Theresa Blume

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8978599/publications.pdf

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58	3,430	159358	149479
papers	citations	30 h-index	56 g-index

93	93	93	4394
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A decade of Predictions in Ungauged Basins (PUB)â€"a review. Hydrological Sciences Journal, 2013, 58, 1198-1255.	1.2	821
2	Twenty-three unsolved problems in hydrology (UPH) â€“ a community perspective. Hydrological Sciences Journal, 2019, 64, 1141-1158.	1.2	474
3	Rainfallâ€"runoff response, event-based runoff coefficients and hydrograph separation. Hydrological Sciences Journal, 2007, 52, 843-862.	1.2	202
4	Measurements and Observations in the XXI century (MOXXI): innovation and multi-disciplinarity to sense the hydrological cycle. Hydrological Sciences Journal, 2018, 63, 169-196.	1.2	151
5	Travel times in the vadose zone: Variability in space and time. Water Resources Research, 2016, 52, 5727-5754.	1.7	103
6	Investigating patterns and controls of groundwater up-welling in a lowland river by combining Fibre-optic Distributed Temperature Sensing with observations of vertical hydraulic gradients. Hydrology and Earth System Sciences, 2012, 16, 1775-1792.	1.9	88
7	The principle of â€˜maximum energy dissipationâ€™: a novel thermodynamic perspective on rapid water flow in connected soil structures. Philosophical Transactions of the Royal Society B: Biological Sciences, 2010, 365, 1377-1386.	1.8	82
8	Estimating flow and transport parameters in the unsaturated zone with pore water stable isotopes. Hydrology and Earth System Sciences, 2015, 19, 2617-2635.	1.9	79
9	HESS Opinions: From response units to functional units: a thermodynamic reinterpretation of the HRU concept to link spatial organization and functioning of intermediate scale catchments. Hydrology and Earth System Sciences, 2014, 18, 4635-4655.	1.9	78
10	The value of satelliteâ€derived snow cover images for calibrating a hydrological model in snowâ€dominated catchments in Central Asia. Water Resources Research, 2014, 50, 2002-2021.	1.7	77
11	From hillslope to stream: methods to investigate subsurface connectivity. Wiley Interdisciplinary Reviews: Water, 2015, 2, 177-198.	2.8	72
12	A comparative analysis of the effectiveness of flood management measures based on the concept of "retaining water in the landscape" in different European hydro-climatic regions. Natural Hazards and Earth System Sciences, 2012, 12, 3287-3306.	1.5	66
13	Use of cosmic-ray neutron sensors for soil moisture monitoring in forests. Hydrology and Earth System Sciences, 2016, 20, 1269-1288.	1.9	58
14	Investigation of runoff generation in a pristine, poorly gauged catchment in the Chilean Andes II: Qualitative and quantitative use of tracers at three spatial scales. Hydrological Processes, 2008, 22, 3676-3688.	1.1	53
15	Upscaling lacustrine groundwater discharge rates by fiber-optic distributed temperature sensing. Water Resources Research, 2013, 49, 7929-7944.	1.7	50
16	Long-term soil moisture dynamics derived from GNSS interferometric reflectometry: a case study for Sutherland, South Africa. GPS Solutions, 2016, 20, 641-654.	2.2	49
17	Form and function in hillslope hydrology: characterization of subsurface flow based on response observations. Hydrology and Earth System Sciences, 2017, 21, 3727-3748.	1.9	47
18	A thermodynamic approach to link self-organization, preferential flow and rainfallâ€"runoff behaviour. Hydrology and Earth System Sciences, 2013, 17, 4297-4322.	1.9	46

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19	A dense network of cosmic-ray neutron sensors for soil moisture observation in a highly instrumented pre-Alpine headwater catchment in Germany. Earth System Science Data, 2020, 12, 2289-2309.	3.7	44
20	Investigation of runoff generation in a pristine, poorly gauged catchment in the Chilean Andes I: A multiâ€method experimental study. Hydrological Processes, 2008, 22, 3661-3675.	1.1	43
21	Spatio-temporal relevance and controls of preferential flow at the landscape scale. Hydrology and Earth System Sciences, 2019, 23, 4869-4889.	1.9	41
22	Form and function in hillslope hydrology: in situ imaging and characterization of flow-relevant structures. Hydrology and Earth System Sciences, 2017, 21, 3749-3775.	1.9	39
23	Stream solute tracer timescales changing with discharge and reach length confound process interpretation. Water Resources Research, 2016, 52, 3227-3245.	1.7	37
24	Permeability Changes in Layered Sediments: Impact of Particle Release. Ground Water, 2002, 40, 466-474.	0.7	36
25	Interstitial poreâ€water temperature dynamics across a poolâ€riffleâ€pool sequence. Ecohydrology, 2011, 4, 549-563.	1.1	36
26	Predicting event response in a nested catchment with generalized linear models and a distributed watershed model. Hydrological Processes, 2012, 26, 3749-3769.	1.1	34
27	Dominant controls of transpiration along a hillslope transect inferred from ecohydrological measurements and thermodynamic limits. Hydrology and Earth System Sciences, 2016, 20, 2063-2083.	1.9	33
28	COSMOS-Europe: a European network of cosmic-ray neutron soil moisture sensors. Earth System Science Data, 2022, 14, 1125-1151.	3.7	33
29	Tree-, stand- and site-specific controls on landscape-scale patterns of transpiration. Hydrology and Earth System Sciences, 2018, 22, 13-30.	1.9	32
30	On the critical salt concentrations for particle detachment in homogeneous sand and heterogeneous Hanford sediments. Geoderma, 2005, 124, 121-132.	2.3	30
31	Interdisciplinary Geoâ€ecological Research across Time Scales in the Northeast German Lowland Observatory (TERENOâ€NE). Vadose Zone Journal, 2018, 17, 1-25.	1.3	29
32	Monitoring ephemeral, intermittent and perennial streamflow: a dataset from 182 sites in the Attert catchment, Luxembourg. Earth System Science Data, 2019, 11, 1363-1374.	3.7	27
33	Impact of seasonal variability and monitoring mode on the adequacy of fiberâ€optic distributed temperature sensing at aquiferâ€river interfaces. Water Resources Research, 2013, 49, 2408-2423.	1.7	26
34	Monitoring Snow Depth by GNSS Reflectometry in Built-up Areas: A Case Study for Wettzell, Germany. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 4809-4816.	2.3	26
35	Impact of modellers' decisions on hydrological a priori predictions. Hydrology and Earth System Sciences, 2014, 18, 2065-2085.	1.9	25
36	The role of experimental work in hydrological sciences â€“ insights from a community survey. Hydrological Sciences Journal, 0, , 1-4.	1.2	25

