

Martin Hoelzle

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4115243/publications.pdf>

Version: 2024-02-01

101
papers

6,566
citations

57631

44
h-index

69108

77
g-index

128
all docs

128
docs citations

128
times ranked

4125
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Adaptation to climate change induced water stress in major glacierized mountain regions. <i>Climate and Development</i> , 2022, 14, 665-677. | 2.2 | 6 |
| 2 | Glacier Runoff Variation Since 1981 in the Upper Naryn River Catchments, Central Tien Shan. <i>Frontiers in Environmental Science</i> , 2022, 9, . | 1.5 | 8 |
| 3 | Long-term energy balance measurements at three different mountain permafrost sites in the Swiss Alps. <i>Earth System Science Data</i> , 2022, 14, 1531-1547. | 3.7 | 5 |
| 4 | Reconstructed Centennial Mass Balance Change for Golubin Glacier, Northern Tien Shan. <i>Atmosphere</i> , 2022, 13, 954. | 1.0 | 4 |
| 5 | Geodetic mass balance of Abramov Glacier from 1975 to 2015. <i>Journal of Glaciology</i> , 2021, 67, 331-342. | 1.1 | 13 |
| 6 | Best Practice for Measuring Permafrost Temperature in Boreholes Based on the Experience in the Swiss Alps. <i>Frontiers in Earth Science</i> , 2021, 9, . | 0.8 | 18 |
| 7 | Hot Spots of Glacier Mass Balance Variability in Central Asia. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL092084. | 1.5 | 26 |
| 8 | Firn changes at Colle Gnifetti revealed with a high-resolution process-based physical model approach. <i>Cryosphere</i> , 2021, 15, 3181-3205. | 1.5 | 5 |
| 9 | Comparison of historical and recent accumulation rates on Abramov Glacier, Pamir Alay. <i>Journal of Glaciology</i> , 2021, 67, 253-268. | 1.1 | 7 |
| 10 | Rockglaciers of the Engadine. <i>World Geomorphological Landscapes</i> , 2021, , 235-248. | 0.1 | 0 |
| 11 | A full Stokes ice-flow model to assist the interpretation of millennial-scale ice cores at the high-Alpine drilling site Colle Gnifetti, Swiss/Italian Alps. <i>Journal of Glaciology</i> , 2020, 66, 35-48. | 1.1 | 11 |
| 12 | The state and future of the cryosphere in Central Asia. <i>Water Security</i> , 2020, 11, 100072. | 1.2 | 20 |
| 13 | Distinguishing ice-rich and ice-poor permafrost to map ground temperatures and ground ice occurrence in the Swiss Alps. <i>Cryosphere</i> , 2019, 13, 1925-1941. | 1.5 | 39 |
| 14 | Change detection of bare-ice albedo in the Swiss Alps. <i>Cryosphere</i> , 2019, 13, 397-412. | 1.5 | 40 |
| 15 | The status and role of the alpine cryosphere in Central Asia. , 2019, , 100-121. | | 14 |
| 16 | Multi-decadal mass balance series of three Kyrgyz glaciers inferred from modelling constrained with repeated snow line observations. <i>Cryosphere</i> , 2018, 12, 1899-1919. | 1.5 | 48 |
| 17 | Near-surface ventilation as a key for modeling the thermal regime of coarse blocky rock glaciers. <i>Permafrost and Periglacial Processes</i> , 2018, 29, 152-163. | 1.5 | 17 |
| 18 | Glacier Monitoring and Capacity Building: Important Ingredients for Sustainable Mountain Development. <i>Mountain Research and Development</i> , 2017, 37, 141-152. | 0.4 | 10 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Mass balance observations and reconstruction for Batysh Sook Glacier, Tien Shan, from 2004 to 2016. <i>Cold Regions Science and Technology</i> , 2017, 135, 76-89. | 1.6 | 30 |
| 20 | Re-establishing glacier monitoring in Kyrgyzstan and Uzbekistan, Central Asia. <i>Geoscientific Instrumentation, Methods and Data Systems</i> , 2017, 6, 397-418. | 0.6 | 29 |
