Nick van de Giesen

List of Publications by Year
in descending order

Version: 2024-02-01

227	10,514	38742 50	43889 91
papers	citations	h-index	g-index

307	307	307	10759
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Hyperresolution global land surface modeling: Meeting a grand challenge for monitoring Earth's terrestrial water. Water Resources Research, 2011, 47, .	4.2	634
2	Distributed fiber-optic temperature sensing for hydrologic systems. Water Resources Research, 2006, 42, .	4.2	472
3	Global Soil Moisture Patterns Observed by Space Borne Microwave Radiometers and Scatterometers. Surveys in Geophysics, 2008, 29, 399-420.	4.6	311
4	Earth's surface water change over the past 30 years. Nature Climate Change, 2016, 6, 810-813.	18.8	301
5	Hyper-resolution global hydrological modelling: what is next?. Hydrological Processes, 2015, 29, 310-320.	2.6	280
6	Homogenization of the terrestrial water cycle. Nature Geoscience, 2020, 13, 656-658.	12.9	242
7	Fiber optics opens window on stream dynamics. Geophysical Research Letters, 2006, 33, .	4.0	227
8	Calibrating Single-Ended Fiber-Optic Raman Spectra Distributed Temperature Sensing Data. Sensors, 2011, 11, 10859-10879.	3.8	205
9	Effects of charcoal production on soil physical properties in Ghana. Journal of Plant Nutrition and Soil Science, 2008, 171, 591-596.	1.9	199
10	Effects of charcoal production on maize yield, chemical properties and texture of soil. Biology and Fertility of Soils, 2004, 39, 295-299.	4.3	198
11	Spatial and temporal variability of rainfall and their effects on hydrological response in urban areas â€“ a review. Hydrology and Earth System Sciences, 2017, 21, 3859-3878.	4.9	192
12	A distributed stream temperature model using high resolution temperature observations. Hydrology and Earth System Sciences, 2007, 11, 1469-1480.	4.9	184
13	Estimation of small reservoir storage capacities in a semi-arid environment. Physics and Chemistry of the Earth, 2005, 30, 448-454.	2.9	173
14	Feasibility of soil moisture monitoring with heated fiber optics. Water Resources Research, 2010, 46, .	4.2	173
15	Double-Ended Calibration of Fiber-Optic Raman Spectra Distributed Temperature Sensing Data. Sensors, 2012, 12, 5471-5485.	3.8	167
16	Organic pollution of rivers: Combined threats of urbanization, livestock farming and global climate change. Scientific Reports, 2017, 7, 43289.	3.3	167
17	Measurements and Observations in the XXI century (MOXXI): innovation and multi-disciplinarity to sense the hydrological cycle. Hydrological Sciences Journal, 2018, 63, 169-196.	2.6	151
18	A 30 m Resolution Surface Water Mask Including Estimation of Positional and Thematic Differences Using Landsat 8, SRTM and OpenStreetMap: A Case Study in the Murray-Darling Basin, Australia. Remote Sensing, 2016, 8, 386.	4.0	140

