Jeffrey D Niemann

List of Publications by Year
in descending order

49 papers	1,155 citations	394421 19 h-index	395702 33 g-index
49 all docs	49 docs citations	49 times ranked	1285 citing authors

#	Article	IF	Citations
1	A Spatial Analysis of Dispersion Mechanisms in the Hydrological Response Using a Spatially Distributed Travel Time Model. Water Resources Research, 2022, 58, .	4.2	0
2	Temporal Variations of NDVI and LAI and Interactions With Hydroclimatic Variables in a Large and Agroâ€Ecologically Diverse Region. Journal of Geophysical Research G: Biogeosciences, 2022, 127, .	3.0	10
3	Using regional characteristics to improve uncalibrated estimation of rootzone soil moisture from optical/thermal remote-sensing. Remote Sensing of Environment, 2022, 273, 112982.	11.0	6
4	Wildfire Impacts on Snowpack Phenology in a Changing Climate Within the Western U.S.. Water Resources Research, 2022, 58, .	4.2	5
5	Modeling hydrologic processes associated with soil saturation and debris flow initiation during the September 2013 storm, Colorado Front Range. Landslides, 2021, 18, 1741-1759.	5.4	3
6	Identifying Runoff Production Mechanisms for Dam Safety Applications in the Colorado Front Range. Journal of Hydrologic Engineering - ASCE, 2020, 25, .	1.9	3
7	Impacts of Channel Network Type on the Unit Hydrograph. Water (Switzerland), 2020, 12, 669.	2.7	3
8	Stochastic analysis and probabilistic downscaling of soil moisture in small catchments. Journal of Hydrology, 2020, 585, 124711.	5.4	3
9	Enhanced hydrologic simulation may not improve downscaled soil moisture patterns without improved soil characterization. Soil Science Society of America Journal, 2020, 84, 672-689.	2.2	1
10	Impact of regional characteristics on the estimation of root-zone soil moisture from the evaporative index or evaporative fraction. Agricultural Water Management, 2020, 238, 106225.	5.6	10
11	A comparison of snowmeltâ€derived streamflow from temperatureâ€index and modifiedâ€temperatureâ€index snow models. Hydrological Processes, 2019, 33, 3030-3045.	2.6	12
12	On the Influence of Upstream Flow Contributions on the Basin Response Function for Hydrograph Prediction. Water Resources Research, 2019, 55, 4915-4935.	4.2	6
13	Planform geometry and relief characterization of drainage networks in high-relief environments: An analysis of Chilean Andean basins. Geomorphology, 2019, 341, 46-64.	2.6	17
14	Modeling input errors to improve uncertainty estimates for one-dimensional sediment transport models. Stochastic Environmental Research and Risk Assessment, 2018, 32, 1817-1832.	4.0	4
15	Hydrologic Downscaling of Soil Moisture Using Global Data Sets without Site-Specific Calibration. Journal of Hydrologic Engineering - ASCE, 2018, 23, .	1.9	3
16	Impacts of precipitation and potential evapotranspiration patterns on downscaling soil moisture in regions with large topographic relief. Water Resources Research, 2017, 53, 1553-1574.	4.2	20
17	AutoRAPID: A Model for Prompt Streamflow Estimation and Flood Inundation Mapping over Regional to Continental Extents. Journal of the American Water Resources Association, 2017, 53, 280-299.	2.4	41
18	Downscaling soil moisture over regions that include multiple coarse-resolution grid cells. Remote Sensing of Environment, 2017, 199, 187-200.	11.0	9

