Harry Vereecken

List of Publications by Year
in descending order

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674 papers	26,950 citations	8159 76 h-index	15218 126 g-index
752 all docs	752 docs citations	752 times ranked	18550 citing authors

#	Article	IF	Citations
1	3-D Electromagnetic Modeling Explains Apparent-Velocity Increase in Crosshole GPR Data-Borehole Fluid Effect Correction Method Enables to Incorporating High-Angle Traveltime Data. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-10.	2.7	1
2	Largeâ€scale detection and quantification of harmful soil compaction in a postâ€mining landscape using multiâ€configuration electromagnetic induction. Soil Use and Management, 2022, 38, 212-228.	2.6	10
3	Investigating Soilâ€"Root Interactions with the Numerical Model R-SWMS. Methods in Molecular Biology, 2022, 2395, 259-283.	0.4	0
4	Coupling the Community Land Model version 5.0 to the parallel data assimilation framework PDAF: description and applications. Geoscientific Model Development, 2022, 15, 395-411.	1.3	6
5	Parasite inversion for determining the coefficients and timeâ€validity of Philip's twoâ€term infiltration equation. Vadose Zone Journal, 2022, 21, .	1.3	6
6	Root System Scale Models Significantly Overestimate Root Water Uptake at Drying Soil Conditions. Frontiers in Plant Science, 2022, 13, 798741.	1.7	8
7	COSMOS-Europe: a European network of cosmic-ray neutron soil moisture sensors. Earth System Science Data, 2022, 14, 1125-1151.	3.7	33
8	Pore-Scale Mechanisms for Spectral Induced Polarization of Calcite Precipitation Inferred from Geo-Electrical Millifluidics. Environmental Science & Technology, 2022, 56, 4998-5008.	4.6	15
9	One decade (2011â€"2020) of European agricultural water stress monitoring by MSG-SEVIRI: workflow implementation on the Virtual Earth Laboratory (VLab) platform. International Journal of Digital Earth, 2022, 15, 730-747.	1.6	3
10	Coupled full-waveform inversion of horizontal borehole ground penetrating radar data to estimate soil hydraulic parameters: A synthetic study. Journal of Hydrology, 2022, 610, 127817.	2.3	8
11	Coupled modelling of hydrological processes and grassland production in two contrasting climates. Hydrology and Earth System Sciences, 2022, 26, 2277-2299.	1.9	4
12	Detection of Tracer Plumes Using Fullâ€Waveform Inversion of Timeâ€Lapse Ground Penetrating Radar Data: A Numerical Study in a Highâ€Resolution Aquifer Model. Water Resources Research, 2022, 58, .	1.7	10
13	Same soil, different climate: Crop model intercomparison on translocated lysimeters. Vadose Zone Journal, 2022, 21, .	1.3	4
14	On Infiltration and Infiltration Characteristic Times. Water Resources Research, 2022, 58, .	1.7	5
15	Development and Validation of a Deep Learning Based Automated Minirhizotron Image Analysis Pipeline. Plant Phenomics, 2022, 2022, .	2.5	14
16	Remote Sensing of Instantaneous Drought Stress at Canopy Level Using Sun-Induced Chlorophyll Fluorescence and Canopy Reflectance. Remote Sensing, 2022, 14, 2642.	1.8	10
17	A calibration free radiation driven model for estimating actual evapotranspiration of mountain grasslands (CLIME-MG). Journal of Hydrology, 2022, 610, 127948.	2.3	7
18	Assimilation of Groundwater Level and Soil Moisture Data in an Integrated Land Surfaceâ€Subsurface Model for Southwestern Germany. Water Resources Research, 2022, 58, .	1.7	11

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19	Estimating the Number of Reference Sites Necessary for the Validation of Global Soil Moisture Products. IEEE Geoscience and Remote Sensing Letters, 2021, 18, 1530-1534.	1.4	8
20	Quantification of water stress induced within-field variability of carbon dioxide fluxes in a sugar beet stand. Agricultural and Forest Meteorology, 2021, 297, 108242.	1.9	6
21	Toward operational validation systems for global satellite-based terrestrial essential climate variables. International Journal of Applied Earth Observation and Geoinformation, 2021, 95, 102240.	1.4	15
