Eric J Rignot

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4007430/publications.pdf

Version: 2024-02-01

279 papers	32,828 citations	6254 80 h-index	4774 169 g-index
313 all docs	313 docs citations	313 times ranked	13108 citing authors

#	Article	IF	Citations
1	Rapid glacier retreat rates observed in West Antarctica. Nature Geoscience, 2022, 15, 48-53.	12.9	31
2	StorstrÃ¸mmen and L. Bistrup BrÃ¦, North Greenland, Protected From Warm Atlantic Ocean Waters. Geophysical Research Letters, 2022, 49, .	4.0	2
3	Greenland Mass Trends From Airborne and Satellite Altimetry During 2011â€“2020. Journal of Geophysical Research F: Earth Surface, 2022, 127, .	2.8	20
4	The International Bathymetric Chart of the Southern Ocean Version 2. Scientific Data, 2022, 9, .	5.3	28
5	Ice dynamics will remain a primary driver of Greenland ice sheet mass loss over the next century. Communications Earth & Environment, 2021, 2, .	6.8	51
6	Thank You to Our 2020 Reviewers. Perspectives of Earth and Space Scientists, 2021, 2, .	0.3	0
7	Retreat of Humboldt Gletscher, North Greenland, Driven by Undercutting From a Warmer Ocean. Geophysical Research Letters, 2021, 48, e2020GL091342.	4.0	10
8	Automatic delineation of glacier grounding lines in differential interferometric synthetic-aperture radar data using deep learning. Scientific Reports, 2021, 11, 4992.	3.3	22
9	Calving Front Machine (CALFIN): glacial termini dataset and automated deep learning extraction method for Greenland, 1972â€“2019. Cryosphere, 2021, 15, 1663-1675.	3.9	38
10	The Scientific Legacy of NASAâ€™s Operation IceBridge. Reviews of Geophysics, 2021, 59, e2020RG000712.	23.0	49
11	Physical processes controlling the rifting of Larsen C Ice Shelf, Antarctica, prior to the calving of iceberg A68. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	16
12	Ocean forcing drives glacier retreat in Greenland. Science Advances, 2021, 7, .	10.3	86
13	Cryosphere Sciences with NISAR. , 2021, , .		0
14	Ocean melting of the Zachariae IsstrÃ¸m and Nioghalvfjerdsfjorden glaciers, northeast Greenland. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	30
15	Mass balance of the Greenland Ice Sheet from 1992 to 2018. Nature, 2020, 579, 233-239.	27.8	434
16	Deep glacial troughs and stabilizing ridges unveiled beneath the margins of the Antarctic ice sheet. Nature Geoscience, 2020, 13, 132-137.	12.9	431
17	Impact of Calving Dynamics on Kangilernata Sermia, Greenland. Geophysical Research Letters, 2020, 47, e2020GL088524.	4.0	3
18	The International Bathymetric Chart of the Arctic Ocean Version 4.0. Scientific Data, 2020, 7, 176.	5.3	129

#	Article	IF	Citations
19	Earth's water reservoirs in a changing climate. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2020, 476, 20190458.	2.1	36
20	Twenty-first century sea-level rise could exceed IPCC projections for strong-warming futures. One Earth, 2020, 3, 691-703.	6.8	52
21	Constraining an Ocean Model Under Getz Ice Shelf, Antarctica, Using A Gravityâ€Derived Bathymetry. Geophysical Research Letters, 2020, 47, e2019GL086522.	4.0	12
22	Continuity of Ice Sheet Mass Loss in Greenland and Antarctica From the GRACE and GRACE Followâ€On Missions. Geophysical Research Letters, 2020, 47, e2020GL087291.	4.0	155
23	Grounding Line Retreat of Denman Glacier, East Antarctica, Measured With COSMOâ€SkyMed Radar Interferometry Data. Geophysical Research Letters, 2020, 47, e2019GL086291.	4.0	28
24	Continentâ€Wide, Interferometric SAR Phase, Mapping of Antarctic Ice Velocity. Geophysical Research Letters, 2019, 46, 9710-9718.	4.0	110
25	Validation of Glacier Topographic Acquisitions from an Airborne Single-Pass Interferometer. Sensors, 2019, 19, 3700.	3.8	2
26	Evaluation of Regional Climate Models Using Regionally Optimized GRACE Mascons in the Amery and Getz Ice Shelves Basins, Antarctica. Geophysical Research Letters, 2019, 46, 13883-13891.	4.0	8
27	Bathymetry of Southeast Greenland From Oceans Melting Greenland (OMG) Data. Geophysical Research Letters, 2019, 46, 11197-11205.	4.0	12
28	Heterogeneous retreat and ice melt of Thwaites Glacier, West Antarctica. Science Advances, 2019, 5, eaau3433.	10.3	109
29	Modeling the response of northwest Greenland to enhanced ocean thermal forcing and subglacial discharge. Cryosphere, 2019, 13, 723-734.	3.9	41
30	Ice Thickness and Bed Elevation of the Northern and Southern Patagonian Icefields. Geophysical Research Letters, 2019, 46, 6626-6635.	4.0	28
31	Detection of Glacier Calving Margins with Convolutional Neural Networks: A Case Study. Remote Sensing, 2019, 11, 74.	4.0	56
32	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
33	Bathymetry of Northwest Greenland Using â€œOcean Melting Greenlandâ€•(OMG) High-Resolution Airborne Gravity and Other Data. Remote Sensing, 2019, 11, 131.	4.0	22
34	Submarine Moraines in Southeast Greenland Fjords Reveal Contrasting Outletâ€Glacier Behavior since the Last Glacial Maximum. Geophysical Research Letters, 2019, 46, 3279-3286.	4.0	17
35	Pathways of ocean heat towards Pine Island and Thwaites grounding lines. Scientific Reports, 2019, 9, 16649.	3.3	42
36	Impact of Iceberg Calving on the Retreat of Thwaites Glacier, West Antarctica Over the Next Century With Different Calving Laws and Ocean Thermal Forcing. Geophysical Research Letters, 2019, 46, 14539-14547.	4.0	9

