

Harry Vereecken

List of Publications by Year in Descending Order

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

647
papers

20,760
citations

69
h-index

111
g-index

752
ext. papers

23,727
ext. citations

4.6
avg, IF

7.04
L-index

#	Paper	IF	Citations
647	Coupling the Community Land Model version 5.0 to the parallel data assimilation framework PDAF: description and applications. <i>Geoscientific Model Development</i> , 2022 , 15, 395-411	6.3	0
646	Parasite inversion for determining the coefficients and time-validity of Philip's two-term infiltration equation. <i>Vadose Zone Journal</i> , 2022 , 21,	2.7	2
645	Investigating Soil-Root Interactions with the Numerical Model R-SWMS. <i>Methods in Molecular Biology</i> , 2022 , 2395, 259-283	1.4	
644	Root System Scale Models Significantly Overestimate Root Water Uptake at Drying Soil Conditions.. <i>Frontiers in Plant Science</i> , 2022 , 13, 798741	6.2	1
643	One decade (2011-2020) of European agricultural water stress monitoring by MSG-SEVIRI: workflow implementation on the Virtual Earth Laboratory (VLab) platform. <i>International Journal of Digital Earth</i> , 2022 , 15, 730-747	3.9	
642	Coupled full-waveform inversion of horizontal borehole ground penetrating radar data to estimate soil hydraulic parameters: A synthetic study. <i>Journal of Hydrology</i> , 2022 , 127817	6	1
641	Coupled modelling of hydrological processes and grassland production in two contrasting climates. <i>Hydrology and Earth System Sciences</i> , 2022 , 26, 2277-2299	5.5	0
640	Development and Validation of a Deep Learning Based Automated Minirhizotron Image Analysis Pipeline. <i>Plant Phenomics</i> , 2022 , 2022, 1-14	7	2
639	Remote Sensing of Instantaneous Drought Stress at Canopy Level Using Sun-Induced Chlorophyll Fluorescence and Canopy Reflectance. <i>Remote Sensing</i> , 2022 , 14, 2642	5	2
638	A Calibration Free Radiation Driven Model for Estimating Actual Evapotranspiration of Mountain Grasslands (CLIME-MG). <i>Journal of Hydrology</i> , 2022 , 127948	6	0
637	GPR and EMI Characterization of the Hyperarid Study Site of Yungay, Chile: Implications of Applying Geophysical Methods on Mars. <i>Earth and Space Science</i> , 2021 , 8, e2021EA001790	3.1	0
636	Response of water fluxes and biomass production to climate change in permanent grassland soil ecosystems. <i>Hydrology and Earth System Sciences</i> , 2021 , 25, 6087-6106	5.5	1
635	Return of crop residues to arable land stimulates N ₂ O emission but mitigates NO ₃ ⁻ leaching: a meta-analysis. <i>Agronomy for Sustainable Development</i> , 2021 , 41, 1	6.8	3
634	Constraining water limitation of photosynthesis in a crop growth model with sun-induced chlorophyll fluorescence. <i>Remote Sensing of Environment</i> , 2021 , 267, 112722	13.2	3
633	Soil Nitrogen Dynamics in a Managed Temperate Grassland Under Changed Climatic Conditions. <i>Water (Switzerland)</i> , 2021 , 13, 931	3	3
632	Choice of Pedotransfer Functions Matters when Simulating Soil Water Balance Fluxes. <i>Journal of Advances in Modeling Earth Systems</i> , 2021 , 13, e2020MS002404	7.1	7
631	Improvement of ground-penetrating radar full-waveform inversion images using cone penetration test data. <i>Geophysics</i> , 2021 , 86, H13-H25	3.1	1

