Andreas KÃ¤Ã¤b

List of Publications by Year
in descending order

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196 papers	20,358 citations	15466 65 h-index	11581 135 g-index
270 all docs	270 docs citations	270 times ranked	9264 citing authors

#	Article	IF	Citations
1	The State and Fate of Himalayan Glaciers. Science, 2012, 336, 310-314.	6.0	1,633
2	Contrasting patterns of early twenty-first-century glacier mass change in the Himalayas. Nature, 2012, 488, 495-498.	13.7	951
3	A spatially resolved estimate of High Mountain Asia glacier mass balances from 2000 to 2016. Nature Geoscience, 2017, 10, 668-673.	5.4	755
4	Co-registration and bias corrections of satellite elevation data sets for quantifying glacier thickness change. Cryosphere, 2011, 5, 271-290.	1.5	682
5	Region-wide glacier mass balances over the Pamir-Karakoram-Himalaya during 1999â€“2011. Cryosphere, 2013, 7, 1263-1286.	1.5	631
6	Accelerated global glacier mass loss in the early twenty-first century. Nature, 2021, 592, 726-731.	13.7	585
7	Permafrost and climate in Europe: Monitoring and modelling thermal, geomorphological and geotechnical responses. Earth-Science Reviews, 2009, 92, 117-171.	4.0	499
8	Northern Hemisphere permafrost map based on TTOP modelling for 2000â€“2016 at 1â€¯km2 scale. Earth-Science Reviews, 2019, 193, 299-316.	4.0	462
9	Remote sensing based assessment of hazards from glacier lake outbursts: a case study in the Swiss Alps. Canadian Geotechnical Journal, 2002, 39, 316-330.	1.4	425
10	Rapid disintegration of Alpine glaciers observed with satellite data. Geophysical Research Letters, 2004, 31, n/a-n/a.	1.5	402
11	Combining satellite multispectral image data and a digital elevation model for mapping debris-covered glaciers. Remote Sensing of Environment, 2004, 89, 510-518.	4.6	391
12	Permafrost creep and rock glacier dynamics. Permafrost and Periglacial Processes, 2006, 17, 189-214.	1.5	381
13	Brief Communication: Contending estimates of 2003â€“2008 glacier mass balance over the Pamirâ€“Karakoramâ€“Himalaya. Cryosphere, 2015, 9, 557-564.	1.5	350
14	The new remote-sensing-derived Swiss glacier inventory: I. Methods. Annals of Glaciology, 2002, 34, 355-361.	2.8	336
15	Geomorphic and geologic controls of geohazards induced by Nepalâ€™s 2015 Gorkha earthquake. Science, 2016, 351, aac8353.	6.0	317
16	Monitoring high-mountain terrain deformation from repeated air- and spaceborne optical data: examples using digital aerial imagery and ASTER data. ISPRS Journal of Photogrammetry and Remote Sensing, 2002, 57, 39-52.	4.9	314
17	Combination of SRTM3 and repeat ASTER data for deriving alpine glacier flow velocities in the Bhutan Himalaya. Remote Sensing of Environment, 2005, 94, 463-474.	4.6	313
18	A massive rock and ice avalanche caused the 2021 disaster at Chamoli, Indian Himalaya. Science, 2021, 373, 300-306.	6.0	304

#	Article	IF	Citations
19	Evaluation of existing image matching methods for deriving glacier surface displacements globally from optical satellite imagery. Remote Sensing of Environment, 2012, 118, 339-355.	4.6	284
20	Sub-pixel precision image matching for measuring surface displacements on mass movements using normalized cross-correlation. Remote Sensing of Environment, 2011, 115, 130-142.	4.6	277
21	An assessment procedure for glacial hazards in the Swiss Alps. Canadian Geotechnical Journal, 2004, 41, 1068-1083.	1.4	260
22	The glaciers climate change initiative: Methods for creating glacier area, elevation change and velocity products. Remote Sensing of Environment, 2015, 162, 408-426.	4.6	253
23	Multispectral imaging contributions to global land ice measurements from space. Remote Sensing of Environment, 2005, 99, 187-219.	4.6	242
24	Recent glacier changes in the Alps observed by satellite: Consequences for future monitoring strategies. Global and Planetary Change, 2007, 56, 111-122.	1.6	229
