

# Mark A Fahnestock

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5218123/publications.pdf>

Version: 2024-02-01

62  
papers

4,837  
citations

126907

33  
h-index

114465

63  
g-index

64  
all docs

64  
docs citations

64  
times ranked

3882  
citing authors

#	ARTICLE	IF	CITATIONS
1	Topographic Correction of Geothermal Heat Flux in Greenland and Antarctica. <i>Journal of Geophysical Research F: Earth Surface</i> , 2021, 126, e2020JF005598.	2.8	19
2	Constraining subglacial processes from surface velocity observations using surrogate-based Bayesian inference. <i>Journal of Glaciology</i> , 2021, 67, 385-403.	2.2	25
3	Granular decoherence precedes ice mÅlange failure and glacier calving at Jakobshavn IsbrÅ. <i>Nature Geoscience</i> , 2021, 14, 417-422.	12.9	16
4	The Scientific Legacy of NASAÅs Operation IceBridge. <i>Reviews of Geophysics</i> , 2021, 59, e2020RG000712.	23.0	49
5	Quo vadis, Alsek? Climate-driven glacier retreat may change the course of a major river outlet in southern Alaska. <i>Geomorphology</i> , 2021, 384, 107701.	2.6	6
6	Evaluation of passive microwave melt detection methods on Antarctic Peninsula ice shelves using time series of Sentinel-1 SAR. <i>Remote Sensing of Environment</i> , 2020, 250, 112044.	11.0	13
7	Impact of Calving Dynamics on Kangilernata Sermia, Greenland. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL088524.	4.0	3
8	Rapid Reconfiguration of the Greenland Ice Sheet Coastal Margin. <i>Journal of Geophysical Research F: Earth Surface</i> , 2020, 125, e2020JF005585.	2.8	17
9	The age of surface-exposed ice along the northern margin of the Greenland Ice Sheet. <i>Journal of Glaciology</i> , 2020, 66, 667-684.	2.2	17
10	Contribution of the Greenland Ice Sheet to sea level over the next millennium. <i>Science Advances</i> , 2019, 5, eaav9396.	10.3	164
11	Extracting recent short-term glacier velocity evolution over southern Alaska and the Yukon from a large collection of Landsat data. <i>Cryosphere</i> , 2019, 13, 795-814.	3.9	47
12	A Possible Second Large Subglacial Impact Crater in Northwest Greenland. <i>Geophysical Research Letters</i> , 2019, 46, 1496-1504.	4.0	18
13	Non-linear glacier response to calving events, Jakobshavn IsbrÅ, Greenland. <i>Journal of Glaciology</i> , 2019, 65, 39-54.	2.2	17
14	A large impact crater beneath Hiawatha Glacier in northwest Greenland. <i>Science Advances</i> , 2018, 4, eaar8173.	10.3	97
15	Acquisition of a 3 min, two-dimensional glacier velocity field with terrestrial radar interferometry. <i>Journal of Glaciology</i> , 2017, 63, 629-636.	2.2	11
16	Spatial Patterns of Summer Speedup on South Central Alaska Glaciers. <i>Geophysical Research Letters</i> , 2017, 44, 9379-9388.	4.0	21
17	Asynchronous behavior of outlet glaciers feeding GodthÅbsfjord (Nuup Kangerlua) and the triggering of Narsap Sermia's retreat in SW Greenland. <i>Journal of Glaciology</i> , 2017, 63, 288-308.	2.2	40
18	A synthesis of the basal thermal state of the Greenland Ice Sheet. <i>Journal of Geophysical Research F: Earth Surface</i> , 2016, 121, 1328-1350.	2.8	122

#	ARTICLE	IF	CITATIONS
19	Complex Greenland outlet glacier flow captured. <i>Nature Communications</i> , 2016, 7, 10524.	12.8	106
20	Rapid large-area mapping of ice flow using Landsat 8. <i>Remote Sensing of Environment</i> , 2016, 185, 84-94.	11.0	223
21	Holocene deceleration of the Greenland Ice Sheet. <i>Science</i> , 2016, 351, 590-593.	12.6	39
22	Radar attenuation and temperature within the Greenland Ice Sheet. <i>Journal of Geophysical Research F: Earth Surface</i> , 2015, 120, 983-1008.	2.8	72
23	Dynamic jamming of iceberg-choked fjords. <i>Geophysical Research Letters</i> , 2015, 42, 1122-1129.	4.0	28
24	Seasonal and interannual variations in ice melange and its impact on terminus stability, Jakobshavn Isbr�, Greenland. <i>Journal of Glaciology</i> , 2015, 61, 76-88.	2.2	73
25	Radiostratigraphy and age structure of the Greenland Ice Sheet. <i>Journal of Geophysical Research F: Earth Surface</i> , 2015, 120, 212-241.	2.8	124
26	Quantifying velocity response to ocean tides and calving near the terminus of Jakobshavn Isbr�, Greenland. <i>Journal of Glaciology</i> , 2014, 60, 609-621.	2.2	22
27	Rapid submarine melting driven by subglacial discharge, LeConte Glacier, Alaska. <i>Geophysical Research Letters</i> , 2013, 40, 5153-5158.	4.0	133
28	Outlet glacier response to forcing over hourly to interannual timescales, Jakobshavn Isbr�, Greenland. <i>Journal of Glaciology</i> , 2012, 58, 1212-1226.	2.2	25
29	Observing calving-generated ocean waves with coastal broadband seismometers, Jakobshavn Isbr�, Greenland. <i>Annals of Glaciology</i> , 2012, 53, 79-84.	1.4	30
30	Detection of Large-Scale Forest Canopy Change in Pan-Tropical Humid Forests 2000-2009 With the SeaWinds Ku-Band Scatterometer. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2012, 50, 2603-2617.	6.3	21
31	Seasonal to decadal scale variations in the surface velocity of Jakobshavn Isbrae, Greenland: Observation and model-based analysis. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	134
32	Submarine melting of the 1985 Jakobshavn Isbrae floating tongue and the triggering of the current retreat. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	183
33	Tropical forest backscatter anomaly evident in SeaWinds scatterometer morning overpass data during 2005 drought in Amazonia. <i>Remote Sensing of Environment</i> , 2011, 115, 897-907.	11.0	127
34	Volume change of Jakobshavn Isbr�, West Greenland: 1985-1997-2007. <i>Journal of Glaciology</i> , 2010, 56, 635-646.	2.2	31
35	Deep air convection in the firn at a zero-accumulation site, central Antarctica. <i>Earth and Planetary Science Letters</i> , 2010, 293, 359-367.	4.4	82
36	Calving icebergs indicate a thick layer of temperate ice at the base of Jakobshavn Isbr�, Greenland. <i>Journal of Glaciology</i> , 2009, 55, 563-566.	2.2	14