630	Sequential and coupled inversion of horizontal borehole ground penetrating radar data to estimate soil hydraulic properties at the field scale. <i>Journal of Hydrology</i> , 2021 , 596, 126010	6	4
629	Improving crosshole ground-penetrating radar full-waveform inversion results by using progressively expanded bandwidths of the data. <i>Near Surface Geophysics</i> , 2021 , 19, 465-487	1.6	2
628	Simplified characteristic time method for accurate estimation of the soil hydraulic parameters from one-dimensional infiltration experiments. <i>Vadose Zone Journal</i> , 2021 , 20, e20117	2.7	0
627	Added value of geophysics-based soil mapping in agro-ecosystem simulations. <i>Soil</i> , 2021 , 7, 125-143	5.8	1
626	Reviews and syntheses: Gaining insights into evapotranspiration partitioning with novel isotopic monitoring methods. <i>Biogeosciences</i> , 2021 , 18, 3701-3732	4.6	2
625	Root architecture development in stony soils. <i>Vadose Zone Journal</i> , 2021 , 20, e20133	2.7	1
624	Statistical Exploration of SENTINEL-1 Data, Terrain Parameters, and in-situ Data for Estimating the Near-Surface Soil Moisture in a Mediterranean Agroecosystem. <i>Frontiers in Water</i> , 2021 , 3,	2.6	6
623	. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2021 , 18, 1530-1534	4.1	2
622	Quantification of water stress induced within-field variability of carbon dioxide fluxes in a sugar beet stand. <i>Agricultural and Forest Meteorology</i> , 2021 , 297, 108242	5.8	3
621	Toward operational validation systems for global satellite-based terrestrial essential climate variables. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2021 , 95, 102240	7.3	10
620	Prediction of soil evaporation measured with weighable lysimeters using the FAO Penman-Monteith method in combination with Richards Equation. <i>Vadose Zone Journal</i> , 2021 , 20, e20102	2.7	2
619	3-D Electromagnetic Modeling Explains Apparent-Velocity Increase in Crosshole GPR Data-Borehole Fluid Effect Correction Method Enables to Incorporating High-Angle Traveltime Data. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2021 , 1-10	8.1	
618	Improving the representation of cropland sites in the Community Land Model (CLM) version 5.0. <i>Geoscientific Model Development</i> , 2021 , 14, 573-601	6.3	3
617	Toward high-resolution agronomic soil information and management zones delineated by ground-based electromagnetic induction and aerial drone data. <i>Vadose Zone Journal</i> , 2021 , 20, e20099	2.7	2
616	The Sarsense Campaign: Air- and Space-Borne C- and L-Band SAR for the Analysis of Soil and Plant Parameters in Agriculture. <i>Remote Sensing</i> , 2021 , 13, 825	5	6
615	Bayesian inference of root architectural model parameters from synthetic field data. <i>Plant and Soil</i> , 2021 , 467, 67	4.2	0
614	The Footprint Characteristics of Cosmic Ray Thermal Neutrons. <i>Geophysical Research Letters</i> , 2021 , 48, e2021GL094281	4.9	3
613	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. <i>Remote Sensing</i> , 2021 , 13, 3068	5	