22	Prediction of soil evaporation measured with weighable lysimeters using the FAO Penmanâ€“Monteith method in combination with Richardsâ€™ equation. Vadose Zone Journal, 2021, 20, e20102.	1.3	10
23	Improving the representation of cropland sites in the Community Land Model (CLM) version 5.0. Geoscientific Model Development, 2021, 14, 573-601.	1.3	18
24	Toward highâ€resolution agronomic soil information and management zones delineated by groundâ€based electromagnetic induction and aerial drone data. Vadose Zone Journal, 2021, 20, e20099.	1.3	10
25	The SARSense Campaign: Air- and Space-Borne C- and L-Band SAR for the Analysis of Soil and Plant Parameters in Agriculture. Remote Sensing, 2021, 13, 825.	1.8	14
26	Soil Nitrogen Dynamics in a Managed Temperate Grassland Under Changed Climatic Conditions. Water (Switzerland), 2021, 13, 931.	1.2	9
27	Choice of Pedotransfer Functions Matters when Simulating Soil Water Balance Fluxes. Journal of Advances in Modeling Earth Systems, 2021, 13, e2020MS002404.	1.3	22
28	Improvement of ground-penetrating radar full-waveform inversion images using cone penetration test data. Geophysics, 2021, 86, H13-H25.	1.4	3
29	Sequential and coupled inversion of horizontal borehole ground penetrating radar data to estimate soil hydraulic properties at the field scale. Journal of Hydrology, 2021, 596, 126010.	2.3	13
30	Improving crosshole groundâ€penetrating radar fullâ€waveform inversion results by using progressively expanded bandwidths of the data. Near Surface Geophysics, 2021, 19, 465-487.	0.6	7
31	Simplified characteristic time method for accurate estimation of the soil hydraulic parameters from oneâ€dimensional infiltration experiments. Vadose Zone Journal, 2021, 20, e20117.	1.3	3
32	Added value of geophysics-based soil mapping in agro-ecosystem simulations. Soil, 2021, 7, 125-143.	2.2	6
33	Reviews and syntheses: Gaining insights into evapotranspiration partitioning with novel isotopic monitoring methods. Biogeosciences, 2021, 18, 3701-3732.	1.3	10
34	Root architecture development in stony soils. Vadose Zone Journal, 2021, 20, e20133.	1.3	12
35	Sentinel-2 Analysis of Spruce Crown Transparency Levels and Their Environmental Drivers After Summer Drought in the Northern Eifel (Germany). Frontiers in Forests and Global Change, 2021, 4, .	1.0	10
36	Statistical Exploration of SENTINEL-1 Data, Terrain Parameters, and in-situ Data for Estimating the Near-Surface Soil Moisture in a Mediterranean Agroecosystem. Frontiers in Water, 2021, 3, .	1.0	15

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37	Bayesian inference of root architectural model parameters from synthetic field data. Plant and Soil, 2021, 467, 67-89.	1.8	5
38	The Footprint Characteristics of Cosmic Ray Thermal Neutrons. Geophysical Research Letters, 2021, 48, e2021GL094281.	1.5	14
39	The Importance of Subsurface Processes in Land Surface Modeling over a Temperate Region: An Analysis with SMAP, Cosmic Ray Neutron Sensing and Triple Collocation Analysis. Remote Sensing, 2021, 13, 3068.	1.8	3
40	Reanalysis in Earth System Science: Toward Terrestrial Ecosystem Reanalysis. Reviews of Geophysics, 2021, 59, e2020RG000715.	9.0	24
41	Presentation and discussion of the high-resolution atmosphereâ€"land-surfaceâ€"subsurface simulation dataset of the simulated Neckar catchment for the period 2007â€"2015. Earth System Science Data, 2021, 13, 4437-4464.	3.7	4
42	Using low-wavenumber information in crosshole GPR FWI by considering angle difference identity with cosine approach: A synthetic study. , 2021, , .		2
43	From hydraulic root architecture models to macroscopic representations of root hydraulics in soil water flow and land surface models. Hydrology and Earth System Sciences, 2021, 25, 4835-4860.	1.9	14
44	Simulating rhizodeposition patterns around growing and exuding root systems. In Silico Plants, 2021, 3, .	0.8	11
45	KEYLINK: towards a more integrative soil representation for inclusion in ecosystem scale modelsâ€"II: model description, implementation and testing. PeerJ, 2021, 9, e10707.	0.9	6