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19	Hydroclimatology of the Volta River Basin in West Africa: Trends and variability from 1901 to 2002. Physics and Chemistry of the Earth, 2006, 31, 1180-1188.	2.9	136
20	Scale effects of Hortonian overland flow and rainfall-runoff dynamics in a West African catena landscape. Hydrological Processes, 2000, 14, 165-175.	2.6	133
21	Feasibility of soil moisture estimation using passive distributed temperature sensing. Water Resources Research, 2010, 46, .	4.2	130
22	Model complexity control for hydrologic prediction. Water Resources Research, 2008, 44, .	4.2	120
23	The International Soil Moisture Network: serving Earth system science for over a decade. Hydrology and Earth System Sciences, 2021, 25, 5749-5804.	4.9	116
24	Systematic high-resolution assessment of global hydropower potential. PLoS ONE, 2017, 12, e0171844.	2.5	111
25	Floods and flood management in Pakistan. Physics and Chemistry of the Earth, 2012, 47-48, 11-20.	2.9	109
26	The Transâ€African Hydroâ€Meteorological Observatory (<scp>TAHMO</scp>). Wiley Interdisciplinary Reviews: Water, 2014, 1, 341-348.	6.5	102
27	An empirical malaria distribution map for West Africa. Tropical Medicine and International Health, 2001, 6, 779-786.	2.3	100
28	Why hydrological predictions should be evaluated using information theory. Hydrology and Earth System Sciences, 2010, 14, 2545-2558.	4.9	99
29	On the sensitivity of urban hydrodynamic modelling to rainfall spatial and temporal resolution. Hydrology and Earth System Sciences, 2015, 19, 691-709.	4.9	96
30	Validation of IMERG Precipitation in Africa. Journal of Hydrometeorology, 2017, 18, 2817-2825.	1.9	95
31	Scenario development for water resource planning and management: A review. Technological Forecasting and Social Change, 2013, 80, 749-761.	11.6	86
32	Do green roofs cool the air?. Building and Environment, 2017, 111, 249-255.	6.9	84
33	Scale effects of Hortonian overland flow and rainfall-runoff dynamics: laboratory validation of a process-based model. Earth Surface Processes and Landforms, 2002, 27, 847-855.	2.5	82
34	Introduction to special section on Uncertainty Assessment in Surface and Subsurface Hydrology: An overview of issues and challenges. Water Resources Research, 2009, 45, .	4.2	80
35	Heated Optical Fiber for Distributed Soilâ€Moisture Measurements: A Lysimeter Experiment. Vadose Zone Journal, 2012, 11, vzj2011.0199.	2.2	77
36	A new bankruptcy method for conflict resolution in water resources allocation. Journal of Environmental Management, 2014, 144, 152-159.	7.8	74

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37	Soilâ€“landscape delineation to define spatial sampling domains for hillslope hydrology. Journal of Hydrology, 2004, 295, 28-46.	5.4	70
38	GlobWat â€“ a global water balance model to assess water use in irrigated agriculture. Hydrology and Earth System Sciences, 2015, 19, 3829-3844.	4.9	70
39	Kullbackâ€“Leibler Divergence as a Forecast Skill Score with Classic Reliabilityâ€“Resolutionâ€“Uncertainty Decomposition. Monthly Weather Review, 2010, 138, 3387-3399.	1.4	67
40	Locating illicit connections in storm water sewers using fiber-optic distributed temperature sensing. Water Research, 2009, 43, 5187-5197.	11.3	66
41	Short-term optimal operation of water systems using ensemble forecasts. Advances in Water Resources, 2014, 71, 200-208.	3.8	66
42	Mapping variability of soil water content and flux across 1â€“1000 m scales using the <scp>A</scp>ctively <scp>H</scp>eated <scp>F</scp>iber <scp>O</scp>ptic method. Water Resources Research, 2014, 50, 7302-7317.	4.2	65
43	Using Diurnal Variation in Backscatter to Detect Vegetation Water Stress. IEEE Transactions on Geoscience and Remote Sensing, 2012, 50, 2618-2629.	6.3	62
44	Spatial Distribution of Groundwater Production and Development Potential in the Volta River basin of Ghana and Burkina Faso. Water International, 2005, 30, 239-249.	1.0	61
45	Identification of stakeholder perspectives on future flood management in the Rhine basin using Q methodology. Hydrology and Earth System Sciences, 2008, 12, 1097-1109.	4.9	61
46	Impact of Diurnal Variation in Vegetation Water Content on Radar Backscatter From Maize During Water Stress. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 3855-3869.	6.3	61
47	Comparison of Rainfall Products over Sub-Saharan Africa. Journal of Hydrometeorology, 2020, 21, 553-596.	1.9	61
48	Delineation of small reservoirs using radar imagery in a semi-arid environment: A case study in the upper east region of Ghana. Physics and Chemistry of the Earth, 2009, 34, 309-315.	2.9	59
49	Urban River Water Level Increase Through Plastic Waste Accumulation at a Rack Structure. Frontiers in Earth Science, 2020, 8, .	1.8	59
50	Corruption of accuracy and efficiency of Markov chain Monte Carlo simulation by inaccurate numerical implementation of conceptual hydrologic models. Water Resources Research, 2010, 46, .	4.2	58
51	Assessment of Gravity Recovery and Climate Experiment (GRACE) temporal signature over the upper Zambezi. Water Resources Research, 2006, 42, .	4.2	53
52	Performance of ERA5 data in retrieving Precipitable Water Vapour over East African tropical region. Advances in Space Research, 2020, 65, 1877-1893.	2.6	51
53	Weighted Bankruptcy Rules and Transboundary Water Resources Allocation. Water Resources Management, 2015, 29, 2303-2321.	3.9	49
54	Scale effects on water use and water productivity in a rice-based irrigation system (UPRIIS) in the Philippines. Agricultural Water Management, 2007, 92, 81-89.	5.6	48

