Benjamin B Mirus

List of Publications by Year in descending order

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43 papers

1,715 citations

257450 24 h-index 289244 40 g-index

58 all docs 58 docs citations

58 times ranked 1976 citing authors

#	Article	IF	Citations
1	An overview of current applications, challenges, and future trends in distributed process-based models in hydrology. Journal of Hydrology, 2016, 537, 45-60.	5.4	349
2	Firstâ€order exchange coefficient coupling for simulating surface water–groundwater interactions: parameter sensitivity and consistency with a physicsâ€based approach. Hydrological Processes, 2009, 23, 1949-1959.	2.6	96
3	How runoff begins (and ends): Characterizing hydrologic response at the catchment scale. Water Resources Research, 2013, 49, 2987-3006.	4.2	82
4	Integrating real-time subsurface hydrologic monitoring with empirical rainfall thresholds to improve landslide early warning. Landslides, 2018, 15, 1909-1919.	5.4	78
5	Simulated effect of a forest road on near-surface hydrologic response: redux. Earth Surface Processes and Landforms, 2007, 32, 126-142.	2.5	65
6	Physics-based hydrologic-response simulation: foundation for hydroecology and hydrogeomorphology. Hydrological Processes, 2006, 20, 1231-1237.	2.6	64
7	Developing Hydro-Meteorological Thresholds for Shallow Landslide Initiation and Early Warning. Water (Switzerland), 2018, 10, 1274.	2.7	63
8	Elucidating the role of vegetation in the initiation of rainfallâ€induced shallow landslides: Insights from an extreme rainfall event in the Colorado Front Range. Geophysical Research Letters, 2016, 43, 9084-9092.	4.0	62
9	Disturbance hydrology: challenges and opportunities. Hydrological Processes, 2014, 28, 5140-5148.	2.6	57
10	Landslides across the USA: occurrence, susceptibility, and data limitations. Landslides, 2020, 17, 2271-2285.	5.4	55
11	Identifying Physicsâ€Based Thresholds for Rainfallâ€Induced Landsliding. Geophysical Research Letters, 2018, 45, 9651-9661.	4.0	44
12	Assessing the Feasibility of Satelliteâ€Based Thresholds for Hydrologically Driven Landsliding. Water Resources Research, 2019, 55, 9006-9023.	4.2	44
13	Assessing the detail needed to capture rainfallâ€runoff dynamics with physicsâ€based hydrologic response simulation. Water Resources Research, 2011, 47, .	4.2	42
14	Identifying longâ€term empirical relationships between storm characteristics and episodic groundwater recharge. Water Resources Research, 2016, 52, 21-35.	4.2	40
15	Effect of Hydraulic Hysteresis on Stability of Infinite Slopes under Steady Infiltration. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2017, 143, .	3.0	40
16	Incorporating spatially heterogeneous infiltration capacity into hydrologic models with applications for simulating postâ€wildfire debris flow initiation. Hydrological Processes, 2018, 32, 1173-1187.	2.6	38
17	Evaluating the importance of characterizing soil structure and horizons in parameterizing a hydrologic process model. Hydrological Processes, 2015, 29, 4611-4623.	2.6	37
18	Disturbance Hydrology: Preparing for an Increasingly Disturbed Future. Water Resources Research, 2017, 53, 10007-10016.	4.2	33