46	Causation Discovery of Weather and Vegetation Condition on Global Wildfire Using the PCMCI Approach. , 2021, , .		2
47	Spruce Crown Transparency Levels Detected from Sentinel-2 Using Google Earth Engine. , 2021, , .		0
48	Return of crop residues to arable land stimulates N2O emission but mitigates NO3â^' leaching: a meta-analysis. Agronomy for Sustainable Development, 2021, 41, 1.	2.2	25
49	Constraining water limitation of photosynthesis in a crop growth model with sun-induced chlorophyll fluorescence. Remote Sensing of Environment, 2021, 267, 112722.	4.6	12
50	GPR and EMI characterization of the hyperarid study site of Yungay, Chile: Implications of applying geophysical methods on Mars. Earth and Space Science, 2021, 8, e2021EA001790.	1.1	2
51	Response of water fluxes and biomass production to climate change in permanent grassland soil ecosystems. Hydrology and Earth System Sciences, 2021, 25, 6087-6106.	1.9	8
52	Recent development of the crosshole ground penetrating radar full-waveform inversion for hydrogeophysical applications. , 2021, , .		0
53	Effect of fertilizers and irrigation on multiâ€configuration electromagnetic induction measurements. Soil Use and Management, 2020, 36, 104-116.	2.6	12
54	Effect of solute concentration on the spectral induced polarization response of calcite precipitation. Geophysical Journal International, 2020, 220, 1187-1196.	1.0	19

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55	Investigating the root plasticity response of Centaurea jacea to soil water availability changes from isotopic analysis. New Phytologist, 2020, 226, 98-110.	3.5	27
56	A framework for modelling soil structure dynamics induced by biological activity. Global Change Biology, 2020, 26, 5382-5403.	4.2	75
57	Stable-Isotope-Aided Investigation of the Effect of Redox Potential on Nitrous Oxide Emissions as Affected by Water Status and N Fertilization. Water (Switzerland), 2020, 12, 2918.	1.2	2
58	Integrating Invasive and Non-invasive Monitoring Sensors to Detect Field-Scale Soil Hydrological Behavior. Frontiers in Water, 2020, 2, .	1.0	4
59	Crop growth and soil water fluxes at erosionâ€affected arable sites: Using weighing lysimeter data for model intercomparison. Vadose Zone Journal, 2020, 19, e20058.	1.3	17
60	Soil hydraulic properties estimation from oneâ€dimensional infiltration experiments using characteristic time concept. Vadose Zone Journal, 2020, 19, e20068.	1.3	17
61	Altered energy partitioning across terrestrial ecosystems in the European drought year 2018. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20190524.	1.8	35
62	Mapping near-surface soil moisture in a Mediterranean agroforestry ecosystem using Cosmic-Ray Neutron Probe and Sentinel-1 Data. , 2020, , .		1
63	3D aquifer characterization of the Hermalle-sous-Argenteau test site using crosshole ground-penetrating radar amplitude analysis and full-waveform inversion. Geophysics, 2020, 85, H133-H148.	1.4	12
64	Gas Permeability of Salt Crusts Formed by Evaporation from Porous Media. Geosciences (Switzerland), 2020, 10, 423.	1.0	7
65	Evaluation of different methods for gap filling of longâ€term actual evapotranspiration time series measured by lysimeters. Vadose Zone Journal, 2020, 19, e20020.	1.3	7
66	Invigorating Hydrological Research Through Journal Publications. Water Resources Research, 2020, 56, .	1.7	5
67	Modelling groundwater evapotranspiration in a shallow aquifer in a semi-arid environment. Journal of Hydrology, 2020, 587, 124967.	2.3	18
68	Value of sun-induced chlorophyll fluorescence for quantifying hydrological states and fluxes: Current status and challenges. Agricultural and Forest Meteorology, 2020, 291, 108088.	1.9	62
69	Error Estimation for Soil Moisture Measurements With Cosmic Ray Neutron Sensing and Implications for Rover Surveys. Frontiers in Water, 2020, 2, .	1.0	33
70	2.5D crosshole GPR full-waveform inversion with synthetic and measured data. Geophysics, 2020, 85, H71-H82.	1.4	12