25	The 2002 rock/ice avalanche at Kolka/Karmadon, Russian Caucasus: assessment of extraordinary avalanche formation and mobility, and application of QuickBird satellite imagery. Natural Hazards and Earth System Sciences, 2005, 5, 173-187.	1.5	222
26	Remote sensing of glacier- and permafrost-related hazards in high mountains: an overview. Natural Hazards and Earth System Sciences, 2005, 5, 527-554.	1.5	217
27	Spatial variability of recent glacier area changes in the Tien Shan Mountains, Central Asia, using Corona (~ 1970), Landsat (~ 2000), and ALOS (~ 2007) satellite data. Global and Planetary Change, 2010, 71, 42-54.	1.6	213
28	Remote sensing and GIS technology in the Global Land Ice Measurements from Space (GLIMS) Project. Computers and Geosciences, 2007, 33, 104-125.	2.0	209
29	Decadal changes from a multi-temporal glacier inventory of Svalbard. Cryosphere, 2013, 7, 1603-1621.	1.5	205
30	Surface Geometry, Thickness Changes and Flow Fields on Creeping Mountain Permafrost: Automatic Extraction by Digital Image Analysis. Permafrost and Periglacial Processes, 2000, 11, 315-326.	1.5	198
31	Geology, glacier retreat and permafrost degradation as controlling factors of slope instabilities in a high-mountain rock wall: the Monte Rosa east face. Natural Hazards and Earth System Sciences, 2006, 6, 761-772.	1.5	195
32	The new remote-sensing-derived Swiss glacier inventory: II. First results. Annals of Glaciology, 2002, 34, 362-366.	2.8	193
33	Landsat-derived glacier inventory for Jotunheimen, Norway, and deduced glacier changes since the 1930s. Cryosphere, 2008, 2, 131-145.	1.5	190
34	Svalbard glacier elevation changes and contribution to sea level rise. Journal of Geophysical Research, 2010, 115, .	3.3	190
35	Massive collapse of two glaciers in western Tibet in 2016 after surge-like instability. Nature Geoscience, 2018, 11, 114-120.	5.4	189
36	On the response of rockglacier creep to surface temperature increase. Global and Planetary Change, 2007, 56, 172-187.	1.6	187

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37	Regional-scale GIS-models for assessment of hazards from glacier lake outbursts: evaluation and application in the Swiss Alps. Natural Hazards and Earth System Sciences, 2003, 3, 647-662.	1.5	160
38	Perspectives on the production of a glacier inventory from multispectral satellite data in Arctic Canada: Cumberland Peninsula, Baffin Island. Annals of Glaciology, 2005, 42, 59-66.	2.8	145
39	Glacier Remote Sensing Using Sentinel-2. Part II: Mapping Glacier Extents and Surface Facies, and Comparison to Landsat 8. Remote Sensing, 2016, 8, 575.	1.8	136
40	Analysing the creep of mountain permafrost using high precision aerial photogrammetry: 25 years of monitoring Gruben rock glacier, Swiss Alps. Permafrost and Periglacial Processes, 1997, 8, 409-426.	1.5	133
41	Global Land Ice Measurements from Space (GLIMS): Remote Sensing and GIS Investigations of the Earth's Cryosphere. Geocarto International, 2004, 19, 57-84.	1.7	131
42	The Kolka-Karmadon rock/ice slide of 20 September 2002: an extraordinary event of historical dimensions in North Ossetia, Russian Caucasus. Journal of Glaciology, 2004, 50, 533-546.	1.1	127
43	Repeat optical satellite images reveal widespread and long term decrease in land-terminating glacier speeds. Cryosphere, 2012, 6, 467-478.	1.5	126
44	Glacier Remote Sensing Using Sentinel-2. Part I: Radiometric and Geometric Performance, and Application to Ice Velocity. Remote Sensing, 2016, 8, 598.	1.8	121
45	Glacier-surge mechanisms promoted by a hydro-thermodynamic feedback to summer melt. Cryosphere, 2015, 9, 197-215.	1.5	120
46	Prevention of outburst floods from periglacial lakes at Grubengletscher, Valais, Swiss Alps. Journal of Glaciology, 2001, 47, 111-122.	1.1	118