612	Reanalysis in Earth System Science: Toward Terrestrial Ecosystem Reanalysis. <i>Reviews of Geophysics</i> , 2021 , 59, e2020RG000715	23.1	4
611	Presentation and discussion of the high-resolution atmosphere-land-surface-subsurface simulation dataset of the simulated Neckar catchment for the period 2007-2015. <i>Earth System Science Data</i> , 2021 , 13, 4437-4464	10.5	1
610	From hydraulic root architecture models to macroscopic representations of root hydraulics in soil water flow and land surface models. <i>Hydrology and Earth System Sciences</i> , 2021 , 25, 4835-4860	5.5	4
609	KEYLINK: towards a more integrative soil representation for inclusion in ecosystem scale models-II: model description, implementation and testing. <i>PeerJ</i> , 2021 , 9, e10707	3.1	1
608	3D aquifer characterization of the Hermalle-sous-Argenteau test site using crosshole ground-penetrating radar amplitude analysis and full-waveform inversion. <i>Geophysics</i> , 2020 , 85, H133-H148	3.1	4
607	Gas Permeability of Salt Crusts Formed by Evaporation from Porous Media. <i>Geosciences (Switzerland)</i> , 2020 , 10, 423	2.7	4
606	Evaluation of different methods for gap filling of long-term actual evapotranspiration time series measured by lysimeters. <i>Vadose Zone Journal</i> , 2020 , 19, e20020	2.7	3
605	Modelling groundwater evapotranspiration in a shallow aquifer in a semi-arid environment. <i>Journal of Hydrology</i> , 2020 , 587, 124967	6	8
604	Value of sun-induced chlorophyll fluorescence for quantifying hydrological states and fluxes: Current status and challenges. <i>Agricultural and Forest Meteorology</i> , 2020 , 291, 108088	5.8	26
603	Error Estimation for Soil Moisture Measurements With Cosmic Ray Neutron Sensing and Implications for Rover Surveys. <i>Frontiers in Water</i> , 2020 , 2,	2.6	17
602	2.5D crosshole GPR full-waveform inversion with synthetic and measured data. <i>Geophysics</i> , 2020 , 85, H71-H82	3.1	5
601	Measuring vertical soil water content profiles by combining horizontal borehole and dispersive surface ground penetrating radar data. <i>Near Surface Geophysics</i> , 2020 , 18, 275-294	1.6	4
600	Pesticide contamination of the upper Elbe River and an adjacent floodplain area. <i>Journal of Soils and Sediments</i> , 2020 , 20, 2067-2081	3.4	8
599	Simulation of spatial variability in crop leaf area index and yield using agroecosystem modeling and geophysics-based quantitative soil information. <i>Vadose Zone Journal</i> , 2020 , 19, e20009	2.7	15
598	Pedotransfer Function for the Brunswick Soil Hydraulic Property Model and Comparison to the van Genuchten-Mualem Model. <i>Water Resources Research</i> , 2020 , 56, e2019WR026820	5.4	6
597	On the impact of increasing drought on the relationship between soil water content and evapotranspiration of a grassland. <i>Vadose Zone Journal</i> , 2020 , 19, e20029	2.7	7
596	Simultaneous multichannel multi-offset ground-penetrating radar measurements for soil characterization. <i>Vadose Zone Journal</i> , 2020 , 19, e20017	2.7	6
595	Effects of Deforestation on Water Flow in the Vadose Zone. <i>Water (Switzerland)</i> , 2020 , 12, 35	3	9

594	CPlantBox, a whole-plant modelling framework for the simulation of water- and carbon-related processes. <i>In Silico Plants</i> , 2020 , 2,	3.2	13
593	KEYLINK: towards a more integrative soil representation for inclusion in ecosystem scale models. I. review and model concept. <i>PeerJ</i> , 2020 , 8, e9750	3.1	8
592	Soil structure is an important omission in Earth System Models. <i>Nature Communications</i> , 2020 , 11, 522	17.4	57
591	Effect of solute concentration on the spectral induced polarization response of calcite precipitation. <i>Geophysical Journal International</i> , 2020 , 220, 1187-1196	2.6	7
590	Investigating the root plasticity response of <i>Centaurea jacea</i> to soil water availability changes from isotopic analysis. <i>New Phytologist</i> , 2020 , 226, 98-110	9.8	14
589	A framework for modelling soil structure dynamics induced by biological activity. <i>Global Change Biology</i> , 2020 , 26, 5382-5403	11.4	22
588	Stable-Isotope-Aided Investigation of the Effect of Redox Potential on Nitrous Oxide Emissions as Affected by Water Status and N Fertilization. <i>Water (Switzerland)</i> , 2020 , 12, 2918	3	1
587	Integrating Invasive and Non-invasive Monitoring Sensors to Detect Field-Scale Soil Hydrological Behavior. <i>Frontiers in Water</i> , 2020 , 2,	2.6	2
586	Crop growth and soil water fluxes at erosion-affected arable sites: Using weighing lysimeter data for model intercomparison. <i>Vadose Zone Journal</i> , 2020 , 19, e20058	2.7	7
585	Soil hydraulic properties estimation from one-dimensional infiltration experiments using characteristic time concept. <i>Vadose Zone Journal</i> , 2020 , 19, e20068	2.7	7
584	Altered energy partitioning across terrestrial ecosystems in the European drought year 2018. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2020 , 375, 20190524	5.8	18
583	2020 ,		1
582	Effect of fertilizers and irrigation on multi-configuration electromagnetic induction measurements. <i>Soil Use and Management</i> , 2020 , 36, 104-116	3.1	10
581	Call for Participation: Collaborative Benchmarking of Functional-Structural Root Architecture Models. The Case of Root Water Uptake. <i>Frontiers in Plant Science</i> , 2020 , 11, 316	6.2	12
580	Responses of soil water storage and crop water use efficiency to changing climatic conditions: a lysimeter-based space-for-time approach. <i>Hydrology and Earth System Sciences</i> , 2020 , 24, 1211-1225	5.5	12
579	Review of crosshole ground-penetrating radar full-waveform inversion of experimental data: Recent developments, challenges, and pitfalls. <i>Geophysics</i> , 2019 , 84, H13-H28	3.1	22
578	Water Retention and Pore Size Distribution of a Biopolymeric-Amended Loam Soil. <i>Vadose Zone Journal</i> , 2019 , 18, 1-13	2.7	4
577	Modeling of Multilayered Media Green Functions With Rough Interfaces. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2019 , 57, 7671-7681	8.1	6

