Aaron A Berg

List of Publications by Year
in descending order

167 papers	7,874 citations	57758 44 h-index	54911 84 g-index
179 all docs	179 docs citations	179 times ranked	6887 citing authors

#	Article	IF	Citations
1	Validation of SMAP surface soil moisture products with core validation sites. Remote Sensing of Environment, 2017, 191, 215-231.	11.0	503
2	Upscaling sparse groundâ€based soil moisture observations for the validation of coarseâ€resolution satellite soil moisture products. Reviews of Geophysics, 2012, 50, .	23.0	493
3	Assessment of the SMAP Passive Soil Moisture Product. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 4994-5007.	6.3	460
4	Contribution of land surface initialization to subseasonal forecast skill: First results from a multiâ€model experiment. Geophysical Research Letters, 2010, 37, .	4.0	330
5	Field observations of soil moisture variability across scales. Water Resources Research, 2008, 44, .	4.2	316
6	Global Soil Moisture from Satellite Observations, Land Surface Models, and Ground Data: Implications for Data Assimilation. Journal of Hydrometeorology, 2004, 5, 430-442.	1.9	315
7	Development and assessment of the SMAP enhanced passive soil moisture product. Remote Sensing of Environment, 2018, 204, 931-941.	11.0	297
8	The Second Phase of the Global Landâ€“Atmosphere Coupling Experiment: Soil Moisture Contributions to Subseasonal Forecast Skill. Journal of Hydrometeorology, 2011, 12, 805-822.	1.9	296
9	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.	6.3	206
10	Globally important nitrous oxide emissions from croplands induced by freezeâ€“thaw cycles. Nature Geoscience, 2017, 10, 279-283.	12.9	200
11	Assessment of the SMAP Level-4 Surface and Root-Zone Soil Moisture Product Using In Situ Measurements. Journal of Hydrometeorology, 2017, 18, 2621-2645.	1.9	196
12	Realistic Initialization of Land Surface States: Impacts on Subseasonal Forecast Skill. Journal of Hydrometeorology, 2004, 5, 1049-1063.	1.9	178
13	The SMAP and Copernicus Sentinel 1A/B microwave active-passive high resolution surface soil moisture product. Remote Sensing of Environment, 2019, 233, 111380.	11.0	175
14	Soil moisture retrieval over agricultural fields from multi-polarized and multi-angular RADARSAT-2 SAR data. Remote Sensing of Environment, 2011, 115, 33-43.	11.0	172
15	Tree ring evidence for limited direct CO₂ fertilization of forests over the 20th century. Global Biogeochemical Cycles, 2010, 24, .	4.9	127
16	Estimation of soil moisture using optical/thermal infrared remote sensing in the Canadian Prairies. ISPRS Journal of Photogrammetry and Remote Sensing, 2013, 83, 94-103.	11.1	122
17	Impact of bias correction to reanalysis products on simulations of North American soil moisture and hydrological fluxes. Journal of Geophysical Research, 2003, 108, ACL 2-1-ACL 2-15.	3.3	116
18	Evaluation of 10 Methods for Initializing a Land Surface Model. Journal of Hydrometeorology, 2005, 6, 146-155.	1.9	108

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19	Spatial distribution of soil moisture over 6 and 30cm depth, Mahurangi river catchment, New Zealand. Journal of Hydrology, 2003, 276, 254-274.	5.4	88
20	SMAP soil moisture drying more rapid than observed in situ following rainfall events. Geophysical Research Letters, 2016, 43, 8068-8075.	4.0	84
21	Filling gaps in evapotranspiration measurements for water budget studies: Evaluation of a Kalman filtering approach. Agricultural and Forest Meteorology, 2006, 141, 57-66.	4.8	78
22	Evaluation of several calibration procedures for a portable soil moisture sensor. Journal of Hydrology, 2013, 498, 335-344.	5.4	77
23	Evaluating DEM conditioning techniques, elevation source data, and grid resolution for field-scale hydrological parameter extraction. Journal of Hydrology, 2016, 540, 1022-1029.	5.4	74
