

Mathieu Morlighem

List of Publications by Year in descending order

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Version: 2024-02-01

153
papers

10,591
citations

31976

53
h-index

37204

96
g-index

242
all docs

242
docs citations

242
times ranked

5571
citing authors

#	ARTICLE	IF	CITATIONS
1	Four decades of Antarctic Ice Sheet mass balance from 1979â€“2017. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 1095-1103.	7.1	662
2	Widespread, rapid grounding line retreat of Pine Island, Thwaites, Smith, and Kohler glaciers, West Antarctica, from 1992 to 2011. Geophysical Research Letters, 2014, 41, 3502-3509.	4.0	621
3	BedMachine v3: Complete Bed Topography and Ocean Bathymetry Mapping of Greenland From Multibeam Echo Sounding Combined With Mass Conservation. Geophysical Research Letters, 2017, 44, 11051-11061.	4.0	536
4	Forty-six years of Greenland Ice Sheet mass balance from 1972 to 2018. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 9239-9244.	7.1	452
5	Deep glacial troughs and stabilizing ridges unveiled beneath the margins of the Antarctic ice sheet. Nature Geoscience, 2020, 13, 132-137.	12.9	431
6	Continental scale, high order, high spatial resolution, ice sheet modeling using the Ice Sheet System Model (ISSM). Journal of Geophysical Research, 2012, 117, .	3.3	311
7	Spatial patterns of basal drag inferred using control methods from a fullâ€“Stokes and simpler models for Pine Island Glacier, West Antarctica. Geophysical Research Letters, 2010, 37, .	4.0	286
8	Ice-sheet model sensitivities to environmental forcing and their use in projecting future sea level (the Tj ETQq0 0 0,rgBT /Overlock 10 Tf	2.2	222
9	Deeply incised submarine glacial valleys beneath the Greenland ice sheet. Nature Geoscience, 2014, 7, 418-422.	12.9	209
10	Improved representation of East Antarctic surface mass balance in a regional atmospheric climate model. Journal of Glaciology, 2014, 60, 761-770.	2.2	208
11	Projected land ice contributions to twenty-first-century sea level rise. Nature, 2021, 593, 74-82.	27.8	200
12	ISMIP6 Antarctica: a multi-model ensemble of the Antarctic ice sheet evolution over the 21st century. Cryosphere, 2020, 14, 3033-3070.	3.9	198
13	Grounding-line migration in plan-view marine ice-sheet models: results of the ice2sea MISIP3d intercomparison. Journal of Glaciology, 2013, 59, 410-422.	2.2	179
14	How accurate are estimates of glacier ice thickness? Results from ITMIX, the Ice Thickness Models Intercomparison eXperiment. Cryosphere, 2017, 11, 949-970.	3.9	173
15	A mass conservation approach for mapping glacier ice thickness. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	170
16	Fast retreat of ZachariÃ IsstrÃ m, northeast Greenland. Science, 2015, 350, 1357-1361.	12.6	158
17	Continued retreat of Thwaites Glacier, West Antarctica, controlled by bed topography and ocean circulation. Geophysical Research Letters, 2017, 44, 6191-6199.	4.0	153
18	A global, high-resolution data set of ice sheet topography, cavity geometry, and ocean bathymetry. Earth System Science Data, 2016, 8, 543-557.	9.9	144

