

Ron Kwok

List of Publications by Year in descending order

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248
papers

19,869
citations

13087

68
h-index

12933

131
g-index

264
all docs

264
docs citations

264
times ranked

11219
citing authors

#	ARTICLE	IF	CITATIONS
1	Decline in Arctic sea ice thickness from submarine and ICESat records: 1958–2008. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	776
2	Classification of multi-look polarimetric SAR imagery based on complex Wishart distribution. <i>International Journal of Remote Sensing</i> , 1994, 15, 2299-2311.	1.3	678
3	Thinning and volume loss of the Arctic Ocean sea ice cover: 2003–2008. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	640
4	The Ice, Cloud, and land Elevation Satellite-2 (ICESat-2): Science requirements, concept, and implementation. <i>Remote Sensing of Environment</i> , 2017, 190, 260-273.	4.6	600
5	CryoSat-2 estimates of Arctic sea ice thickness and volume. <i>Geophysical Research Letters</i> , 2013, 40, 732-737.	1.5	597
6	Greater role for Atlantic inflows on sea-ice loss in the Eurasian Basin of the Arctic Ocean. <i>Science</i> , 2017, 356, 285-291.	6.0	576
7	Thermoelasticity of large lecithin bilayer vesicles. <i>Biophysical Journal</i> , 1981, 35, 637-652.	0.2	470
8	Arctic sea ice thickness, volume, and multiyear ice coverage: losses and coupled variability (1958–2018). <i>Environmental Research Letters</i> , 2018, 13, 105005.	2.2	469
9	Wind-driven trends in Antarctic sea-ice drift. <i>Nature Geoscience</i> , 2012, 5, 872-875.	5.4	468
10	Divergent consensus on Arctic amplification influence on midlatitude severe winter weather. <i>Nature Climate Change</i> , 2020, 10, 20-29.	8.1	424
11	Uncertainty in modeled Arctic sea ice volume. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	421
12	Changing Arctic Ocean freshwater pathways. <i>Nature</i> , 2012, 481, 66-70.	13.7	363
13	The ICESat-2 Laser Altimetry Mission. <i>Proceedings of the IEEE</i> , 2010, 98, 735-751.	16.4	327
14	Analysis of the Arctic System for Freshwater Cycle Intensification: Observations and Expectations. <i>Journal of Climate</i> , 2010, 23, 5715-5737.	1.2	303
15	Southern Ocean Climate and Sea Ice Anomalies Associated with the Southern Oscillation. <i>Journal of Climate</i> , 2002, 15, 487-501.	1.2	283
16	Arctic sea ice circulation and drift speed: Decadal trends and ocean currents. <i>Journal of Geophysical Research: Oceans</i> , 2013, 118, 2408-2425.	1.0	273
17	Variability of Fram Strait ice flux and North Atlantic Oscillation. <i>Journal of Geophysical Research</i> , 1999, 104, 5177-5189.	3.3	255
18	Trends in Arctic sea ice drift and role of wind forcing: 1992-2009. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	1.5	248

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19	ICESat over Arctic sea ice: Estimation of snow depth and ice thickness. Journal of Geophysical Research, 2008, 113, .	3.3	243
20	Greenland Ice Sheet Surface Properties and Ice Dynamics from ERS-1 SAR Imagery. Science, 1993, 262, 1530-1534.	6.0	241
21	Toward Quantifying the Increasing Role of Oceanic Heat in Sea Ice Loss in the New Arctic. Bulletin of the American Meteorological Society, 2015, 96, 2079-2105.	1.7	217
22	Interferometric estimation of three-dimensional ice-flow using ascending and descending passes. IEEE Transactions on Geoscience and Remote Sensing, 1998, 36, 25-37.	2.7	213
23	Sea ice motion from satellite passive microwave imagery assessed with ERS SAR and buoy motions. Journal of Geophysical Research, 1998, 103, 8191-8214.	3.3	212
24	ICESat measurements of sea ice freeboard and estimates of sea ice thickness in the Weddell Sea. Journal of Geophysical Research, 2008, 113, .	3.3	211
25	Spatial patterns of variability in Antarctic surface temperature: Connections to the Southern Hemisphere Annular Mode and the Southern Oscillation. Geophysical Research Letters, 2002, 29, 50-1-50-4.	1.5	204
26	Symmetry properties in polarimetric remote sensing. Radio Science, 1992, 27, 693-711.	0.8	200
27	Fram Strait sea ice outflow. Journal of Geophysical Research, 2004, 109, .	3.3	186
28	An ice-motion tracking system at the Alaska SAR facility. IEEE Journal of Oceanic Engineering, 1990, 15, 44-54.	2.1	185
29	Outflow of Arctic Ocean Sea Ice into the Greenland and Barents Seas: 1979â€“2007. Journal of Climate, 2009, 22, 2438-2457.	1.2	174
30	Block adaptive quantization of Magellan SAR data. IEEE Transactions on Geoscience and Remote Sensing, 1989, 27, 375-383.	2.7	168
31	ICESat observations of Arctic sea ice: A first look. Geophysical Research Letters, 2004, 31, .	1.5	167
32	The thinning of Arctic sea ice. Physics Today, 2011, 64, 36-41.	0.3	167
33	Variability of Arctic sea ice thickness and volume from CryoSat-2. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2015, 373, 20140157.	1.6	167
34	Recent Changes of Arctic Multiyear Sea Ice Coverage and the Likely Causes. Bulletin of the American Meteorological Society, 2012, 93, 145-151.	1.7	166
35	Ice sheet motion and topography from radar interferometry. IEEE Transactions on Geoscience and Remote Sensing, 1996, 34, 189-200.	2.7	158
36	Mechanical calorimetry of large dimyristoylphosphatidylcholine vesicles in the phase transition region. Biochemistry, 1982, 21, 4874-4879.	1.2	157