#	Article	IF	Citations
37	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
38	Vulnerability of Southeast Greenland Glaciers to Warm Atlantic Water From Operation IceBridge and Ocean Melting Greenland Data. Geophysical Research Letters, 2018, 45, 2688-2696.	4.0	51
39	A Century of Stability of Avannarleq and Kujalleq Glaciers, West Greenland, Explained Using Highâ€Resolution Airborne Gravity and Other Data. Geophysical Research Letters, 2018, 45, 3156-3163.	4.0	13
40	Ionospheric correction of InSAR data for accurate ice velocity measurement at polar regions. Remote Sensing of Environment, 2018, 209, 166-180.	11.0	23
41	Submarine landforms reveal varying rates and styles of deglaciation in North-West Greenland fjords. Marine Geology, 2018, 402, 60-80.	2.1	22
42	Designing the Climate Observing System of the Future. Earth's Future, 2018, 6, 80-102.	6.3	24
43	Simulating ice thickness and velocity evolution of Upernavik IsstrÃ¸m 1849â€“2012 by forcing prescribed terminus positions in ISSM. Cryosphere, 2018, 12, 1511-1522.	3.9	13
44	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.	3.9	34
45	Insights on the Surge Behavior of StorstrÃ¸mmen and L. Bistrup BrÃ¦, Northeast Greenland, Over the Last Century. Geophysical Research Letters, 2018, 45, 11,197.	4.0	20
46	Ice flow modelling to constrain the surface mass balance and ice discharge of San Rafael Glacier, Northern Patagonia Icefield. Journal of Glaciology, 2018, 64, 568-582.	2.2	12
47	Origin of Circumpolar Deep Water intruding onto the Amundsen and Bellingshausen Sea continental shelves. Nature Communications, 2018, 9, 3403.	12.8	69
48	Evaluation of Reconstructions of Snow/Ice Melt in Greenland by Regional Atmospheric Climate Models Using Laser Altimetry Data. Geophysical Research Letters, 2018, 45, 8324-8333.	4.0	14
49	Mass Loss of Totten and Moscow University Glaciers, East Antarctica, Using Regionally Optimized GRACE Mascons. Geophysical Research Letters, 2018, 45, 7010-7018.	4.0	27
50	Oceanâ€Induced Melt Triggers Glacier Retreat in Northwest Greenland. Geophysical Research Letters, 2018, 45, 8334-8342.	4.0	65
51	Intercomparison and Validation of SAR-Based Ice Velocity Measurement Techniques within the Greenland Ice Sheet CCI Project. Remote Sensing, 2018, 10, 929.	4.0	18
52	Mass balance of the Antarctic Ice Sheet from 1992 to 2017. Nature, 2018, 558, 219-222.	27.8	759
53	Global sea-level budget 1993â€“present. Earth System Science Data, 2018, 10, 1551-1590.	9.9	409
54	Bathymetry of the Amundsen Sea Embayment sector of West Antarctica from Operation IceBridge gravity and other data. Geophysical Research Letters, 2017, 44, 1360-1368.	4.0	63