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19	The future sea-level contribution of the Greenland ice sheet: a multi-model ensemble study of ISMIP6. <i>Cryosphere</i> , 2020, 14, 3071-3096.	3.9	144
20	The International Bathymetric Chart of the Arctic Ocean Version 4.0. <i>Scientific Data</i> , 2020, 7, 176.	5.3	129
21	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
22	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
23	Inversion of basal friction in Antarctica using exact and incomplete adjoints of a higher-order model. <i>Journal of Geophysical Research F: Earth Surface</i> , 2013, 118, 1746-1753.	2.8	120
24	Dependence of century-scale projections of the Greenland ice sheet on its thermal regime. <i>Journal of Glaciology</i> , 2013, 59, 1024-1034.	2.2	111
25	Substantial export of suspended sediment to the global oceans from glacial erosion in Greenland. <i>Nature Geoscience</i> , 2017, 10, 859-863.	12.9	110
26	Ice velocity and thickness of the world's glaciers. <i>Nature Geoscience</i> , 2022, 15, 124-129.	12.9	106
27	Ice flux divergence anomalies on 79north Glacier, Greenland. <i>Geophysical Research Letters</i> , 2011, 38, .	4.0	101
28	Modeling of Store Gletscher's calving dynamics, West Greenland, in response to ocean thermal forcing. <i>Geophysical Research Letters</i> , 2016, 43, 2659-2666.	4.0	99
29	neXtSIM: a new Lagrangian sea ice model. <i>Cryosphere</i> , 2016, 10, 1055-1073.	3.9	98
30	A large impact crater beneath Hiawatha Glacier in northwest Greenland. <i>Science Advances</i> , 2018, 4, eaar8173.	10.3	97
31	Supraglacial lakes on the Greenland ice sheet advance inland under warming climate. <i>Nature Climate Change</i> , 2015, 5, 51-55.	18.8	95
32	Projecting Antarctica's contribution to future sea level rise from basal ice shelf melt using linear response functions of 16 ice sheet models (LARMIP-2). <i>Earth System Dynamics</i> , 2020, 11, 35-76.	7.1	92
33	Design and results of the ice sheet model initialisation experiments initMIP-Greenland: an ISMIP6 intercomparison. <i>Cryosphere</i> , 2018, 12, 1433-1460.	3.9	89
34	Geometric Controls on Tidewater Glacier Retreat in Central Western Greenland. <i>Journal of Geophysical Research F: Earth Surface</i> , 2018, 123, 2024-2038.	2.8	86
35	Ocean forcing drives glacier retreat in Greenland. <i>Science Advances</i> , 2021, 7, .	10.3	86
36	Modeling of ocean-induced ice melt rates of five west Greenland glaciers over the past two decades. <i>Geophysical Research Letters</i> , 2016, 43, 6374-6382.	4.0	85

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37	A damage mechanics assessment of the Larsen B ice shelf prior to collapse: Toward a physically based calving law. <i>Geophysical Research Letters</i> , 2012, 39, .	4.0	84
38	Hydrostatic grounding line parameterization in ice sheet models. <i>Cryosphere</i> , 2014, 8, 2075-2087.	3.9	83
39	The uncertain future of the Antarctic Ice Sheet. <i>Science</i> , 2020, 367, 1331-1335.	12.6	83
40	Insights into spatial sensitivities of ice mass response to environmental change from the SeaRISE ice sheet modeling project II: Greenland. <i>Journal of Geophysical Research F: Earth Surface</i> , 2013, 118, 1025-1044.	2.8	79
41	Inland thinning on the Greenland ice sheet controlled by outlet glacier geometry. <i>Nature Geoscience</i> , 2017, 10, 366-369.	12.9	74
42	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
43	Experimental protocol for sea level projections from ISMIP6 stand-alone ice sheet models. <i>Cryosphere</i> , 2020, 14, 2331-2368.	3.9	72
44	Grounding line retreat of Totten Glacier, East Antarctica, 1996 to 2013. <i>Geophysical Research Letters</i> , 2015, 42, 8049-8056.	4.0	71
45	Antarctic ice sheet response to sudden and sustained ice-shelf collapse (ABUMIP). <i>Journal of Glaciology</i> , 2020, 66, 891-904.	2.2	70
46	initMIP-Antarctica: an ice sheet model initialization experiment of ISMIP6. <i>Cryosphere</i> , 2019, 13, 1441-1471.	3.9	69
47	Grounding line retreat of Pope, Smith, and Kohler Glaciers, West Antarctica, measured with Sentinel-1a radar interferometry data. <i>Geophysical Research Letters</i> , 2016, 43, 8572-8579.	4.0	67
48	Ocean-induced Melt Triggers Glacier Retreat in Northwest Greenland. <i>Geophysical Research Letters</i> , 2018, 45, 8334-8342.	4.0	65
49	Insights into spatial sensitivities of ice mass response to environmental change from the SeaRISE ice sheet modeling project I: Antarctica. <i>Journal of Geophysical Research F: Earth Surface</i> , 2013, 118, 1002-1024.	2.8	63
50	Bathymetry of the Amundsen Sea Embayment sector of West Antarctica from Operation IceBridge gravity and other data. <i>Geophysical Research Letters</i> , 2017, 44, 1360-1368.	4.0	63
51	Representation of basal melting at the grounding line in ice flow models. <i>Cryosphere</i> , 2018, 12, 3085-3096.	3.9	62
52	Sensitivity of the dynamics of Pine Island Glacier, West Antarctica, to climate forcing for the next 50 years. <i>Cryosphere</i> , 2014, 8, 1699-1710.	3.9	58
53	A constitutive framework for predicting weakening and reduced buttressing of ice shelves based on observations of the progressive deterioration of the remnant Larsen B Ice Shelf. <i>Geophysical Research Letters</i> , 2016, 43, 2027-2035.	4.0	58
54	Slowdown in Antarctic mass loss from solid Earth and sea-level feedbacks. <i>Science</i> , 2019, 364, .	12.6	56