47	Remote sensing of permafrostâ€related problems and hazards. Permafrost and Periglacial Processes, 2008, 19, 107-136.	1.5	112
48	Combined observations of rock mass movements using satellite SAR interferometry, differential GPS, airborne digital photogrammetry, and airborne photography interpretation. Journal of Geophysical Research, 2010, 115, .	3.3	111
49	Error sources and guidelines for quality assessment of glacier area, elevation change, and velocity products derived from satellite data in the Glaciers_cci project. Remote Sensing of Environment, 2017, 203, 256-275.	4.6	109
50	Evaluation of ASTER and SRTM DEM data for lahar modeling: A case study on lahars from PopocatÃ©petl Volcano, Mexico. Journal of Volcanology and Geothermal Research, 2008, 170, 99-110.	0.8	108
51	Svalbard surge dynamics derived from geometric changes. Annals of Glaciology, 2009, 50, 50-60.	2.8	105
52	Glacier Volume Changes Using ASTER Satellite Stereo and ICESat GLAS Laser Altimetry. A Test Study on EdgeÃ˜ya, Eastern Svalbard. IEEE Transactions on Geoscience and Remote Sensing, 2008, 46, 2823-2830.	2.7	104
53	Fast deformation of perennially frozen debris in a warm rock glacier in the Swiss Alps: An effect of liquid water. Journal of Geophysical Research, 2008, 113, .	3.3	102
54	Corrigendum to "Region-wide glacier mass balances over the Pamir-Karakoram-Himalaya during 1999â€“2011" published in The Cryosphere, 7, 1263â€“1286, 2013. Cryosphere, 2013, 7, 1885-1886.	1.5	99

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55	Sensitivity of glacier volume change estimation to DEM void interpolation. Cryosphere, 2019, 13, 895-910.	1.5	97
56	Towards a palaeoclimatic model of rock-glacier formation in the Swiss Alps. Annals of Glaciology, 2000, 31, 281-286.	2.8	89
57	Slope failures and erosion rates on a glacierized highâ€mountain face under climatic changes. Earth Surface Processes and Landforms, 2013, 38, 836-846.	1.2	87
58	Detecting and quantifying mountain permafrost creep from in situ inventory, space-borne radar interferometry and airborne digital photogrammetry. International Journal of Remote Sensing, 2004, 25, 2919-2931.	1.3	86
59	Reconciling Svalbard Glacier Mass Balance. Frontiers in Earth Science, 2020, 8, .	0.8	77
60	Mountain permafrost distribution modelling using a multi-criteria approach in the HÃ¶vsgÃ¶l area, northern Mongolia. Permafrost and Periglacial Processes, 2006, 17, 91-104.	1.5	75
61	Development of transverse ridges on rock glaciers: field measurements and laboratory experiments. Permafrost and Periglacial Processes, 2004, 15, 379-391.	1.5	73
62	The 24 July 2008 outburst flood at the western Zyndan glacier lake and recent regional changes in glacier lakes of the Teskey Ala-Too range, Tien Shan, Kyrgyzstan. Natural Hazards and Earth System Sciences, 2010, 10, 647-659.	1.5	71
63	Pollen analysis and ¹⁴C age of moss remains in a permafrost core recovered from the active rock glacier MurtÃ¨l-Corvatsch, Swiss Alps: geomorphological and glaciological implications. Journal of Glaciology, 1999, 45, 1-8.	1.1	69
64	Thaw Subsidence of a Yedoma Landscape in Northern Siberia, Measured In Situ and Estimated from TerraSAR-X Interferometry. Remote Sensing, 2018, 10, 494.	1.8	69
65	Photogrammetry for early recognition of high mountain hazards: New techniques and applications. Physics and Chemistry of the Earth, 2000, 25, 765-770.	0.3	65
66	Mountain permafrost dynamics within a recently exposed glacier forefield inferred by a combined geomorphological, geophysical and photogrammetrical approach. Earth Surface Processes and Landforms, 2007, 32, 1797-1810.	1.2	65
67	Recent glacier and lake changes in High Mountain Asia and their relation to precipitation changes. Cryosphere, 2019, 13, 2977-3005.	1.5	64
