

# Fabian Walter

## List of Publications by Year in descending order

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Version: 2024-02-01

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	Cryoseismology. <i>Reviews of Geophysics</i> , 2016, 54, 708-758.	23.0	164
2	Environmental seismology: What can we learn on earth surface processes with ambient noise?. <i>Journal of Applied Geophysics</i> , 2015, 116, 62-74.	2.1	131
3	Distributed acoustic sensing of microseismic sources and wave propagation in glaciated terrain. <i>Nature Communications</i> , 2020, 11, 2436.	12.8	127
4	Direct observations of a three million cubic meter rock-slope collapse with almost immediate initiation of ensuing debris flows. <i>Geomorphology</i> , 2020, 351, 106933.	2.6	100
5	Basal icequakes during changing subglacial water pressures beneath Gornergletscher, Switzerland. <i>Journal of Glaciology</i> , 2008, 54, 511-521.	2.2	84
6	Moment Tensor Inversions of Icequakes on Gornergletscher, Switzerland. <i>Bulletin of the Seismological Society of America</i> , 2009, 99, 852-870.	2.3	76
7	Iceberg calving during transition from grounded to floating ice: Columbia Glacier, Alaska. <i>Geophysical Research Letters</i> , 2010, 37, .	4.0	72
8	Sustained seismic tremors and icequakes detected in the ablation zone of the Greenland ice sheet. <i>Journal of Glaciology</i> , 2014, 60, 563-575.	2.2	67
9	Testing seismic amplitude source location for fast debris-flow detection at Illgraben, Switzerland. <i>Natural Hazards and Earth System Sciences</i> , 2017, 17, 939-955.	3.6	55
10	Empirical Investigations of the Instrument Response for Distributed Acoustic Sensing (DAS) across 17 Octaves. <i>Bulletin of the Seismological Society of America</i> , 2021, 111, 1-10.	2.3	54
11	Thick sediments beneath Greenland's ablation zone and their potential role in future ice sheet dynamics. <i>Geology</i> , 2014, 42, 487-490.	4.4	52
12	Infrasound Array Analysis of Debris Flow Activity and Implication for Early Warning. <i>Journal of Geophysical Research F: Earth Surface</i> , 2019, 124, 567-587.	2.8	50
13	Seismic Network in Greenland Monitors Earth and Ice System. <i>Eos</i> , 2014, 95, 13-14.	0.1	43
14	Meltwater influences on deep stick-slip icequakes near the base of the Greenland Ice Sheet. <i>Journal of Geophysical Research F: Earth Surface</i> , 2016, 121, 223-240.	2.8	39
15	Evidence for Near-Horizontal Tensile Faulting at the Base of Gornergletscher, a Swiss Alpine Glacier. <i>Bulletin of the Seismological Society of America</i> , 2010, 100, 458-472.	2.3	38
16	Analysis of low-frequency seismic signals generated during a multiple-iceberg calving event at Jakobshavn Isbr�, Greenland. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	38
17	Tide-modulated ice flow variations drive seismicity near the calving front of Bowdoin Glacier, Greenland. <i>Geophysical Research Letters</i> , 2016, 43, 2036-2044.	4.0	36
18	Using glacier seismicity for phase velocity measurements and Green's function retrieval. <i>Geophysical Journal International</i> , 2015, 201, 1722-1737.	2.4	33

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19	Seismic moulin tremor. <i>Journal of Geophysical Research: Solid Earth</i> , 2016, 121, 5838-5858.	3.4	31
20	Machine Learning Improves Debris Flow Warning. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL090874.	4.0	31
21	Observation of surface seismic activity changes of an Alpine glacier during a glacier-dammed lake outburst. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	28
22	Deep icequakes: What happens at the base of Alpine glaciers?. <i>Journal of Geophysical Research F: Earth Surface</i> , 2013, 118, 1720-1728.	2.8	27
23	Seventeen Antarctic seismic events detected by global surface waves and a possible link to calving events from satellite images. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	26
24	Automatic Identification of Alpine Mass Movements by a Combination of Seismic and Infrasound Sensors. <i>Sensors</i> , 2018, 18, 1658.	3.8	26
25	Quantification of seasonal and diurnal dynamics of subglacial channels using seismic observations on an Alpine glacier. <i>Cryosphere</i> , 2020, 14, 1475-1496.	3.9	26
26	Complex force history of a calving-generated glacial earthquake derived from broadband seismic inversion. <i>Geophysical Research Letters</i> , 2016, 43, 1055-1065.	4.0	24
27	Near-real-time automated classification of seismic signals of slope failures with continuous random forests. <i>Natural Hazards and Earth System Sciences</i> , 2021, 21, 339-361.	3.6	24
28	Seismic activity and surface motion of a steep temperate glacier: a study on Triftgletscher, Switzerland. <i>Journal of Glaciology</i> , 2012, 58, 513-528.	2.2	20
29	On the Green's function emergence from interferometry of seismic wave fields generated in high-melt glaciers: implications for passive imaging and monitoring. <i>Cryosphere</i> , 2020, 14, 1139-1171.	3.9	20
30	Insights From the Particle Impact Model Into the High-Frequency Seismic Signature of Debris Flows. <i>Geophysical Research Letters</i> , 2021, 48, .	4.0	20
31	Calving event detection by observation of seiche effects on the Greenland fjords. <i>Journal of Glaciology</i> , 2013, 59, 162-178.	2.2	19
32	Glaciohydraulic seismic tremors on an Alpine glacier. <i>Cryosphere</i> , 2020, 14, 287-308.	3.9	19
33	Investigating the dynamics of an Alpine glacier using probabilistic icequake locations: Triftgletscher, Switzerland. <i>Journal of Geophysical Research F: Earth Surface</i> , 2013, 118, 2003-2018.	2.8	18
34	Humming glaciers. <i>Geology</i> , 2014, 42, 1099-1102.	4.4	18
35	Icequake Source Mechanisms for Studying Glacial Sliding. <i>Journal of Geophysical Research F: Earth Surface</i> , 2020, 125, e2020JF005627.	2.8	18
36	Constraining landslide characteristics with Bayesian inversion of field and seismic data. <i>Geophysical Journal International</i> , 2020, 221, 1341-1348.	2.4	18