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55	Inferred basal friction and surface mass balance of the Northeast Greenland Ice Stream using data assimilation of ICESat (Ice Cloud and land Elevation Satellite) surface altimetry and ISSM (Ice Sheet) Tj ETQq1 1 0.784314 rg55 /Overl	3.9	53
56	Rate of mass loss from the Greenland Ice Sheet will exceed Holocene values this century. <i>Nature</i> , 2020, 586, 70-74.	27.8	53
57	Results of the third Marine Ice Sheet Model Intercomparison Project (MISMIP+). <i>Cryosphere</i> , 2020, 14, 2283-2301.	3.9	53
58	Exploration of Antarctic Ice Sheet 100-year contribution to sea level rise and associated model uncertainties using the ISSM framework. <i>Cryosphere</i> , 2018, 12, 3511-3534.	3.9	52
59	Ice flow sensitivity to geothermal heat flux of Pine Island Glacier, Antarctica. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	51
60	Modelling calving front dynamics using a level-set method: application to Jakobshavn Isbr�, West Greenland. <i>Cryosphere</i> , 2016, 10, 497-510.	3.9	51
61	Vulnerability of Southeast Greenland Glaciers to Warm Atlantic Water From Operation IceBridge and Ocean Melting Greenland Data. <i>Geophysical Research Letters</i> , 2018, 45, 2688-2696.	4.0	51
62	Twenty-first century ocean forcing of the Greenland ice sheet for modelling of sea level contribution. <i>Cryosphere</i> , 2020, 14, 985-1008.	3.9	51
63	Ice dynamics will remain a primary driver of Greenland ice sheet mass loss over the next century. <i>Communications Earth & Environment</i> , 2021, 2, .	6.8	51
64	The mechanisms behind Jakobshavn Isbr�'s acceleration and mass loss: A 3� thermomechanical model study. <i>Geophysical Research Letters</i> , 2017, 44, 6252-6260.	4.0	49
65	High-resolution bed topography mapping of Russell Glacier, Greenland, inferred from Operation IceBridge data. <i>Journal of Glaciology</i> , 2013, 59, 1015-1023.	2.2	47
66	Plastic bed beneath Hofsj�kull Ice Cap, central Iceland, and the sensitivity of ice flow to surface meltwater flux. <i>Journal of Glaciology</i> , 2016, 62, 147-158.	2.2	46
67	Basal resistance for three of the largest Greenland outlet glaciers. <i>Journal of Geophysical Research F: Earth Surface</i> , 2016, 121, 168-180.	2.8	44
68	Linking glacially modified waters to catchment-scale subglacial discharge using autonomous underwater vehicle observations. <i>Cryosphere</i> , 2016, 10, 417-432.	3.9	43
69	Modeling the Response of Nioghalvfjerdingsfjorden and Zachariae Isstr�m Glaciers, Greenland, to Ocean Forcing Over the Next Century. <i>Geophysical Research Letters</i> , 2017, 44, 11,071.	4.0	41
70	Modeling the response of northwest Greenland to enhanced ocean thermal forcing and subglacial discharge. <i>Cryosphere</i> , 2019, 13, 723-734.	3.9	41
71	Holocene deceleration of the Greenland Ice Sheet. <i>Science</i> , 2016, 351, 590-593.	12.6	39
72	A modeling study of the effect of runoff variability on the effective pressure beneath Russell Glacier, West Greenland. <i>Journal of Geophysical Research F: Earth Surface</i> , 2016, 121, 1834-1848.	2.8	38