576	Modeling the Impact of Biopores on Root Growth and Root Water Uptake. <i>Vadose Zone Journal</i> , 2019 , 18, 1-20	2.7	23
575	CO ₂ fluxes before and after partial deforestation of a Central European spruce forest. <i>Agricultural and Forest Meteorology</i> , 2019 , 274, 61-74	5.8	16
574	Hydroxylamine Contributes More to Abiotic N ₂ O Production in Soils Than Nitrite. <i>Frontiers in Environmental Science</i> , 2019 , 7,	4.8	10
573	Geophysical imaging of regolith in landscapes along a climate and vegetation gradient in the Chilean coastal cordillera. <i>Catena</i> , 2019 , 180, 146-159	5.8	9
572	Ground, Proximal, and Satellite Remote Sensing of Soil Moisture. <i>Reviews of Geophysics</i> , 2019 , 57, 530-616	15.1	125
571	Quantification and Prediction of Nighttime Evapotranspiration for Two Distinct Grassland Ecosystems. <i>Water Resources Research</i> , 2019 , 55, 2961-2975	5.4	20
570	Observing Ecohydrological Processes: Challenges and Perspectives. <i>Ecohydrology</i> , 2019 , 1-27	0.2	0
569	Upscaling Issues in Ecohydrological Observations. <i>Ecohydrology</i> , 2019 , 435-454	0.2	4
568	Source partitioning of H ₂ O and CO ₂ fluxes based on high-frequency eddy covariance data: a comparison between study sites. <i>Biogeosciences</i> , 2019 , 16, 1111-1132	4.6	12
567	Parameter sensitivity analysis of a root system architecture model based on virtual field sampling. <i>Plant and Soil</i> , 2019 , 438, 101-126	4.2	5
566	Accounting for Surface Roughness Scattering in the Characterization of Forest Litter with Ground-Penetrating Radar. <i>Remote Sensing</i> , 2019 , 11, 828	5	3
565	Root Processes Affecting Soil Moisture Patterns in Ecohydrology. <i>Ecohydrology</i> , 2019 , 417-433	0.2	
564	On the Information Content of Cosmic-Ray Neutron Data in the Inverse Estimation of Soil Hydraulic Properties. <i>Vadose Zone Journal</i> , 2019 , 18, 1-24	2.7	17
563	Incorporating a root water uptake model based on the hydraulic architecture approach in terrestrial systems simulations. <i>Agricultural and Forest Meteorology</i> , 2019 , 269-270, 28-45	5.8	16
562	Large-scale soil mapping using multi-configuration EMI and supervised image classification. <i>Geoderma</i> , 2019 , 335, 133-148	6.7	35
561	Assessment of the position accuracy of a single-frequency GPS receiver designed for electromagnetic induction surveys. <i>Precision Agriculture</i> , 2019 , 20, 19-39	5.6	4
560	Infiltration from the Pedon to Global Grid Scales: An Overview and Outlook for Land Surface Modeling. <i>Vadose Zone Journal</i> , 2019 , 18, 1-53	2.7	36
559	GPR full-waveform inversion of a variably saturated soil-aquifer system. <i>Journal of Applied Geophysics</i> , 2019 , 170, 103823	1.7	6