68	MMASTER: Improved ASTER DEMs for Elevation Change Monitoring. Remote Sensing, 2017, 9, 704.	1.8	63
69	Sudden large-volume detachments of low-angle mountain glaciers â€“ more frequent than thought?. Cryosphere, 2021, 15, 1751-1785.	1.5	63
70	Rockglacier acceleration in the Turtmann valley (Swiss Alps): Probable controls. Norsk Geografisk Tidsskrift, 2005, 59, 157-163.	0.3	62
71	Surface speed and frontal ablation of Kronebreen and Kongsbreen, NW Svalbard, from SAR offset tracking. Cryosphere, 2015, 9, 2339-2355.	1.5	62
72	Flow field of Kronebreen, Svalbard, using repeated Landsat 7 and ASTER data. Annals of Glaciology, 2005, 42, 7-13.	2.8	61

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73	A surge-type movement at Ghiacciaio del Belvedere and a developing slope instability in the east face of Monte Rosa, Macugnaga, Italian Alps. Norsk Geografisk Tidsskrift, 2002, 56, 104-111.	0.3	60
74	The Distribution, Thermal Characteristics and Dynamics of Permafrost in TrÃ¶llaskagi, Northern Iceland, as Inferred from the Distribution of Rock Glaciers and Iceâ€Cored Moraines. Permafrost and Periglacial Processes, 2013, 24, 322-335.	1.5	60
75	Ice-elevation changes of Glaciar Chico, southern Patagonia, using ASTER DEMs, aerial photographs and GPS data. Journal of Glaciology, 2005, 51, 105-112.	1.1	59
76	Evolution of a High-Mountain Thermokarst Lake in the Swiss Alps. Arctic, Antarctic, and Alpine Research, 2001, 33, 385-390.	0.4	58
77	Monitoring ice shelf velocities from repeat MODIS and Landsat data â€“ a method study on the Larsen C ice shelf, Antarctic Peninsula, and 10 other ice shelves around Antarctica. Cryosphere, 2010, 4, 161-178.	1.5	58
78	Contrasting responses of Central Asian rock glaciers to global warming. Scientific Reports, 2015, 5, 8228.	1.6	57
79	Modeling Glacier Elevation Change from DEM Time Series. Remote Sensing, 2015, 7, 10117-10142.	1.8	56
80	Monitoring topographic changes in a periglacial highâ€mountain face using highâ€resolution DTMs, Monte Rosa East Face, Italian Alps. Permafrost and Periglacial Processes, 2011, 22, 140-152.	1.5	55
81	Climate change impacts on mountain glaciers and permafrost. Global and Planetary Change, 2007, 56, vii-ix.	1.6	54
82	Mass-balance reconstruction for Glacier No. 354, Tien Shan, from 2003 to 2014. Annals of Glaciology, 2016, 57, 92-102.	2.8	54
83	Measurement of Surface Displacement and Deformation of Mass Movements Using Least Squares Matching of Repeat High Resolution Satellite and Aerial Images. Remote Sensing, 2012, 4, 43-67.	1.8	53
84	Glacial lake mapping with very high resolution satellite SAR data. Natural Hazards and Earth System Sciences, 2012, 12, 2487-2498.	1.5	53
85	Advance mechanisms of rock glaciers. Permafrost and Periglacial Processes, 2005, 16, 187-193.	1.5	52
86	Geochemical characterization of supraglacial debris via in situ and optical remote sensing methods: a case study in Khumbu Himalaya, Nepal. Cryosphere, 2012, 6, 85-100.	1.5	52
87	Assessment of the hazard potential of ice avalanches using remote sensing and GISâ€modelling. Norsk Geografisk Tidsskrift, 2004, 58, 74-84.	0.3	50
88	Modelling mass balance using photogrammetric and geophysical data: a pilot study at Griesgletscher, Swiss Alps. Journal of Glaciology, 1999, 45, 575-583.	1.1	49
89	Circum-Arctic Changes in the Flow of Glaciers and Ice Caps from Satellite SAR Data between the 1990s and 2017. Remote Sensing, 2017, 9, 947.	1.8	49
90	Monitoring Rock Glacier Kinematics with Satellite Synthetic Aperture Radar. Remote Sensing, 2020, 12, 559.	1.8	49

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91	Surface kinematics of periglacial sorted circles using structure-from-motion technology. Cryosphere, 2014, 8, 1041-1056.	1.5	48
92	Mechanisms leading to the 2016 giant twin glacier collapses, Aru Range, Tibet. Cryosphere, 2018, 12, 2883-2900.	1.5	48