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73	Subglacial lake drainage detected beneath the Greenland ice sheet. <i>Nature Communications</i> , 2015, 6, 8408.	12.8	36
74	Centennial response of Greenland's three largest outlet glaciers. <i>Nature Communications</i> , 2020, 11, 5718.	12.8	36
75	Sensitivity Analysis of Pine Island Glacier ice flow using ISSM and DAKOTA. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	35
76	Terminus-driven retreat of a major southwest Greenland tidewater glacier during the early 19th century: insights from glacier reconstructions and numerical modelling. <i>Journal of Glaciology</i> , 2014, 60, 333-344.	2.2	34
77	Retreat of Thwaites Glacier, West Antarctica, over the next 100 years using various ice flow models, ice shelf melt scenarios and basal friction laws. <i>Cryosphere</i> , 2018, 12, 3861-3876.	3.9	34
78	Bed topography of Princess Elizabeth Land in East Antarctica. <i>Earth System Science Data</i> , 2020, 12, 2765-2774.	9.9	34
79	On the Short-term Grounding Zone Dynamics of Pine Island Glacier, West Antarctica, Observed With COSMO'skyMed Interferometric Data. <i>Geophysical Research Letters</i> , 2017, 44, 10,436.	4.0	33
80	Future Antarctic bed topography and its implications for ice sheet dynamics. <i>Solid Earth</i> , 2014, 5, 569-584.	2.8	30
81	Comparison of four calving laws to model Greenland outlet glaciers. <i>Cryosphere</i> , 2018, 12, 3735-3746.	3.9	30
82	Brief communication: PICOP, a new ocean melt parameterization under ice shelves combining PICO and a plume model. <i>Cryosphere</i> , 2019, 13, 1043-1049.	3.9	30
83	Bed elevation of Jakobshavn Isbrae, West Greenland, from high-resolution airborne gravity and other data. <i>Geophysical Research Letters</i> , 2017, 44, 3728-3736.	4.0	29
84	Iceberg calving of Thwaites Glacier, West Antarctica: full-Stokes modeling combined with linear elastic fracture mechanics. <i>Cryosphere</i> , 2017, 11, 1283-1296.	3.9	29
85	Grounding Line Retreat of Denman Glacier, East Antarctica, Measured With COSMO'skyMed Radar Interferometry Data. <i>Geophysical Research Letters</i> , 2020, 47, e2019GL086291.	4.0	28
86	Future Sea Level Change Under Coupled Model Intercomparison Project Phase 5 and Phase 6 Scenarios From the Greenland and Antarctic Ice Sheets. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL091741.	4.0	28
87	The International Bathymetric Chart of the Southern Ocean Version 2. <i>Scientific Data</i> , 2022, 9, .	5.3	28
88	High-resolution ice-thickness mapping in South Greenland. <i>Annals of Glaciology</i> , 2014, 55, 64-70.	1.4	27
89	Ice discharge uncertainties in Northeast Greenland from boundary conditions and climate forcing of an ice flow model. <i>Journal of Geophysical Research F: Earth Surface</i> , 2015, 120, 29-54.	2.8	27
90	Simulating the evolution of Hardangerjøkulen ice cap in southern Norway since the mid-Holocene and its sensitivity to climate change. <i>Cryosphere</i> , 2017, 11, 281-302.	3.9	27

