Thomas Vikhamar Schuler

List of Publications by Year
in descending order

72	2,763	156536	242451
papers	citations	32 h-index	47 g-index

115	115	115	2867
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	CryoSat-2 interferometric mode calibration and validation: A case study from the Austfonna ice cap, Svalbard. Remote Sensing of Environment, 2022, 269, 112805.	4.6	7
2	A Machine Learning Framework to Automate the Classification of Surgeâ€Type Glaciers in Svalbard. Journal of Geophysical Research F: Earth Surface, 2022, 127, .	1.0	4
3	A Consistent Framework for Coupling Basal Friction With Subglacial Hydrology on Hardâ€Bedded Glaciers. Geophysical Research Letters, 2022, 49, .	1.5	6
4	Accelerating future mass loss of Svalbard glaciers from a multi-model ensemble. Journal of Glaciology, 2021, 67, 485-499.	1.1	16
5	Measurement report: Spatial variations in ionic chemistry and water-stable isotopes in the snowpack on glaciers across Svalbard during the 2015â€“2016Âsnow accumulation season. Atmospheric Chemistry and Physics, 2021, 21, 3163-3180.	1.9	10
6	Elemental and water-insoluble organic carbon in Svalbard snow: a synthesis of observations during 2007â€“2018. Atmospheric Chemistry and Physics, 2021, 21, 3035-3057.	1.9	6
7	Simulating Snow Redistribution and its Effect on Ground Surface Temperature at a Highâ€Arctic Site on Svalbard. Journal of Geophysical Research F: Earth Surface, 2021, 126, e2020JF005673.	1.0	20
8	Surface temperatures and their influence on the permafrost thermal regime in high-Arctic rock walls on Svalbard. Cryosphere, 2021, 15, 2491-2509.	1.5	7
9	Sensitivity of subglacial drainage to water supply distribution at the Kongsfjord basin, Svalbard. Cryosphere, 2021, 15, 2719-2738.	1.5	4
10	Measured and Modeled Historical Precipitation Trends for Svalbard. Journal of Hydrometeorology, 2020, 21, 1279-1296.	0.7	13
11	Pressure and inertia sensing drifters for glacial hydrology flow path measurements. Cryosphere, 2020, 14, 1009-1023.	1.5	7
12	Reconciling Svalbard Glacier Mass Balance. Frontiers in Earth Science, 2020, 8, .	0.8	77
13	Sval_Imp: a gridded forcing dataset for climate change impact research on Svalbard. Earth System Science Data, 2020, 12, 875-885.	3.7	10
14	Coupled machine learning and the limits of acceptability approach applied in parameter identification for a distributed hydrological model. Hydrology and Earth System Sciences, 2020, 24, 4641-4658.	1.9	12
15	Subglacial permafrost dynamics and erosion inside subglacial channels driven by surface events in Svalbard. Cryosphere, 2020, 14, 4217-4231.	1.5	5
16	Rate-and-state friction explains glacier surge propagation. Nature Communications, 2019, 10, 2823.	5.8	50
17	A long-term dataset of climatic mass balance, snow conditions, and runoff in Svalbard (1957â€“2018). Cryosphere, 2019, 13, 2259-2280.	1.5	79
18	Timeâ€Lapse Photogrammetry of Distributed Snow Depth During Snowmelt. Water Resources Research, 2019, 55, 7916-7926.	1.7	13