| 21 | Cross-Comparison of Albedo Products for Glacier Surfaces Derived from Airborne and Satellite (Sentinel-2 and Landsat 8) Optical Data. <i>Remote Sensing</i> , 2017, 9, 110. | 1.8 | 74 |
| 22 | Distributed snow and rock temperature modelling in steep rock walls using Alpine3D. <i>Cryosphere</i> , 2017, 11, 585-607. | 1.5 | 31 |
| 23 | Application and validation of long-range terrestrial laser scanning to monitor the mass balance of very small glaciers in the Swiss Alps. <i>Cryosphere</i> , 2016, 10, 1279-1295. | 1.5 | 63 |
| 24 | Semi-automated calibration method for modelling of mountain permafrost evolution in Switzerland. <i>Cryosphere</i> , 2016, 10, 2693-2719. | 1.5 | 25 |
| 25 | Mass Balance Re-analysis of Findelengletscher, Switzerland; Benefits of Extensive Snow Accumulation Measurements. <i>Frontiers in Earth Science</i> , 2016, 4, . | 0.8 | 40 |
| 26 | Mass-balance reconstruction for Glacier No. 354, Tien Shan, from 2003 to 2014. <i>Annals of Glaciology</i> , 2016, 57, 92-102. | 2.8 | 54 |
| 27 | Snow as a driving factor of rock surface temperatures in steep rough rock walls. <i>Cold Regions Science and Technology</i> , 2015, 118, 64-75. | 1.6 | 30 |
| 28 | Historically unprecedented global glacier decline in the early 21st century. <i>Journal of Glaciology</i> , 2015, 61, 745-762. | 1.1 | 561 |
| 29 | Thermal regime of rock and its relation to snow cover in steep alpine rock walls: gemsstock, central swiss alps. <i>Geografiska Annaler, Series A: Physical Geography</i> , 2015, 97, 579-597. | 0.6 | 39 |
| 30 | Surface elevation and mass changes of all Swiss glaciers 1980â€“2010. <i>Cryosphere</i> , 2015, 9, 525-540. | 1.5 | 182 |
| 31 | Re-analysis of seasonal mass balance at Abramov glacier 1968â€“2014. <i>Journal of Glaciology</i> , 2015, 61, 1103-1117. | 1.1 | 59 |
| 32 | Imaging spectroscopy to assess the composition of ice surface materials and their impact on glacier mass balance. <i>Remote Sensing of Environment</i> , 2015, 168, 388-402. | 4.6 | 33 |
| 33 | Unlocking annual firn layer water equivalents from ground-penetrating radar data on an Alpine glacier. <i>Cryosphere</i> , 2015, 9, 1075-1087. | 1.5 | 20 |
| 34 | Introduction to the special issue of <i>Geographica Helvetica</i>; "Mapping, measuring and modeling in geomorphology". <i>Geographica Helvetica</i> , 2015, 70, 311-313. | 0.4 | 0 |
| 35 | A two-sided approach to estimate heat transfer processes within the active layer of the MurtÃ“lâ€“Corvatsch rock glacier. <i>Earth Surface Dynamics</i> , 2014, 2, 141-154. | 1.0 | 28 |
| 36 | The New Swiss Glacier Inventory SGI2010: Relevance of Using High-Resolution Source Data in Areas Dominated by Very Small Glaciers. <i>Arctic, Antarctic, and Alpine Research</i> , 2014, 46, 933-945. | 0.4 | 122 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | Introduction: Global Glacier Monitoring – a Long-Term Task Integrating in Situ Observations and Remote Sensing. , 2014, , 1-21. | | 8 |
| 38 | Modeled sensitivity of two alpine permafrost sites to RCM-based climate scenarios. Journal of Geophysical Research F: Earth Surface, 2013, 118, 780-794. | 1.0 | 54 |
| 39 | Glacier and runoff changes in the Rukhkh catchment, upper Amu-Darya basin until 2050. Global and Planetary Change, 2013, 110, 62-73. | 1.6 | 77 |
| 40 | Methodological approaches to infer end-of-winter snow distribution on alpine glaciers. Journal of Glaciology, 2013, 59, 1047-1059. | 1.1 | 62 |
| 41 | Towards remote monitoring of sub-seasonal glacier mass balance. Annals of Glaciology, 2013, 54, 75-83. | 2.8 | 34 |