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37	Seismicity within a propagating ice shelf rift: The relationship between icequake locations and ice shelf structure. <i>Journal of Geophysical Research F: Earth Surface</i> , 2014, 119, 731-744.	2.8	17
38	Monitoring Greenland ice sheet buoyancy-driven calving discharge using glacial earthquakes. <i>Annals of Glaciology</i> , 2019, 60, 75-95.	1.4	17
39	Deciphering seismic and normal force fluctuation signatures of debris flows: An experimental assessment of effects of flow composition and dynamics. <i>Earth Surface Processes and Landforms</i> , 2021, 46, 2195-2210.	2.5	15
40	High-Frequency (>2ÂHz) Ambient Seismic Noise on High-Melt Glaciers: Green's Function Estimation and Source Characterization. <i>Journal of Geophysical Research F: Earth Surface</i> , 2018, 123, 1667-1681.	2.8	14
41	Crevasse-induced Rayleigh-wave azimuthal anisotropy on Glacier de la Plaine Morte, Switzerland. <i>Annals of Glaciology</i> , 2019, 60, 96-111.	1.4	14
42	Changing friction at the base of an Alpine glacier. <i>Scientific Reports</i> , 2021, 11, 10872.	3.3	13
43	Crack wave resonances within the basal water layer. <i>Annals of Glaciology</i> , 2019, 60, 158-166.	1.4	12
44	A Multi-Physics Experiment with a Temporary Dense Seismic Array on the Argentière Glacier, French Alps: The RESOLVE Project. <i>Seismological Research Letters</i> , 2021, 92, 1185-1201.	1.9	11
45	Analyzing Bulk Flow Characteristics of Debris Flows Using Their High Frequency Seismic Signature. <i>Journal of Geophysical Research: Solid Earth</i> , 2021, 126, .	3.4	11
46	Effects of geometry on the seismic wavefield of Alpine glaciers. <i>Annals of Glaciology</i> , 2019, 60, 112-124.	1.4	10
47	Thinning leads to calving-style changes at Bowdoin Glacier, Greenland. <i>Cryosphere</i> , 2021, 15, 485-500.	3.9	10
48	Seasonal variations of glacier seismicity at the tongue of Rhonegletscher (Switzerland) with a focus on basal icequakes. <i>Journal of Glaciology</i> , 2016, 62, 18-30.	2.2	9
49	Tides modulate crevasse opening prior to a major calving event at Bowdoin Glacier, Northwest Greenland. <i>Journal of Glaciology</i> , 2020, 66, 113-123.	2.2	9
50	Infrasonic and Seismic Analysis of Debris-Flow Events at Illgraben (Switzerland): Relating Signal Features to Flow Parameters and to the Seismic Acoustic Source Mechanism. <i>Journal of Geophysical Research F: Earth Surface</i> , 2022, 127, .	2.8	9
51	Full, constrained and stochastic source inversions support evidence for volumetric changes during the Basel earthquake sequence. <i>Swiss Journal of Geosciences</i> , 2015, 108, 361-377.	1.2	7
52	Broadband Infrasound Signal of a Collapsing Hanging Glacier. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL093579.	4.0	7
53	Towards monitoring the englacial fracture state using virtual-reflector seismology. <i>Geophysical Journal International</i> , 2018, 214, 825-844.	2.4	6
54	Joint geodetic and seismic analysis of surface crevassing near a seasonal glacier-dammed lake at Gornergletscher, Switzerland. <i>Annals of Glaciology</i> , 2019, 60, 1-13.	1.4	6

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55	Fine Structure of Microseismic Glacial Stickâ€šlip. Geophysical Research Letters, 2021, 48, e2021GL096043.	4.0	6
56	Diurnal expansion and contraction of englacial fracture networks revealed by seismic shear wave splitting. Communications Earth & Environment, 2021, 2, .	6.8	3