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91	Fluctuations of a Greenlandic tidewater glacier driven by changes in atmospheric forcing: observations and modelling of Kangiata Nunaata Sermia, 1859â€“present. <i>Cryosphere</i> , 2014, 8, 2031-2045.	3.9	26
92	SHAKTI: Subglacial Hydrology and Kinetic, Transient Interactions v1.0. <i>Geoscientific Model Development</i> , 2018, 11, 2955-2974.	3.6	24
93	Decadal-scale sensitivity of Northeast Greenland ice flow to errors in surface mass balance using ISSM. <i>Journal of Geophysical Research F: Earth Surface</i> , 2013, 118, 667-680.	2.8	23
94	The impact of model resolution on the simulated Holocene retreat of the southwestern Greenland ice sheet using the Ice Sheet System Model (ISSM). <i>Cryosphere</i> , 2019, 13, 879-893.	3.9	22
95	Results from the Ice Thickness Models Intercomparison eXperiment Phase 2 (ITMIX2). <i>Frontiers in Earth Science</i> , 2021, 8, .	1.8	22
96	Coupling ice flow models of varying orders of complexity with the Tiling method. <i>Journal of Glaciology</i> , 2012, 58, 776-786.	2.2	21
97	¹⁰ Be dating reveals early-middle Holocene age of the Drygalski Moraines in central West Greenland. <i>Quaternary Science Reviews</i> , 2016, 147, 59-68.	3.0	19
98	Implementing an empirical scalar constitutive relation for ice with flow-induced polycrystalline anisotropy in large-scale ice sheet models. <i>Cryosphere</i> , 2018, 12, 1047-1067.	3.9	19
99	Basal friction of Fleming Glacier, Antarctica â€“ Part 1: Sensitivity of inversion to temperature and bedrock uncertainty. <i>Cryosphere</i> , 2018, 12, 2637-2652.	3.9	19
100	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
101	A new bed elevation model for the Weddell Sea sector of the West Antarctic Ice Sheet. <i>Earth System Science Data</i> , 2018, 10, 711-725.	9.9	19
102	Hard rock landforms generate 130%km ice shelf channels through water focusing in basal corrugations. <i>Nature Communications</i> , 2018, 9, 4576.	12.8	17
103	Widespread Grounding Line Retreat of Totten Glacier, East Antarctica, Over the 21st Century. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL093213.	4.0	17
104	Implementation of higher-order vertical finite elements in ISSM v4.13 for improved ice sheet flow modeling over paleoclimate timescales. <i>Geoscientific Model Development</i> , 2018, 11, 1683-1694.	3.6	16
105	Dynamics of Active Subglacial Lakes in Recovery Ice Stream. <i>Journal of Geophysical Research F: Earth Surface</i> , 2018, 123, 837-850.	2.8	16
106	Control of Ocean Temperature on Jakobshavn IsbrÃ¡'s Present and Future Mass Loss. <i>Geophysical Research Letters</i> , 2018, 45, 12,912.	4.0	15
107	Atmosphere-driven ice sheet mass loss paced by topography: Insights from modelling the south-western Scandinavian Ice Sheet. <i>Quaternary Science Reviews</i> , 2018, 195, 32-47.	3.0	15
108	Steep Glacier Bed Knickpoints Mitigate Inland Thinning in Greenland. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL090112.	4.0	15