#	Article	IF	Citations
55	Bed elevation of Jakobshavn Isbrae, West Greenland, from high-resolution airborne gravity and other data. Geophysical Research Letters, 2017, 44, 3728-3736.	4.0	29
56	Increased ice flow in Western Palmer Land linked to ocean melting. Geophysical Research Letters, 2017, 44, 4159-4167.	4.0	47
57	Amundsen and <scp>B</scp>ellingshausen <scp>S</scp>eas simulation with optimized ocean, sea ice, and thermodynamic ice shelf model parameters. Journal of Geophysical Research: Oceans, 2017, 122, 6180-6195.	2.6	31
58	Continued retreat of Thwaites Glacier, West Antarctica, controlled by bed topography and ocean circulation. Geophysical Research Letters, 2017, 44, 6191-6199.	4.0	153
59	Mass budget of the glaciers and ice caps of the Queen Elizabeth Islands, Canada, from 1991 to 2015. Environmental Research Letters, 2017, 12, 024016.	5.2	35
60	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.	4.0	41
61	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
62	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.	4.0	33
63	Observations and modeling of oceanâ€induced melt beneath Petermann Glacier Ice Shelf in northwestern Greenland. Geophysical Research Letters, 2017, 44, 8396-8403.	4.0	33
64	Optimal numerical solvers for transient simulations of ice flow using the Ice Sheet System Model (ISSM versions 4.2.5 and 4.11). Geoscientific Model Development, 2017, 10, 155-168.	3.6	5
65	Comprehensive Annual Ice Sheet Velocity Mapping Using Landsat-8, Sentinel-1, and RADARSAT-2 Data. Remote Sensing, 2017, 9, 364.	4.0	181
66	Antarctic ICE sheet grounding line migration monitoring using COSMO-SkyMed very short repeat-time SAR interferometry. , 2017, , .		0
67	Iceberg calving of Thwaites Glacier, West Antarctica: full-Stokes modeling combined with linear elastic fracture mechanics. Cryosphere, 2017, 11, 1283-1296.	3.9	29
68	Oceans Melting Greenland: Early Results from NASAâ€™s Ocean-Ice Mission in Greenland. , 2016, 29, 72-83.		75
69	Introduction to the Special Issue on Ocean-Ice Interaction. , 2016, 29, 19-21.		3
70	Bathymetry data reveal glaciers vulnerable to iceâ€ocean interaction in Uummannaq and Vaigat glacial fjords, west Greenland. Geophysical Research Letters, 2016, 43, 2667-2674.	4.0	52
71	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.	2.8	38
72	Modeling of Store Gletscher's calving dynamics, West Greenland, in response to ocean thermal forcing. Geophysical Research Letters, 2016, 43, 2659-2666.	4.0	99

#	Article	IF	Citations
73	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.	4.0	67
74	Modeling of oceanâ€induced ice melt rates of five west Greenland glaciers over the past two decades. Geophysical Research Letters, 2016, 43, 6374-6382.	4.0	85
75	Ice flow dynamics and mass loss of Totten Glacier, East Antarctica, from 1989 to 2015. Geophysical Research Letters, 2016, 43, 6366-6373.	4.0	63
76	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.	4.0	58
77	Ice shelf basal melt rates around <scp>A</scp>ntarctica from simulations and observations. Journal of Geophysical Research: Oceans, 2016, 121, 1085-1109.	2.6	51
78	Rapid submarine ice melting in the grounding zones of ice shelves in West Antarctica. Nature Communications, 2016, 7, 13243.	12.8	58
79	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.	4.9	421
80	Ice thickness of the northern half of the Patagonia Icefields of South America from highâ€resolution airborne gravity surveys. Geophysical Research Letters, 2016, 43, 241-249.	4.0	29
81	Improving Bed Topography Mapping of Greenland Glaciers Using NASAâ€™s Oceans Melting Greenland (OMG) Data. , 2016, 29, 62-71.		15
82	Undercutting of marineâ€terminating glaciers in West Greenland. Geophysical Research Letters, 2015, 42, 5909-5917.	4.0	140
83	Fast retreat of ZachariÃ¦ IsstrÃ¸m, northeast Greenland. Science, 2015, 350, 1357-1361.	12.6	158
84	Ice motion of the Patagonian Icefields of South America: 1984â€“2014. Geophysical Research Letters, 2015, 42, 1441-1449.	4.0	76
85	Quantifying mass balance processes on the Southern Patagonia Icefield. Cryosphere, 2015, 9, 25-35.	3.9	77
86	The evolving instability of the remnant Larsen B Ice Shelf and its tributary glaciers. Earth and Planetary Science Letters, 2015, 419, 199-210.	4.4	37
87	Observed latitudinal variations in erosion as a function of glacier dynamics. Nature, 2015, 526, 100-103.	27.8	151
88	Grounding line retreat of Totten Glacier, East Antarctica, 1996 to 2013. Geophysical Research Letters, 2015, 42, 8049-8056.	4.0	71
89	Supraglacial lakes on the Greenland ice sheet advance inland under warming climate. Nature Climate Change, 2015, 5, 51-55.	18.8	95
90	Hydrostatic grounding line parameterization in ice sheet models. Cryosphere, 2014, 8, 2075-2087.	3.9	83

