Fabian Walter

List of Publications by Year
in descending order

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56 papers	1,890 citations	236925 25 h-index	276875 41 g-index
81 all docs	81 docs citations	81 times ranked	1446 citing authors

#	Article	IF	Citations
1	Infrasonic and Seismic Analysis of Debrisâ€Flow Events at Illgraben (Switzerland): Relating Signal Features to Flow Parameters and to the Seismoâ€Acoustic Source Mechanism. Journal of Geophysical Research F: Earth Surface, 2022, 127, .	2.8	9
2	Insights From the Particle Impact Model Into the Highâ€Frequency Seismic Signature of Debris Flows. Geophysical Research Letters, 2021, 48, .	4.0	20
3	Empirical Investigations of the Instrument Response for Distributed Acoustic Sensing (DAS) across 17 Octaves. Bulletin of the Seismological Society of America, 2021, 111, 1-10.	2.3	54
4	Near-real-time automated classification of seismic signals of slope failures with continuous random forests. Natural Hazards and Earth System Sciences, 2021, 21, 339-361.	3.6	24
5	Thinning leads to calving-style changes at Bowdoin Glacier, Greenland. Cryosphere, 2021, 15, 485-500.	3.9	10
6	Machine Learning Improves Debris Flow Warning. Geophysical Research Letters, 2021, 48, e2020GL090874.	4.0	31
7	A Multi-Physics Experiment with a Temporary Dense Seismic Array on the ArgentiÃ¨re Glacier, French Alps: The RESOLVE Project. Seismological Research Letters, 2021, 92, 1185-1201.	1.9	11
8	Changing friction at the base of an Alpine glacier. Scientific Reports, 2021, 11, 10872.	3.3	13
9	Deciphering seismic and normalâ€force fluctuation signatures of debris flows: An experimental assessment of effects of flow composition and dynamics. Earth Surface Processes and Landforms, 2021, 46, 2195-2210.	2.5	15
10	Broadband Infrasound Signal of a Collapsing Hanging Glacier. Geophysical Research Letters, 2021, 48, e2021GL093579.	4.0	7
11	Diurnal expansion and contraction of englacial fracture networks revealed by seismic shear wave splitting. Communications Earth & Environment, 2021, 2, .	6.8	3
12	Fine Structure of Microseismic Glacial Stickâ€Slip. Geophysical Research Letters, 2021, 48, e2021GL096043.	4.0	6
13	Analyzing Bulk Flow Characteristics of Debris Flows Using Their High Frequency Seismic Signature. Journal of Geophysical Research: Solid Earth, 2021, 126, .	3.4	11
14	Direct observations of a three million cubic meter rock-slope collapse with almost immediate initiation of ensuing debris flows. Geomorphology, 2020, 351, 106933.	2.6	100
15	Icequake Source Mechanisms for Studying Glacial Sliding. Journal of Geophysical Research F: Earth Surface, 2020, 125, e2020JF005627.	2.8	18
16	Distributed acoustic sensing of microseismic sources and wave propagation in glaciated terrain. Nature Communications, 2020, 11, 2436.	12.8	127
17	Quantification of seasonal and diurnal dynamics of subglacial channels using seismic observations on an Alpine glacier. Cryosphere, 2020, 14, 1475-1496.	3.9	26
18	Glaciohydraulic seismic tremors on an Alpine glacier. Cryosphere, 2020, 14, 287-308.	3.9	19

