Eric J Rignot

List of Publications by Year
in descending order

279 papers	32,828 citations	6233 80 h-index	4750 169 g-index
313 all docs	313 docs citations	313 times ranked	13108 citing authors

#	Article	IF	Citations
1	Bedmap2: improved ice bed, surface and thickness datasets for Antarctica. Cryosphere, 2013, 7, 375-393.	1.5	1,455
2	A Reconciled Estimate of Ice-Sheet Mass Balance. Science, 2012, 338, 1183-1189.	6.0	1,246
3	Changes in the Velocity Structure of the Greenland Ice Sheet. Science, 2006, 311, 986-990.	6.0	1,055
4	Ice-Shelf Melting Around Antarctica. Science, 2013, 341, 266-270.	6.0	986
5	Ice Flow of the Antarctic Ice Sheet. Science, 2011, 333, 1427-1430.	6.0	906
6	Acceleration of the contribution of the Greenland and Antarctic ice sheets to sea level rise. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	870
7	Recent Antarctic ice mass loss from radarÂinterferometry and regional climateÂmodelling. Nature Geoscience, 2008, 1, 106-110.	5.4	819
8	Mass balance of the Antarctic Ice Sheet from 1992 to 2017. Nature, 2018, 558, 219-222.	13.7	759
9	Partitioning Recent Greenland Mass Loss. Science, 2009, 326, 984-986.	6.0	755
10	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.	3.3	662
11	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.	1.5	621
12	Accelerated ice discharge from the Antarctic Peninsula following the collapse of Larsen B ice shelf. Geophysical Research Letters, 2004, 31, .	1.5	546
13	Change detection techniques for ERS-1 SAR data. IEEE Transactions on Geoscience and Remote Sensing, 1993, 31, 896-906.	2.7	537
14	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.	1.5	536
15	Rapid Bottom Melting Widespread near Antarctic Ice Sheet Grounding Lines. Science, 2002, 296, 2020-2023.	6.0	466
16	Contribution of the Patagonia Icefields of South America to Sea Level Rise. Science, 2003, 302, 434-437.	6.0	455
17	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.	3.3	452
18	Mass balance of the Greenland Ice Sheet from 1992 to 2018. Nature, 2020, 579, 233-239.	13.7	434

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19	Deep glacial troughs and stabilizing ridges unveiled beneath the margins of the Antarctic ice sheet. Nature Geoscience, 2020, 13, 132-137.	5.4	431
20	Ice melt, sea level rise and superstorms: evidence from paleoclimate data, climate modeling, and modern observations that 2 Â°C global warming could be dangerous. Atmospheric Chemistry and Physics, 2016, 16, 3761-3812.	1.9	421
21	Revisiting the Earth's sea-level and energy budgets from 1961 to 2008. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	415
22	Global sea-level budget 1993â€“present. Earth System Science Data, 2018, 10, 1551-1590.	3.7	409
23	Mass Balance of Polar Ice Sheets. Science, 2002, 297, 1502-1506.	6.0	406
24	Warm ocean is eroding West Antarctic Ice Sheet. Geophysical Research Letters, 2004, 31, .	1.5	371
25	Antarctic grounding line mapping from differential satellite radar interferometry. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	366
26	Mass balance of the Greenland ice sheet from 1958 to 2007. Geophysical Research Letters, 2008, 35, .	1.5	344
27	A new bed elevation dataset for Greenland. Cryosphere, 2013, 7, 499-510.	1.5	341
28	Rapid submarine melting of the calving faces of West Greenland glaciers. Nature Geoscience, 2010, 3, 187-191.	5.4	338
29	Fast Recession of a West Antarctic Glacier. , 1998, 281, 549-551.		336
30	Sustained increase in ice discharge from the Amundsen Sea Embayment, West Antarctica, from 1973 to 2013. Geophysical Research Letters, 2014, 41, 1576-1584.	1.5	333
31	Accelerated Sea-Level Rise from West Antarctica. Science, 2004, 306, 255-258.	6.0	317
32	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