24	Canadian Experiment for Soil Moisture in 2010 (CanEx-SM10): Overview and Preliminary Results. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 347-363.	6.3	71
25	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.	6.3	64
26	Validation of SMOS Data Over Agricultural and Boreal Forest Areas in Canada. IEEE Transactions on Geoscience and Remote Sensing, 2012, 50, 1623-1635.	6.3	62
27	Improved SMAP Dual-Channel Algorithm for the Retrieval of Soil Moisture. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 3894-3905.	6.3	62
28	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.	4.9	62
29	Domain Adaptation Using Representation Learning for the Classification of Remote Sensing Images. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 4198-4209.	4.9	61
30	A Time-Series Approach to Estimating Soil Moisture From Vegetated Surfaces Using L-Band Radar Backscatter. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 3186-3193.	6.3	60
31	Climate change and permafrost thaw-induced boreal forest loss in northwestern Canada. Environmental Research Letters, 2018, 13, 084018.	5.2	60
32	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.	11.0	59
33	Assessing SMAP Soil Moisture Scaling and Retrieval in the Carman (Canada) Study Site. Vadose Zone Journal, 2018, 17, 1-14.	2.2	59
34	The environmental consequences of climate-driven agricultural frontiers. PLoS ONE, 2020, 15, e0228305.	2.5	58
35	Reply to comment by H. Vereecken et al. on â€œField observations of soil moisture variability across scalesâ€• Water Resources Research, 2008, 44, .	4.2	56
36	Evaluation of soil moisture derived from passive microwave remote sensing over agricultural sites in Canada using ground-based soil moisture monitoring networks. International Journal of Remote Sensing, 2010, 31, 3669-3690.	2.9	53

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37	Development of a hydrometeorological forcing data set for global soil moisture estimation. International Journal of Climatology, 2005, 25, 1697-1714.	3.5	51
38	Response of L-Band brightness temperatures to freeze/thaw and snow dynamics in a prairie environment from ground-based radiometer measurements. Remote Sensing of Environment, 2017, 191, 67-80.	11.0	50
39	Sensitivity of C-band SAR polarimetric variables to unvegetated agricultural fields. Canadian Journal of Remote Sensing, 2013, 39, 1-16.	2.4	49
40	Selecting Model Parameter Sets from a Trade-off Surface Generated from the Non-Dominated Sorting Genetic Algorithm-II. Water Resources Management, 2010, 24, 4469-4489.	3.9	48
41	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.	4.9	47
42	Importance of soil organic carbon on surface soil water content variability among agricultural fields. Journal of Hydrology, 2014, 516, 297-303.	5.4	46
43	An assessment of the differences between spatial resolution and grid size for the SMAP enhanced soil moisture product over homogeneous sites. Remote Sensing of Environment, 2018, 207, 65-70.	11.0	46
44	Comparison of high-resolution airborne soil moisture retrievals to SMAP soil moisture during the SMAP validation experiment 2016 (SMAPVEX16). Remote Sensing of Environment, 2019, 227, 137-150.	11.0	45
45	GCOM-W AMSR2 Soil Moisture Product Validation Using Core Validation Sites. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2018, 11, 209-219.	4.9	44
46	Streamflow predictability in the Saskatchewan/Nelson River basin given macroscale estimates of the initial soil moisture status. Hydrological Sciences Journal, 2006, 51, 642-654.	2.6	40
47	Evaluation of SMOS soil moisture products over the CanEx-SM10 area. Journal of Hydrology, 2015, 520, 254-267.	5.4	40
48	Precision conservation meets precision agriculture: A case study from southern Ontario. Agricultural Systems, 2018, 167, 176-185.	6.1	40