#	Article	IF	CITATIONS
19	Physically Based Estimation of Rainfall Thresholds Triggering Shallow Landslides in Volcanic Slopes of Southern Italy. Water (Switzerland), 2019, 11, 1915.	2.7	33
20	Using simulated hydrologic response to revisit the 1973 Lerida Court landslide. Environmental Earth Sciences, 2010, 61, 1249-1257.	2.7	28
21	A hypothetical reality of Tarrawarraâ€ike hydrologic response. Hydrological Processes, 2009, 23, 1093-1103.	2.6	27
22	Hydrologic Impacts of Landslide Disturbances: Implications for Remobilization and Hazard Persistence. Water Resources Research, 2017, 53, 8250-8265.	4.2	26
23	Balancing practicality and hydrologic realism: A parsimonious approach for simulating rapid groundwater recharge via unsaturatedâ€zone preferential flow. Water Resources Research, 2013, 49, 1458-1465.	4.2	25
24	The future of landslides' pastâ€"a framework for assessing consecutive landsliding systems. Landslides, 2020, 17, 1519-1528.	5 . 4	25
25	Variability in soil-water retention properties and implications for physics-based simulation of landslide early warning criteria. Landslides, 2018, 15, 1265-1277.	5.4	23
26	Hydrologic Characterization of Desert Soils with Varying Degrees of Pedogenesis: 2. Inverse Modeling for Effective Properties. Vadose Zone Journal, 2009, 8, 496-509.	2.2	23
27	Clays Are Not Created Equal: How Clay Mineral Type Affects Soil Parameterization. Geophysical Research Letters, 2021, 48, e2021GL095311.	4.0	21
28	Incorporating the Effects of Complex Soil Layering and Thickness Local Variability into Distributed Landslide Susceptibility Assessments. Water (Switzerland), 2021, 13, 713.	2.7	18
29	Deep Learning as a Tool to Forecast Hydrologic Response for Landslideâ€Prone Hillslopes. Geophysical Research Letters, 2020, 47, e2020GL088731.	4.0	17
30	Rapid-Response Unsaturated Zone Hydrology: Small-Scale Data, Small-Scale Theory, Big Problems. Frontiers in Earth Science, 2021, 9, .	1.8	16
31	A synthetic hydrologicâ€response dataset. Hydrological Processes, 2011, 25, 3688-3692.	2.6	15
32	The $Gal\tilde{A}_i$ pagos archipelago: a natural laboratory to examine sharp hydroclimatic, geologic and anthropogenic gradients. Wiley Interdisciplinary Reviews: Water, 2016, 3, 587-600.	6.5	14
33	Hillslopes in humidâ€tropical climates aren't always wet: Implications for hydrologic response and landslide initiation in Puerto Rico. Hydrological Processes, 2020, 34, 4307-4318.	2.6	14
34	Effects of Infiltration Characteristics on Spatial-Temporal Evolution of Stability of an Interstate Highway Embankment. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2019, 145, 05019008.	3.0	11
35	HydroMet: A New Code for Automated Objective Optimization of Hydrometeorological Thresholds for Landslide Initiation. Water (Switzerland), 2021, 13, 1752.	2.7	10
36	Preferential flow, diffuse flow, and perching in an interbedded fractured-rock unsaturated zone. Hydrogeology Journal, 2017, 25, 421-444.	2.1	9

#	Article	IF	CITATIONS
37	Numerical Analysis of the Effect of Subgrid Variability in a Physically Based Hydrological Model on Runoff, Soil Moisture, and Slope Stability. Water Resources Research, 2021, 57, e2020WR027326.	4.2	6
38	Evaluation of techniques for mitigating snowmelt infiltration-induced landsliding in a highway embankment. Engineering Geology, 2021, 291, 106240.	6.3	6
39	Testing the suitability of geologic frameworks for extrapolating hydraulic properties across regional scales. Hydrogeology Journal, 2016, 24, 1133-1146.	2.1	5
40	Constructing a Large-Scale Landslide Database Across Heterogeneous Environments Using Task-Specific Model Updates. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2022, 15, 4349-4370.	4.9	5
41	Practical estimates of fieldâ€saturated hydraulic conductivity of bedrock outcrops using a modified bottomless bucket method. Water Resources Research, 2012, 48, .	4.2	3
42	Temporal and spatial variability of shallow soil moisture across four planar hillslopes on a tropical ocean island, San Cristóbal, Galápagos. Journal of Hydrology: Regional Studies, 2020, 30, 100692.	2.4	2
43	Subsurface and Surface Flow Leading to Channel Initiation. , 2021, , .		0