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55	Suitability of 17 gridded rainfall and temperature datasets for large-scale hydrological modelling in West Africa. Hydrology and Earth System Sciences, 2020, 24, 5379-5406.	4.9	48
56	A particle batch smoother for soil moisture estimation using soil temperature observations. Advances in Water Resources, 2015, 83, 111-122.	3.8	47
57	Determining watershed response in data poor environments with remotely sensed small reservoirs as runoff gauges. Water Resources Research, 2009, 45, .	4.2	46
58	Fiber optic distributed temperature sensing for the determination of air temperature. Atmospheric Measurement Techniques, 2015, 8, 335-339.	3.1	45
59	Monthly streamflow prediction in the Volta Basin of West Africa: A SISO NARMAX polynomial modelling. Physics and Chemistry of the Earth, 2008, 33, 141-150.	2.9	44
60	The relationship between Anopheles gambiae density and rice cultivation in the savannah zone and forest zone of Cote d'Ivoire. Tropical Medicine and International Health, 2003, 8, 439-448.	2.3	43
61	Effects of sand storage dams on groundwater levels with examples from Kenya. Physics and Chemistry of the Earth, 2008, 33, 56-66.	2.9	42
62	On the study of control effectiveness and computational efficiency of reduced Saint-Venant model in model predictive control of open channel flow. Advances in Water Resources, 2011, 34, 282-290.	3.8	42
63	Increased biofuel production in the coming decade: to what extent will it affect global freshwater resources?. Irrigation and Drainage, 2009, 58, S148.	1.7	40
64	Monitoring land subsidence in Yangon, Myanmar using Sentinel-1 persistent scatterer interferometry and assessment of driving mechanisms. Remote Sensing of Environment, 2018, 217, 101-110.	11.0	40
65	Water use and productivity of two small reservoir irrigation schemes in Ghana's upper east region. Irrigation and Drainage, 2008, 57, 151-163.	1.7	39
66	Scale effects in Hortonian surface runoff on agricultural slopes in West Africa: Field data and models. Agriculture, Ecosystems and Environment, 2011, 142, 95-101.	5.3	39
67	Alternative water management options to reduce vulnerability for climate change in the Netherlands. Natural Hazards, 2009, 51, 407-422.	3.4	38
68	Measuring Tree Properties and Responses Using Low-Cost Accelerometers. Sensors, 2017, 17, 1098.	3.8	38
69	Deduction of reservoir operating rules for application in global hydrological models. Hydrology and Earth System Sciences, 2018, 22, 831-851.	4.9	38
70	Scatterometer-Derived Soil Moisture Calibrated for Soil Texture With a One-Dimensional Water-Flow Model. IEEE Transactions on Geoscience and Remote Sensing, 2008, 46, 4041-4049.	6.3	37
71	Diurnal Differences in Global ERS Scatterometer Backscatter Observations of the Land Surface. IEEE Transactions on Geoscience and Remote Sensing, 2012, 50, 2595-2602.	6.3	37
72	Efficient multi-scenario Model Predictive Control for water resources management with ensemble streamflow forecasts. Advances in Water Resources, 2017, 109, 58-68.	3.8	37