33	Recent dramatic thinning of largest West Antarctic ice stream triggered by oceans. Geophysical Research Letters, 2004, 31, .	1.5	296
34	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, .	1.5	286
35	Penetration depth of interferometric synthetic-aperture radar signals in snow and ice. Geophysical Research Letters, 2001, 28, 3501-3504.	1.5	275
36	Recent large increases in freshwater fluxes from Greenland into the North Atlantic. Geophysical Research Letters, 2012, 39, .	1.5	261

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37	Deeply incised submarine glacial valleys beneath the Greenland ice sheet. Nature Geoscience, 2014, 7, 418-422.	5.4	209
38	Improved representation of East Antarctic surface mass balance in a regional atmospheric climate model. Journal of Glaciology, 2014, 60, 761-770.	1.1	208
39	Characteristics of ocean waters reaching Greenland's glaciers. Annals of Glaciology, 2012, 53, 202-210.	2.8	194
40	Ice flow in Greenland for the International Polar Year 2008â€“2009. Geophysical Research Letters, 2012, 39, .	1.5	193
41	Changes in West Antarctic ice stream dynamics observed with ALOS PALSAR data. Geophysical Research Letters, 2008, 35, .	1.5	191
42	Comprehensive Annual Ice Sheet Velocity Mapping Using Landsat-8, Sentinel-1, and RADARSAT-2 Data. Remote Sensing, 2017, 9, 364.	1.8	181
43	Timing and origin of recent regional ice-mass loss in Greenland. Earth and Planetary Science Letters, 2012, 333-334, 293-303.	1.8	179
44	A mass conservation approach for mapping glacier ice thickness. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	170
45	Mapping of Ice Motion in Antarctica Using Synthetic-Aperture Radar Data. Remote Sensing, 2012, 4, 2753-2767.	1.8	168
46	Fast retreat of ZachariÃ¦ IsstrÃ¸m, northeast Greenland. Science, 2015, 350, 1357-1361.	6.0	158
47	Acceleration of Pine Island and Thwaites Glaciers, West Antarctica. Annals of Glaciology, 2002, 34, 189-194.	2.8	156
48	Continuity of Ice Sheet Mass Loss in Greenland and Antarctica From the GRACE and GRACE Followâ€On Missions. Geophysical Research Letters, 2020, 47, e2020GL087291.	1.5	155
49	Continued retreat of Thwaites Glacier, West Antarctica, controlled by bed topography and ocean circulation. Geophysical Research Letters, 2017, 44, 6191-6199.	1.5	153
50	Observed latitudinal variations in erosion as a function of glacier dynamics. Nature, 2015, 526, 100-103.	13.7	151
51	Subaqueous melting of Store Glacier, west Greenland from threeâ€dimensional, highâ€resolution numerical modeling and ocean observations. Geophysical Research Letters, 2013, 40, 4648-4653.	1.5	146
52	Channelized bottom melting and stability of floating ice shelves. Geophysical Research Letters, 2008, 35, .	1.5	145
53	Radar estimates of aboveground biomass in boreal forests of interior Alaska. IEEE Transactions on Geoscience and Remote Sensing, 1994, 32, 1117-1124.	2.7	141
54	Flow of Glaciar Moreno, Argentina, from repeat-pass Shuttle Imaging Radar images: comparison of the phase correlation method with radar interferometry. Journal of Glaciology, 1999, 45, 93-100.	1.1	141

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55	Undercutting of marineâ€terminating glaciers in West Greenland. Geophysical Research Letters, 2015, 42, 5909-5917.	1.5	140
56	Numerical experiments on subaqueous melting of Greenland tidewater glaciers in response to ocean warming and enhanced subglacial discharge. Annals of Glaciology, 2012, 53, 229-234.	2.8	138
57	Identification of sea ice types in spaceborne synthetic aperture radar data. Journal of Geophysical Research, 1992, 97, 2391-2402.	3.3	137
58	Mapping deforestation and secondary growth in Rondonia, Brazil, using imaging radar and thematic mapper data. Remote Sensing of Environment, 1997, 59, 167-179.	4.6	135