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109	Future Projections of Petermann Glacier Under Ocean Warming Depend Strongly on Friction Law. <i>Journal of Geophysical Research F: Earth Surface</i> , 2021, 126, e2020JF005921.	2.8	15
110	Improving Bed Topography Mapping of Greenland Glaciers Using NASA's Oceans Melting Greenland (OMG) Data. , 2016, 29, 62-71.		15
111	Elastic deformation plays a non-negligible role in Greenland's outlet glacier flow. <i>Communications Earth & Environment</i> , 2021, 2, .	6.8	14
112	Simulating ice thickness and velocity evolution of Upernavik Isstrøm 1849–2012 by forcing prescribed terminus positions in ISSM. <i>Cryosphere</i> , 2018, 12, 1511-1522.	3.9	13
113	Representation of sharp rifts and faults mechanics in modeling ice shelf flow dynamics: Application to Brunt/Stancomb-Wills Ice Shelf, Antarctica. <i>Journal of Geophysical Research F: Earth Surface</i> , 2014, 119, 1918-1935.	2.8	12
114	Holocene history of the Helheim Glacier, southeast Greenland. <i>Quaternary Science Reviews</i> , 2018, 193, 145-158.	3.0	12
115	Bathymetry of Southeast Greenland From Oceans Melting Greenland (OMG) Data. <i>Geophysical Research Letters</i> , 2019, 46, 11197-11205.	4.0	12
116	Constraining an Ocean Model Under Getz Ice Shelf, Antarctica, Using A Gravity-Derived Bathymetry. <i>Geophysical Research Letters</i> , 2020, 47, e2019GL086522.	4.0	12
117	The transferability of adjoint inversion products between different ice flow models. <i>Cryosphere</i> , 2021, 15, 1975-2000.	3.9	12
118	Aurora Basin, the Weak Underbelly of East Antarctica. <i>Geophysical Research Letters</i> , 2020, 47, e2019GL086821.	4.0	11
119	The Holocene dynamics of Ryder Glacier and ice tongue in north Greenland. <i>Cryosphere</i> , 2021, 15, 4073-4097.	3.9	11
120	Ocean-Ice Interactions in Inglefield Gulf: Early Results from NASA's Oceans Melting Greenland Mission. <i>Oceanography</i> , 2018, 31, .	1.0	11
121	Characteristic Depths, Fluxes, and Timescales for Greenland's Tidewater Glacier Fjords From Subglacial Discharge-Driven Upwelling During Summer. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	11
122	Retreat of Humboldt Gletscher, North Greenland, Driven by Undercutting From a Warmer Ocean. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL091342.	4.0	10
123	Drygalski Ice Tongue stability influenced by rift formation and ice morphology. <i>Journal of Glaciology</i> , 2021, 67, 243-252.	2.2	10
124	A statistical fracture model for Antarctic ice shelves and glaciers. <i>Cryosphere</i> , 2018, 12, 3187-3213.	3.9	9
125	Impact of Iceberg Calving on the Retreat of Thwaites Glacier, West Antarctica Over the Next Century With Different Calving Laws and Ocean Thermal Forcing. <i>Geophysical Research Letters</i> , 2019, 46, 14539-14547.	4.0	9
126	A new sub-grid surface mass balance and flux model for continental-scale ice sheet modelling: testing and last glacial cycle. <i>Geoscientific Model Development</i> , 2015, 8, 3199-3213.	3.6	8