558	In Situ Detection of Tree Root Systems under Heterogeneous Anthropogenic Soil Conditions Using Ground Penetrating Radar. <i>Journal of Infrastructure Systems</i> , 2019 , 25, 05019008	2.9	2
557	First real-time isotopic characterisation of N ₂ O from chemodenitrification. <i>Geochimica Et Cosmochimica Acta</i> , 2019 , 267, 17-32	5.5	20
556	Can Drip Irrigation be Scheduled with Cosmic-Ray Neutron Sensing?. <i>Vadose Zone Journal</i> , 2019 , 18, 190053	2.7	11
555	Spectral Induced Polarization of Biochar in Variably Saturated Soil. <i>Vadose Zone Journal</i> , 2019 , 18, 1-13	2.7	3
554	Assimilation of High-Resolution Soil Moisture Data Into an Integrated Terrestrial Model for a Small-Scale Head-Water Catchment. <i>Water Resources Research</i> , 2019 , 55, 10358-10385	5.4	4
553	Calibration, Conversion, and Quantitative Multi-Layer Inversion of Multi-Coil Rigid-Boom Electromagnetic Induction Data. <i>Sensors</i> , 2019 , 19,	3.8	11
552	Improved resolution of ground penetrating radar full-waveform inversion by using cone penetration test data: A synthetic study 2019 ,		1
551	Water Retention and Pore Size Distribution of a Biopolymeric-Amended Loam Soil. <i>Vadose Zone Journal</i> , 2019 , 18, 1	2.7	12
550	Co-transport of multi-walled carbon nanotubes and sodium dodecylbenzenesulfonate in chemically heterogeneous porous media. <i>Environmental Pollution</i> , 2019 , 247, 907-916	9.3	14
549	Estimating Gravimetric Water Content of a Winter Wheat Field from L-Band Vegetation Optical Depth. <i>Remote Sensing</i> , 2019 , 11, 2353	5	4
548	Development and Uncertainty Assessment of Pedotransfer Functions for Predicting Water Contents at Specific Pressure Heads. <i>Vadose Zone Journal</i> , 2019 , 18, 190063	2.7	4
547	Time variability and uncertainty in the fraction of young water in a small headwater catchment. <i>Hydrology and Earth System Sciences</i> , 2019 , 23, 4333-4347	5.5	10
546	Monitoring Soil Water Content Using Time-Lapse Horizontal Borehole GPR Data at the Field-Plot Scale. <i>Vadose Zone Journal</i> , 2019 , 18, 190044	2.7	12
545	Integrating ground-based and remote sensing-based monitoring of near-surface soil moisture in a Mediterranean environment 2019 ,		3
544	Comparative Study of Statistical, Numerical and Machine Learning-based Pedotransfer Functions of Water Retention Curve with Particle Size Distribution Data. <i>Eurasian Soil Science</i> , 2019 , 52, 1555-1571	1.5	11
543	In-situ monitoring of soil water isotopic composition for partitioning of evapotranspiration during one growing season of sugar beet (<i>Beta vulgaris</i>). <i>Agricultural and Forest Meteorology</i> , 2019 , 266-267, 53-64	5.8	17
542	Simultaneous calibration and inversion algorithm for multiconfiguration electromagnetic induction data acquired at multiple elevations. <i>Geophysics</i> , 2019 , 84, EN1-EN14	3.1	9
541	Quantitative imaging of P in plant materials using C polymer references. <i>Analytical and Bioanalytical Chemistry</i> , 2019 , 411, 1253-1260	4.4	2

