Jan-Thomas Fischer

List of Publications by Year
in descending order

29 papers	1,065 citations	516710 16 h-index	526287 27 g-index
51 all docs	51 docs citations	51 times ranked	796 citing authors

#	Article	IF	Citations
1	r.avaflow v1, an advanced open-source computational framework for the propagation and interaction of two-phase mass flows. Geoscientific Model Development, 2017, 10, 553-569.	3.6	215
2	How well can we simulate complex hydroâ€geomorphic process chains? The 2012 multiâ€lake outburst flood in the Santa Cruz Valley (Cordillera Blanca, PerÃº). Earth Surface Processes and Landforms, 2018, 43, 1373-1389.	2.5	103
3	Topographic curvature effects in applied avalanche modeling. Cold Regions Science and Technology, 2012, 74-75, 21-30.	3.5	84
4	Interaction of two-phase debris flow with obstacles. Engineering Geology, 2018, 242, 197-217.	6.3	80
5	Computational experiments on the 1962 and 1970 landslide events at HuascarÃ¡n (Peru) with r.avaflow: Lessons learned for predictive mass flow simulations. Geomorphology, 2018, 322, 15-28.	2.6	78
6	Reconstruction of the 1941ÂGLOF process chain at Lake Palcacocha (Cordillera Blanca, Peru). Hydrology and Earth System Sciences, 2020, 24, 93-114.	4.9	76
7	A mechanical erosion model for two-phase mass flows. International Journal of Multiphase Flow, 2020, 132, 103416.	3.4	47
8	A mechanical model for phase separation in debris flow. International Journal of Multiphase Flow, 2020, 129, 103292.	3.4	44
9	Multivariate parameter optimization for computational snow avalanche simulation. Journal of Glaciology, 2015, 61, 875-888.	2.2	41
10	Dynamic response of submarine obstacles to two-phase landslide and tsunami impact on reservoirs. Acta Mechanica, 2019, 230, 3143-3169.	2.1	38
11	Computational snow avalanche simulation in forested terrain. Natural Hazards and Earth System Sciences, 2014, 14, 2233-2248.	3.6	36
12	A novel approach to evaluate and compare computational snow avalanche simulation. Natural Hazards and Earth System Sciences, 2013, 13, 1655-1667.	3.6	26
13	Gravitational wet avalanche pressure on pylon-like structures. Cold Regions Science and Technology, 2016, 126, 66-75.	3.5	21
14	Evolution of stony debris flows in laboratory experiments. Geomorphology, 2021, 372, 107431.	2.6	21
15	Cold-to-warm flow regime transition in snow avalanches. Cryosphere, 2018, 12, 3759-3774.	3.9	20
16	Determining forest parameters for avalanche simulation using remote sensing data. Cold Regions Science and Technology, 2020, 172, 102976.	3.5	20
17	Evaluation of probabilistic snow avalanche simulation ensembles with Doppler radar observations. Cold Regions Science and Technology, 2014, 97, 151-158.	3.5	18
18	Deposition morphology in large-scale laboratory stony debris flows. Geomorphology, 2022, 396, 107992.	2.6	14

#	Article	IF	Citations
19	Modeling of unsaturated granular flows by a two-layer approach. Acta Geotechnica, 2017, 12, 677-701.	5.7	12
20	The Heat of the Flow: Thermal Equilibrium in Gravitational Mass Flows. Geophysical Research Letters, 2018, 45, 11,219.	4.0	12
21	Bayesian Inference in Snow Avalanche Simulation with r.avaflow. Geosciences (Switzerland), 2020, 10, 191.	2.2	11
22	Snow avalanche friction relation based on extended kinetic theory. Natural Hazards and Earth System Sciences, 2016, 16, 2325-2345.	3.6	10
23	Flow-Py v1.0: a customizable, open-source simulation tool to estimate runout and intensity of gravitational mass flows. Geoscientific Model Development, 2022, 15, 2423-2439.	3.6	9
24	A mechanically-based model of snow slab and weak layer fracture in the Propagation Saw Test. International Journal of Solids and Structures, 2019, 158, 1-20.	2.7	6
25	Retarding avalanches in motion with net structures. Cold Regions Science and Technology, 2014, 97, 159-169.	3.5	4
26	The Historic Avalanche that Destroyed the Village of Ã€rreu in 1803, Catalan Pyrenees. Geosciences (Switzerland), 2020, 10, 169.	2.2	4
27	Investigation of a mmWave-Radar-Based Sensor for Snow-Suspension Density Measurements. IEEE Sensors Journal, 2016, 16, 8861-8862.	4.7	2
28	mGEODARâ€"A Mobile Radar System for Detection and Monitoring of Gravitational Mass-Movements. Sensors, 2020, 20, 6373.	3.8	1
29	Process Chain Modelling with r.avaflow: Lessons Learned for Multi-hazard Analysis. , 2017, , 565-572.		1