71	Measuring vertical soil water content profiles by combining horizontal borehole and dispersive surface ground penetrating radar data. Near Surface Geophysics, 2020, 18, 275-294.	0.6	12
72	Pesticide contamination of the upper Elbe River and an adjacent floodplain area. Journal of Soils and Sediments, 2020, 20, 2067-2081.	1.5	20

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73	Simulation of spatial variability in crop leaf area index and yield using agroecosystem modeling and geophysicsâ€based quantitative soil information. Vadose Zone Journal, 2020, 19, e20009.	1.3	29
74	Pedotransfer Function for the Brunswick Soil Hydraulic Property Model and Comparison to the van Genuchtenâ€Mualem Model. Water Resources Research, 2020, 56, e2019WR026820.	1.7	18
75	On the impact of increasing drought on the relationship between soil water content and evapotranspiration of a grassland. Vadose Zone Journal, 2020, 19, e20029.	1.3	17
76	Simultaneous multichannel multiâ€offset groundâ€penetrating radar measurements for soil characterization. Vadose Zone Journal, 2020, 19, e20017.	1.3	19
77	Effects of Deforestation on Water Flow in the Vadose Zone. Water (Switzerland), 2020, 12, 35.	1.2	19
78	CPlantBox, a whole-plant modelling framework for the simulation of water- and carbon-related processes. In Silico Plants, 2020, 2, .	0.8	37
79	Call for Participation: Collaborative Benchmarking of Functional-Structural Root Architecture Models. The Case of Root Water Uptake. Frontiers in Plant Science, 2020, 11, 316.	1.7	18
80	Responses of soil water storage and crop water use efficiency to changing climatic conditions: a lysimeter-based space-for-time approach. Hydrology and Earth System Sciences, 2020, 24, 1211-1225.	1.9	22
81	Soil structureÂis an important omission in Earth System Models. Nature Communications, 2020, 11, 522.	5.8	138
82	KEYLINK: towards a more integrative soil representation for inclusion in ecosystem scale models. I. review and model concept. PeerJ, 2020, 8, e9750.	0.9	21
83	Sarsense: A C- and L-Band SAR Rehearsal Campaign in Germany in Preparation for ROSE-L. , 2020, , .		1
84	Large-scale soil mapping using multi-configuration EMI and supervised image classification. Geoderma, 2019, 335, 133-148.	2.3	60
85	Assessment of the position accuracy of a single-frequency GPS receiver designed for electromagnetic induction surveys. Precision Agriculture, 2019, 20, 19-39.	3.1	7
86	Infiltration from the Pedon to Global Grid Scales: An Overview and Outlook for Land Surface Modeling. Vadose Zone Journal, 2019, 18, 1-53.	1.3	56
87	GPR full-waveform inversion of a variably saturated soil-aquifer system. Journal of Applied Geophysics, 2019, 170, 103823.	0.9	12
88	In Situ Detection of Tree Root Systems under Heterogeneous Anthropogenic Soil Conditions Using Ground Penetrating Radar. Journal of Infrastructure Systems, 2019, 25, .	1.0	3
89	First real-time isotopic characterisation of N2O from chemodenitrification. Geochimica Et Cosmochimica Acta, 2019, 267, 17-32.	1.6	28
90	Can Drip Irrigation be Scheduled with Cosmicâ€Ray Neutron Sensing?. Vadose Zone Journal, 2019, 18, 190053.	1.3	22

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91	Spectral Induced Polarization of Biochar in Variably Saturated Soil. Vadose Zone Journal, 2019, 18, 1-13.	1.3	6
92	Assimilation of Highâ€Resolution Soil Moisture Data Into an Integrated Terrestrial Model for a Smallâ€Scale Headâ€Water Catchment. Water Resources Research, 2019, 55, 10358-10385.	1.7	10
93	Calibration, Conversion, and Quantitative Multi-Layer Inversion of Multi-Coil Rigid-Boom Electromagnetic Induction Data. Sensors, 2019, 19, 4753.	2.1	27
94	Review of crosshole ground-penetrating radar full-waveform inversion of experimental data: Recent developments, challenges, and pitfalls. Geophysics, 2019, 84, H13-H28.	1.4	52
95	Water Retention and Pore Size Distribution of a Biopolymericâ€Amended Loam Soil. Vadose Zone Journal, 2019, 18, 1-13.	1.3	8
96	Modeling of Multilayered Media Greenâ€™s Functions With Rough Interfaces. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 7671-7681.	2.7	12