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37	Reducing gravity data for the influence of water storage variations beneath observatory buildings. Geophysics, 2019, 84, EN15-EN31.	1.4	22
38	How can we model subsurface stormflow at the catchment scale if we cannot measure it?. Hydrological Processes, 2019, 33, 1378-1385.	1.1	19
39	Estimates of tree root water uptake from soil moisture profile dynamics. Biogeosciences, 2020, 17, 5787-5808.	1.3	19
40	Soil moisture: variable in space but redundant in time. Hydrology and Earth System Sciences, 2020, 24, 2633-2653.	1.9	19
41	The impact of landscape evolution on soil physics: evolution of soil physical and hydraulic properties along two chronosequences of proglacial moraines. Earth System Science Data, 2020, 12, 3189-3204.	3.7	17
42	Identifying, characterizing and predicting spatial patterns of lacustrine groundwater discharge. Hydrology and Earth System Sciences, 2017, 21, 5043-5063.	1.9	14
43	Predicting probabilities of streamflow intermittency across a temperate mesoscale catchment. Hydrology and Earth System Sciences, 2020, 24, 5453-5472.	1.9	14
44	Field observations of soil hydrological flow path evolution over 10Âmillennia. Hydrology and Earth System Sciences, 2020, 24, 3271-3288.	1.9	13
45	Towards disentangling heterogeneous soil moisture patterns in cosmic-ray neutron sensor footprints. Hydrology and Earth System Sciences, 2021, 25, 6547-6566.	1.9	12
46	Does the Normalized Difference Vegetation Index explain spatial and temporal variability in sap velocity in temperate forest ecosystems?. Hydrology and Earth System Sciences, 2019, 23, 2077-2091.	1.9	11
47	Characterising hillslopeâ€“stream connectivity with a joint event analysis of stream and groundwater levels. Hydrology and Earth System Sciences, 2020, 24, 5713-5744.	1.9	11
48	Energy states of soil water â€“ a thermodynamic perspective on soil water dynamics and storage-controlled streamflow generation in different landscapes. Hydrology and Earth System Sciences, 2019, 23, 971-987.	1.9	9
49	Incentives for field hydrology and data sharing: collaboration and compensation: reply to â€œA need for incentivizing field hydrology, especially in an era of open dataâ€•. Hydrological Sciences Journal, 2018, 63, 1266-1268.	1.2	8
50	Holocene lakeâ€level evolution of Lake Tiefer See, NE Germany, caused by climate and land cover changes. Boreas, 2022, 51, 299-316.	1.2	8
51	Comparative analysis of throughfall observations in six different forest stands: Influence of seasons, rainfallâ€and stand characteristics. Hydrological Processes, 2022, 36, .	1.1	6
52	Finding behavioral parameterization for a 1-D water balance model by multi-criteria evaluation. Journal of Hydrology and Hydromechanics, 2019, 67, 213-224.	0.7	4
53	Fieldâ€Scale Subsurface Flow Processes Inferred From Continuous Gravity Monitoring During a Sprinkling Experiment. Water Resources Research, 2021, 57, e2021WR030044.	1.7	3
54	Preface: Linking landscape organisation and hydrological functioning: from hypotheses and observations to concepts, models and understanding. Hydrology and Earth System Sciences, 2021, 25, 5277-5285.	1.9	3

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55	Suspended sediment and discharge dynamics in a glaciated alpine environment: identifying crucial areas and time periods on several spatial and temporal scales in the Ã–tztal, Austria. Earth Surface Dynamics, 2022, 10, 653-669.	1.0	3
56	RelaciÃ³n de la variaciÃ³n del almacenamiento de agua local y el gravÃmetro superconductor en el Observatorio GeodÃ©sico TIGO, ConcepciÃ³n, Chile. Obras Y Proyectos, 2012, , 71-78.	0.2	2
57	Event controls on intermittent streamflow in a temperate climate. Hydrology and Earth System Sciences, 2022, 26, 2671-2696.	1.9	1
58	Why and when it is useful to publish and share inconclusive results and failures: reply to â€œReporting negative results to stimulate experimental hydrologyâ€• Hydrological Sciences Journal, 2018, 63, 1273-1274.	1.2	0