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19	Constraining landslide characteristics with Bayesian inversion of field and seismic data. Geophysical Journal International, 2020, 221, 1341-1348.	2.4	18
20	Tides modulate crevasse opening prior to a major calving event at Bowdoin Glacier, Northwest Greenland. Journal of Glaciology, 2020, 66, 113-123.	2.2	9
21	On the Green's function emergence from interferometry of seismic wave fields generated in high-melt glaciers: implications for passive imaging and monitoring. Cryosphere, 2020, 14, 1139-1171.	3.9	20
22	Crack wave resonances within the basal water layer. Annals of Glaciology, 2019, 60, 158-166.	1.4	12
23	Joint geodetic and seismic analysis of surface crevassing near a seasonal glacier-dammed lake at Gornergletscher, Switzerland. Annals of Glaciology, 2019, 60, 1-13.	1.4	6
24	Effects of geometry on the seismic wavefield of Alpine glaciers. Annals of Glaciology, 2019, 60, 112-124.	1.4	10
25	Crevasse-induced Rayleigh-wave azimuthal anisotropy on Glacier de la Plaine Morte, Switzerland. Annals of Glaciology, 2019, 60, 96-111.	1.4	14
26	Monitoring Greenland ice sheet buoyancy-driven calving discharge using glacial earthquakes. Annals of Glaciology, 2019, 60, 75-95.	1.4	17
27	Infrasound Array Analysis of Debris Flow Activity and Implication for Early Warning. Journal of Geophysical Research F: Earth Surface, 2019, 124, 567-587.	2.8	50
28	Towards monitoring the englacial fracture state using virtual-reflector seismology. Geophysical Journal International, 2018, 214, 825-844.	2.4	6
29	Highâ€Frequency (>2ÂHz) Ambient Seismic Noise on Highâ€Melt Glaciers: Green's Function Estimation and Source Characterization. Journal of Geophysical Research F: Earth Surface, 2018, 123, 1667-1681.	2.8	14
30	Automatic Identification of Alpine Mass Movements by a Combination of Seismic and Infrasound Sensors. Sensors, 2018, 18, 1658.	3.8	26
31	Testing seismic amplitude source location for fast debris-flow detection at Illgraben, Switzerland. Natural Hazards and Earth System Sciences, 2017, 17, 939-955.	3.6	55
32	Meltwater influences on deep stickâ€slip icequakes near the base of the Greenland Ice Sheet. Journal of Geophysical Research F: Earth Surface, 2016, 121, 223-240.	2.8	39
33	Complex force history of a calvingâ€generated glacial earthquake derived from broadband seismic inversion. Geophysical Research Letters, 2016, 43, 1055-1065.	4.0	24
34	Tideâ€modulated ice flow variations drive seismicity near the calving front of Bowdoin Glacier, Greenland. Geophysical Research Letters, 2016, 43, 2036-2044.	4.0	36
35	Seasonal variations of glacier seismicity at the tongue of Rhonegletscher (Switzerland) with a focus on basal icequakes. Journal of Glaciology, 2016, 62, 18-30.	2.2	9
36	Cryoseismology. Reviews of Geophysics, 2016, 54, 708-758.	23.0	164

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37	Seismic moulin tremor. Journal of Geophysical Research: Solid Earth, 2016, 121, 5838-5858.	3.4	31
38	Full, constrained and stochastic source inversions support evidence for volumetric changes during the Basel earthquake sequence. Swiss Journal of Geosciences, 2015, 108, 361-377.	1.2	7
39	Environmental seismology: What can we learn on earth surface processes with ambient noise?. Journal of Applied Geophysics, 2015, 116, 62-74.	2.1	131
40	Using glacier seismicity for phase velocity measurements and Green's function retrieval. Geophysical Journal International, 2015, 201, 1722-1737.	2.4	33
41	Seismicity within a propagating ice shelf rift: The relationship between icequake locations and ice shelf structure. Journal of Geophysical Research F: Earth Surface, 2014, 119, 731-744.	2.8	17
42	Seismic Network in Greenland Monitors Earth and Ice System. Eos, 2014, 95, 13-14.	0.1	43
43	Sustained seismic tremors and icequakes detected in the ablation zone of the Greenland ice sheet. Journal of Glaciology, 2014, 60, 563-575.	2.2	67
44	Thick sediments beneath Greenlandâ€™s ablation zone and their potential role in future ice sheet dynamics. Geology, 2014, 42, 487-490.	4.4	52
45	Humming glaciers. Geology, 2014, 42, 1099-1102.	4.4	18
46	Deep icequakes: What happens at the base of Alpine glaciers?. Journal of Geophysical Research F: Earth Surface, 2013, 118, 1720-1728.	2.8	27
47	Investigating the dynamics of an Alpine glacier using probabilistic icequake locations: Triftgletscher, Switzerland. Journal of Geophysical Research F: Earth Surface, 2013, 118, 2003-2018.	2.8	18
48	Calving event detection by observation of seiche effects on the Greenland fjords. Journal of Glaciology, 2013, 59, 162-178.	2.2	19
49	Seismic activity and surface motion of a steep temperate glacier: a study on Triftgletscher, Switzerland. Journal of Glaciology, 2012, 58, 513-528.	2.2	20
50	Analysis of lowâ€frequency seismic signals generated during a multipleâ€iceberg calving event at Jakobshavn IsbrÃ¦, Greenland. Journal of Geophysical Research, 2012, 117, .	3.3	38
51	Seventeen Antarctic seismic events detected by global surface waves and a possible link to calving events from satellite images. Journal of Geophysical Research, 2011, 116, .	3.3	26
52	Evidence for Near-Horizontal Tensile Faulting at the Base of Gornergletscher, a Swiss Alpine Glacier. Bulletin of the Seismological Society of America, 2010, 100, 458-472.	2.3	38
53	Observation of surface seismic activity changes of an Alpine glacier during a glacierâ€dammed lake outburst. Journal of Geophysical Research, 2010, 115, .	3.3	28
54	Iceberg calving during transition from grounded to floating ice: Columbia Glacier, Alaska. Geophysical Research Letters, 2010, 37, .	4.0	72

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55	Moment Tensor Inversions of Icequakes on Gornergletscher, Switzerland. Bulletin of the Seismological Society of America, 2009, 99, 852-870.	2.3	76
56	Basal icequakes during changing subglacial water pressures beneath Gornergletscher, Switzerland. Journal of Glaciology, 2008, 54, 511-521.	2.2	84