#	Article	IF	Citations
91	Sensitivity of the dynamics of Pine Island Glacier, West Antarctica, to climate forcing for the next 50 years. Cryosphere, 2014, 8, 1699-1710.	3.9	58
92	High-resolution ice-thickness mapping in South Greenland. Annals of Glaciology, 2014, 55, 64-70.	1.4	27
93	Low-frequency radar sounding of ice in East Antarctica and southern Greenland. Annals of Glaciology, 2014, 55, 138-146.	1.4	16
94	Deeply incised submarine glacial valleys beneath the Greenland ice sheet. Nature Geoscience, 2014, 7, 418-422.	12.9	209
95	Two independent methods for mapping the grounding line of an outlet glacier â€“ an example from the Astrolabe Glacier, Terre AdÃ©lie, Antarctica. Cryosphere, 2014, 8, 1331-1346.	3.9	13
96	Mass loss of the Amundsen Sea Embayment of West Antarctica from four independent techniques. Geophysical Research Letters, 2014, 41, 8421-8428.	4.0	91
97	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	3.9	37
98	Sustained increase in ice discharge from the Amundsen Sea Embayment, West Antarctica, from 1973 to 2013. Geophysical Research Letters, 2014, 41, 1576-1584.	4.0	333
99	Representation of sharp rifts and faults mechanics in modeling ice shelf flow dynamics: Application to Brunt/Stancombâ€Wills Ice Shelf, Antarctica. Journal of Geophysical Research F: Earth Surface, 2014, 119, 1918-1935.	2.8	12
100	Basal terraces on melting ice shelves. Geophysical Research Letters, 2014, 41, 5506-5513.	4.0	81
101	Improved representation of East Antarctic surface mass balance in a regional atmospheric climate model. Journal of Glaciology, 2014, 60, 761-770.	2.2	208
102	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.	2.8	32
103	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
104	Subaqueous melting of Store Glacier, west Greenland from threeâ€dimensional, highâ€resolution numerical modeling and ocean observations. Geophysical Research Letters, 2013, 40, 4648-4653.	4.0	146
105	Observed thinning of Totten Glacier is linked to coastal polynya variability. Nature Communications, 2013, 4, 2857.	12.8	76
106	Ice-Shelf Melting Around Antarctica. Science, 2013, 341, 266-270.	12.6	986
107	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.	2.8	63
108	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.	2.8	120

#	Article	IF	Citations
109	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.	3.3	126
110	Bedmap2: improved ice bed, surface and thickness datasets for Antarctica. Cryosphere, 2013, 7, 375-393.	3.9	1,455
111	A new bed elevation dataset for Greenland. Cryosphere, 2013, 7, 499-510.	3.9	341
112	Getz Ice Shelf melting response to changes in ocean forcing. Journal of Geophysical Research: Oceans, 2013, 118, 4152-4168.	2.6	68
113	Lowâ€frequency radar sounding of temperate ice masses in Southern Alaska. Geophysical Research Letters, 2013, 40, 5399-5405.	4.0	42
114	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.	2.8	79
115	Computing the volume response of the Antarctic Peninsula ice sheet to warming scenarios to 2200. Journal of Glaciology, 2013, 59, 397-409.	2.2	31
116	High-resolution bed topography mapping of Russell Glacier, Greenland, inferred from Operation IceBridge data. Journal of Glaciology, 2013, 59, 1015-1023.	2.2	47
117	Continued slowing of the Ross Ice Shelf and thickening of West Antarctic ice streams. Journal of Glaciology, 2013, 59, 838-844.	2.2	8
118	Dependence of century-scale projections of the Greenland ice sheet on its thermal regime. Journal of Glaciology, 2013, 59, 1024-1034.	2.2	111
119	Creep deformation and buttressing capacity of damaged ice shelves: theory and application to Larsen C ice shelf. Cryosphere, 2013, 7, 1931-1947.	3.9	78
120	Ice velocity changes in the Ross and Ronne sectors observed using satellite radar data from 1997 and 2009. Cryosphere, 2012, 6, 1019-1030.	3.9	42
121	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.	1.4	130
122	Coupling ice flow models of varying orders of complexity with the Tiling method. Journal of Glaciology, 2012, 58, 776-786.	2.2	21
123	Characteristics of ocean waters reaching Greenland's glaciers. Annals of Glaciology, 2012, 53, 202-210.	1.4	194
124	Spreading of warm ocean waters around Greenland as a possible cause for glacier acceleration. Annals of Glaciology, 2012, 53, 257-266.	1.4	89
125	A damage mechanics assessment of the Larsen B ice shelf prior to collapse: Toward a physicallyâ€based calving law. Geophysical Research Letters, 2012, 39, .	4.0	84
126	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.	1.4	138

