Roland Kaitna

List of Publications by Year
in descending order

34	1,047	471061 17	414034 32
papers	citations	h-index	g-index

50	50	50	953
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Stress anisotropy in natural debris flows during impacting a monitoring structure. Landslides, 2022, 19, 211-220.	2.7	7
2	Variable hydrograph inputs for a numerical debris-flow runout model. Natural Hazards and Earth System Sciences, 2022, 22, 1627-1654.	1.5	8
3	Monitoring Debris-Flow Surges and Triggering Rainfall at the Lattenbach Creek, Austria. Environmental and Engineering Geoscience, 2021, 27, 213-220.	0.3	11
4	Future changes in annual, seasonal and monthly runoff signatures in contrasting Alpine catchments in Austria. Hydrology and Earth System Sciences, 2021, 25, 3429-3453.	1.9	16
5	Measurements of Velocity Profiles in Natural Debris Flows: A View behind the Muddy Curtain. Environmental and Engineering Geoscience, 2021, 27, 87-94.	0.3	2
6	Velocity profiles and basal stresses in natural debris flows. Earth Surface Processes and Landforms, 2020, 45, 1764-1776.	1.2	43
7	Trigger characteristics of torrential flows from high to low alpine regions in Austria. Science of the Total Environment, 2019, 658, 958-972.	3.9	20
8	Forschungsbauwerk zur Untersuchung von MurgÃngen und deren Einwirkung auf Schutzbauwerke. Ce/Papers, 2019, 3, 161-165.	0.1	1
9	The Heat of the Flow: Thermal Equilibrium in Gravitational Mass Flows. Geophysical Research Letters, 2018, 45, 11,219.	1.5	12
10	The Value of Using Multiple Hydrometeorological Variables to Predict Temporal Debris Flow Susceptibility in an Alpine Environment. Water Resources Research, 2018, 54, 6822-6843.	1.7	31
11	The temporally varying roles of rainfall, snowmelt and soil moisture for debris flow initiation in a snow-dominated system. Hydrology and Earth System Sciences, 2018, 22, 3493-3513.	1.9	45
12	Evaluation concepts to compare observed and simulated deposition areas of mass movements. Computational Geosciences, 2017, 21, 335-343.	1.2	12
13	Debris-flow risk analysis in a managed torrent based on a stochastic life-cycle performance. Science of the Total Environment, 2016, 557-558, 142-153.	3.9	35
14	Evaluation of Model Parameterization Through Laboratory Investigations. International Journal of Erosion Control Engineering, 2016, 9, 130-134.	0.5	0
15	Effects of coarse grain size distribution and fine particle content on pore fluid pressure and shear behavior in experimental debris flows. Journal of Geophysical Research F: Earth Surface, 2016, 121, 415-441.	1.0	97
16	Granular-front formation in free-surface flow of concentrated suspensions. Physical Review E, 2015, 92, 052204.	0.8	38
17	Modeling debris-flow runout patterns on two alpine fans with different dynamic simulation models. Natural Hazards and Earth System Sciences, 2015, 15, 1483-1492.	1.5	54
18	Numerical Simulation of Shallow Grain-Fluid Flows in a Rotating Drum. , 2015, , 1663-1666.		0

#	Article	IF	Citations
19	Debris-flow activity in five adjacent gullies in a limestone mountain range. Geochronometria, 2015, 42, .	0.2	20
20	Viscous Effects on Granular Mixtures in a Rotating Drum. Springer Series in Geomechanics and Geoengineering, 2015, , 57-71.	0.0	1
21	Surface slopes, velocity profiles and fluid pressure in coarse-grained debris flows saturated with water and mud. Journal of Fluid Mechanics, 2014, 741, 377-403.	1.4	45
22	Analysing Debris-Flow Impact Models, Based on a Small Scale Modelling Approach. Surveys in Geophysics, 2013, 34, 121-140.	2.1	141
23	Estimation of debris flood magnitudes based on dendrogeomorphic data and semi-empirical relationships. Geomorphology, 2013, 201, 80-85.	1.1	12
24	Susceptibility and Triggers for Debris Flows: Emergence, Loading, Release and Entrainment. Advances in Global Change Research, 2013, , 33-49.	1.6	3
25	Occurrence conditions of roll waves for three grainâ€“fluid models and comparison with results from experiments and field observation. Geophysical Journal International, 2013, 195, 1464-1480.	1.0	25
26	Silent Witnesses for Torrential Processes. Advances in Global Change Research, 2013, , 111-130.	1.6	7
27	Frictional behavior of granular gravelâ€“ice mixtures in vertically rotating drum experiments and implications for rockâ€“ice avalanches. Cold Regions Science and Technology, 2011, 69, 70-90.	1.6	55
28	Physical and numerical modelling of a bedload deposition area for an Alpine torrent. Natural Hazards and Earth System Sciences, 2011, 11, 1589-1597.	1.5	22
29	Unraveling driving factors for large rockâ€“ice avalanche mobility. Earth Surface Processes and Landforms, 2011, 36, 1948-1966.	1.2	117
30	The Application of the Risk Concept to Debris Flow Hazards. Geomechanik Und Tunnelbau, 2008, 1, 120-129.	0.2	31
31	AbschÃtzung einer Anprallkraft fÃ¼r murenexponierte Massivbauwerke. Bautechnik, 2008, 85, 803-811.	0.2	14
32	A new experimental facility for laboratory debris flow investigation. Journal of Hydraulic Research/De Recherches Hydrauliques, 2007, 45, 797-810.	0.7	27
33	Experimental study on rheologic behaviour of debris flow material. Acta Geotechnica, 2007, 2, 71-85.	2.9	85
34	Comparative rheologic investigations in a vertically rotating flume and a â€œmoving-bedâ€•conveyor belt flume. WIT Transactions on Ecology and the Environment, 2006, , .	0.0	4