49	Monitoring agricultural soil moisture extremes in Canada using passive microwave remote sensing. Remote Sensing of Environment, 2011, 115, 2434-2444.	11.0	39
50	Evaluation of near-surface soil moisture data from an AAFC monitoring network in Manitoba, Canada: Implications for L-band satellite validation. Journal of Hydrology, 2015, 521, 582-592.	5.4	36
51	Satellite surface soil moisture from SMOS and Aquarius: Assessment for applications in agricultural landscapes. International Journal of Applied Earth Observation and Geoinformation, 2016, 45, 143-154.	2.8	36
52	Capturing agricultural soil freeze/thaw state through remote sensing and ground observations: A soil freeze/thaw validation campaign. Remote Sensing of Environment, 2018, 211, 59-70.	11.0	36
53	Evaluation of soil moisture extremes for agricultural productivity in the Canadian prairies. Agricultural and Forest Meteorology, 2012, 165, 1-11.	4.8	34
54	Estimating time-dependent vegetation biases in the SMAP soil moisture product. Hydrology and Earth System Sciences, 2018, 22, 4473-4489.	4.9	33

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55	Sensitivity of the Statistical DownScaling Model (SDSM) to reanalysis products. Atmosphere - Ocean, 2009, 47, 1-18.	1.6	32
56	Ensemble Identification of Spectral Bands Related to Soil Organic Carbon Levels over an Agricultural Field in Southern Ontario, Canada. Remote Sensing, 2019, 11, 1298.	4.0	32
57	A synthesis of three decades of hydrological research at Scotty Creek, NWT, Canada. Hydrology and Earth System Sciences, 2019, 23, 2015-2039.	4.9	30
58	An 11-year (2007â€“2017) soil moisture and precipitation dataset from the Kenaston Network in the Brightwater Creek basin, Saskatchewan, Canada. Earth System Science Data, 2019, 11, 787-796.	9.9	30
59	Relationships of pest grasshopper populations in Alberta, Canada to soil moisture and climate variables. Agricultural and Forest Meteorology, 2007, 144, 73-84.	4.8	29
60	Seasonal Variability in Vadose Zone Biodegradation at a Crude Oil Pipeline Rupture Site. Vadose Zone Journal, 2016, 15, 1-14.	2.2	29
61	Satellite-Observed Soil Moisture as an Indicator of Wildfire Risk. Remote Sensing, 2020, 12, 1543.	4.0	29
62	Impact of soil surface characteristics on soil water content variability in agricultural fields. Hydrological Processes, 2014, 28, 4340-4351.	2.6	28
63	Validation of the SMAP freeze/thaw product using categorical triple collocation. Remote Sensing of Environment, 2018, 205, 329-337.	11.0	27
64	Canadian snow and sea ice: assessment of snow, sea ice, and related climate processes in Canada's Earth system model and climate-prediction system. Cryosphere, 2018, 12, 1137-1156.	3.9	27
65	Influence of snow and soil moisture initialization on sub-seasonal predictability and forecast skill in boreal spring. Climate Dynamics, 2016, 47, 49-65.	3.8	25
66	Minor contribution of overstorey transpiration to landscape evapotranspiration in boreal permafrost peatlands. Ecohydrology, 2018, 11, e1975.	2.4	25
67	Contributions of C-Band SAR Data and Polarimetric Decompositions to Subarctic Boreal Peatland Mapping. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 1467-1482.	4.9	24
68	Uncertainty of Reference Pixel Soil Moisture Averages Sampled at SMAP Core Validation Sites. Journal of Hydrometeorology, 2019, 20, 1553-1569.	1.9	24
69	Shrub tundra ecohydrology: rainfall interception is a major component of the water balance. Environmental Research Letters, 2019, 14, 055005.	5.2	24
70	An Integrated Framework for a Joint Assimilation of Brightness Temperature and Soil Moisture Using the Nondominated Sorting Genetic Algorithm II. Journal of Hydrometeorology, 2011, 12, 1596-1609.	1.9	23