| 42 | Implications of climate change on Glacier de la Plaine Morte, Switzerland. Geographica Helvetica, 2013, 68, 227-237. | 0.4 | 23 |
| 43 | A spatial and temporal analysis of different periglacial materials by using geoelectrical, seismic and borehole temperature data at Murt – Corvatsch, Upper Engadin, Swiss Alps. Geographica Helvetica, 2013, 68, 265-280. | 0.4 | 25 |
| 44 | <i>Editorial</i> Publishing physical geography papers in <i>Geographica Helvetica</i>. Geographica Helvetica, 2013, 68, 225-226. | 0.4 | 0 |
| 45 | Influence of surface and subsurface heterogeneity on observed borehole temperatures at a mountain permafrost site in the Upper Engadine, Swiss Alps. Cryosphere, 2012, 6, 517-531. | 1.5 | 45 |
| 46 | Preface: the mountain cryosphere – a holistic view on processes and their interactions. Geografiska Annaler, Series A: Physical Geography, 2012, 94, 177-182. | 0.6 | 3 |
| 47 | Evidence of accelerated englacial warming in the Monte Rosa area, Switzerland/Italy. Cryosphere, 2011, 5, 231-243. | 1.5 | 39 |
| 48 | Meltwater infiltration into the frozen active layer at an alpine permafrost site. Permafrost and Periglacial Processes, 2010, 21, 325-334. | 1.5 | 91 |
| 49 | Six decades of glacier mass-balance observations: a review of the worldwide monitoring network. Annals of Glaciology, 2009, 50, 101-111. | 2.8 | 293 |
| 50 | Monitoring mountain permafrost evolution using electrical resistivity tomography: A 7-year study of seasonal, annual, and long-term variations at Schilthorn, Swiss Alps. Journal of Geophysical Research, 2008, 113, . | 3.3 | 115 |
| 51 | Integrated glacier monitoring strategies: comments on a recent correspondence. Journal of Glaciology, 2008, 54, 947-948. | 1.1 | 4 |
| 52 | Exploring uncertainty in glacier mass balance modelling with Monte Carlo simulation. Cryosphere, 2008, 2, 191-204. | 1.5 | 66 |
| 53 | Integrated monitoring of mountain glaciers as key indicators of global climate change: the European Alps. Annals of Glaciology, 2007, 46, 150-160. | 2.8 | 259 |
| 54 | Distributed modelling of the regional climatic equilibrium line altitude of glaciers in the European Alps. Global and Planetary Change, 2007, 56, 83-100. | 1.6 | 70 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 55 | The application of Regional Climate Model output for the simulation of high-mountain permafrost scenarios. <i>Global and Planetary Change</i> , 2007, 56, 188-202. | 1.6 | 72 |
| 56 | Very high-elevation Mont Blanc glaciated areas not affected by the 20th century climate change. <i>Journal of Geophysical Research</i> , 2007, 112, . | 3.3 | 41 |
| 57 | Ground surface temperature scenarios in complex high-mountain topography based on regional climate model results. <i>Journal of Geophysical Research</i> , 2007, 112, . | 3.3 | 40 |
| 58 | Influence of different digital terrain models (DTMs) on alpine permafrost modeling. <i>Environmental Modeling and Assessment</i> , 2007, 12, 303-313. | 1.2 | 0 |
| 59 | Alpine glaciers to disappear within decades?. <i>Geophysical Research Letters</i> , 2006, 33, . | 1.5 | 276 |
| 60 | Strong spatial variability of snow accumulation observed with helicopter-borne GPR on two adjacent Alpine glaciers. <i>Geophysical Research Letters</i> , 2006, 33, . | 1.5 | 125 |
| 61 | Distributed glacier mass-balance modelling as an important component of modern multi-level glacier monitoring. <i>Annals of Glaciology</i> , 2006, 43, 335-343. | 2.8 | 82 |
| 62 | GIS-based modelling of rock-ice avalanches from Alpine permafrost areas. <i>Computational Geosciences</i> , 2006, 10, 161-178. | 1.2 | 57 |