59	State of the Climate in 2010. Bulletin of the American Meteorological Society, 2011, 92, S1-S236.	1.7	135
60	Tidal motion, ice velocity and melt rate of Petermann Gletscher, Greenland, measured from radar interferometry. Journal of Glaciology, 1996, 42, 476-485.	1.1	131
61	Monitoring freezeâ€"thaw cycles along Northâ€"South Alaskan transects using ERS-1 SAR. Remote Sensing of Environment, 1994, 49, 131-137.	4.6	130
62	Sensitivity of the ice-shelf/ocean system to the sub-ice-shelf cavity shape measured by NASA IceBridge in Pine Island Glacier, West Antarctica. Annals of Glaciology, 2012, 53, 156-162.	2.8	130
63	The International Bathymetric Chart of the Arctic Ocean Version 4.0. Scientific Data, 2020, 7, 176.	2.4	129
64	Timing of Recent Accelerations of Pine Island Glacier, Antarctica. Geophysical Research Letters, 2003, 30, .	1.5	127
65	Challenges to Understanding the Dynamic Response of Greenland's Marine Terminating Glaciers to Oceanic and Atmospheric Forcing. Bulletin of the American Meteorological Society, 2013, 94, 1131-1144.	1.7	126
66	North and Northeast Greenland Ice Discharge from Satellite Radar Interferometry. Science, 1997, 276, 934-937.	6.0	122
67	Inversion of basal friction in Antarctica using exact and incomplete adjoints of a higherâ€order model. Journal of Geophysical Research F: Earth Surface, 2013, 118, 1746-1753.	1.0	120
68	Segmentation of polarimetric synthetic aperture radar data. IEEE Transactions on Image Processing, 1992, 1, 281-300.	6.0	116
69	Dependence of century-scale projections of the Greenland ice sheet on its thermal regime. Journal of Glaciology, 2013, 59, 1024-1034.	1.1	111
70	Chapter 1 Impacts of the Oceans on Climate Change. Advances in Marine Biology, 2009, 56, 1-150.	0.7	110
71	Continentâ€Wide, Interferometric SAR Phase, Mapping of Antarctic Ice Velocity. Geophysical Research Letters, 2019, 46, 9710-9718.	1.5	110
72	Evidence for rapid retreat and mass loss of Thwaites Glacier, West Antarctica. Journal of Glaciology, 2001, 47, 213-222.	1.1	109

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73	Heterogeneous retreat and ice melt of Thwaites Glacier, West Antarctica. Science Advances, 2019, 5, eaau3433.	4.7	109
74	Mass balance of East Antarctic glaciers and ice shelves from satellite data. Annals of Glaciology, 2002, 34, 217-227.	2.8	105
75	Spaceborne applications of P band imaging radars for measuring forest biomass. IEEE Transactions on Geoscience and Remote Sensing, 1995, 33, 1162-1169.	2.7	103
76	Ice flux divergence anomalies on 79north Glacier, Greenland. Geophysical Research Letters, 2011, 38, .	1.5	101
77	Modeling of Store Gletscher's calving dynamics, West Greenland, in response to ocean thermal forcing. Geophysical Research Letters, 2016, 43, 2659-2666.	1.5	99
78	Supraglacial lakes on the Greenland ice sheet advance inland under warming climate. Nature Climate Change, 2015, 5, 51-55.	8.1	95
79	Mass loss of the Amundsen Sea Embayment of West Antarctica from four independent techniques. Geophysical Research Letters, 2014, 41, 8421-8428.	1.5	91
80	Unsupervised segmentation of polarimetric SAR data using the covariance matrix. IEEE Transactions on Geoscience and Remote Sensing, 1992, 30, 697-705.	2.7	89
81	Spreading of warm ocean waters around Greenland as a possible cause for glacier acceleration. Annals of Glaciology, 2012, 53, 257-266.	2.8	89
82	Changes in ice dynamics and mass balance of the Antarctic ice sheet. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2006, 364, 1637-1655.	1.6	88
83	Ocean forcing drives glacier retreat in Greenland. Science Advances, 2021, 7, .	4.7	86
84	Modeling of oceanâ€induced ice melt rates of five west Greenland glaciers over the past two decades. Geophysical Research Letters, 2016, 43, 6374-6382.	1.5	85
