Luke A Mcguire

List of Publications by Year
in descending order

35 papers	1,048 citations	331670 21 h-index	414414 32 g-index
36 all docs	36 docs citations	36 times ranked	861 citing authors

#	Article	IF	Citations
1	Temporal changes in rainfall intensityâ€“duration thresholds for post-wildfire flash floods in southern California. Natural Hazards and Earth System Sciences, 2022, 22, 361-376.	3.6	9
2	A progressive flow-routing model for rapid assessment of debris-flow inundation. Landslides, 2022, 19, 2055-2073.	5.4	11
3	Wildfire and earth surface processes. Earth Surface Processes and Landforms, 2021, 46, 1099.	2.5	2
4	Time Since Burning and Rainfall Characteristics Impact Post-Fire Debris-Flow Initiation and Magnitude. Environmental and Engineering Geoscience, 2021, 27, 43-56.	0.9	6
5	Extreme Precipitation Across Adjacent Burned and Unburned Watersheds Reveals Impacts of Low Severity Wildfire on Debrisâ€Flow Processes. Journal of Geophysical Research F: Earth Surface, 2021, 126, e2020JF005997.	2.8	15
6	The timing and magnitude of changes to Hortonian overland flow at the watershed scale during the postâ€fire recovery process. Hydrological Processes, 2021, 35, e14208.	2.6	15
7	Postwildfire Soilâ€Hydraulic Recovery and the Persistence of Debris Flow Hazards. Journal of Geophysical Research F: Earth Surface, 2021, 126, e2021JF006091.	2.8	28
8	Controls on the Spatial Distribution of Nearâ€Surface Pyrogenic Carbon on Hillslopes 1 Year Following Wildfire. Journal of Geophysical Research F: Earth Surface, 2021, 126, e2020JF005996.	2.8	5
9	Movement of Sediment Through a Burned Landscape: Sediment Volume Observations and Model Comparisons in the San Gabriel Mountains, California, USA. Journal of Geophysical Research F: Earth Surface, 2021, 126, e2020JF006053.	2.8	23
10	Modeling the Dynamics of Dense Pyroclastic Flows on Venus: Insights Into Pyroclastic Eruptions. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006943.	3.6	7
11	Hydrogeomorphic Recovery and Temporal Changes in Rainfall Thresholds for Debris Flows Following Wildfire. Journal of Geophysical Research F: Earth Surface, 2021, 126, e2021JF006374.	2.8	21
12	Thresholds for postâ€wildfire debris flows: Insights from the Pinal Fire, Arizona, USA. Earth Surface Processes and Landforms, 2020, 45, 1349-1360.	2.5	34
13	What drives spatial variability in rainfall intensity-duration thresholds for post-wildfire debris flows? Insights from the 2018 Buzzard Fire, NM, USA. Landslides, 2020, 17, 2385-2399.	5.4	27
14	Landslides after wildfire: initiation, magnitude, and mobility. Landslides, 2020, 17, 2631-2641.	5.4	71
15	The Impact of Sediment Supply on the Initiation and Magnitude of Runoffâ€Generated Debris Flows. Geophysical Research Letters, 2020, 47, e2020GL087643.	4.0	12
16	The Influence of Frost Weathering on Debris Flow Sediment Supply in an Alpine Basin. Journal of Geophysical Research F: Earth Surface, 2020, 125, e2019JF005369.	2.8	24
17	Progress in simplifying hydrologic model parameterization for broad applications to postâ€wildfire flooding and debrisâ€flow hazards. Earth Surface Processes and Landforms, 2019, 44, 3078-3092.	2.5	29
18	Developing and Testing Physically Based Triggering Thresholds for Runoffâ€Generated Debris Flows. Geophysical Research Letters, 2019, 46, 8830-8839.	4.0	32

#	Article	IF	Citations
19	Evolution of Debrisâ€Flow Initiation Mechanisms and Sediment Sources During a Sequence of Postwildfire Rainstorms. Journal of Geophysical Research F: Earth Surface, 2019, 124, 1572-1595.	2.8	58
20	Impacts of successive wildfire on soil hydraulic properties: Implications for debris flow hazards and system resilience. Earth Surface Processes and Landforms, 2019, 44, 2236-2250.	2.5	23
21	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
22	Which way do you lean? Using slope aspect variations to understand Critical Zone processes and feedbacks. Earth Surface Processes and Landforms, 2018, 43, 1133-1154.	2.5	70
23	Estimating post-fire debris-flow hazards prior to wildfire using a statistical analysis of historical distributions of fire severity from remote sensing data. International Journal of Wildland Fire, 2018, 27, 595.	2.4	37
24	RAINFALL INTENSITY-DURATION THRESHOLDS FOR POST-WILDFIRE DEBRIS FLOWS IN ARIZONA. , 2018, , .		1
25	Coevolution of soil and topography across a semiarid cinder cone chronosequence. Catena, 2017, 156, 338-352.	5.0	12
26	Debris flow initiation by runoff in a recently burned basin: Is grainâ€byâ€grain sediment bulking or en masse failure to blame?. Geophysical Research Letters, 2017, 44, 7310-7319.	4.0	72
27	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
28	The influence of vegetation on debris-flow initiation during extreme rainfall in the northern Colorado Front Range. Geology, 2016, 44, 823-826.	4.4	41
29	Model simulations of flood and debris flow timing in steep catchments after wildfire. Water Resources Research, 2016, 52, 6041-6061.	4.2	76
30	Amplification of postwildfire peak flow by debris. Geophysical Research Letters, 2016, 43, 8545-8553.	4.0	27
31	Constraining the relative importance of raindropâ€and flowâ€driven sediment transport mechanisms in postwildfire environments and implications for recovery time scales. Journal of Geophysical Research F: Earth Surface, 2016, 121, 2211-2237.	2.8	33
32	Development of topographic asymmetry: Insights from dated cinder cones in the western United States. Journal of Geophysical Research F: Earth Surface, 2014, 119, 1725-1750.	2.8	35
33	Controls on the spacing and geometry of rill networks on hillslopes: Rain splash detachment, initial hillslope roughness, and the competition between fluvial and colluvial transport. Journal of Geophysical Research F: Earth Surface, 2013, 118, 241-256.	2.8	48
34	How do vegetation bands form in dry lands? Insights from numerical modeling and field studies in southern Nevada, USA. Journal of Geophysical Research, 2012, 117, .	3.3	16
35	Calibration and testing of upland hillslope evolution models in a dated landscape: Banco Bonito, New Mexico. Journal of Geophysical Research, 2011, 116, .	3.3	28