Research</i> , 2018 , 54, 4228-4244	5.4	22
92	Effect of vegetation index choice on soil moisture retrievals via the synergistic use of synthetic aperture radar and optical remote sensing. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2019 , 80, 47-57	7.3	21
91	Global Investigation of Soil Moisture and Latent Heat Flux Coupling Strength. <i>Water Resources Research</i> , 2018 , 54, 8196-8215	5.4	21
90	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
89	Agricultural Drought Monitoring via the Assimilation of SMAP Soil Moisture Retrievals Into a Global Soil Water Balance Model. <i>Frontiers in Big Data</i> , 2020 , 3, 10	2.8	19
88	Information loss in approximately Bayesian estimation techniques: A comparison of generative and discriminative approaches to estimating agricultural productivity. <i>Journal of Hydrology</i> , 2013 , 507, 163-173	6.3	19
87	Enhancing model-based land surface temperature estimates using multiplatform microwave observations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013 , 118, 577-591	4.4	19
86	A double instrumental variable method for geophysical product error estimation. <i>Remote Sensing of Environment</i> , 2019 , 225, 217-228	13.2	18
85	On the Use of a Water Balance to Evaluate Interannual Terrestrial ET Variability. <i>Journal of Hydrometeorology</i> , 2015 , 16, 1102-1108	3.7	18
84	Multi-decadal analysis of root-zone soil moisture applying the exponential filter across CONUS. <i>Hydrology and Earth System Sciences</i> , 2017 , 21, 4403-4417	5.5	18
83	Assimilation of Spatially Sparse In Situ Soil Moisture Networks into a Continuous Model Domain. <i>Water Resources Research</i> , 2018 , 54, 1353-1367	5.4	18
82	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
81	Spatial patterns in timing of the diurnal temperature cycle. <i>Hydrology and Earth System Sciences</i> , 2013 , 17, 3695-3706	5.5	18

80	Improving Spaceborne Radiometer Soil Moisture Retrievals With Alternative Aggregation Rules for Ancillary Parameters in Highly Heterogeneous Vegetated Areas. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2008 , 5, 261-265	4.1	18
79	Optimal averaging of soil moisture predictions from ensemble land surface model simulations. <i>Water Resources Research</i> , 2015 , 51, 9273-9289	5.4	17
78	Improving long-term, retrospective precipitation datasets using satellite-based surface soil moisture retrievals and the Soil Moisture Analysis Rainfall Tool. <i>Journal of Applied Remote Sensing</i> , 2012 , 6, 063604	1.4	17
77	Global Estimates of Land Surface Water Fluxes from SMOS and SMAP Satellite Soil Moisture Data. <i>Journal of Hydrometeorology</i> , 2020 , 21, 241-253	3.7	17
76	Cloud tolerance of remote-sensing technologies to measure land surface temperature. <i>Hydrology and Earth System Sciences</i> , 2016 , 20, 3263-3275	5.5	17
75	Error decomposition of nine passive and active microwave satellite soil moisture data sets over Australia. <i>Remote Sensing of Environment</i> , 2016 , 182, 128-140	13.2	16
74	An Improved Triple Collocation Analysis Algorithm for Decomposing Autocorrelated and White Soil Moisture Retrieval Errors. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017 , 122, 13,081-13,094	4.4	16
73	. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2010 , 7, 501-505	4.1	16
72	Recent Advances in Land Data Assimilation at the NASA Global Modeling and Assimilation Office 2009 , 407-428		16
71	A Quasi-Global Approach to Improve Day-Time Satellite Surface Soil Moisture Anomalies through the Land Surface Temperature Input. <i>Climate</i> , 2016 , 4, 50	3.1	16
70	A Monte Carlo based adaptive Kalman filtering framework for soil moisture data assimilation. <i>Remote Sensing of Environment</i> , 2019 , 228, 105-114	13.2	15
69	Retrieving global surface soil moisture from GRACE satellite gravity data. <i>Journal of Hydrology</i> , 2020 , 584, 124717	6	15
68	Multi-Profile Analysis of Soil Moisture within the US Climate Reference Network. <i>Vadose Zone Journal</i> , 2016 , 15, 1-8	2.7	15
67	The Efficiency of Data Assimilation. <i>Water Resources Research</i> , 2018 , 54, 6374-6392	5.4	15
66	Operational Hydrological Forecasting during the IPHEX-IOP Campaign - Meet the Challenge. <i>Journal of Hydrology</i> , 2016 , 541, 434-456	6	15
65	Estimating annual water storage variations in medium-scale (2000-10 000 km ²) basins using microwave-based soil moisture retrievals. <i>Hydrology and Earth System Sciences</i> , 2017 , 21, 1849-1862	5.5	14
64	An approach to quantifying the efficiency of a Bayesian filter. <i>Water Resources Research</i> , 2013 , 49, 2164-2173	3.173	14
63	Diagnosing Bias in Modeled Soil Moisture/Runoff Coefficient Correlation Using the SMAP Level 4 Soil Moisture Product. <i>Water Resources Research</i> , 2019 , 55, 7010-7026	5.4	13

