

Jason Kean

List of Publications by Year in descending order

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Version: 2024-02-01

53
papers

3,128
citations

159525

30
h-index

182361

51
g-index

60
all docs

60
docs citations

60
times ranked

2258
citing authors

#	ARTICLE	IF	CITATIONS
1	New insights into debris-flow hazards from an extraordinary event in the Colorado Front Range. <i>GSA Today</i> , 2014, 24, 4-10.	1.1	260
2	Objective definition of rainfall intensity–duration thresholds for the initiation of post-fire debris flows in southern California. <i>Landslides</i> , 2013, 10, 547-562.	2.7	227
3	Runoff-generated debris flows: Observations and modeling of surge initiation, magnitude, and frequency. <i>Journal of Geophysical Research F: Earth Surface</i> , 2013, 118, 2190-2207.	1.0	180
4	In situ measurements of post-fire debris flows in southern California: Comparisons of the timing and magnitude of 24 debris-flow events with rainfall and soil moisture conditions. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	167
5	Evolution of a natural debris flow: In situ measurements of flow dynamics, video imagery, and terrestrial laser scanning. <i>Geology</i> , 2010, 38, 735-738.	2.0	136
6	Landslide movement in southwest Colorado triggered by atmospheric tides. <i>Nature Geoscience</i> , 2009, 2, 863-866.	5.4	135
7	Prediction of spatially explicit rainfall intensity–duration thresholds for post-fire debris-flow generation in the western United States. <i>Geomorphology</i> , 2017, 278, 149-162.	1.1	135
8	Sediment entrainment by debris flows: In situ measurements from the headwaters of a steep catchment. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	124
9	Rainfall intensity–duration thresholds for postfire debris-flow emergency-response planning. <i>Natural Hazards</i> , 2011, 59, 209-236.	1.6	112
10	Characterizing the primary material sources and dominant erosional processes for post-fire debris-flow initiation in a headwater basin using multi-temporal terrestrial laser scanning data. <i>Geomorphology</i> , 2014, 214, 324-338.	1.1	81
11	Model simulations of flood and debris flow timing in steep catchments after wildfire. <i>Water Resources Research</i> , 2016, 52, 6041-6061.	1.7	76
12	Estimating rates of debris flow entrainment from ground vibrations. <i>Geophysical Research Letters</i> , 2015, 42, 6365-6372.	1.5	75
13	Debris flow initiation by runoff in a recently burned basin: Is grain-by-grain sediment bulking or en masse failure to blame?. <i>Geophysical Research Letters</i> , 2017, 44, 7310-7319.	1.5	72
14	Field measurement of basal forces generated by erosive debris flows. <i>Journal of Geophysical Research F: Earth Surface</i> , 2013, 118, 589-602.	1.0	71
15	Landslides after wildfire: initiation, magnitude, and mobility. <i>Landslides</i> , 2020, 17, 2631-2641.	2.7	71
16	Flow and boundary shear stress in channels with woody bank vegetation. <i>Water Science and Application</i> , 2004, , 237-252.	0.3	65
17	Rock-avalanche dynamics revealed by large-scale field mapping and seismic signals at a highly mobile avalanche in the West Salt Creek valley, western Colorado. , 2016, 12, 607-631.		62
18	Elucidating the role of vegetation in the initiation of rainfall-induced shallow landslides: Insights from an extreme rainfall event in the Colorado Front Range. <i>Geophysical Research Letters</i> , 2016, 43, 9084-9092.	1.5	62