97	Modeling the Impact of Biopores on Root Growth and Root Water Uptake. Vadose Zone Journal, 2019, 18, 1-20.	1.3	36
98	CO2 fluxes before and after partial deforestation of a Central European spruce forest. Agricultural and Forest Meteorology, 2019, 274, 61-74.	1.9	27
99	Hydroxylamine Contributes More to Abiotic N2O Production in Soils Than Nitrite. Frontiers in Environmental Science, 2019, 7, .	1.5	18
100	Geophysical imaging of regolith in landscapes along a climate and vegetation gradient in the Chilean coastal cordillera. Catena, 2019, 180, 146-159.	2.2	18
101	Ground, Proximal, and Satellite Remote Sensing of Soil Moisture. Reviews of Geophysics, 2019, 57, 530-616.	9.0	307
102	Quantification and Prediction of Nighttime Evapotranspiration for Two Distinct Grassland Ecosystems. Water Resources Research, 2019, 55, 2961-2975.	1.7	38
103	Observing Ecohydrological Processes: Challenges and Perspectives. Ecohydrology, 2019, , 1-27.	0.2	2
104	Upscaling Issues in Ecohydrological Observations. Ecohydrology, 2019, , 435-454.	0.2	5
105	Source partitioning of H₂O and CO₂ fluxes based on high-frequency eddy covariance data: a comparison between study sites. Biogeosciences, 2019, 16, 1111-1132.	1.3	17
106	Parameter sensitivity analysis of a root system architecture model based on virtual field sampling. Plant and Soil, 2019, 438, 101-126.	1.8	9
107	Accounting for Surface Roughness Scattering in the Characterization of Forest Litter with Ground-Penetrating Radar. Remote Sensing, 2019, 11, 828.	1.8	5
108	Root Processes Affecting Soil Moisture Patterns in Ecohydrology. Ecohydrology, 2019, , 417-433.	0.2	0

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109	On the Information Content of Cosmicâ€Ray Neutron Data in the Inverse Estimation of Soil Hydraulic Properties. Vadose Zone Journal, 2019, 18, 1-24.	1.3	29
110	Incorporating a root water uptake model based on the hydraulic architecture approach in terrestrial systems simulations. Agricultural and Forest Meteorology, 2019, 269-270, 28-45.	1.9	28
111	Implications for Validation Activities of Global Soil Moisture Missions by the Prediction of Sub-Grid Soil Moisture Variability. , 2019, , .		0
112	Estimating Gravimetric Water Content of a Winter Wheat Field from L-Band Vegetation Optical Depth. Remote Sensing, 2019, 11, 2353.	1.8	10
113	Development and Uncertainty Assessment of Pedotransfer Functions for Predicting Water Contents at Specific Pressure Heads. Vadose Zone Journal, 2019, 18, 190063.	1.3	6
114	Time variability and uncertainty in the fraction of young water in a small headwater catchment. Hydrology and Earth System Sciences, 2019, 23, 4333-4347.	1.9	22
115	Monitoring Soil Water Content Using Timeâ€Lapse Horizontal Borehole GPR Data at the Fieldâ€Plot Scale. Vadose Zone Journal, 2019, 18, 190044.	1.3	24
116	Integrating ground-based and remote sensing-based monitoring of near-surface soil moisture in a Mediterranean environment. , 2019, , .		3
117	Comparative Study of Statistical, Numerical and Machine Learning-based Pedotransfer Functions of Water Retention Curve with Particle Size Distribution Data. Eurasian Soil Science, 2019, 52, 1555-1571.	0.5	30
118	In-situ monitoring of soil water isotopic composition for partitioning of evapotranspiration during one growing season of sugar beet (Beta vulgaris). Agricultural and Forest Meteorology, 2019, 266-267, 53-64.	1.9	28
119	Simultaneous calibration and inversion algorithm for multiconfiguration electromagnetic induction data acquired at multiple elevations. Geophysics, 2019, 84, EN1-EN14.	1.4	12
120	Quantitative imaging of 33P in plant materials using 14C polymer references. Analytical and Bioanalytical Chemistry, 2019, 411, 1253-1260.	1.9	2
121	Continuum multiscale model of root water and nutrient uptake from soil with explicit consideration of the 3D root architecture and the rhizosphere gradients. Plant and Soil, 2019, 439, 273-292.	1.8	35