93	Multi-decadal mass balance series of three Kyrgyz glaciers inferred from modelling constrained with repeated snow line observations. Cryosphere, 2018, 12, 1899-1919.	1.5	48
94	Glacier surface velocity estimation using repeat TerraSAR-X images: Wavelet- vs. correlation-based image matching. ISPRS Journal of Photogrammetry and Remote Sensing, 2013, 82, 49-62.	4.9	47
95	Extracting recent short-term glacier velocity evolution over southern Alaska and the Yukon from a large collection of Landsat data. Cryosphere, 2019, 13, 795-814.	1.5	47
96	Using SAR satellite data time series for regional glacier mapping. Cryosphere, 2018, 12, 867-890.	1.5	46
97	Surface displacements and surface age estimates for creeping slope landforms in Northern and Eastern Iceland using digital photogrammetry. Geomorphology, 2006, 80, 59-79.	1.1	45
98	Coseismic displacements of the 14 November 2016 <i>M</i>_wÂ7.8 Kaikoura, New Zealand, earthquake using the Planet optical cubesat constellation. Natural Hazards and Earth System Sciences, 2017, 17, 627-639.	1.5	44
99	New eyes in the sky measure glaciers and ice sheets. Eos, 2000, 81, 265.	0.1	43
100	Regional Glacier Mapping Using Optical Satellite Data Time Series. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 3698-3711.	2.3	43
101	The 2015 Surge of Hispar Glacier in the Karakoram. Remote Sensing, 2017, 9, 888.	1.8	41
102	Evolution of a High-Mountain Thermokarst Lake in the Swiss Alps. Arctic, Antarctic, and Alpine Research, 2001, 33, 385.	0.4	40
103	Characteristics and potential climatic significance of â€œminiature ice capsâ€•(crest- and cornice-type) Tj ETQq1 1 0.784314 rgBT /Ov	1.1	40
104	Permafrost creep within a recently deglaciated glacier forefield: Muragl, Swiss Alps. Permafrost and Periglacial Processes, 2006, 17, 79-85.	1.5	39
105	Vegetation on Alpine rock glacier surfaces: a contribution to abundance and dynamics on extreme plant habitats. Flora: Morphology, Distribution, Functional Ecology of Plants, 2004, 199, 505-515.	0.6	38
106	Assessment of multispectral glacier mapping methods and derivation of glacier area changes, 1978â€“2002, in the central Southern Alps, New Zealand, from ASTER satellite data, field survey and existing inventory data. Journal of Glaciology, 2011, 57, 667-683.	1.1	38
107	Accelerated glacier shrinkage in the Ak-Shyirak massif, Inner Tien Shan, during 2003â€“2013. Science of the Total Environment, 2016, 562, 364-378.	3.9	38
108	Motion detection using near-simultaneous satellite acquisitions. Remote Sensing of Environment, 2014, 154, 164-179.	4.6	37

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109	River-ice and water velocities using the Planet optical cubesat constellation. Hydrology and Earth System Sciences, 2019, 23, 4233-4247.	1.9	37
110	GISâ€based modeling of glacial hazards and their interactions using Landsatâ€TM and IKONOS imagery. Norsk Geografisk Tidsskrift, 2004, 58, 61-73.	0.3	36
111	Accuracy assessment for mapping glacier flow velocity and detecting flow dynamics from ASTER satellite imagery: Tasman Glacier, New Zealand. Remote Sensing of Environment, 2013, 133, 90-101.	4.6	35
112	Locally adaptive template sizes for matching repeat images of Earth surface mass movements. ISPRS Journal of Photogrammetry and Remote Sensing, 2012, 69, 10-28.	4.9	34
113	Seasonal drainage of supraglacial lakes on debris-covered glaciers in the Tien Shan Mountains, Central Asia. Geomorphology, 2017, 286, 133-142.	1.1	34
114	Pan-Antarctic map of near-surface permafrost temperatures at 1â€‰km² scale. Cryosphere, 2020, 14, 497-519.	1.5	34
115	Monitoring Bedfast Ice and Ice Phenology in Lakes of the Lena River Delta Using TerraSAR-X Backscatter and Coherence Time Series. Remote Sensing, 2016, 8, 903.	1.8	32