62	Assessment of the impact of spatial heterogeneity on microwave satellite soil moisture periodic error. <i>Remote Sensing of Environment</i> , 2018 , 205, 85-99	13.2	13
61	A Framework for Diagnosing Factors Degrading the Streamflow Performance of a Soil Moisture Data Assimilation System. <i>Journal of Hydrometeorology</i> , 2019 , 20, 79-97	3.7	11
60	Use of Satellite Soil Moisture to Diagnose Climate Model Representations of European Soil Moisture-Air Temperature Coupling Strength. <i>Geophysical Research Letters</i> , 2018 , 45, 12,884	4.9	11
59	Soil Evaporation Stress Determines Soil Moisture-Evapotranspiration Coupling Strength in Land Surface Modeling. <i>Geophysical Research Letters</i> , 2020 , 47, e2020GL090391	4.9	10
58	Improving Streamflow Prediction Using Remotely-Sensed Soil Moisture and Snow Depth. <i>Remote Sensing</i> , 2016 , 8, 503	5	10
57	L-band remote-sensing increases sampled levels of global soil moisture-air temperature coupling strength. <i>Remote Sensing of Environment</i> , 2019 , 220, 51-58	13.2	10
56	Improving root-zone soil moisture estimations using dynamic root growth and crop phenology. <i>Advances in Water Resources</i> , 2015 , 86, 170-183	4.7	9
55	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
54	Model representation of the coupling between evapotranspiration and soil water content at different depths. <i>Hydrology and Earth System Sciences</i> , 2020 , 24, 581-594	5.5	9
53	Improving Spatial Patterns Prior to Land Surface Data Assimilation via Model Calibration Using SMAP Surface Soil Moisture Data. <i>Water Resources Research</i> , 2020 , 56, e2020WR027770	5.4	9
52	Impact of Model Relative Accuracy in Framework of Rescaling Observations in Hydrological Data Assimilation Studies. <i>Journal of Hydrometeorology</i> , 2016 , 17, 2245-2257	3.7	8
51	Soil Moisture-Evapotranspiration Overcoupling and L-Band Brightness Temperature Assimilation: Sources and Forecast Implications. <i>Journal of Hydrometeorology</i> , 2020 , 21, 2359-2374	3.7	8
50	. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2019 , 12, 3351-3365	4.7	7
49	SMAP DATA for cropland soil moisture assessment [A case study 2017 ,		7
48	The Impact of Assumed Error Variances on Surface Soil Moisture and Snow Depth Hydrologic Data Assimilation. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2015 , 8, 5116-5129	4.7	7
47	US national cropland soil moisture monitoring using SMAP 2013 ,		7
46	Enhanced Large-Scale Validation of Satellite-Based Land Rainfall Products. <i>Journal of Hydrometeorology</i> , 2021 , 22, 245-257	3.7	7
45	Nonparametric triple collocation. <i>Water Resources Research</i> , 2017 , 53, 5516-5530	5.4	6

44	Impact of Rescaling Approaches in Simple Fusion of Soil Moisture Products. <i>Water Resources Research</i> , 2019 , 55, 7804-7825	5-4	6
43	Dual state/rainfall correction via soil moisture assimilation for improved streamflow simulation: evaluation of a large-scale implementation with Soil Moisture Active Passive (SMAP) satellite data. <i>Hydrology and Earth System Sciences</i> , 2020 , 24, 615-631	5-5	6
42	Impact of Temporal Autocorrelation Mismatch on the Assimilation of Satellite-Derived Surface Soil Moisture Retrievals. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2014 , 7, 3534-3542	4-7	6
41	Land transpiration-evaporation partitioning errors responsible for modeled summertime warm bias in the central United States.. <i>Nature Communications</i> , 2022 , 13, 336	17.4	6
40	The Contributions of Gauge-Based Precipitation and SMAP Brightness Temperature Observations to the Skill of the SMAP Level-4 Soil Moisture Product. <i>Journal of Hydrometeorology</i> , 2021 , 22, 405-424	3-7	6
39	Consistency Between NASS Surveyed Soil Moisture Conditions and SMAP Soil Moisture Observations. <i>Water Resources Research</i> , 2019 , 55, 7682-7693	5-4	5
38	A Unified Data-Driven Method to Derive Hydrologic Dynamics From Global SMAP Surface Soil Moisture and GPM Precipitation Data. <i>Water Resources Research</i> , 2020 , 56, e2019WR024949	5-4	5
37	On the utility of land surface models for agricultural drought monitoring		5
36	Spatial and temporal variability of root-zone soil moisture acquired from hydrologic modeling and AirMOSS P-band radar. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2018 , 11, 4578-4590	4-7	5
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