85	Ice flow dynamics of the Greenland Ice Sheet from SAR interferometry. Geophysical Research Letters, 1995, 22, 575-578.	1.5	84
86	A damage mechanics assessment of the Larsen B ice shelf prior to collapse: Toward a physicallyâ€based calving law. Geophysical Research Letters, 2012, 39, .	1.5	84
87	Rapid ice discharge from southeast Greenland glaciers. Geophysical Research Letters, 2004, 31, n/a-n/a.	1.5	83
88	Hydrostatic grounding line parameterization in ice sheet models. Cryosphere, 2014, 8, 2075-2087.	1.5	83
89	Rheology of the Ronne Ice Shelf, Antarctica, inferred from satellite radar interferometry data using an inverse control method. Geophysical Research Letters, 2005, 32, .	1.5	81
90	Basal terraces on melting ice shelves. Geophysical Research Letters, 2014, 41, 5506-5513.	1.5	81

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91	Recent ice loss from the Fleming and other glaciers, Wordie Bay, West Antarctic Peninsula. Geophysical Research Letters, 2005, 32, n/a-n/a.	1.5	80
92	Insights into spatial sensitivities of ice mass response to environmental change from the SeaRISE ice sheet modeling project II: Greenland. Journal of Geophysical Research F: Earth Surface, 2013, 118, 1025-1044.	1.0	79
93	Monitoring of environmental conditions in Taiga forests using ERS-1 SAR. Remote Sensing of Environment, 1994, 49, 145-154.	4.6	78
94	Creep deformation and buttressing capacity of damaged ice shelves: theory and application to Larsen C ice shelf. Cryosphere, 2013, 7, 1931-1947.	1.5	78
95	Quantifying mass balance processes on the Southern Patagonia Icefield. Cryosphere, 2015, 9, 25-35.	1.5	77
96	Observed thinning of Totten Glacier is linked to coastal polynya variability. Nature Communications, 2013, 4, 2857.	5.8	76
97	Ice motion of the Patagonian Icefields of South America: 1984â€“2014. Geophysical Research Letters, 2015, 42, 1441-1449.	1.5	76
98	Oceans Melting Greenland: Early Results from NASAâ€™s Ocean-Ice Mission in Greenland. , 2016, 29, 72-83.		75
99	Contribution to the glaciology of northern Greenland from satellite radar interferometry. Journal of Geophysical Research, 2001, 106, 34007-34019.	3.3	74
100	Mapping of forest types in Alaskan boreal forests using SAR imagery. IEEE Transactions on Geoscience and Remote Sensing, 1994, 32, 1051-1059.	2.7	73
101	Multifrequency polarimetric synthetic aperture radar observations of sea ice. Journal of Geophysical Research, 1991, 96, 20679-20698.	3.3	72
102	Ice-shelf changes in Pine Island Bay, Antarctica, 1947-2000. Journal of Glaciology, 2002, 48, 247-256.	1.1	71
103	Grounding line retreat of Totten Glacier, East Antarctica, 1996 to 2013. Geophysical Research Letters, 2015, 42, 8049-8056.	1.5	71
104	Larsen B Ice Shelf rheology preceding its disintegration inferred by a control method. Geophysical Research Letters, 2007, 34, .	1.5	70
105	Roles of marine ice, rheology, and fracture in the flow and stability of the Brunt/Stancombâ€Wills Ice Shelf. Journal of Geophysical Research, 2009, 114, .	3.3	69
106	Origin of Circumpolar Deep Water intruding onto the Amundsen and Bellingshausen Sea continental shelves. Nature Communications, 2018, 9, 3403.	5.8	69
107	Substantial thinning of a major east Greenland outlet glacier. Geophysical Research Letters, 2000, 27, 1291-1294.	1.5	68
108	Getz Ice Shelf melting response to changes in ocean forcing. Journal of Geophysical Research: Oceans, 2013, 118, 4152-4168.	1.0	68

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109	Backscatter model for the unusual radar properties of the Greenland Ice Sheet. Journal of Geophysical Research, 1995, 100, 9389.	3.3	67