#	ARTICLE	IF	CITATIONS
37	Understanding Glacier Flow in Changing Times. <i>Science</i> , 2008, 322, 1061-1062.	12.6	37
38	Synchronous retreat and acceleration of southeast Greenland outlet glaciers 2000–06: ice dynamics and coupling to climate. <i>Journal of Glaciology</i> , 2008, 54, 646-660.	2.2	228
39	CLIMATE CHANGE: Rethinking Ice Sheet Time Scales. <i>Science</i> , 2007, 315, 1508-1510.	12.6	41
40	Large subglacial lakes in East Antarctica at the onset of fast-flowing ice streams. <i>Nature</i> , 2007, 445, 904-907.	27.8	224
41	Tectonically controlled subglacial lakes on the flanks of the Gamburtsev Subglacial Mountains, East Antarctica. <i>Geophysical Research Letters</i> , 2006, 33, .	4.0	52
42	Remote sensing of snow thaw at the pan-Arctic scale using the SeaWinds scatterometer. <i>Journal of Hydrology</i> , 2005, 312, 294-311.	5.4	56
43	West Antarctic ice-stream discharge variability: mechanism, controls and pattern of grounding-line retreat. <i>Journal of Glaciology</i> , 2004, 50, 471-484.	2.2	61
44	Large fluctuations in speed on Greenland's Jakobshavn Isbr� glacier. <i>Nature</i> , 2004, 432, 608-610.	27.8	434
45	Extreme firn metamorphism: impact of decades of vapor transport on near-surface firn at a low-accumulation glazed site on the East Antarctic plateau. <i>Annals of Glaciology</i> , 2004, 39, 73-78.	1.4	52
46	GEOPHYSICS: Glacial Flow Goes Seismic. <i>Science</i> , 2003, 302, 578-579.	12.6	11
47	Catastrophic ice-shelf break-up by an ice-shelf-fragment-capsize mechanism. <i>Journal of Glaciology</i> , 2003, 49, 22-36.	2.2	185
48	Long melt seasons on ice shelves of the Antarctic Peninsula: an analysis using satellite-based microwave emission measurements. <i>Annals of Glaciology</i> , 2002, 34, 127-133.	1.4	55
49	Ice flow in the northeast Greenland ice stream. <i>Annals of Glaciology</i> , 2000, 31, 141-146.	1.4	18
50	The link between climate warming and break-up of ice shelves in the Antarctic Peninsula. <i>Journal of Glaciology</i> , 2000, 46, 516-530.	2.2	581
51	Snow megadune fields on the East Antarctic Plateau: Extreme atmosphere-ice interaction. <i>Geophysical Research Letters</i> , 2000, 27, 3719-3722.	4.0	93
52	Ice flow of Humboldt, Petermann and Ryder Gletscher, northern Greenland. <i>Journal of Glaciology</i> , 1999, 45, 231-241.	2.2	29
53	Improving AVHRR Resolution Through Data Cumulation for Mapping Polar Ice Sheets. <i>Remote Sensing of Environment</i> , 1999, 69, 56-66.	11.0	18
54	Detailed topography of Roosevelt Island and Siple Dome, West Antarctica. <i>Annals of Glaciology</i> , 1998, 27, 61-67.	1.4	9

#	ARTICLE	IF	CITATIONS
55	Improving digital elevation models over ice sheets using AVHRR-based photogrammetry. <i>Journal of Glaciology</i> , 1998, 44, 97-103.	2.2	20
56	balance velocities of the Greenland Ice Sheet. <i>Geophysical Research Letters</i> , 1997, 24, 3045-3048.	4.0	39
57	Measurement of ice-sheet topography using satellite-radar interferometry. <i>Journal of Glaciology</i> , 1996, 42, 10-22.	2.2	72
58	Estimation of ice-sheet motion using satellite radar interferometry: method and error analysis with application to Humboldt Glacier, Greenland. <i>Journal of Glaciology</i> , 1996, 42, 564-575.	2.2	6
59	Observations of ice-sheet motion in Greenland using satellite radar interferometry. <i>Geophysical Research Letters</i> , 1995, 22, 571-574.	4.0	97
60	Development of enhanced ice flow at the southern margin of Ice Stream D, Antarctica. <i>Annals of Glaciology</i> , 1994, 20, 313-318.	1.4	1
61	Greenland Ice Sheet Surface Properties and Ice Dynamics from ERS-1 SAR Imagery. <i>Science</i> , 1993, 262, 1530-1534.	12.6	241
62	Description of a program for SAR investigation of the Greenland ice sheet and an example of margin change detection using SAR. <i>Annals of Glaciology</i> , 1993, 17, 332-336.	1.4	7