540	Continuum multiscale model of root water and nutrient uptake from soil with explicit consideration of the 3D root architecture and the rhizosphere gradients. <i>Plant and Soil</i> , 2019 , 439, 273-292	4.2	23
539	Sensitivity analysis of a source partitioning method for H ₂ O and CO ₂ fluxes based on high frequency eddy covariance data: Findings from field data and large eddy simulations. <i>Agricultural and Forest Meteorology</i> , 2019 , 265, 152-170	5.8	8
538	Role of rain intensity and soil colloids in the retention of surfactant-stabilized silver nanoparticles in soil. <i>Environmental Pollution</i> , 2018 , 238, 1027-1034	9.3	31
537	Measuring root system traits of wheat in 2D images to parameterize 3D root architecture models. <i>Plant and Soil</i> , 2018 , 425, 457-477	4.2	16
536	CRootBox: a structural-functional modelling framework for root systems. <i>Annals of Botany</i> , 2018 , 121, 1033-1053	4.1	71
535	Cross-disciplinary links in environmental systems science: Current state and claimed needs identified in a meta-review of process models. <i>Science of the Total Environment</i> , 2018 , 622-623, 954-973	10.2	8
534	Root Processes Affecting the Soil Moisture Patterns in Ecohydrology. <i>Ecohydrology</i> , 2018 , 1-17	0.2	
533	Problems associated to kinetic fitting of incubation data. <i>Soil Biology and Biochemistry</i> , 2018 , 120, 260-271	5	6
532	Radius estimation of subsurface cylindrical objects from ground-penetrating-radar data using full-waveform inversion. <i>Geophysics</i> , 2018 , 83, H43-H54	3.1	13
531	A New Soil Moisture Downscaling Approach for SMAP, SMOS, and ASCAT by Predicting Sub-Grid Variability. <i>Remote Sensing</i> , 2018 , 10, 427	5	33
530	Root growth, water uptake, and sap flow of winter wheat in response to different soil water conditions. <i>Hydrology and Earth System Sciences</i> , 2018 , 22, 2449-2470	5.5	29
529	Evaluation of an operational real-time irrigation scheduling scheme for drip irrigated citrus fields in Picassent, Spain. <i>Agricultural Water Management</i> , 2018 , 208, 465-477	5.9	11
528	Understanding Soil and Plant Interaction by Combining Ground-Based Quantitative Electromagnetic Induction and Airborne Hyperspectral Data. <i>Geophysical Research Letters</i> , 2018 , 45, 7571-7579	4.9	25
527	GPR full-waveform inversion, recent developments, and future opportunities 2018 ,		3
526	Cosmic Ray Neutron Sensing for Simultaneous Soil Water Content and Biomass Quantification in Drought Conditions. <i>Water Resources Research</i> , 2018 , 54, 7383-7402	5.4	33
525	Invigorating hydrological research through journal publications. <i>Hydrological Sciences Journal</i> , 2018 , 63, 1113-1117	3.5	3
524	Time-lapse ground-penetrating radar full-waveform inversion to detect tracer plumes: A numerical study 2018 ,		2
523	Development and analysis of the Soil Water Infiltration Global database. <i>Earth System Science Data</i> , 2018 , 10, 1237-1263	10.5	54

522	Joint Editorial Invigorating Hydrological Research through Journal Publications. <i>Journal of Hydrology and Hydromechanics</i> , 2018 , 66, 257-260	2.1	1
521	Upscaling Issues in Ecohydrological Observations. <i>Ecohydrology</i> , 2018 , 1-21	0.2	1
520	Comparison of different assimilation methodologies of groundwater levels to improve predictions of root zone soil moisture with an integrated terrestrial system model. <i>Advances in Water Resources</i> , 2018 , 111, 224-238	4.7	14
519	Parameterization of Root Water Uptake Models Considering Dynamic Root Distributions and Water Uptake Compensation. <i>Vadose Zone Journal</i> , 2018 , 17, 160125	2.7	31
518	The Effect of Bedrock Topography on Timing and Location of Landslide Initiation Using the Local Factor of Safety Concept. <i>Water (Switzerland)</i> , 2018 , 10, 1290	3	4
517	Magnetic Resonance Monitoring and Numerical Modeling of Soil Moisture during Evaporation. <i>Vadose Zone Journal</i> , 2018 , 17, 160099	2.7	6
516	Vegetation Optical Depth and Soil Moisture Retrieved from L-Band Radiometry over the Growth Cycle of a Winter Wheat. <i>Remote Sensing</i> , 2018 , 10, 1637	5	13
515	Numerical and Experimental Investigations of Cesium and Strontium Sorption and Transport in Agricultural Soils. <i>Vadose Zone Journal</i> , 2018 , 17, 170126	2.7	6
514	Simulating Flood-Induced Riverbed Transience Using Unmanned Aerial Vehicles, Physically Based Hydrological Modeling, and the Ensemble Kalman Filter. <i>Water Resources Research</i> , 2018 , 54, 9342-9363	5.4	19
513	Joint editorial: Invigorating hydrological research through journal publications. <i>Hydrology and Earth System Sciences</i> , 2018 , 22, 5735-5739	5.5	2
512	Monitoring Hydrological Processes for Land and Water Resources Management in a Mediterranean Ecosystem: The Alento River Catchment Observatory. <i>Vadose Zone Journal</i> , 2018 , 17, 180042	2.7	20
511	Field evaluation of broadband spectral electrical imaging for soil and aquifer characterization. <i>Journal of Applied Geophysics</i> , 2018 , 159, 484-496	1.7	8
510	Invigorating Hydrological Research through Journal Publications. <i>Journal of Hydrometeorology</i> , 2018 , 19, 1713-1719	3.7	
509	Characterizing Redox Potential Effects on Greenhouse Gas Emissions Induced by Water-Level Changes. <i>Vadose Zone Journal</i> , 2018 , 17, 170152	2.7	10
508	Steering operational synergies in terrestrial observation networks: opportunity for advancing Earth system dynamics modelling. <i>Earth System Dynamics</i> , 2018 , 9, 593-609	4.8	23
507	Investigation of Kinetic Isotopic Fractionation of Water During Bare Soil Evaporation. <i>Water Resources Research</i> , 2018 , 54, 6909-6928	5.4	15
506	Inverse Estimation of Soil Hydraulic and Transport Parameters of Layered Soils from Water Stable Isotope and Lysimeter Data. <i>Vadose Zone Journal</i> , 2018 , 17, 170168	2.7	33
505	The TERENO-Rur Hydrological Observatory: A Multiscale Multi-Compartment Research Platform for the Advancement of Hydrological Science. <i>Vadose Zone Journal</i> , 2018 , 17, 180055	2.7	48