#	Article	IF	Citations
127	A Reconciled Estimate of Ice-Sheet Mass Balance. Science, 2012, 338, 1183-1189.	12.6	1,246
128	Timing and origin of recent regional ice-mass loss in Greenland. Earth and Planetary Science Letters, 2012, 333-334, 293-303.	4.4	179
129	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
130	Sensitivity Analysis of Pine Island Glacier ice flow using ISSM and DAKOTA. Journal of Geophysical Research, 2012, 117, .	3.3	35
131	Spatial distribution of glacial erosion rates in the St. Elias range, Alaska, inferred from a realistic model of glacier dynamics. Journal of Geophysical Research, 2012, 117, .	3.3	17
132	Basal crevasses on the Larsen C Ice Shelf, Antarctica: Implications for meltwater ponding and hydrofracture. Geophysical Research Letters, 2012, 39, .	4.0	53
133	Recent large increases in freshwater fluxes from Greenland into the North Atlantic. Geophysical Research Letters, 2012, 39, .	4.0	261
134	Ice flow sensitivity to geothermal heat flux of Pine Island Glacier, Antarctica. Journal of Geophysical Research, 2012, 117, .	3.3	51
135	Mapping of Ice Motion in Antarctica Using Synthetic-Aperture Radar Data. Remote Sensing, 2012, 4, 2753-2767.	4.0	168
136	Ice flow in Greenland for the International Polar Year 2008â€“2009. Geophysical Research Letters, 2012, 39, .	4.0	193
137	Context for the Recent Massive Petermann Glacier Calving Event. Eos, 2011, 92, 117-118.	0.1	35
138	Acceleration of the contribution of the Greenland and Antarctic ice sheets to sea level rise. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	870
139	Acceleration and spatial rheology of Larsen C Ice Shelf, Antarctic Peninsula. Geophysical Research Letters, 2011, 38, .	4.0	42
140	Antarctic grounding line mapping from differential satellite radar interferometry. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	366
141	Ice flux divergence anomalies on 79north Glacier, Greenland. Geophysical Research Letters, 2011, 38, .	4.0	101
142	A mass conservation approach for mapping glacier ice thickness. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	170
143	Revisiting the Earth's sea-level and energy budgets from 1961 to 2008. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	415
144	Ice Flow of the Antarctic Ice Sheet. Science, 2011, 333, 1427-1430.	12.6	906

#	Article	IF	Citations
145	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.	6.3	31
146	Ice Sheets and Sea Level: Thinking Outside the Box. Surveys in Geophysics, 2011, 32, 495-505.	4.6	50
147	Is Antarctica melting?. Wiley Interdisciplinary Reviews: Climate Change, 2011, 2, 324-331.	8.1	6
148	State of the Climate in 2010. Bulletin of the American Meteorological Society, 2011, 92, S1-S236.	3.3	135
149	Ice Sheets and Sea Level: Thinking Outside the Box. Space Sciences Series of ISSI, 2011, , 495-505.	0.0	2
150	Ice Sheet Mass Balance. Encyclopedia of Earth Sciences Series, 2011, , 608-612.	0.1	0
151	Rapid submarine melting of the calving faces of West Greenland glaciers. Nature Geoscience, 2010, 3, 187-191.	12.9	338
152	Geophysical Research Letters: New Policies Improve Top-Cited Geosciences Journal. Eos, 2010, 91, 337-337.	0.1	0
153	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
154	Partitioning Recent Greenland Mass Loss. Science, 2009, 326, 984-986.	12.6	755
155	Dynamics and mass balance of Taylor Glacier, Antarctica: 1. Geometry and surface velocities. Journal of Geophysical Research, 2009, 114, .	3.3	15
156	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
157	Chapter 1 Impacts of the Oceans on Climate Change. Advances in Marine Biology, 2009, 56, 1-150.	1.4	110
158	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.	1.4	41
159	The Patagonian ice fields: An updated assessment of sea level contribution. IOP Conference Series: Earth and Environmental Science, 2009, 6, 012006.	0.3	0
160	Recent Antarctic ice mass loss from radarÂinterferometry and regional climateÂmodelling. Nature Geoscience, 2008, 1, 106-110.	12.9	819
161	Channelized bottom melting and stability of floating ice shelves. Geophysical Research Letters, 2008, 35, .	4.0	145
162	Changes in West Antarctic ice stream dynamics observed with ALOS PALSAR data. Geophysical Research Letters, 2008, 35, .	4.0	191