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19	Improving the Informational Value of MODIS Fractional Snow Cover Area Using Fuzzy Logic Based Ensemble Smoother Data Assimilation Frameworks. Remote Sensing, 2019, 11, 28.	1.8	8
20	Comparison of snow accumulation events on two High-Arctic glaciers to model-derived and observed precipitation. Polar Research, 2019, 38, .	1.6	5
21	Simulating climatic mass balance, seasonal snow development and associated freshwater runoff in the Kongsfjord basin, Svalbard (1980â€“2016). Journal of Glaciology, 2018, 64, 943-956.	1.1	27
22	Parameter uncertainty analysis for an operational hydrological model using residual-based and limits of acceptability approaches. Hydrology and Earth System Sciences, 2018, 22, 5021-5039.	1.9	43
23	The Iceâ€Free Topography of Svalbard. Geophysical Research Letters, 2018, 45, 11,760.	1.5	32
24	Ensemble-based assimilation of fractional snow-covered area satellite retrievals to estimate the snow distribution at Arctic sites. Cryosphere, 2018, 12, 247-270.	1.5	40
25	Modeling Winter Precipitation Over the Juneau Icefield, Alaska, Using a Linear Model of Orographic Precipitation. Frontiers in Earth Science, 2018, 6, .	0.8	15
26	Implementation of a physically based water percolation routine in the Crocus/SURFEX (V7.3) snowpack model. Geoscientific Model Development, 2017, 10, 3547-3566.	1.3	17
27	Diagnosing the decline in climatic mass balance of glaciers in Svalbard over 1957â€“2014. Cryosphere, 2017, 11, 191-215.	1.5	69
28	The climatic mass balance of Svalbard glaciers: a 10-year simulation with a coupled atmosphereâ€“glacier mass balance model. Cryosphere, 2016, 10, 1089-1104.	1.5	50
29	Small-scale variation of snow in a regional permafrost model. Cryosphere, 2016, 10, 1201-1215.	1.5	56
30	Changes in Winter Warming Events in the Nordic Arctic Region. Journal of Climate, 2016, 29, 6223-6244.	1.2	109
31	Sensitivities of glacier mass balance and runoff to climate perturbations in Norway. Annals of Glaciology, 2015, 56, 79-88.	2.8	24
32	CryoSat-2 delivers monthly and inter-annual surface elevation change for Arctic ice caps. Cryosphere, 2015, 9, 1895-1913.	1.5	48
33	A ground temperature map of the North Atlantic permafrost region based on remote sensing and reanalysis data. Cryosphere, 2015, 9, 1303-1319.	1.5	82
34	A Comparison between Simulated and Observed Surface Energy Balance at the Svalbard Archipelago. Journal of Applied Meteorology and Climatology, 2015, 54, 1102-1119.	0.6	16
35	Glacier-surge mechanisms promoted by a hydro-thermodynamic feedback to summer melt. Cryosphere, 2015, 9, 197-215.	1.5	120
36	Contribution of snow and glacier melt to discharge for highly glacierised catchments in Norway. Hydrology and Earth System Sciences, 2014, 18, 511-523.	1.9	54

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37	A statistical approach to represent small-scale variability of permafrost temperatures due to snow cover. Cryosphere, 2014, 8, 2063-2074.	1.5	78
38	Meteorological conditions on an Arctic ice capâ€”8â€‰years of automatic weather station data from Austfonna, Svalbard. International Journal of Climatology, 2014, 34, 2047-2058.	1.5	23
39	Severe cloud contamination of MODIS Land Surface Temperatures over an Arctic ice cap, Svalbard. Remote Sensing of Environment, 2014, 142, 95-102.	4.6	61
40	Parameter uncertainty, refreezing and surface energy balance modelling at Austfonna ice cap, Svalbard, 2004-08. Annals of Glaciology, 2013, 54, 229-240.	2.8	18
41	Transient thermal modeling of permafrost conditions in Southern Norway. Cryosphere, 2013, 7, 719-739.	1.5	113
42	CryoGRID 1.0: Permafrost Distribution in Norway estimated by a Spatial Numerical Model. Permafrost and Periglacial Processes, 2013, 24, 2-19.	1.5	63
43	Glacier mass balance of Norway 1961-2010 calculated by a temperature-index model. Annals of Glaciology, 2013, 54, 32-40.	2.8	17
44	Use of a multilayer snow model to assess grazing conditions for reindeer. Annals of Glaciology, 2013, 54, 214-226.	2.8	27
45	Modelling borehole temperatures in Southern Norway â€“ insights into permafrost dynamics during the 20th and 21st century. Cryosphere, 2012, 6, 553-571.	1.5	49
46	Seasonal speed-up of two outlet glaciers of Austfonna, Svalbard, inferred from continuous GPS measurements. Cryosphere, 2012, 6, 453-466.	1.5	44
47	Evaluation of gridded precipitation for norway using glacier massâ€balance measurements. Geografiska Annaler, Series A: Physical Geography, 2012, 94, 501-509.	0.6	21
48	The relative age of mountain permafrost â€” estimation of Holocene permafrost limits in Norway. Global and Planetary Change, 2012, 92-93, 209-223.	1.6	67
49	Estimating the long-term calving flux of Kronebreen, Svalbard, from geodetic elevation changes and mass-balance modeling. Journal of Glaciology, 2012, 58, 119-133.	1.1	75
50	Permanent fast flow versus cyclic surge behaviour: numerical simulations of the Austfonna ice cap, Svalbard. Journal of Glaciology, 2011, 57, 247-259.	1.1	28
51	Spatio-temporal variability of snowmelt across Svalbard during the period 2000â€“08 derived from QuikSCAT/SeaWinds scatterometry. Polar Research, 2011, 30, 5963.	1.6	30
52	Air and Ground Temperature Variations Observed along Elevation and Continentality Gradients in Southern Norway. Permafrost and Periglacial Processes, 2011, 22, 343-360.	1.5	59
53	Modeling the temperature evolution of Svalbard permafrost during the 20th and 21st century. Cryosphere, 2011, 5, 67-79.	1.5	81
54	Modeling the impact of wintertime rain events on the thermal regime of permafrost. Cryosphere, 2011, 5, 945-959.	1.5	95