116	Pollen analysis and ¹⁴C age of moss remains in a permafrost core recovered from the active rock glacier MurtÃ¨l-Corvatsch, Swiss Alps: geomorphological and glaciological implications. Journal of Glaciology, 1999, 45, 1-8.	1.1	32
117	Geometry and dynamics of two lobe-shaped rock glaciers in the permafrost of Svalbard. Norsk Geografisk Tidsskrift, 2002, 56, 152-160.	0.3	31
118	Inventory and changes of rock glacier creep speeds in Ile Alatau and KungÃ¶y Ala-Too, northern Tien Shan, since the 1950s. Cryosphere, 2021, 15, 927-949.	1.5	31
119	Impact of the eruptive activity on glacier evolution at PopocatÃ©petl Volcano (MÃ©xico) during 1994â€“2004. Journal of Volcanology and Geothermal Research, 2008, 170, 86-98.	0.8	30
120	Spatio-temporal variability of X-band radar backscatter and coherence over the Lena River Delta, Siberia. Remote Sensing of Environment, 2016, 182, 169-191.	4.6	30
121	Dynamic vulnerability revealed in the collapse of an Arctic tidewater glacier. Scientific Reports, 2019, 9, 5541.	1.6	29
122	Greenland-wide inventory of ice marginal lakes using a multi-method approach. Scientific Reports, 2021, 11, 4481.	1.6	29
123	A new DEM of the Austfonna ice cap by combining differential SAR interferometry with ICESat laser altimetry. Polar Research, 2012, 31, 18460.	1.6	27
124	Elevation Change and Improved Velocity Retrieval Using Orthorectified Optical Satellite Data from Different Orbits. Remote Sensing, 2017, 9, 300.	1.8	27
125	Photogrammetric reconstruction of glacier mass balance using a kinematic ice-flow model: a 20 year time series on Grubengletscher, Swiss Alps. Annals of Glaciology, 2000, 31, 45-52.	2.8	26
126	Large drainages from short-lived glacial lakes in the Teskey Range, Tien Shan Mountains, Central Asia. Natural Hazards and Earth System Sciences, 2018, 18, 983-995.	1.5	26

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127	Using dynamic modelling to simulate the distribution of rockglaciers. Geomorphology, 2008, 93, 130-143.	1.1	25
128	Assessing lahars from ice-capped volcanoes using ASTER satellite data, the SRTM DTM and two different flow models: case study on IztaccÃhuatl (Central Mexico). Natural Hazards and Earth System Sciences, 2008, 8, 559-571.	1.5	25
129	Detection and Analysis of Ground Deformation in Permafrost Environments. Permafrost and Periglacial Processes, 2016, 27, 339-351.	1.5	25
130	Snow depth from ICESat laser altimetry â€" A test study in southernÂNorway. Remote Sensing of Environment, 2017, 191, 389-401.	4.6	24
131	Terrain changes from images acquired on opportunistic flights by SfM photogrammetry. Cryosphere, 2017, 11, 827-840.	1.5	23
132	Weekly Glacier Flow Estimation from Dense Satellite Time Series Using Adapted Optical Flow Technology. Frontiers in Earth Science, 0, 5, .	0.8	23
133	Frontal destabilization of Stonebreen, EdgeÃ¸ya, Svalbard. Cryosphere, 2017, 11, 553-566.	1.5	21
134	Precise DEM extraction from Svalbard using 1936 high oblique imagery. Geoscientific Instrumentation, Methods and Data Systems, 2018, 7, 277-288.	0.6	21
135	An Inter-Comparison of Techniques for Determining Velocities of Maritime Arctic Glaciers, Svalbard, Using Radarsat-2 Wide Fine Mode Data. Remote Sensing, 2016, 8, 785.	1.8	20
136	Brief communication: Collapse of 4â€‰Mm³ of ice from a cirque glacier in the Central Andes of Argentina. Cryosphere, 2019, 13, 997-1004.	1.5	20
137	Cold-regions river flow observed from space. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	19
138	River ice flux and water velocities along a 600 km-long reach of Lena River, Siberia, from satellite stereo. Hydrology and Earth System Sciences, 2013, 17, 4671-4683.	1.9	19
139	Composition and internal structures of a rock glacier on the strandflat of western Spitsbergen, Svalbard. Norsk Geografisk Tidsskrift, 2005, 59, 139-148.	0.3	18