#	Article	IF	Citations
163	Deformation, Ecosystem Structure, and Dynamics of Ice (DESDynI). Aerospace Conference Proceedings IEEE, 2008, , .	0.0	18
164	Mass balance of the Greenland ice sheet from 1958 to 2007. Geophysical Research Letters, 2008, 35, .	4.0	344
165	Technology Demonstration of Ka-band Digitally-Beam formed Radar for Ice Topography Mapping. , 2007, , .		8
166	Larsen B Ice Shelf rheology preceding its disintegration inferred by a control method. Geophysical Research Letters, 2007, 34, .	4.0	70
167	Changes in the Velocity Structure of the Greenland Ice Sheet. Science, 2006, 311, 986-990.	12.6	1,055
168	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.	3.4	88
169	Ice volumetric changes on active volcanoes in southern Chile. Annals of Glaciology, 2006, 43, 111-122.	1.4	28
170	Ice Mass Balance and Antarctic Gravity Change: Satellite and Terrestrial Perspectives. , 2005, , 3-12.		3
171	Glacier wastage on southern Adelaide Island, Antarctica, and its impact on snow runway operations. Annals of Glaciology, 2005, 41, 57-62.	1.4	9
172	Retreat of Glaciar Tyndall, Patagonia, over the last half-century. Journal of Glaciology, 2005, 51, 239-247.	2.2	46
173	Rheology of the Ronne Ice Shelf, Antarctica, inferred from satellite radar interferometry data using an inverse control method. Geophysical Research Letters, 2005, 32, .	4.0	81
174	Recent ice loss from the Fleming and other glaciers, Wordie Bay, West Antarctic Peninsula. Geophysical Research Letters, 2005, 32, n/a-n/a.	4.0	80
175	Accelerated Sea-Level Rise from West Antarctica. Science, 2004, 306, 255-258.	12.6	317
176	Rapid ice discharge from southeast Greenland glaciers. Geophysical Research Letters, 2004, 31, n/a-n/a.	4.0	83
177	Modelling of rift propagation on Ronne Ice Shelf, Antarctica, and sensitivity to climate change. Geophysical Research Letters, 2004, 31, .	4.0	54
178	Accelerated ice discharge from the Antarctic Peninsula following the collapse of Larsen B ice shelf. Geophysical Research Letters, 2004, 31, .	4.0	546
179	Warm ocean is eroding West Antarctic Ice Sheet. Geophysical Research Letters, 2004, 31, .	4.0	371
180	Recent dramatic thinning of largest West Antarctic ice stream triggered by oceans. Geophysical Research Letters, 2004, 31, .	4.0	296

#	Article	IF	Citations
181	Recommendations for the collection and synthesis of Antarctic Ice Sheet mass balance data. Global and Planetary Change, 2004, 42, 1-15.	3.5	38
182	Processes involved in the propagation of rifts near Hemmen Ice Rise, Ronne Ice Shelf, Antarctica. Journal of Glaciology, 2004, 50, 329-341.	2.2	32
183	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.	1.4	44
184	Force-perturbation analysis of Pine Island Glacier, Antarctica, suggests cause for recent acceleration. Annals of Glaciology, 2004, 39, 133-138.	1.4	59
185	Plan for living on a restless planet sets NASA's solid Earth agenda. Eos, 2003, 84, 485.	0.1	7
186	Timing of Recent Accelerations of Pine Island Glacier, Antarctica. Geophysical Research Letters, 2003, 30, .	4.0	127
187	Contribution of the Patagonia Icefields of South America to Sea Level Rise. Science, 2003, 302, 434-437.	12.6	455
188	Ice-shelf changes in Pine Island Bay, Antarctica, 1947-2000. Journal of Glaciology, 2002, 48, 247-256.	2.2	71
189	Unsteady flow inferred for Thwaites Glacier, and comparison with Pine Island Glacier, West Antarctica. Journal of Glaciology, 2002, 48, 237-246.	2.2	14
190	Assessment of JERS-1 SAR for monitoring secondary vegetation in Amazonia: II. Spatial, temporal, and radiometric considerations for operational monitoring. International Journal of Remote Sensing, 2002, 23, 1381-1399.	2.9	15
191	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.	2.9	39
192	Mass balance of East Antarctic glaciers and ice shelves from satellite data. Annals of Glaciology, 2002, 34, 217-227.	1.4	105
193	Tidal flexure along ice-sheet margins: comparison of InSAR with an elastic-plate model. Annals of Glaciology, 2002, 34, 202-208.	1.4	46
194	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.	2.2	60
195	Mass Balance of Polar Ice Sheets. Science, 2002, 297, 1502-1506.	12.6	406
196	Rapid Bottom Melting Widespread near Antarctic Ice Sheet Grounding Lines. Science, 2002, 296, 2020-2023.	12.6	466
197	Rock glacier surface motion in Beacon Valley, Antarctica, from synthetic-aperture radar interferometry. Geophysical Research Letters, 2002, 29, 48-1.	4.0	55
198	Acceleration of Pine Island and Thwaites Glaciers, West Antarctica. Annals of Glaciology, 2002, 34, 189-194.	1.4	156