| 63 | Permafrost Monitoring in High Mountain Areas Using a Coupled Geophysical and Meteorological Approach. , 2006, , 57-71. | | 5 |
| 64 | Sampling and statistical analyses of BTS measurements. <i>Permafrost and Periglacial Processes</i> , 2005, 16, 383-393. | 1.5 | 57 |
| 65 | Installation of a shallow borehole network and monitoring of the ground thermal regime of a high alpine discontinuous permafrost environment, Eastern Swiss Alps. <i>Norsk Geografisk Tidsskrift</i> , 2005, 59, 84-93. | 0.3 | 17 |
| 66 | The thermal regime of the active layer at the Murt l rock glacier based on data from 2002. <i>Permafrost and Periglacial Processes</i> , 2004, 15, 273-282. | 1.5 | 91 |
| 67 | Rock-wall temperatures in the Alps: modelling their topographic distribution and regional differences. <i>Permafrost and Periglacial Processes</i> , 2004, 15, 299-307. | 1.5 | 135 |
| 68 | Interpretation of geothermal profiles perturbed by topography: the alpine permafrost boreholes at Stockhorn Plateau, Switzerland. <i>Permafrost and Periglacial Processes</i> , 2004, 15, 349-357. | 1.5 | 49 |
| 69 | Energy balance at a cold Alpine firn saddle, Seserjoch, Monte Rosa. <i>International Journal of Climatology</i> , 2004, 24, 1423-1442. | 1.5 | 14 |
| 70 | Permafrost thaw and destabilization of Alpine rock walls in the hot summer of 2003. <i>Geophysical Research Letters</i> , 2004, 31, n/a-n/a. | 1.5 | 307 |
| 71 | Vegetation on Alpine rock glacier surfaces: a contribution to abundance and dynamics on extreme plant habitats. <i>Flora: Morphology, Distribution, Functional Ecology of Plants</i> , 2004, 199, 505-515. | 0.6 | 38 |
| 72 | Cold firn in the Mont Blanc and Monte Rosa areas, European Alps: spatial distribution and statistical models. <i>Annals of Glaciology</i> , 2002, 35, 9-18. | 2.8 | 24 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 73 | The new remote-sensing-derived Swiss glacier inventory: II. First results. <i>Annals of Glaciology</i> , 2002, 34, 362-366. | 2.8 | 193 |
| 74 | Thirty years of permafrost research in the Corvatschâ€Furtschellas area, Eastern Swiss Alps: A review. <i>Norsk Geografisk Tidsskrift</i> , 2002, 56, 137-145. | 0.3 | 31 |
| 75 | Snowmelt Evolution Mapping Using an Energy Balance Approach over an Alpine Terrain. <i>Arctic, Antarctic, and Alpine Research</i> , 2002, 34, 274-281. | 0.4 | 25 |
| 76 | Borehole deformation measurements and internal structure of some rock glaciers in Switzerland. <i>Permafrost and Periglacial Processes</i> , 2002, 13, 117-135. | 1.5 | 206 |
| 77 | Modelling alpine permafrost distribution based on energy-balance data: a first step. <i>Permafrost and Periglacial Processes</i> , 2002, 13, 271-282. | 1.5 | 54 |
| 78 | Snowmelt Evolution Mapping Using an Energy Balance Approach over an Alpine Terrain. <i>Arctic, Antarctic, and Alpine Research</i> , 2002, 34, 274. | 0.4 | 17 |
| 79 | Permafrost distribution modelling in the mountains of the Mediterranean: Corral del Veleta, Sierra Nevada, Spain. <i>Norsk Geografisk Tidsskrift</i> , 2001, 55, 253-260. | 0.3 | 22 |
| 80 | Statistical modelling of mountain permafrost distribution: local calibration and incorporation of remotely sensed data. <i>Permafrost and Periglacial Processes</i> , 2001, 12, 69-77. | 1.5 | 119 |
| 81 | Surface energy fluxes and distribution models of permafrost in European mountain areas: an overview of current developments. <i>Permafrost and Periglacial Processes</i> , 2001, 12, 53-68. | 1.5 | 115 |