140	Glacier Mapping and Monitoring Using Multispectral Data. , 2014, , 75-112.		18
141	From high friction zone to frontal collapse: dynamics of an ongoing tidewater glacier surge, Negribreen, Svalbard. Journal of Glaciology, 2020, 66, 742-754.	1.1	17
142	Modeling the Biophysical Impacts of Global Change in Mountain Biosphere Reserves. Mountain Research and Development, 2007, 27, 66-77.	0.4	16
143	Estimating river discharge during ice breakup from near-simultaneous satellite imagery. Cold Regions Science and Technology, 2014, 98, 35-46.	1.6	16
144	ICESat laser altimetry over small mountain glaciers. Cryosphere, 2016, 10, 2129-2146.	1.5	16

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145	Brief communication: Detection of glacier surge activity using cloud computing of Sentinel-1 radar data. Cryosphere, 2021, 15, 4901-4907.	1.5	15
146	Ensemble matching of repeat satellite images applied to measure fast-changing ice flow, verified with mountain climber trajectories on Khumbu icefall, Mount Everest. Journal of Glaciology, 2020, 66, 905-915.	1.1	14
147	Glaciers as water resources. , 2015, , 184-203.		13
148	PERMAFROST AND PERIGLACIAL FEATURES | Rock Glaciers and Protalus Forms. , 2013, , 535-541.		12
149	Towards a European Cal/Val service for earth observation. International Journal of Remote Sensing, 2020, 41, 4496-4511.	1.3	12
150	Glacier surges. , 2021, , 417-466.		12
151	Modelling mass balance using photogrammetric and geophysical data: a pilot study at Griesgletscher, Swiss Alps. Journal of Glaciology, 1999, 45, 575-583.	1.1	11
152	Identification and mapping of soil erosion areas in the Blue Nile, Eastern Sudan using multispectral ASTER and MODIS satellite data and the SRTM elevation model. Hydrology and Earth System Sciences, 2010, 14, 1167-1178.	1.9	11
153	Glacier displacement on Comfortlessbreen, Svalbard, using 2-pass differential SAR interferometry (DInSAR) with a digital elevation model. Polar Record, 2012, 48, 17-25.	0.4	11
154	Glacier Surges. , 2015, , 437-485.		11
155	Glacier- and permafrost-related slope instabilities. , 2015, , 147-165.		10
156	Regional Geomorphological Conditions Related to Recent Changes of Glacial Lakes in the Issyk-Kul Basin, Northern Tien Shan. Geosciences (Switzerland), 2018, 8, 99.	1.0	10
157	Introduction: Global Glacier Monitoringâ€"a Long-Term Task Integrating in Situ Observations and Remote Sensing. , 2014, , 1-21.		8
158	Estimation of Supraglacial Dust and Debris Geochemical Composition via Satellite Reflectance and Emissivity. Remote Sensing, 2012, 4, 2554-2575.	1.8	7
159	Pressure and inertia sensing drifters for glacial hydrology flow path measurements. Cryosphere, 2020, 14, 1009-1023.	1.5	7
160	Himalayan Glaciers (India, Bhutan, Nepal): Satellite Observations of Thinning and Retreat. , 2014, , 549-582.		7
161	Digital Terrain Modeling and Glacier Topographic Characterization. , 2014, , 113-144.		7
162	ASTER Imaging and Analysis of Glacier Hazards. Remote Sensing and Digital Image Processing, 2010, , 325-373.	0.7	7

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163	Three different glacier surges at a spot: what satellites observe and what not. Cryosphere, 2022, 16, 2505-2526.	1.5	7
164	Surface elevation change and high resolution surface velocities for advancing outlets of jostedalsbreen. Geografiska Annaler, Series A: Physical Geography, 2006, 88, 55-74.	0.6	6
165	Glacierâ€“permafrost relations in a high-mountain environment: 5 decades of kinematic monitoring at the Gruben site, Swiss Alps. Cryosphere, 2022, 16, 2083-2101.	1.5	6
166	A Consistent Framework for Coupling Basal Friction With Subglacial Hydrology on Hardâ€Bedded Glaciers. Geophysical Research Letters, 2022, 49, .	1.5	6
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