#	Article	IF	Citations
199	"Crack!" in the polar night. Eos, 2001, 82, 497-497.	0.1	18
200	Contribution to the glaciology of northern Greenland from satellite radar interferometry. Journal of Geophysical Research, 2001, 106, 34007-34019.	3.3	74
201	Penetration depth of interferometric synthetic-aperture radar signals in snow and ice. Geophysical Research Letters, 2001, 28, 3501-3504.	4.0	275
202	Evidence for rapid retreat and mass loss of Thwaites Glacier, West Antarctica. Journal of Glaciology, 2001, 47, 213-222.	2.2	109
203	Ephemeral grounding as a signal of ice-shelf change. Journal of Glaciology, 2001, 47, 71-77.	2.2	33
204	Mass balance of the northeast sector of the Greenland ice sheet: a remote-sensing perspective. Journal of Glaciology, 2000, 46, 265-273.	2.2	19
205	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.	6.3	62
206	Substantial thinning of a major east Greenland outlet glacier. Geophysical Research Letters, 2000, 27, 1291-1294.	4.0	68
207	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
208	Constraining ice dynamics at Dome C, Antarctica, using remotely sensed measurements. Geophysical Research Letters, 2000, 27, 3493-3496.	4.0	8
209	Interferometric radar observations of Glaciares Europa and Penguin, Hielo PatagÃ³nico Sur, Chile. Journal of Glaciology, 1999, 45, 325-337.	2.2	18
210	Interferometric radar observations of Glaciares Europa and Penguin, Hielo PatagÃ³nico Sur, Chile. Journal of Glaciology, 1999, 45, 325-337.	2.2	1
211	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.	2.2	141
212	Interferometric radar observations of Glaciares Europa and Penguin, Hielo Patagonico Sur, Chile. Journal of Glaciology, 1999, 45, 325-337.	2.2	19
213	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.	2.2	66
214	Fast Recession of a West Antarctic Glacier. , 1998, 281, 549-551.		336
215	Comparison of ice-shelf creep flow simulations with ice-front motion of Filchner-Ronne Ice Shelf, Antarctica, detected by SAR interferometry. Annals of Glaciology, 1998, 27, 182-186.	1.4	11
216	Radar interferometry detection of hinge-line migration on Rutford Ice Stream and Carlson Inlet, Antarctica. Annals of Glaciology, 1998, 27, 25-32.	1.4	40

#	Article	IF	Citations
217	Hinge-line migration of Petermann Gletscher, north Greenland, detected using satellite-radar interferometry. Journal of Glaciology, 1998, 44, 469-476.	2.2	46
218	Ice-shelf dynamics near the front of the Filchnerâ€"Ronne Ice Shelf, Antarctica, revealed by SAR interferometry. Journal of Glaciology, 1998, 44, 405-418.	2.2	66
219	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.	2.2	40
220	Ice-shelf dynamics near the front of the Filchnerâ€"Ronne Ice Shelf, Antarctica, revealed by SAR interferometry. Journal of Glaciology, 1998, 44, 405-418.	2.2	48
221	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.	2.2	37
222	Hinge-line migration of Petermann Gletscher, north Greenland, detected using satellite-radar interferometry. Journal of Glaciology, 1998, 44, 469-476.	2.2	36
223	North and Northeast Greenland Ice Discharge from Satellite Radar Interferometry. Science, 1997, 276, 934-937.	12.6	122
224	Winter and spring thaw as observed with imaging radar at BOREAS. Journal of Geophysical Research, 1997, 102, 29673-29684.	3.3	59
225	Mapping deforestation and secondary growth in Rondonia, Brazil, using imaging radar and thematic mapper data. Remote Sensing of Environment, 1997, 59, 167-179.	11.0	135
226	Classification of boreal forest cover types using SAR images. Remote Sensing of Environment, 1997, 60, 270-281.	11.0	38
227	Dual-frequency interferometric SAR observations of a tropical rain-forest. Geophysical Research Letters, 1996, 23, 993-996.	4.0	13
228	Interferometric radar observations of Glaciar San Rafael, Chile. Journal of Glaciology, 1996, 42, 279-291.	2.2	59
229	Mapping of glacial motion and surface topography of Hielo PatagÃ³nico Norte, Chile, using satellite SAR L-band interferometry data. Annals of Glaciology, 1996, 23, 209-216.	1.4	30
230	Interferometric radar observations of Glaciar San Rafael, Chile. Journal of Glaciology, 1996, 42, 279-291.	2.2	17
231	Tidal motion, ice velocity and melt rate of Petermann Gletscher, Greenland, measured from radar interferometry. Journal of Glaciology, 1996, 42, 476-485.	2.2	131
232	Tidal motion, ice velocity and melt rate of Petermann Gletscher, Greenland, measured from radar interferometry. Journal of Glaciology, 1996, 42, 476-485.	2.2	27
233	Mapping of glacial motion and surface topography of Hielo PatagÃ³nico Norte, Chile, using satellite SAR L-band interferometry data. Annals of Glaciology, 1996, 23, 209-216.	1.4	16
234	Monitoring Seasonal Variations in Boreal Ecosystems Using Multi-Temporal Spaceborne SAR Data. Canadian Journal of Remote Sensing, 1995, 21, 96-109.	2.4	19