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19	Evolution of Debris-Flow Initiation Mechanisms and Sediment Sources During a Sequence of Postwildfire Rainstorms. <i>Journal of Geophysical Research F: Earth Surface</i> , 2019, 124, 1572-1595.	1.0	58
20	Form drag in rivers due to small-scale natural topographic features: 1. Regular sequences. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	55
21	Test of a Method to Calculate Near-Bank Velocity and Boundary Shear Stress. <i>Journal of Hydraulic Engineering</i> , 2009, 135, 588-601.	0.7	54
22	A low-cost method to measure the timing of postfire flash floods and debris flows relative to rainfall. <i>Water Resources Research</i> , 2012, 48, .	1.7	47
23	Modeling effects of bank friction and woody bank vegetation on channel flow and boundary shear stress in the Rio Puerco, New Mexico. <i>Journal of Geophysical Research</i> , 2005, 110, n/a-n/a.	3.3	45
24	The influence of vegetation on debris-flow initiation during extreme rainfall in the northern Colorado Front Range. <i>Geology</i> , 2016, 44, 823-826.	2.0	41
25	Form drag in rivers due to small-scale natural topographic features: 2. Irregular sequences. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	38
26	Incorporating spatially heterogeneous infiltration capacity into hydrologic models with applications for simulating post-wildfire debris flow initiation. <i>Hydrological Processes</i> , 2018, 32, 1173-1187.	1.1	38
27	Estimating post-fire debris-flow hazards prior to wildfire using a statistical analysis of historical distributions of fire severity from remote sensing data. <i>International Journal of Wildland Fire</i> , 2018, 27, 595.	1.0	37
28	Modeling the evolution of channel shape: Balancing computational efficiency with hydraulic fidelity. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	35
29	Thresholds for post-wildfire debris flows: Insights from the Pinal Fire, Arizona, USA. <i>Earth Surface Processes and Landforms</i> , 2020, 45, 1349-1360.	1.2	34
30	The recurrence interval of post-fire debris-flow generating rainfall in the southwestern United States. <i>Geomorphology</i> , 2020, 370, 107392.	1.1	34
31	Seismic and geodetic signatures of fault slip at the Slumgullion Landslide Natural Laboratory. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	33
32	Constraining the relative importance of raindrop- and flow-driven sediment transport mechanisms in postwildfire environments and implications for recovery time scales. <i>Journal of Geophysical Research F: Earth Surface</i> , 2016, 121, 2211-2237.	1.0	33
33	Developing and Testing Physically Based Triggering Thresholds for Runoff-Generated Debris Flows. <i>Geophysical Research Letters</i> , 2019, 46, 8830-8839.	1.5	32
34	Forecasting the Frequency and Magnitude of Postfire Debris Flows Across Southern California. <i>Earth's Future</i> , 2021, 9, e2020EF001735.	2.4	32
35	Generation and verification of theoretical rating curves in the Whitewater River basin, Kansas. <i>Journal of Geophysical Research</i> , 2005, 110, n/a-n/a.	3.3	30
36	Progress in simplifying hydrologic model parameterization for broad applications to post-wildfire flooding and debris-flow hazards. <i>Earth Surface Processes and Landforms</i> , 2019, 44, 3078-3092.	1.2	29

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37	Postwildfire Soilâ€Hydraulic Recovery and the Persistence of Debris Flow Hazards. Journal of Geophysical Research F: Earth Surface, 2021, 126, e2021JF006091.	1.0	28
38	Amplification of postwildfire peak flow by debris. Geophysical Research Letters, 2016, 43, 8545-8553.	1.5	27
39	Modelling rating curves using remotely sensed LiDAR data. Hydrological Processes, 2012, 26, 1427-1434.	1.1	26
40	Measuring Basal Force Fluctuations of Debris Flows Using Seismic Recordings and Empirical Green's Functions. Journal of Geophysical Research F: Earth Surface, 2020, 125, e2020JF005590.	1.0	24
41	The Influence of Frost Weathering on Debris Flow Sediment Supply in an Alpine Basin. Journal of Geophysical Research F: Earth Surface, 2020, 125, e2019JF005369.	1.0	24
42	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.	1.0	23
43	Multiâ€Model Comparison of Computed Debris Flow Runout for the 9 January 2018 Montecito, California Postâ€Wildfire Event. Journal of Geophysical Research F: Earth Surface, 2021, 126, .	1.0	20
44	Value of a Dual-Polarized Gap-Filling Radar in Support of Southern California Post-Fire Debris-Flow Warnings. Journal of Hydrometeorology, 2011, 12, 1581-1595.	0.7	18
45	Calculation of stageâ€discharge relations for gravel bedded channels. Journal of Geophysical Research, 2010, 115, .	3.3	14
46	The Impact of Sediment Supply on the Initiation and Magnitude of Runoffâ€Generated Debris Flows. Geophysical Research Letters, 2020, 47, e2020GL087643.	1.5	12
47	Establishing a Multi-scale Stream Gaging Network in the Whitewater River Basin, Kansas, USA. Water Resources Management, 2010, 24, 3641-3664.	1.9	9
48	Can Low-Resolution Airborne Laser Scanning Data Be Used to Model Stream Rating Curves?. Water (Switzerland), 2015, 7, 1324-1339.	1.2	7
49	Long-Term Soil-Water Tension Measurements in Semiarid Environments: A Method for Automated Tensiometer Refilling. Vadose Zone Journal, 2018, 17, 180070.	1.3	6
50	Time Since Burning and Rainfall Characteristics Impact Post-Fire Debris-Flow Initiation and Magnitude. Environmental and Engineering Geoscience, 2021, 27, 43-56.	0.3	6
51	Modeling streamflow from coupled airborne laser scanning and acoustic Doppler current profiler data. Hydrology Research, 2017, 48, 981-996.	1.1	2
52	Progress and Lessons Learned from Responses to Landslide Disasters. ICL Contribution To Landslide Disaster Risk Reduction, 2021, , 85-111.	0.3	2
53	Chalk Creek Valley: Colorado's natural debris-flow laboratory. , 2010, , 95-117.		2