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127	An approach to computing discrete adjoints for MPI-parallelized models applied to Ice Sheet System Model 4.11. <i>Geoscientific Model Development</i> , 2016, 9, 3907-3918.	3.6	8
128	Bathymetric Influences on Antarctic Iceâ€Šelf Melt Rates. <i>Journal of Geophysical Research: Oceans</i> , 2020, 125, .	2.6	7
129	Mapping the Sensitivity of the Amundsen Sea Embayment to Changes in External Forcings Using Automatic Differentiation. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL095440.	4.0	7
130	Geometric controls of tidewater glacier dynamics. <i>Cryosphere</i> , 2022, 16, 581-601.	3.9	7
131	Near-margin ice thickness and subglacial water routing, Leverett Glacier, Greenland. <i>Arctic, Antarctic, and Alpine Research</i> , 2018, 50, .	1.1	6
132	Source-to-source adjoint Algorithmic Differentiation of an ice sheet model written in C. <i>Optimization Methods and Software</i> , 2018, 33, 829-843.	2.4	6
133	Assessment of numerical schemes for transient, finite-element ice flow models using ISSM v4.18. <i>Geoscientific Model Development</i> , 2021, 14, 2545-2573.	3.6	6
134	Drivers of Change of Thwaites Glacier, West Antarctica, Between 1995 and 2015. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL093102.	4.0	6
135	Seasonal Tidewater Glacier Terminus Oscillations Bias Multiâ€Šecadal Projections of Ice Mass Change. <i>Journal of Geophysical Research F: Earth Surface</i> , 2022, 127, .	2.8	6
136	Petermann ice shelf may not recover after a future breakup. <i>Nature Communications</i> , 2022, 13, 2519.	12.8	6
137	An Empirical Approach for Estimating Stress-Coupling Lengths for Marine-Terminating Glaciers. <i>Frontiers in Earth Science</i> , 2016, 4, .	1.8	5
138	Optimal numerical solvers for transient simulations of ice flow using the Ice Sheet System Model (ISSM versions 4.2.5 and 4.11). <i>Geoscientific Model Development</i> , 2017, 10, 155-168.	3.6	5
139	Basal friction of Fleming Glacier, Antarctica â€œ Partâ€Š2: Evolution fromâ€Š2008 toâ€Š2015. <i>Cryosphere</i> , 2018, 12, 2653-2666.	3.9	5
140	Implementation and performance of adaptive mesh refinement in the Ice Sheet System Model (ISSM) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	3.8	5
141	The Impact of Variable Ocean Temperatures on Totten Glacier Stability and Discharge. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL091790.	4.0	5
142	A new vertically integrated MOno-Layer Higher-Orderâ€Š(MOLHO) ice flow model. <i>Cryosphere</i> , 2022, 16, 179-195.	3.9	5
143	Extended enthalpy formulations in the Ice-sheet and Sea-level System Model (ISSM) version 4.17: discontinuous conductivity and anisotropic streamline upwind Petrovâ€ŠGalerkin (SUPG) method. <i>Geoscientific Model Development</i> , 2020, 13, 4491-4501.	3.6	4
144	ISSM-SLPS: geodetically compliant Sea-Level Projection System for the Ice-sheet and Sea-level System Model v4.17. <i>Geoscientific Model Development</i> , 2020, 13, 4925-4941.	3.6	4

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145	A scalability study of the Ice-sheet and Sea-level System Model (ISSM, version 4.18). <i>Geoscientific Model Development</i> , 2022, 15, 3753-3771.	3.6	3
146	A JavaScript API for the Ice Sheet System Model (ISSM) 4.11: towards an online interactive model for the cryosphere community. <i>Geoscientific Model Development</i> , 2017, 10, 4393-4403.	3.6	2
147	Helheim Glacier's Terminus Position Controls Its Seasonal and Inter-Annual Ice Flow Variability. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	2
148	Simulating the Holocene deglaciation across a marine-terminating portion of southwestern Greenland in response to marine and atmospheric forcings. <i>Cryosphere</i> , 2022, 16, 2355-2372.	3.9	2
149	Modeling the Evolution of Polar Ice Sheets. <i>Eos</i> , 2014, 95, 411-411.	0.1	0
150	Thank You to Our 2018 Peer Reviewers. <i>Geophysical Research Letters</i> , 2019, 46, 12608-12636.	4.0	0
151	Thank You to Our 2019 Peer Reviewers. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL088048.	4.0	0
152	Thank You to Our 2020 Peer Reviewers. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL093126.	4.0	0
153	Thank You to Our 2021 Peer Reviewers. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	0