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19	Effects of woody vegetation on shallow soil moisture at a semiarid montane catchment. Ecohydrology, 2015, 8, 935-947.	2.4	12
20	Evaluation of a surface energy balance method based on optical and thermal satellite imagery to estimate rootâ€zone soil moisture. Hydrological Processes, 2015, 29, 5354-5368.	2.6	3
21	Evaluation of Parameter and Model Uncertainty in Simple Applications of a 1D Sediment Transport Model. Journal of Hydraulic Engineering, 2015, 141, .	1.5	13
22	A method to downscale soil moisture to fine resolutions using topographic, vegetation, and soil data. Advances in Water Resources, 2015, 76, 81-96.	3.8	57
23	Simulating the impacts of small convective storms and channel transmission losses on gully evolution. , 2014, , .		2
24	Assessing the impact of travel time formulations on the performance of spatially distributed travel time methods applied to hillslopes. Journal of Hydrology, 2014, 519, 1315-1327.	5.4	13
25	Evaluation of sampling techniques to characterize topographically-dependent variability for soil moisture downscaling. Journal of Hydrology, 2014, 516, 304-316.	5.4	29
26	Controls on topographic dependence and temporal instability in catchmentâ€scale soil moisture patterns. Water Resources Research, 2013, 49, 1625-1642.	4.2	40
27	An evaluation of nonlinear methods for estimating catchment-scale soil moisture patterns based on topographic attributes. Journal of Hydroinformatics, 2012, 14, 800-814.	2.4	13
28	Evaluation of an empirical orthogonal functionâ€"based method to downscale soil moisture patterns based on topographical attributes. Hydrological Processes, 2012, 26, 2696-2709.	2.6	46
29	Under what conditions do parallel river networks occur?. Geomorphology, 2011, 132, 260-271.	2.6	19
30	Impact of Shallow Groundwater on Evapotranspiration Losses from Uncultivated Land in an Irrigated River Valley. Journal of Irrigation and Drainage Engineering - ASCE, 2011, 137, 501-512.	1.0	9
31	Method for Assessing Impacts of Parameter Uncertainty in Sediment Transport Modeling Applications. Journal of Hydraulic Engineering, 2011, 137, 623-636.	1.5	20
32	Effects of gullies on spaceâ€"time patterns of soil moisture in a semiarid grassland. Journal of Hydrology, 2010, 389, 289-300.	5.4	33
33	Reconstruction of hillslope and valley paleotopography by application of a geomorphic model. Computers and Geosciences, 2009, 35, 1776-1784.	4.2	6
34	A morpho-climatic instantaneous unit hydrograph model for urban catchments based on the kinematic wave approximation. Journal of Hydrology, 2009, 377, 317-334.	5.4	41
35	How do streamflow generation mechanisms affect watershed hypsometry?. Earth Surface Processes and Landforms, 2008, 33, 751-772.	2.5	15
36	Evaluating the parameter identifiability and structural validity of a probability-distributed model for soil moisture. Journal of Hydrology, 2008, 353, 93-108.	5.4	26

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37	Identification and characterization of dendritic, parallel, pinnate, rectangular, and trellis networks based on deviations from planform selfâ€similarity. Journal of Geophysical Research, 2008, 113, .	3.3	53
38	Analysis and estimation of soil moisture at the catchment scale using EOFs. Journal of Hydrology, 2007, 334, 388-404.	5.4	98
39	Spatial patterns from EOF analysis of soil moisture at a large scale and their dependence on soil, land-use, and topographic properties. Advances in Water Resources, 2007, 30, 366-381.	3.8	87
40	An evaluation of the geomorphically effective event for fluvial processes over long periods. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	25
41	Modelling the potential impacts of groundwater hydrology on long-term drainage basin evolution. Earth Surface Processes and Landforms, 2006, 31, 1802-1823.	2.5	50
42	A comparison of experimental and natural drainage basin morphology across a range of scales. Journal of Geophysical Research, 2005, 110, n/a-n/a.	3.3	14
43	Sensitivity of regional hydrology to climate changes, with application to the Illinois River basin. Water Resources Research, 2005, 41, .	4.2	35
44	Prediction of regional water balance components based on climate, soil, and vegetation parameters, with application to the Illinois River Basin. Water Resources Research, 2004, 40, .	4.2	12
45	A physically based interpolation method for fluvially eroded topography. Water Resources Research, 2003, 39, .	4.2	9
46	Impacts of surface elevation on the growth and scaling properties of simulated river networks. Geomorphology, 2001, 40, 37-55.	2.6	35
47	A quantitative evaluation of Playfair's law and its use in testing long-term stream erosion models. Earth Surface Processes and Landforms, 2001, 26, 1317-1332.	2.5	127
48	Self-similarity and multifractality of fluvial erosion topography: 1. Mathematical conditions and physical origin. Water Resources Research, 2000, 36, 1923-1936.	4.2	33
49	Self-similarity and multifractality of fluvial erosion topography: 2. Scaling properties. Water Resources Research, 2000, 36, 1937-1951.	4.2	24