122	Sensitivity analysis of a source partitioning method for H2O and CO2 fluxes based on high frequency eddy covariance data: Findings from field data and large eddy simulations. Agricultural and Forest Meteorology, 2019, 265, 152-170.	1.9	13
123	Co-transport of multi-walled carbon nanotubes and sodium dodecylbenzenesulfonate in chemically heterogeneous porous media. Environmental Pollution, 2019, 247, 907-916.	3.7	28
124	Improved resolution of ground penetrating radar full-waveform inversion by using cone penetration test data: A synthetic study. , 2019, , .		1
125	Water Retention and Pore Size Distribution of a Biopolymeric-Amended Loam Soil. Vadose Zone Journal, 2019, 18, 1.	1.3	78
126	Role of rain intensity and soil colloids in the retention of surfactant-stabilized silver nanoparticles in soil. Environmental Pollution, 2018, 238, 1027-1034.	3.7	34

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127	Measuring root system traits of wheat in 2D images to parameterize 3D root architecture models. Plant and Soil, 2018, 425, 457-477.	1.8	21
128	CRootBox: a structuralâ€"functional modelling framework for root systems. Annals of Botany, 2018, 121, 1033-1053.	1.4	123
129	Cross-disciplinary links in environmental systems science: Current state and claimed needs identified in a meta-review of process models. Science of the Total Environment, 2018, 622-623, 954-973.	3.9	12
130	Root Processes Affecting the Soil Moisture Patterns in Ecohydrology. Ecohydrology, 2018, , 1-17.	0.2	1
131	Problems associated to kinetic fitting of incubation data. Soil Biology and Biochemistry, 2018, 120, 260-271.	4.2	11
132	Comparison of different assimilation methodologies of groundwater levels to improve predictions of root zone soil moisture with an integrated terrestrial system model. Advances in Water Resources, 2018, 111, 224-238.	1.7	23
133	Parameterization of Root Water Uptake Models Considering Dynamic Root Distributions and Water Uptake Compensation. Vadose Zone Journal, 2018, 17, 1-21.	1.3	47
134	The Effect of Bedrock Topography on Timing and Location of Landslide Initiation Using the Local Factor of Safety Concept. Water (Switzerland), 2018, 10, 1290.	1.2	10
135	Joint Editorial: Invigorating hydrological research through journal publications. Hydrology Research, 2018, 49, iii-ix.	1.1	0
136	Magnetic Resonance Monitoring and Numerical Modeling of Soil Moisture during Evaporation. Vadose Zone Journal, 2018, 17, 1-15.	1.3	7
137	Presentation of CPlantBox: a whole functional-structural plant model (root and shoot) coupled with a mechanistic resolution of carbon and water flows. , 2018, , .		1
138	Calibration, inversion, and applications of multiconfiguration electromagnetic induction for agricultural top- and subsoil characterization. , 2018, , .		1
139	Time-lapse horizontal borehole GPR measurements to investigate spatial and temporal soil-water content changes. , 2018, , .		0
140	Vegetation Optical Depth and Soil Moisture Retrieved from L-Band Radiometry over the Growth Cycle of a Winter Wheat. Remote Sensing, 2018, 10, 1637.	1.8	17
141	Numerical and Experimental Investigations of Cesium and Strontium Sorption and Transport in Agricultural Soils. Vadose Zone Journal, 2018, 17, 1-14.	1.3	11
142	Simulating Floodâ€Induced Riverbed Transience Using Unmanned Aerial Vehicles, Physically Based Hydrological Modeling, and the Ensemble Kalman Filter. Water Resources Research, 2018, 54, 9342-9363.	1.7	27
143	Joint editorial: Invigorating hydrological research through journal publications. Hydrology and Earth System Sciences, 2018, 22, 5735-5739.	1.9	3
144	Monitoring Hydrological Processes for Land and Water Resources Management in a Mediterranean Ecosystem: The Alento River Catchment Observatory. Vadose Zone Journal, 2018, 17, 1-12.	1.3	33

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145	Field evaluation of broadband spectral electrical imaging for soil and aquifer characterization. Journal of Applied Geophysics, 2018, 159, 484-496.	0.9	12
146	Invigorating Hydrological Research through Journal Publications. Journal of Hydrometeorology, 2018, 19, 1713-1719.	0.7	0