| 82 | Using relict rockglaciers in GIS-based modelling to reconstruct Younger Dryas permafrost distribution patterns in the Err-Julier area, Swiss Alp. <i>Norsk Geografisk Tidsskrift</i> , 2001, 55, 195-202. | 0.3 | 65 |
| 83 | Cold firn and ice of high-altitude glaciers in the Alps: measurements and distribution modelling. <i>Journal of Glaciology</i> , 2001, 47, 85-96. | 1.1 | 57 |
| 84 | Mapping and modelling the occurrence and distribution of mountain permafrost. <i>Norsk Geografisk Tidsskrift</i> , 2001, 55, 186-194. | 0.3 | 56 |
| 85 | Editorial: Mapping and distribution modelling of mountain permafrost. <i>Norsk Geografisk Tidsskrift</i> , 2001, 55, 185-185. | 0.3 | 0 |
| 86 | First results and interpretation of energy-flux measurements over Alpine permafrost. <i>Annals of Glaciology</i> , 2000, 31, 275-280. | 2.8 | 48 |
| 87 | New eyes in the sky measure glaciers and ice sheets. <i>Eos</i> , 2000, 81, 265. | 0.1 | 43 |
| 88 | Miniature temperature dataloggers for mapping and monitoring of permafrost in high mountain areas: first experience from the Swiss Alps. <i>Permafrost and Periglacial Processes</i> , 1999, 10, 113-124. | 1.5 | 111 |
| 89 | Occurrence of rocky and sedimentary glacier beds in the Swiss Alps as estimated from glacier-inventory data. <i>Annals of Glaciology</i> , 1999, 28, 231-235. | 2.8 | 29 |
| 90 | On Rates and Acceleration Trends of Global Glacier Mass Changes. <i>Geografiska Annaler, Series A: Physical Geography</i> , 1999, 81, 585-591. | 0.6 | 106 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 91 | On the potential use of glacier and permafrost observations for verification of climate models. Annals of Glaciology, 1997, 25, 400-406. | 2.8 | 5 |
| 92 | On the potential use of glacier and permafrost observations for verification of climate models. Annals of Glaciology, 1997, 25, 400-406. | 2.8 | 6 |
| 93 | Mapping and modelling of mountain permafrost distribution in the Alps. Norsk Geografisk Tidsskrift, 1996, 50, 11-15. | 0.3 | 52 |
| 94 | Permafrost mapping and prospecting in southern Norway. Norsk Geografisk Tidsskrift, 1996, 50, 41-53. | 0.3 | 55 |
| 95 | Application of inventory data for estimating characteristics of and regional climate-change effects on mountain glaciers: a pilot study with the European Alps. Annals of Glaciology, 1995, 21, 206-212. | 2.8 | 280 |
| 96 | Simulating the effects of mean annual air-temperature changes on permafrost distribution and glacier size: an example from the Upper Engadin, Swiss Alps. Annals of Glaciology, 1995, 21, 399-405. | 2.8 | 19 |
| 97 | Simulating the effects of mean annual air-temperature changes on permafrost distribution and glacier size: an example from the Upper Engadin, Swiss Alps. Annals of Glaciology, 1995, 21, 399-405. | 2.8 | 61 |
| 98 | Application of inventory data for estimating characteristics of and regional climate-change effects on mountain glaciers: a pilot study with the European Alps. Annals of Glaciology, 1995, 21, 206-212. | 2.8 | 193 |
| 99 | A model of potential direct solar radiation for investigating occurrences of mountain permafrost. Permafrost and Periglacial Processes, 1992, 3, 139-142. | 1.5 | 48 |
| 100 | Permafrost occurrence from BTS measurements and climatic parameters in the eastern Swiss Alps. Permafrost and Periglacial Processes, 1992, 3, 143-147. | 1.5 | 100 |
| 101 | Permafrost research sites in the Alps: Excursions of the international workshop on permafrost and periglacial environments in mountain areas. Permafrost and Periglacial Processes, 1992, 3, 189-202. | 1.5 | 17 |