504	Passive L-Band Microwave Remote Sensing of Organic Soil Surface Layers: A Tower-Based Experiment. <i>Remote Sensing</i> , 2018 , 10, 304	5	18
503	Simultaneous multi-channel GPR measurements for soil characterization 2018 ,		3
502	Joint Editorial: Invigorating Hydrological Research through Journal Publications. <i>Vadose Zone Journal</i> , 2018 , 17, 180001ed	2.7	
501	Evaluation and uncertainty analysis of regional-scale CLM4.5 net carbon flux estimates. <i>Biogeosciences</i> , 2018 , 15, 187-208	4.6	13
500	Determining dew and hoar frost formation for a low mountain range and alpine grassland site by weighable lysimeter. <i>Journal of Hydrology</i> , 2018 , 563, 372-381	6	31
499	No effect of digestate amendment on Cs-137 and Sr-90 translocation in lysimeter experiments. <i>Chemosphere</i> , 2017 , 172, 310-315	8.4	3
498	Stimulation of N ₂ O emission by manure application to agricultural soils may largely offset carbon benefits: a global meta-analysis. <i>Global Change Biology</i> , 2017 , 23, 4068-4083	11.4	135
497	A Three-Dimensional View on Soil Biogeochemistry: A Dataset for a Forested Headwater Catchment. <i>Journal of Environmental Quality</i> , 2017 , 46, 210-218	3.4	15
496	High resolution modelling of soil moisture patterns with TerrSysMP: A comparison with sensor network data. <i>Journal of Hydrology</i> , 2017 , 547, 309-331	6	14
495	N ₂ O and NO _x emissions by reactions of nitrite with soil organic matter of a Norway spruce forest. <i>Biogeochemistry</i> , 2017 , 132, 325-342	3.8	26
494	High resolution aquifer characterization using crosshole GPR full-waveform tomography: Comparison with direct-push and tracer test data. <i>Water Resources Research</i> , 2017 , 53, 49-72	5.4	27
493	Interactive effects of MnO ₂ , organic matter and pH on abiotic formation of NO from hydroxylamine in artificial soil mixtures. <i>Scientific Reports</i> , 2017 , 7, 39590	4.9	16
492	Towards an unbiased filter routine to determine precipitation and evapotranspiration from high precision lysimeter measurements. <i>Journal of Hydrology</i> , 2017 , 549, 731-740	6	25
491	Integrating hydrological modelling, data assimilation and cloud computing for real-time management of water resources. <i>Environmental Modelling and Software</i> , 2017 , 93, 418-435	5.2	33
490	Catchment tomography - An approach for spatial parameter estimation. <i>Advances in Water Resources</i> , 2017 , 107, 147-159	4.7	4
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