147	Characterizing Redox Potential Effects on Greenhouse Gas Emissions Induced by Waterâ€Level Changes. Vadose Zone Journal, 2018, 17, 1-13.	1.3	17
148	Steering operational synergies in terrestrial observation networks: opportunity for advancing Earth system dynamics modelling. Earth System Dynamics, 2018, 9, 593-609.	2.7	28
149	Investigation of Kinetic Isotopic Fractionation of Water During Bare Soil Evaporation. Water Resources Research, 2018, 54, 6909-6928.	1.7	19
150	Inverse Estimation of Soil Hydraulic and Transport Parameters of Layered Soils from Water Stable Isotope and Lysimeter Data. Vadose Zone Journal, 2018, 17, 1-19.	1.3	57
151	The TERENOâ€Rur Hydrological Observatory: A Multiscale Multiâ€Compartment Research Platform for the Advancement of Hydrological Science. Vadose Zone Journal, 2018, 17, 1-22.	1.3	81
152	Passive L-Band Microwave Remote Sensing of Organic Soil Surface Layers: A Tower-Based Experiment. Remote Sensing, 2018, 10, 304.	1.8	22
153	Simultaneous multi-channel GPR measurements for soil characterization. , 2018, , .		5
154	Joint Editorial: Invigorating Hydrological Research through Journal Publications. Vadose Zone Journal, 2018, 17, 180001ed.	1.3	0
155	Evaluation and uncertainty analysis of regional-scale CLM4.5 net carbon flux estimates. Biogeosciences, 2018, 15, 187-208.	1.3	18
156	Determining dew and hoar frost formation for a low mountain range and alpine grassland site by weighable lysimeter. Journal of Hydrology, 2018, 563, 372-381.	2.3	51
157	Radius estimation of subsurface cylindrical objects from ground-penetrating-radar data using full-waveform inversion. Geophysics, 2018, 83, H43-H54.	1.4	27
158	A New Soil Moisture Downscaling Approach for SMAP, SMOS, and ASCAT by Predicting Sub-Grid Variability. Remote Sensing, 2018, 10, 427.	1.8	45
159	Root growth, water uptake, and sap flow of winter wheat in response to different soil water conditions. Hydrology and Earth System Sciences, 2018, 22, 2449-2470.	1.9	44
160	Evaluation of an operational real-time irrigation scheduling scheme for drip irrigated citrus fields in Picassent, Spain. Agricultural Water Management, 2018, 208, 465-477.	2.4	16
161	Understanding Soil and Plant Interaction by Combining Groundâ€Based Quantitative Electromagnetic Induction and Airborne Hyperspectral Data. Geophysical Research Letters, 2018, 45, 7571-7579.	1.5	29
162	GPR full-waveform inversion, recent developments, and future opportunities. , 2018, , .		4

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163	Invigorating hydrological research through journal publications. Ecohydrology, 2018, 11, e2016.	1.1	0
164	Cosmic Ray Neutron Sensing for Simultaneous Soil Water Content and Biomass Quantification in Drought Conditions. Water Resources Research, 2018, 54, 7383-7402.	1.7	54
165	Invigorating hydrological research through journal publications. Hydrological Sciences Journal, 2018, 63, 1113-1117.	1.2	4
166	Time-lapse ground-penetrating radar full-waveform inversion to detect tracer plumes: A numerical study. , 2018, , .		2
167	Development and analysis of the Soil Water Infiltration Global database. Earth System Science Data, 2018, 10, 1237-1263.	3.7	85
168	Upscaling Issues in Ecohydrological Observations. Ecohydrology, 2018, , 1-21.	0.2	1
169	Joint Editorial Invigorating Hydrological Research through Journal Publications. Journal of Hydrology and Hydromechanics, 2018, 66, 257-260.	0.7	1
170	No effect of digestate amendment on Cs-137 and Sr-90 translocation in lysimeter experiments. Chemosphere, 2017, 172, 310-315.	4.2	3
171	Stimulation of N₂O emission by manure application to agricultural soils may largely offset carbon benefits: a global metaâ€analysis. Global Change Biology, 2017, 23, 4068-4083.	4.2	222
172	A Threeâ€Dimensional View on Soil Biogeochemistry: A Dataset for a Forested Headwater Catchment. Journal of Environmental Quality, 2017, 46, 210-218.	1.0	17
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