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73	The hydrology of inland valleys in the sub-humid zone of West Africa: rainfall-runoff processes in the M'bÃ© experimental watershed. Hydrological Processes, 2003, 17, 1213-1225.	2.6	36
74	Surface Fluxes and Characteristics of Drying Semi-Arid Terrain in West Africa. Boundary-Layer Meteorology, 2006, 118, 583-612.	2.3	36
75	Identification of resonance waves in open water channels. Control Engineering Practice, 2010, 18, 863-872.	5.5	36
76	Remotely Sensed Monitoring of Small Reservoir Dynamics: A Bayesian Approach. Remote Sensing, 2014, 6, 1191-1210.	4.0	36
77	Evaluating the Infiltration Performance of Eight Dutch Permeable Pavements Using a New Full-Scale Infiltration Testing Method. Water (Switzerland), 2014, 6, 2070-2083.	2.7	36
78	Measuring heat balance residual at lake surface using Distributed Temperature Sensing. Limnology and Oceanography: Methods, 2013, 11, 79-90.	2.0	35
79	The Influence of Rainfall and Catchment Critical Scales on Urban Hydrological Response Sensitivity. Water Resources Research, 2019, 55, 3375-3390.	4.2	35
80	A Critical Review of Flood Risk Management and the Selection of Suitable Measures. Applied Sciences (Switzerland), 2020, 10, 8752.	2.5	34
81	Advancing ecohydrology in the 21st century: A convergence of opportunities. Ecohydrology, 2020, 13, e2208.	2.4	34
82	Tillage and surface moisture effects on bare-soil albedo of a tropical loamy sand. Soil and Tillage Research, 2006, 85, 107-114.	5.6	33
83	Transient flow to open drains: Comparison of linearized solutions with and without the Dupuit assumption. Water Resources Research, 1994, 30, 3033-3039.	4.2	32
84	Surface runoff scale effects in West African watersheds: modeling and management options. Agricultural Water Management, 2005, 72, 109-130.	5.6	32
85	Determining soil moisture and soil properties in vegetated areas by assimilating soil temperatures. Water Resources Research, 2016, 52, 4280-4300.	4.2	32
86	Mapping Surface Heat Fluxes by Assimilating SMAP Soil Moisture and GOES Land Surface Temperature Data. Water Resources Research, 2017, 53, 10858-10877.	4.2	32
87	Tree rainfall interception measured by stem compression. Water Resources Research, 2008, 44, .	4.2	31
88	Suitability and Limitations of ENVISAT ASAR for Monitoring Small Reservoirs in a Semiarid Area. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 1536-1547.	6.3	31
89	De Saint-Venant equations-based model assessment in model predictive control of open channel flow. Advances in Water Resources, 2012, 49, 37-45.	3.8	31
90	Observed Soil Moistureâ€“Precipitation Feedback in Illinois: A Systematic Analysis over Different Scales. Journal of Hydrometeorology, 2016, 17, 1645-1660.	1.9	31

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91	Using a spatio-temporal dynamic state-space model with the EM algorithm to patch gaps in daily riverflow series. Hydrology and Earth System Sciences, 2005, 9, 209-224.	4.9	29
92	Energy partitioning over the West African savanna: Multi-year evaporation and surface conductance measurements in Eastern Burkina Faso. Journal of Hydrology, 2007, 334, 545-559.	5.4	29
93	Application of the Ordered Weighted Averaging (OWA) method to the Caspian Sea conflict. Stochastic Environmental Research and Risk Assessment, 2014, 28, 1359.	4.0	29
94	The closed city as a strategy to reduce vulnerability of urban areas for climate change. Water Science and Technology, 2007, 56, 165-173.	2.5	28
95	Accounting for Observational Uncertainty in Forecast Verification: An Information-Theoretical View on Forecasts, Observations, and Truth. Monthly Weather Review, 2011, 139, 2156-2162.	1.4	28
96	Citizen science flow â€“ an assessment of simple streamflow measurement methods. Hydrology and Earth System Sciences, 2019, 23, 1045-1065.	4.9	28
97	Soda Bottle Scienceâ€”Citizen Science Monsoon Precipitation Monitoring in Nepal. Frontiers in Earth Science, 2019, 7, .	1.8	28
98	High Quality Zenith Tropospheric Delay Estimation Using a Low-Cost Dual-Frequency Receiver and Relative Antenna Calibration. Remote Sensing, 2020, 12, 1393.	4.0	28
99	An Engineering Perspective of Water Sharing Issues in Pakistan. Water (Switzerland), 2020, 12, 477.	2.7	28
100	The GLOWA Volta Project: A framework for water resources decision-making and scientific capacity building in a transnational West African Basin. Water Resources Management, 2007, 21, 295-313.	3.9	27
101	Evaporation mapping at two scales using optical imagery in the White Volta Basin, Upper East Ghana. Physics and Chemistry of the Earth, 2008, 33, 127-140.	2.9	27
102	Shade estimation over streams using distributed temperature sensing. Water Resources Research, 2011, 47, .	4.2	27
103	Measurement and modelling of transpiration of a rain-fed citrus orchard under subhumid tropical conditions. Agricultural Water Management, 2007, 87, 200-208.	5.6	26
104	Reply to comment by Keith J. Beven and Hannah L. Cloke on â€œHyperresolution global land surface modeling: Meeting a grand challenge for monitoring Earth's terrestrial waterâ€• Water Resources Research, 2012, 48, .	4.2	26
105	The Influence of a Eutrophic Lake to the River Downstream: Spatiotemporal Algal Composition Changes and the Driving Factors. Water (Switzerland), 2015, 7, 2184-2201.	2.7	26
106	Estimating surface turbulent heat fluxes from land surface temperature and soil moisture observations using the particle batch smoother. Water Resources Research, 2016, 52, 9086-9108.	4.2	26
107	Towards Underwater Macroplastic Monitoring Using Echo Sounding. Frontiers in Earth Science, 2021, 9, .	1.8	26
108	Short- and long-time behavior of aquifer drainage after slow and sudden recharge according to the linearized Laplace equation. Advances in Water Resources, 2005, 28, 1122-1132.	3.8	25