71	Laboratory Calibration Procedures of the Hydra Probe Soil Moisture Sensor:Infiltration Wet-Up vs. Dry-Down. Vadose Zone Journal, 2014, 13, vzj2014.07.0081.	2.2	22
72	Improving Permafrost Modeling by Assimilating Remotely Sensed Soil Moisture. Water Resources Research, 2019, 55, 1814-1832.	4.2	22

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73	Linking observed and general circulation model upper air circulation patterns to current and future snow runoff for the Rocky Mountains. Water Resources Research, 1999, 35, 3793-3802.	4.2	20
74	Summary and synthesis of Changing Cold Regions Network (CCRN) research in the interior of western Canada â€“ PartÂ2: Future change in cryosphere, vegetation, and hydrology. Hydrology and Earth System Sciences, 2021, 25, 1849-1882.	4.9	20
75	Sediment-assisted nutrient transfer from a small, no-till, tile drained watershed in Southwestern Ontario, Canada. Agricultural Water Management, 2015, 152, 31-40.	5.6	19
76	Evaluating the Cloudeâ€“Pottier and Freemanâ€“Durden scattering decompositions for distinguishing between unharvested and post-harvest agricultural fields. Canadian Journal of Remote Sensing, 2013, 39, 318-327.	2.4	18
77	Horizontal monitoring of soil water content using a novel automated and mobile electromagnetic access-tube sensor. Journal of Hydrology, 2014, 516, 50-55.	5.4	18
78	Impact of Soil Moisture Data Characteristics on the Sensitivity to Crop Yields Under Drought and Excess Moisture Conditions. Remote Sensing, 2019, 11, 372.	4.0	18
79	Field Level Soil Moisture Variability at 6â€•and 3â€cm Sampling Depths: Implications for Microwave Sensor Validation. Vadose Zone Journal, 2013, 12, 1-12.	2.2	17
80	Use of in situ soil moisture network for estimating regional-scale soil moisture during high soil moisture conditions. Canadian Water Resources Journal, 2015, 40, 343-351.	1.2	17
81	Temporal Change of Soil Carbon on a Long-Term Experimental Site with Variable Crop Rotations and Tillage Systems. Agronomy, 2020, 10, 840.	3.0	17
82	Evaluating the temporal accuracy of grassland to cropland change detection using multitemporal image analysis. Remote Sensing of Environment, 2021, 255, 112292.	11.0	17
83	Evaluating the Impact of Assimilating Soil Moisture Variability Data on Latent Heat Flux Estimation in a Land Surface Model. Canadian Water Resources Journal, 2010, 35, 157-172.	1.2	16
84	L-Band response to freeze/thaw in a boreal forest stand from ground- and tower-based radiometer observations. Remote Sensing of Environment, 2020, 237, 111542.	11.0	16
85	Validating the BERMS in situ Soil Water Content Data Record with a Large Scale Temporary Network. Vadose Zone Journal, 2013, 12, 1-5.	2.2	15
86	Monitoring tomato root zone water content variation and partitioning evapotranspiration with a novel horizontally-oriented mobile dielectric sensor. Agricultural and Forest Meteorology, 2016, 228-229, 85-94.	4.8	15
87	Validation of the Soil Moisture Active Passive (SMAP) satellite soil moisture retrieval in an Arctic tundra environment. Geophysical Research Letters, 2017, 44, 4152-4158.	4.0	15
88	Using a Mobile Device â€œAppâ€•and Proximal Remote Sensing Technologies to Assess Soil Cover Fractions on Agricultural Fields. Sensors, 2018, 18, 708.	3.8	15
89	An Analysis of Ground-Point Classifiers for Terrestrial LiDAR. Remote Sensing, 2019, 11, 1915.	4.0	15
90	Evaluating Autoselection Methods Used for Choosing Solutions from Pareto-Optimal Set: Does Nondominance Persist from Calibration to Validation Phase?. Journal of Hydrologic Engineering - ASCE, 2012, 17, 150-159.	1.9	14

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91	Soil organic carbon as a factor in passive microwave retrievals of soil water content over agricultural croplands. Journal of Hydrology, 2015, 528, 643-651.	5.4	14