110	Grounding line retreat of Pope, Smith, and Kohler Glaciers, West Antarctica, measured with Sentinelâ€1a radar interferometry data. Geophysical Research Letters, 2016, 43, 8572-8579.	1.5	67
111	Winter Sea-ice mapping from multi-parameter synthetic-aperture radar data. Journal of Glaciology, 1994, 40, 31-45.	1.1	66
112	Ice-shelf dynamics near the front of the Filchnerâ€"Ronne Ice Shelf, Antarctica, revealed by SAR interferometry. Journal of Glaciology, 1998, 44, 405-418.	1.1	66
113	Flow of Glaciar Moreno, Argentina, from repeat-pass Shuttle Imaging Radar images: comparison of the phase correlation method with radar interferometry. Journal of Glaciology, 1999, 45, 93-100.	1.1	66
114	Oceanâ€Induced Melt Triggers Glacier Retreat in Northwest Greenland. Geophysical Research Letters, 2018, 45, 8334-8342.	1.5	65
115	Evaluating the type and state of Alaska taiga forests with imaging radar for use in ecosystem models. IEEE Transactions on Geoscience and Remote Sensing, 1994, 32, 353-370.	2.7	64
116	Insights into spatial sensitivities of ice mass response to environmental change from the SeaRISE ice sheet modeling project I: Antarctica. Journal of Geophysical Research F: Earth Surface, 2013, 118, 1002-1024.	1.0	63
117	Ice flow dynamics and mass loss of Totten Glacier, East Antarctica, from 1989 to 2015. Geophysical Research Letters, 2016, 43, 6366-6373.	1.5	63
118	Bathymetry of the Amundsen Sea Embayment sector of West Antarctica from Operation IceBridge gravity and other data. Geophysical Research Letters, 2017, 44, 1360-1368.	1.5	63
119	Effect of Faraday rotation on L-band interferometric and polarimetric synthetic-aperture radar data. IEEE Transactions on Geoscience and Remote Sensing, 2000, 38, 383-390.	2.7	62
120	Sensitivity of Pine Island Glacier, West Antarctica, to changes in ice-shelf and basal conditions: a model study. Journal of Glaciology, 2002, 48, 552-558.	1.1	60
121	Interferometric radar observations of Glaciar San Rafael, Chile. Journal of Glaciology, 1996, 42, 279-291.	1.1	59
122	Winter and spring thaw as observed with imaging radar at BOREAS. Journal of Geophysical Research, 1997, 102, 29673-29684.	3.3	59
123	Force-perturbation analysis of Pine Island Glacier, Antarctica, suggests cause for recent acceleration. Annals of Glaciology, 2004, 39, 133-138.	2.8	59
124	Sensitivity of the dynamics of Pine Island Glacier, West Antarctica, to climate forcing for the next 50 years. Cryosphere, 2014, 8, 1699-1710.	1.5	58
125	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. Geophysical Research Letters, 2016, 43, 2027-2035.	1.5	58
126	Rapid submarine ice melting in the grounding zones of ice shelves in West Antarctica. Nature Communications, 2016, 7, 13243.	5.8	58

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127	Detection of Glacier Calving Margins with Convolutional Neural Networks: A Case Study. Remote Sensing, 2019, 11, 74.	1.8	56
128	Rock glacier surface motion in Beacon Valley, Antarctica, from synthetic-aperture radar interferometry. Geophysical Research Letters, 2002, 29, 48-1.	1.5	55
129	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 rgBT /Overlo	1.5	55
130	Unusual Radar Echoes from the Greenland Ice Sheet. Science, 1993, 261, 1710-1713.	6.0	54
131	Modelling of rift propagation on Ronne Ice Shelf, Antarctica, and sensitivity to climate change. Geophysical Research Letters, 2004, 31, .	1.5	54
132	Basal crevasses on the Larsen C Ice Shelf, Antarctica: Implications for meltwater ponding and hydrofracture. Geophysical Research Letters, 2012, 39, .	1.5	53
133	Bathymetry data reveal glaciers vulnerable to iceâ€ocean interaction in Uummannaq and Vaigat glacial fjords, west Greenland. Geophysical Research Letters, 2016, 43, 2667-2674.	1.5	52