#	Article	IF	Citations
235	Monitoring, classification, and characterization of interior Alaska forests using AIRSAR and ERS-1 SAR. Polar Record, 1995, 31, 227-234.	0.8	1
236	Ice flow dynamics of the Greenland Ice Sheet from SAR interferometry. Geophysical Research Letters, 1995, 22, 575-578.	4.0	84
237	Backscatter model for the unusual radar properties of the Greenland Ice Sheet. Journal of Geophysical Research, 1995, 100, 9389.	3.3	67
238	Spaceborne applications of P band imaging radars for measuring forest biomass. IEEE Transactions on Geoscience and Remote Sensing, 1995, 33, 1162-1169.	6.3	103
239	Winter Sea-ice mapping from multi-parameter synthetic-aperture radar data. Journal of Glaciology, 1994, 40, 31-45.	2.2	3
240	Winter Sea-ice mapping from multi-parameter synthetic-aperture radar data. Journal of Glaciology, 1994, 40, 31-45.	2.2	66
241	Monitoring freezeâ€"thaw cycles along Northâ€"South Alaskan transects using ERS-1 SAR. Remote Sensing of Environment, 1994, 49, 131-137.	11.0	130
242	Monitoring of environmental conditions in Taiga forests using ERS-1 SAR. Remote Sensing of Environment, 1994, 49, 145-154.	11.0	78
243	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.	6.3	64
244	Polarization signatures of frozen and thawed forests of varying environmental state. IEEE Transactions on Geoscience and Remote Sensing, 1994, 32, 371-381.	6.3	37
245	Mapping of forest types in Alaskan boreal forests using SAR imagery. IEEE Transactions on Geoscience and Remote Sensing, 1994, 32, 1051-1059.	6.3	73
246	Radar estimates of aboveground biomass in boreal forests of interior Alaska. IEEE Transactions on Geoscience and Remote Sensing, 1994, 32, 1117-1124.	6.3	141
247	Maximum a posteriori classification of multifrequency, multilook, synthetic aperture radar intensity data. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1993, 10, 573.	1.5	23
248	Change detection techniques for ERS-1 SAR data. IEEE Transactions on Geoscience and Remote Sensing, 1993, 31, 896-906.	6.3	537
249	Unusual Radar Echoes from the Greenland Ice Sheet. Science, 1993, 261, 1710-1713.	12.6	54
250	Characterization of spatial statistics of distributed targets in SAR data. International Journal of Remote Sensing, 1993, 14, 345-363.	2.9	34
251	A Bayes classifier for change detection in synthetic aperture radar imagery. , 1992, , .		4
252	Potential applications of polarimetry to the classification of sea ice. Geophysical Monograph Series, 1992, , 419-430.	0.1	30

#	Article	IF	Citations
253	Segmentation of polarimetric synthetic aperture radar data. IEEE Transactions on Image Processing, 1992, 1, 281-300.	9.8	116
254	Identification of sea ice types in spaceborne synthetic aperture radar data. Journal of Geophysical Research, 1992, 97, 2391-2402.	3.3	137
255	Unsupervised segmentation of polarimetric SAR data using the covariance matrix. IEEE Transactions on Geoscience and Remote Sensing, 1992, 30, 697-705.	6.3	89
256	Segmentation of synthetic-aperture-radar complex data. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1991, 8, 1499.	1.5	32
257	Multifrequency polarimetric synthetic aperture radar observations of sea ice. Journal of Geophysical Research, 1991, 96, 20679-20698.	3.3	72
258	Segmentation of multifrequency SAR complex data. , 1991, , .		0
259	Boundary integral calculations of scattered fields: Application to a spacecraft launcher. Journal of the Acoustical Society of America, 1987, 82, 1771-1781.	1.1	8
260	Unsupervised Segmentation of Polarimetric Sar Data Using the Covariance Matrix. , 0, , .		3
261	Understanding sea level changes. , 0, , .		3
262	Monitoring temporal change in Alaskan forests using airsar data. , 0, , .		2
263	Synthetic Aperture Radar Polarimetry Of Sea Ice. , 0, , .		12
264	Status Of The Ice Classification Algorithm In The Alaska Sar Facility Geophysical Processor System. , 0, , .		4
265	Polarization Signatures Of Frozen And Thawed Forests Of Varying Biomass. , 0, , .		3
266	SEGMENTATION OF SYNTHETIC APERTURE RADAR COMPLEX DATA. , 0, , .		2
267	Classification of Multifrequency Multilook Synthetic Aperture Radar Data. , 0, , .		0
268	Effect Of Speckle On The Hh-vv Statistics. , 0, , .		0
269	On The Application Of Multifrequency Polarimetric Radar Observations To Sea-ice Classification. , 0, , .		5
270	Direction Angle Sensitivity of Agricultural Field Backscatter with Airsar Data. , 0, , .		7

#	Article	IF	Citations
271	Monitoring seasonal change in taiga forests using ERS-1 SAR data. , 0, , .		1
272	Monitoring freeze-thaw along north-south Alaskan transects using ERS-1 SAR. , 0, , .		1
273	Monitoring of freeze/thaw transitions in taiga forests using ERS-1 SAR. , 0, , .		1
274	An ecological approach to radar mapping of biomass in interior Alaska boreal forests. , 0, , .		0
275	P-band radar mapping of forest biomass in boreal forests of interior Alaska. , 0, , .		3
276	Inference of forest biomass using P-band circular-polarized radar signals. , 0, , .		0
277	Characterization of canopy physiology at BOREAS with SAR. , 0, , .		1
278	Observed radar backscatter from forested areas with terrain variations. , 0, , .		4
279	Influence of Ocean Warming on Glaciers and Ice Streams. , 0, , 136-137.		0