92	DEM Fusion using a modifiedk-means clustering algorithm. International Journal of Digital Earth, 2016, 9, 1242-1255.	3.9	14
93	Sensitivity of GRACE-derived estimates of groundwater-level changes in southern Ontario, Canada. Hydrogeology Journal, 2017, 25, 2391-2402.	2.1	14
94	Influence of snowmelt on soil moisture and on near surface air temperature during winterâ€“spring transition season. Climate Dynamics, 2018, 51, 1295-1309.	3.8	14
95	Fine-Scale SAR Soil Moisture Estimation in the Subarctic Tundra. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 4898-4912.	6.3	14
96	Canola yield sensitivity to climate indicators and passive microwave-derived soil moisture estimates in Saskatchewan, Canada. Agricultural and Forest Meteorology, 2019, 268, 354-362.	4.8	14
97	In Situ Estimates of Freezing/Melting Point Depression in Agricultural Soils Using Permittivity and Temperature Measurements. Water Resources Research, 2020, 56, e2019WR026020.	4.2	14
98	Hyperresolution Land Surface Modeling in the Context of SMAP Calâ€“Val. Journal of Hydrometeorology, 2016, 17, 345-352.	1.9	13
99	Spatial Variability of L-Band Brightness Temperature during Freeze/Thaw Events over a Prairie Environment. Remote Sensing, 2017, 9, 894.	4.0	13
100	L-band radiometry freeze/ thaw validation using air temperature and ground measurements. Remote Sensing Letters, 2018, 9, 403-410.	1.4	13
101	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.	4.9	13
102	Effects of sample size and covariate resolution on field-scale predictive digital mapping of soil carbon. Geoderma, 2022, 425, 116054.	5.1	13
103	Energy-based comparison between a dynamic cone penetrometer and a motor-operated static cone penetrometer. Soil and Tillage Research, 2011, 115-116, 105-109.	5.6	12
104	Effect of Realistic Soil Moisture Initialization on the Canadian CanCM3 Seasonal Forecast Model. Atmosphere - Ocean, 2012, 50, 466-474.	1.6	12
105	Assessing Soil Cover Levels during the Non-Growing Season Using Multitemporal Satellite Imagery and Spectral Unmixing Techniques. Remote Sensing, 2020, 12, 1397.	4.0	12
106	Application of L-band SAR for mapping tundra shrub biomass, leaf area index, and rainfall interception. Remote Sensing of Environment, 2022, 268, 112747.	11.0	12
107	Observing soil water dynamics under two field conditions by a novel sensor system. Journal of Hydrology, 2011, 409, 555-560.	5.4	11
108	Pareto-optimality and a search for robustness: choosing solutions with desired properties in objective space and parameter space. Journal of Hydroinformatics, 2012, 14, 270-285.	2.4	11

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109	Regional scale spatial and temporal variability of soil moisture in a prairie region. Hydrological Processes, 2016, 30, 3639-3649.	2.6	11
110	Modelling desertification risk in the north-west of Jordan using geospatial and remote sensing techniques. Geomatics, Natural Hazards and Risk, 2016, 7, 531-549.	4.3	11
111	Temporal transferability of soil moisture calibration equations. Journal of Hydrology, 2018, 556, 349-358.	5.4	11
112	Vegetationâ€“soil moisture coupling metrics from dual-polarization microwave radiometry using regularization. Remote Sensing of Environment, 2019, 231, 111257.	11.0	11
113	Cover crop mixtures: A powerful strategy to reduce post-harvest surplus of soil nitrate and leaching. Agriculture, Ecosystems and Environment, 2022, 325, 107750.	5.3	11
114	Development of a trapezoidal framework-based model (PCALEP) for partition of land evapotranspiration. Journal of Hydrology, 2020, 589, 124994.	5.4	10
115	Soil dielectric characterization during freezeâ€“thaw transitions using L-band coaxial and soil moisture probes. Hydrology and Earth System Sciences, 2021, 25, 1117-1131.	4.9	10