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109	Designing and evaluating control systems of the Dez main canal. Irrigation and Drainage, 2011, 60, 70-79.	1.7	25
110	Model reduction in model predictive control of combined water quantity and quality in open channels. Environmental Modelling and Software, 2013, 42, 72-87.	4.5	25
111	Determining soil moisture by assimilating soil temperature measurements using the Ensemble Kalman Filter. Advances in Water Resources, 2015, 86, 340-353.	3.8	25
112	Can urban pluvial flooding be predicted by open spatial data and weather data?. Environmental Modelling and Software, 2016, 85, 156-171.	4.5	25
113	Water stress detection in the Amazon using radar. Geophysical Research Letters, 2017, 44, 6841-6849.	4.0	25
114	Potential of Cost-Efficient Single Frequency GNSS Receivers for Water Vapor Monitoring. Remote Sensing, 2018, 10, 1493.	4.0	25
115	Critical rainfall thresholds for urban pluvial flooding inferred from citizen observations. Science of the Total Environment, 2019, 689, 258-268.	8.0	25
116	A numerical model for simulating Hortonian overland flow on tropical hillslopes with vegetation elements. Hydrological Processes, 2008, 22, 1107-1118.	2.6	24
117	Learning from Collaborative Research in Water Management Practice. Water Resources Management, 2012, 26, 3251-3266.	3.9	24
118	Stormwater Quality Characteristics in (Dutch) Urban Areas and Performance of Settlement Basins. Challenges, 2014, 5, 112-122.	1.7	24
119	Comment on â€œCapabilities and limitations of tracing spatial temperature patterns by fiberâ€optic distributed temperature sensingâ€•by Liliana Rose et al.. Water Resources Research, 2014, 50, 5372-5374.	4.2	24
120	Operational flood control of a low-lying delta system using large time step Model Predictive Control. Advances in Water Resources, 2015, 75, 1-13.	3.8	24
121	Quantifying the connectionsâ€”linkages between land-use and water in the Kathmandu Valley, Nepal. Environmental Monitoring and Assessment, 2018, 190, 304.	2.7	24
122	Tree structure generation from ensemble forecasts for real time control. Hydrological Processes, 2013, 27, 75-82.	2.6	22
123	Investigation of Temperature Dynamics in Small and Shallow Reservoirs, Case Study: Lake Binaba, Upper East Region of Ghana. Water (Switzerland), 2016, 8, 84.	2.7	22
124	Estimating soil moisture and soil thermal and hydraulic properties by assimilating soil temperatures using a particle batch smoother. Advances in Water Resources, 2016, 91, 104-116.	3.8	22
125	Dielectric Response of Corn Leaves to Water Stress. IEEE Geoscience and Remote Sensing Letters, 2017, 14, 8-12.	3.1	22
126	Productivity of irrigation technologies in the White Volta basin. Physics and Chemistry of the Earth, 2010, 35, 706-716.	2.9	20