134	Twenty-first century sea-level rise could exceed IPCC projections for strong-warming futures. One Earth, 2020, 3, 691-703.	3.6	52
135	Ice flow sensitivity to geothermal heat flux of Pine Island Glacier, Antarctica. Journal of Geophysical Research, 2012, 117, .	3.3	51
136	Ice shelf basal melt rates around <scp>A</scp>ntarctica from simulations and observations. Journal of Geophysical Research: Oceans, 2016, 121, 1085-1109.	1.0	51
137	Vulnerability of Southeast Greenland Glaciers to Warm Atlantic Water From Operation IceBridge and Ocean Melting Greenland Data. Geophysical Research Letters, 2018, 45, 2688-2696.	1.5	51
138	Ice dynamics will remain a primary driver of Greenland ice sheet mass loss over the next century. Communications Earth & Environment, 2021, 2, .	2.6	51
139	Ice Sheets and Sea Level: Thinking Outside the Box. Surveys in Geophysics, 2011, 32, 495-505.	2.1	50
140	The Scientific Legacy of NASAâ€™s Operation IceBridge. Reviews of Geophysics, 2021, 59, e2020RG000712.	9.0	49
141	Ice-shelf dynamics near the front of the Filchnerâ€"Ronne Ice Shelf, Antarctica, revealed by SAR interferometry. Journal of Glaciology, 1998, 44, 405-418.	1.1	48
142	Observation of ocean tides below the Filchner and Ronne Ice Shelves, Antarctica, using synthetic aperture radar interferometry: Comparison with tide model predictions. Journal of Geophysical Research, 2000, 105, 19615-19630.	3.3	48
143	High-resolution bed topography mapping of Russell Glacier, Greenland, inferred from Operation IceBridge data. Journal of Glaciology, 2013, 59, 1015-1023.	1.1	47
144	Increased ice flow in Western Palmer Land linked to ocean melting. Geophysical Research Letters, 2017, 44, 4159-4167.	1.5	47

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145	Hinge-line migration of Petermann Gletscher, north Greenland, detected using satellite-radar interferometry. Journal of Glaciology, 1998, 44, 469-476.	1.1	46
146	Tidal flexure along ice-sheet margins: comparison of InSAR with an elastic-plate model. Annals of Glaciology, 2002, 34, 202-208.	2.8	46
147	Retreat of Glaciar Tyndall, Patagonia, over the last half-century. Journal of Glaciology, 2005, 51, 239-247.	1.1	46
148	Improved estimation of the mass balance of glaciers draining into the Amundsen Sea sector of West Antarctica from the CECS/NASA 2002 campaign. Annals of Glaciology, 2004, 39, 231-237.	2.8	44
149	Acceleration and spatial rheology of Larsen C Ice Shelf, Antarctic Peninsula. Geophysical Research Letters, 2011, 38, .	1.5	42
150	Ice velocity changes in the Ross and Ronne sectors observed using satellite radar data from 1997 and 2009. Cryosphere, 2012, 6, 1019-1030.	1.5	42
151	Lowâ€frequency radar sounding of temperate ice masses in Southern Alaska. Geophysical Research Letters, 2013, 40, 5399-5405.	1.5	42
152	Pathways of ocean heat towards Pine Island and Thwaites grounding lines. Scientific Reports, 2019, 9, 16649.	1.6	42
153	A low-frequency ice-penetrating radar system adapted for use from an airplane: test results from Bering and Malaspina Glaciers, Alaska, USA. Annals of Glaciology, 2009, 50, 93-97.	2.8	41
154	Modeling the Response of Nioghalvfjerdsfjorden and Zachariae IsstrÃ¸m Glaciers, Greenland, to Ocean Forcing Over the Next Century. Geophysical Research Letters, 2017, 44, 11,071.	1.5	41
155	Modeling the response of northwest Greenland to enhanced ocean thermal forcing and subglacial discharge. Cryosphere, 2019, 13, 723-734.	1.5	41
156	Radar interferometry detection of hinge-line migration on Rutford Ice Stream and Carlson Inlet, Antarctica. Annals of Glaciology, 1998, 27, 25-32.	2.8	40
157	Ice-shelf dynamics near the front of the Filchner-Ronne Ice Shelf, Antaretica, revealed by SAR interferometry: model/interferogram comparison. Journal of Glaciology, 1998, 44, 419-428.	1.1	40