116	AN URBAN WATER BALANCE STUDY, LETHBRIDGE, ALBERTA: ESTIMATION OF URBAN LAWN OVERWATERING AND POTENTIAL EFFECTS ON LOCAL WATER TABLES. Canadian Water Resources Journal, 1996, 21, 355-365.	1.2	9
117	A comparison of two models to predict soil moisture from remote sensing data of RADARSAT II. Arabian Journal of Geosciences, 2014, 7, 4851-4860.	1.3	9
118	Evaluation of the validated Soil Moisture product from the SMAP radiometer. , 2016, , .		9
119	Impact of sub-pixel heterogeneity on modelled brightness temperature for an agricultural region. International Journal of Applied Earth Observation and Geoinformation, 2016, 45, 212-220.	2.8	9
120	Assessment of nitrification and urease inhibitors on nitrate leaching in corn (Zea mays L.). Canadian Journal of Soil Science, 2019, 99, 80-91.	1.2	9
121	Effect of Rainfall Events on SMAP Radiometer-Based Soil Moisture Accuracy Using Core Validation Sites. Journal of Hydrometeorology, 2020, 21, 255-264.	1.9	9
122	Within-Field Yield Prediction in Cereal Crops Using LiDAR-Derived Topographic Attributes with Geographically Weighted Regression Models. Remote Sensing, 2021, 13, 4152.	4.0	9
123	Errors associated with estimating vegetation water content from radar for use in passive microwave brightness temperature algorithms. International Journal of Remote Sensing, 2015, 36, 782-796.	2.9	8
124	Modelling the L-Band Snow-Covered Surface Emission in a Winter Canadian Prairie Environment. Remote Sensing, 2018, 10, 1451.	4.0	8
125	Debris cover on thaw slumps and its insulative role in a warming climate. Earth Surface Processes and Landforms, 2020, 45, 2631-2646.	2.5	8
126	Applying Machine Learning and Time-Series Analysis on Sentinel-1A SAR/InSAR for Characterizing Arctic Tundra Hydro-Ecological Conditions. Remote Sensing, 2022, 14, 1123.	4.0	8

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127	Characterization of the Spatial Variability of In-Situ Soil Moisture Measurements for Upscaling at the Spatial Resolution of RADARSAT-2. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 1813-1823.	4.9	7
128	Plot-scale assessment of soil freeze/thaw detection and variability with impedance probes: implications for remote sensing validation networks. Hydrology Research, 2018, 49, 1-16.	2.7	7
129	Development and validation of the SMAP enhanced passive soil moisture product. , 2017, , .		6
130	Comparing the Use of Terrestrial LiDAR Scanners and Pin Profilers for Deriving Agricultural Roughness Statistics. Canadian Journal of Remote Sensing, 2018, 44, 153-168.	2.4	6
131	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.	4.9	6
132	Improving crop yield forecasts with satellite-based soil moisture estimates: An example for township level canola yield forecasts over the Canadian Prairies. International Journal of Applied Earth Observation and Geoinformation, 2020, 89, 102092.	2.8	6
133	Multi-frequency radiometer-based soil moisture retrieval and algorithm parameterization using in situ sites. Remote Sensing of Environment, 2022, 279, 113113.	11.0	6
134	SPATIAL ANALYSIS OF TEMPERATURE AND PRECIPITATION ANOMALIES ON THE CANADIAN PRAIRIES DURING TWO STRONG EL NINO EVENTS. Canadian Water Resources Journal, 1998, 23, 231-243.	1.2	5
135	Soil Moisture Initialization Effects in the CCCma AGCM3: Relationship of Sub-Seasonal Climate Forecast Error to Uncertainty in Soil Moisture Initializations. Atmosphere - Ocean, 2011, 49, 179-188.	1.6	5
136	Soil Moisture Retrievals Using Optical/TIR Methods. , 2016, , 47-72.		5
137	Assessment of version 4 of the SMAP passive soil moisture standard product. , 2017, , .		5
138	Seasonal Dependence of SMAP Radiometer-Based Soil Moisture Performance as Observed Over Core Validation Sites. , 2019, , .		5
139	Implications of measurement metrics on soil freezing curves: A simulation of freezeâ€“thaw hysteresis. Hydrological Processes, 2021, 35, e14269.	2.6	5