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55	Geometric changes and mass balance of the Austfonna ice cap, Svalbard. Cryosphere, 2010, 4, 21-34.	1.5	83
56	Short term variations of tracer transit speed on alpine glaciers. Cryosphere, 2010, 4, 381-396.	1.5	27
57	Modeling the diurnal variation of tracer transit velocity through a subglacial channel. Journal of Geophysical Research, 2009, 114, .	3.3	18
58	Recent fluctuations in the extent of the firn area of Austfonna, Svalbard, inferred from GPR. Annals of Glaciology, 2009, 50, 155-162.	2.8	52
59	Distribution of snow accumulation on the Svartisen ice cap, Norway, assessed by a model of orographic precipitation. Hydrological Processes, 2008, 22, 3998-4008.	1.1	26
60	Calibrating a surface mass-balance model for Austfonna ice cap, Svalbard. Annals of Glaciology, 2007, 46, 241-248.	2.8	56
61	Thermal characteristics and impact of climate change on mountain permafrost in Iceland. Journal of Geophysical Research, 2007, 112, .	3.3	54
62	The distribution of snow accumulation across the Austfonna ice cap, Svalbard: direct measurements and modelling. Polar Research, 2007, 26, 7-13.	1.6	50
63	Assessing the future evolution of meltwater intrusions into a mine below Gruvefonna, Svalbard. Annals of Glaciology, 2005, 42, 262-268.	2.8	5
64	Analysis of the first jÃ¶kulhlaup at BlÃ¥mannsisen, northern Norway, and implications for future events. Annals of Glaciology, 2005, 42, 35-41.	2.8	6
65	Distributed mass-balance and climate sensitivity modelling of Engabreen, Norway. Annals of Glaciology, 2005, 42, 395-401.	2.8	41
66	Breaching of an ice dam at Qorlortossup tasia, south Greenland. Annals of Glaciology, 2005, 42, 297-302.	2.8	16
67	Diurnal variability of subglacial drainage conditions as revealed by tracer experiments. Journal of Geophysical Research, 2004, 109, n/a-n/a.	3.3	41
68	Elucidating changes in the degree of tracer dispersion in a subglacial channel. Annals of Glaciology, 2003, 37, 275-280.	2.8	8
69	Ground-water intrusions in a mine beneath HÃ¸ganesbreen, Svalbard: assessing the possibility of evacuating water subglacially. Annals of Glaciology, 2003, 37, 269-274.	2.8	10
70	Comparison of Modeled Water Input and Measured Discharge Prior to a Release Event: Unteraargletscher, Bernese Alps, Switzerland. Hydrology Research, 2002, 33, 27-46.	1.1	15
71	Hydraulic and mechanical properties of glacial sediments beneath Unteraargletscher, Switzerland: implications for glacier basal motion. Hydrological Processes, 2001, 15, 3525-3540.	1.1	44
72	Flow separation on Zongo Glacier, Cordillera Real, Bolivia. Hydrological Processes, 1998, 12, 1911-1926.	1.1	18