158	Assessment of JERS-1 SAR for monitoring secondary vegetation in Amazonia: I. Spatial and temporal variability in backscatter across a chrono-sequence of secondary vegetation stands in Rondonia. International Journal of Remote Sensing, 2002, 23, 1357-1379.	1.3	39
159	Classification of boreal forest cover types using SAR images. Remote Sensing of Environment, 1997, 60, 270-281.	4.6	38
160	Recommendations for the collection and synthesis of Antarctic Ice Sheet mass balance data. Global and Planetary Change, 2004, 42, 1-15.	1.6	38
161	A modeling study of the effect of runoff variability on the effective pressure beneath Russell Glacier, West Greenland. Journal of Geophysical Research F: Earth Surface, 2016, 121, 1834-1848.	1.0	38
162	Calving Front Machine (CALFIN): glacial termini dataset and automated deep learning extraction method for Greenland, 1972â€“2019. Cryosphere, 2021, 15, 1663-1675.	1.5	38

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163	Polarization signatures of frozen and thawed forests of varying environmental state. IEEE Transactions on Geoscience and Remote Sensing, 1994, 32, 371-381.	2.7	37
164	Ice-shelf dynamics near the front of the Filchner-Ronne Ice Shelf, Antaretica, revealed by SAR interferometry: model/interferogram comparison. Journal of Glaciology, 1998, 44, 419-428.	1.1	37
165	The evolving instability of the remnant Larsen B Ice Shelf and its tributary glaciers. Earth and Planetary Science Letters, 2015, 419, 199-210.	1.8	37
166	Hinge-line migration of Petermann Gletscher, north Greenland, detected using satellite-radar interferometry. Journal of Glaciology, 1998, 44, 469-476.	1.1	36
167	Earth's water reservoirs in a changing climate. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2020, 476, 20190458.	1.0	36
168	Context for the Recent Massive Petermann Glacier Calving Event. Eos, 2011, 92, 117-118.	0.1	35
169	Sensitivity Analysis of Pine Island Glacier ice flow using ISSM and DAKOTA. Journal of Geophysical Research, 2012, 117, .	3.3	35
170	Mass budget of the glaciers and ice caps of the Queen Elizabeth Islands, Canada, from 1991 to 2015. Environmental Research Letters, 2017, 12, 024016.	2.2	35
171	Characterization of spatial statistics of distributed targets in SAR data. International Journal of Remote Sensing, 1993, 14, 345-363.	1.3	34
172	Retreat of Thwaites Glacier, West Antarctica, over the next 100 years using various ice flow models, ice shelf melt scenarios and basal friction laws. Cryosphere, 2018, 12, 3861-3876.	1.5	34
173	Ephemeral grounding as a signal of ice-shelf change. Journal of Glaciology, 2001, 47, 71-77.	1.1	33
174	On the Shortâ€term Grounding Zone Dynamics of Pine Island Glacier, West Antarctica, Observed With COSMOâ€SkyMed Interferometric Data. Geophysical Research Letters, 2017, 44, 10,436.	1.5	33
175	Observations and modeling of oceanâ€induced melt beneath Petermann Glacier Ice Shelf in northwestern Greenland. Geophysical Research Letters, 2017, 44, 8396-8403.	1.5	33
176	Segmentation of synthetic-aperture-radar complex data. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1991, 8, 1499.	0.8	32
177	Processes involved in the propagation of rifts near Hemmen Ice Rise, Ronne Ice Shelf, Antarctica. Journal of Glaciology, 2004, 50, 329-341.	1.1	32
178	The structure and effect of suture zones in the Larsen C Ice Shelf, Antarctica. Journal of Geophysical Research F: Earth Surface, 2014, 119, 588-602.	1.0	32
179	The Glacier and Land Ice Surface Topography Interferometer: An Airborne Proof-of-Concept Demonstration of High-Precision Ka-Band Single-Pass Elevation Mapping. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 827-842.	2.7	31
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