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127	HydroZIP: How Hydrological Knowledge can Be Used to Improve Compression of Hydrological Data. Entropy, 2013, 15, 1289-1310.	2.2	20
128	Development of a riskâ€based framework to integrate flood insurance. Journal of Flood Risk Management, 2014, 7, 291-307.	3.3	20
129	Predictive Control for National Water Flow Optimization in The Netherlands. , 2010, , 439-461.		20
130	Data compression to define information content of hydrological time series. Hydrology and Earth System Sciences, 2013, 17, 3171-3187.	4.9	19
131	Determining water reservoir characteristics with global elevation data. Geophysical Research Letters, 2016, 43, 11,278.	4.0	19
132	Continuity vs. the Crowdâ€"Tradeoffs Between Continuous and Intermittent Citizen Hydrology Streamflow Observations. Environmental Management, 2017, 60, 12-29.	2.7	19
133	Multi-Objective Model Predictive Control for Real-Time Operation of a Multi-Reservoir System. Water (Switzerland), 2020, 12, 1898.	2.7	19
134	The GLOWA Volta project: Integrated assessment of feedback mechanisms between climate, landuse, and hydrology. Advances in Global Change Research, 2002, , 151-170.	1.6	19
135	Crop growth and development effects on surface albedo for maize and cowpea fields in Ghana, West Africa. International Journal of Biometeorology, 2004, 49, 106-112.	3.0	18
136	Nighttime Cooling of an Urban Pond. Frontiers in Earth Science, 2019, 7, .	1.8	18
137	Real-time control of combined surface water quantity and quality: polder flushing. Water Science and Technology, 2010, 61, 869-878.	2.5	17
138	Spatial Distribution of Flood Incidents Along Urban Overland Flow-Paths. Water Resources Management, 2015, 29, 3387-3399.	3.9	17
139	Participation: Rhetoric and Reality. The Importance of Understanding Stakeholders Based on a Case Study in Upper East Ghana. International Journal of Water Resources Development, 2006, 22, 561-573.	2.0	16
140	Understanding Heat Transfer in the Shallow Subsurface Using Temperature Observations. Vadose Zone Journal, 2010, 9, 1034-1045.	2.2	16
141	Practical considerations for enhanced-resolution coil-wrapped distributed temperature sensing. Geoscientific Instrumentation, Methods and Data Systems, 2016, 5, 151-162.	1.6	16
142	Mapping highâ€resolution soil moisture and properties using distributed temperature sensing data and an adaptive particle batch smoother. Water Resources Research, 2016, 52, 7690-7710.	4.2	16
143	WEST AFRICA: VOLTA DISCHARGE DATA QUALITY ASSESSMENT AND USE. Journal of the American Water Resources Association, 2006, 42, 1113-1126.	2.4	15
144	Stormflow generation in two headwater catchments in eastern Amazonia, Brazil. Hydrological Processes, 2008, 22, 3285-3293.	2.6	15

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145	Highly parameterized inversion of groundwater reactive transport for a complex field site. Journal of Contaminant Hydrology, 2015, 173, 38-58.	3.3	15
146	A Shazam-like Household Water Leakage Detection Method. Procedia Engineering, 2017, 186, 452-459.	1.2	15
147	Critical scales to explain urban hydrological response: an application in Cranbrook, London. Hydrology and Earth System Sciences, 2018, 22, 2425-2447.	4.9	15
148	Variability and accuracy of Zenith Total Delay over the East African tropical region. Advances in Space Research, 2019, 64, 900-920.	2.6	15
149	Hydrotope-Based Protocol to Determine Average Soil Moisture Over Large Areas for Satellite Calibration and Validation With Results From an Observation Campaign in the Volta Basin, West Africa. IEEE Transactions on Geoscience and Remote Sensing, 2008, 46, 1995-2004.	6.3	14
150	Enhanced potential ecological risk induced by a large scale water diversion project. Stochastic Environmental Research and Risk Assessment, 2020, 34, 2125-2138.	4.0	14
151	Revisiting wind speed measurements using actively heated fiber optics: a wind tunnel study. Atmospheric Measurement Techniques, 2020, 13, 5423-5439.	3.1	14
152	A flume design for the study of slope length effects on runoff. Earth Surface Processes and Landforms, 2001, 26, 647-655.	2.5	13
153	Water flux measurement and prediction in young cashew trees using sap flow data. Hydrological Processes, 2005, 19, 3235-3248.	2.6	13
154	Carbon monoxide as a tracer of gas transport in snow and other natural porous media. Geophysical Research Letters, 2012, 39, .	4.0	13
155	The influence of hard substratum reflection and calibration profiles on in situ fluorescence measurements of benthic microalgal biomass. Environmental Sciences: Processes and Impacts, 2013, 15, 783.	3.5	13
156	Floodplain wetland mapping in the White Volta River Basin of Ghana. GIScience and Remote Sensing, 2015, 52, 374-395.	5.9	13
157	The Impacts of Heating Strategy on Soil Moisture Estimation Using Actively Heated Fiber Optics. Sensors, 2017, 17, 2102.	3.8	13
158	A comparison between leaf dielectric properties of stressed and unstressed tomato plants. , 2015, , .		12
159	Comment on â€œMost computational hydrology is not reproducible, so is it really science?â€• by Christopher Hutton et al.: Let hydrologists learn the latest computer science by working with Research Software Engineers (RSEs) and not reinvent the waterwheel ourselves. Water Resources Research, 2017, 53, 4524-4526.	4.2	12
160	Peak grain forecasts for the US High Plains amid withering waters. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 26145-26150.	7.1	12
161	Threeâ€dimensional dense distributed temperature sensing for measuring layered thermohaline systems. Water Resources Research, 2016, 52, 6656-6670.	4.2	11
162	A Low-Cost Water Quality Monitoring System for the Ayeyarwady River in Myanmar Using a Participatory Approach. Water (Switzerland), 2019, 11, 1984.	2.7	11