140	Characterizing regional uncertainty in the initial soil moisture status. Geophysical Research Letters, 2003, 30, .	4.0	4
141	Evaluating the utility of remotely sensed soil moisture for the characterization of runoff response over Canadian watersheds. Canadian Water Resources Journal, 2020, 45, 77-89.	1.2	4
142	Parameterization of Vegetation Scattering Albedo in the Tau-Omega Model for Soil Moisture Retrieval on Croplands. Remote Sensing, 2020, 12, 2939.	4.0	4
143	Semi-Automated Roadside Image Data Collection for Characterization of Agricultural Land Management Practices. Remote Sensing, 2020, 12, 2342.	4.0	4
144	Sensitivity of C-Band SAR Polarimetric Variables to the Directionality of Surface Roughness Parameters. Remote Sensing, 2021, 13, 2210.	4.0	4

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145	Assimilation of Soil Moisture and Temperature Data into Land Surface Models: A Survey. , 2009, , 429-448.		4
146	Importance of soil organic carbon in near-surface soil water content estimation: A simple model comparison in dry-end Canadian Prairie soils. Canadian Water Resources Journal, 2017, 42, 364-377.	1.2	3
147	How climatic and sociotechnical factors influence crop production: a case study of canola production. SN Applied Sciences, 2020, 2, 1.	2.9	3
148	An inverse dielectric mixing model at 50â€‰MHz that considers soil organic carbon. Hydrology and Earth System Sciences, 2021, 25, 6407-6420.	4.9	3
149	Surface soil moisture retrieval using L-band SMAP SAR data and its validation. , 2016, , .		2
150	Development and validation of the GCOM-W AMSR2 soil moisture product. , 2016, , .		2
151	AMSR2 soil moisture product validation. , 2017, , .		2
152	L-, C- and X-Band Passive Microwave Soil Moisture Retrieval Algorithm Parameterization Using in Situ Validation Sites. , 2018, , .		2
153	Comparing the Assimilation of SMOS Brightness Temperatures and Soil Moisture Products on Hydrological Simulation in the Canadian Land Surface Scheme. Remote Sensing, 2020, 12, 3405.	4.0	2
154	Use of Radarsat-2 images to develop a scaling method of soil moisture over an agricultural area. , 2009, , .		1
155	Evaluation of L-Band passive microwave soil moisture for Canada. , 2014, , .		1
156	Method for upscaling in-situ soil moisture measurements for calibration and validation of smap soil moisture products. , 2016, , .		1
157	Soil moisture retrieval with airborne PALS instrument over agricultural areas in SMAPVEX16. , 2017, , .		1
158	Contributions of Geophysical and C-Band SAR Data for Estimation of Field Scale Soil Moisture. , 2018, , .		1
159	The Impact of In Situ Probe Orientation on SMAP Validation Statistics. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	1
160	Evaluation of Agrobiodiversity and Cover Crop Adoption in Southern Ontario Field Crops. Agronomy, 2022, 12, 415.	3.0	1
161	Potentials of RADARSAT-2 data to monitor freezing/thawing cycles over agricultural lands in Canada. , 2009, , .		0
162	Airborne active and passive L-band measurements using PALS instrument in SMAPVEX12 soil moisture field campaign. Proceedings of SPIE, 2012, , .	0.8	0

#	Article	IF	Citations
163	Analysis of L-Band brightness temperatures response to freeze/thaw in two prairie environments from surface-based radiometer measurements. , 2016, , .		0
164	Analysis of Soil Freeze/Thaw Signatures During Slapex F/T Campaign. , 2018, , .		0
165	Use of L-Band Ground-Based Radiometers for Freeze/Thaw Retrieval in A Boreal Forest Site. , 2018, , .		0
166	A Method for Assessing SMAP Core Validation Site Scaling Bias Using Enhanced Sampling and Random Forests. , 2019, , .		0
167	Exploring the Relationship between Cover Crop Adoption and Soil Erosion Severity: A Case Study from the Simcoe Watershed, Ontario, Canada. Land, 2022, 11, 988.	2.9	0