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163	The relations between farmersâ€™ land tenure security and agriculture production. An assessment in the perspective of smallholder farmers in Rwanda. Land Use Policy, 2022, 118, 106122.	5.6	11
164	Seasonal forecast of cooling water problems in the River Rhine. Hydrological Processes, 2008, 22, 1037-1045.	2.6	10
165	Use of isotopes to study floodplain wetland and river flow interaction in the White Volta River basin, Ghana. Isotopes in Environmental and Health Studies, 2010, 46, 91-106.	1.0	10
166	Removal efficiency of storm water treatment techniques: standardized full scale laboratory testing. Urban Water Journal, 2017, 14, 255-262.	2.1	10
167	Effects of atmospheric stability conditions on heat fluxes from small water surfaces in (semi-)arid regions. Hydrological Sciences Journal, 2017, 62, 1422-1439.	2.6	10
168	A Field Calibration Solution to Achieve High-Grade-Level Performance for Low-Cost Dual-Frequency GNSS Receiver and Antennas. Sensors, 2022, 22, 2267.	3.8	10
169	Water Flux in a Cashew Orchard during a Wet-to-Dry Transition Period: Analysis of Sap Flow and Eddy Correlation Measurements. Earth Interactions, 2004, 8, 1-17.	1.5	9
170	Hydrological parameterization through remote sensing in Volta Basin, West Africa. International Journal of River Basin Management, 2007, 5, 49-56.	2.7	9
171	An information-theoretical perspective on weighted ensemble forecasts. Journal of Hydrology, 2013, 498, 177-190.	5.4	9
172	Interactive Water Services: The WATERNOMICS Approach. Procedia Engineering, 2014, 89, 1058-1065.	1.2	9
173	Reduction of Used Memory Ensemble Kalman Filtering (RumEnKF): A data assimilation scheme for memory intensive, high performance computing. Advances in Water Resources, 2015, 86, 273-283.	3.8	9
174	Global impacts of the meat trade on in-stream organic river pollution: the importance of spatially distributed hydrological conditions. Environmental Research Letters, 2018, 13, 014013.	5.2	9
175	Ideas and perspectives: Treeâ€“atmosphere interaction responds to water-related stem variations. Biogeosciences, 2018, 15, 6439-6449.	3.3	9
176	Skin Effect of Fresh Water Measured Using Distributed Temperature Sensing. Water (Switzerland), 2018, 10, 214.	2.7	9
177	Human activities have changed the shapes of river deltas. Nature, 2020, 577, 473-474.	27.8	9
178	Mapping energy balance fluxes and root zone soil moisture in the White Volta Basin using optical imagery. , 2006, 6239, 238.		8
179	Uchimizu: A Cool(ing) Tradition to Locally Decrease Air Temperature. Water (Switzerland), 2018, 10, 741.	2.7	8
180	A Greedy Algorithm for Optimal Sensor Placement to Estimate Salinity in Polder Networks. Water (Switzerland), 2019, 11, 1101.	2.7	8

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181	The eWaterCycle platform for open and FAIR hydrological collaboration. Geoscientific Model Development, 2022, 15, 5371-5390.	3.6	8
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