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37	Multiyear Volume, Liquid Freshwater, and Sea Ice Transports through Davis Strait, 2004â€“10*. Journal of Physical Oceanography, 2014, 44, 1244-1266.	0.7	153
38	A Mini-Surge on the Ryder Glacier, Greenland, Observed by Satellite Radar Interferometry. Science, 1996, 274, 228-230.	6.0	146
39	Davis Strait volume, freshwater and heat fluxes. Deep-Sea Research Part I: Oceanographic Research Papers, 2005, 52, 519-542.	0.6	140
40	Identification of sea ice types in spaceborne synthetic aperture radar data. Journal of Geophysical Research, 1992, 97, 2391-2402.	3.3	137
41	Variability and trends in sea ice extent and ice production in the Ross Sea. Journal of Geophysical Research, 2011, 116, .	3.3	133
42	Estimation of the thin ice thickness and heat flux for the Chukchi Sea Alaskan coast polynya from Special Sensor Microwave/Imager data, 1990â€“2001. Journal of Geophysical Research, 2004, 109, .	3.3	126
43	Estimation of ice-sheet motion using satellite radar interferometry: method and error analysis with application to Humboldt Glacier, Greenland. Journal of Glaciology, 1996, 42, 564-575.	1.1	126
44	Polarimetric passive remote sensing of ocean wind vectors. Radio Science, 1994, 29, 799-814.	0.8	122
45	Arctic ice-ocean simulation with optimized model parameters: Approach and assessment. Journal of Geophysical Research, 2011, 116, .	3.3	120
46	Ice, Cloud, and land Elevation Satellite (ICESat) over Arctic sea ice: Retrieval of freeboard. Journal of Geophysical Research, 2007, 112, .	3.3	111
47	Recent changes in Arctic Ocean sea ice motion associated with the North Atlantic Oscillation. Geophysical Research Letters, 2000, 27, 775-778.	1.5	105
48	Annual cycles of multiyear sea ice coverage of the Arctic Ocean: 1999â€“2003. Journal of Geophysical Research, 2004, 109, .	3.3	97
49	Contribution of melt in the Beaufort Sea to the decline in Arctic multiyear sea ice coverage: 1993â€“2009. Geophysical Research Letters, 2010, 37, .	1.5	95
50	Surface and radiative characteristics of the summer Arctic sea ice cover from multisensor satellite observations. Journal of Geophysical Research, 1996, 101, 28397-28416.	3.3	94
51	Snow megadune fields on the East Antarctic Plateau: Extreme atmosphere-ice interaction. Geophysical Research Letters, 2000, 27, 3719-3722.	1.5	93
52	Snow in the changing sea-ice systems. Nature Climate Change, 2018, 8, 946-953.	8.1	91
53	Polarimetric scattering and emission properties of targets with reflection symmetry. Radio Science, 1994, 29, 1409-1420.	0.8	86
54	Large sea ice outflow into the Nares Strait in 2007. Geophysical Research Letters, 2010, 37, .	1.5	86

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55	Open water production in Arctic sea ice: Satellite measurements and model parameterizations. Journal of Geophysical Research, 1995, 100, 20601.	3.3	85
56	Dynamic Topography and Sea Level Anomalies of the Southern Ocean: Variability and Teleconnections. Journal of Geophysical Research: Oceans, 2018, 123, 613-630.	1.0	85
57	The areas and ice production of the western and central Ross Sea polynyas, 1992–2002, and their relation to the B-15 and C-19 iceberg events of 2000 and 2002. Journal of Marine Systems, 2007, 68, 201-214.	0.9	82
58	Satellite remote sensing of sea-ice thickness and kinematics: a review. Journal of Glaciology, 2010, 56, 1129-1140.	1.1	82
59	Detection of snowmelt regions on the Greenland ice sheet using diurnal backscatter change. Journal of Glaciology, 2001, 47, 539-547.	1.1	81
60	Water exchange between the subglacial Lake Vostok and the overlying ice sheet. Nature, 2000, 403, 643-646.	13.7	79
61	Improved modeling of the Arctic halocline with a subgrid-scale brine rejection parameterization. Journal of Geophysical Research, 2009, 114, .	3.3	79
62	Modeled Trends in Antarctic Sea Ice Thickness. Journal of Climate, 2014, 27, 3784-3801.	1.2	78
63	psi-s correlation and dynamic time warping: two methods for tracking ice floes in SAR images. IEEE Transactions on Geoscience and Remote Sensing, 1991, 29, 1004-1012.	2.7	75
64	Analysis of reactive bromine production and ozone depletion in the Arctic boundary layer using 3-D simulations with GEM-AQ: inference from synoptic-scale patterns. Atmospheric Chemistry and Physics, 2011, 11, 3949-3979.	1.9	75
65	Summer sea ice motion from the 18 GHz channel of AMSR-E and the exchange of sea ice between the Pacific and Atlantic sectors. Geophysical Research Letters, 2008, 35, .	1.5	74
66	Exchange of sea ice between the Arctic Ocean and the Canadian Arctic Archipelago. Geophysical Research Letters, 2006, 33, .	1.5	73
67	Multifrequency polarimetric synthetic aperture radar observations of sea ice. Journal of Geophysical Research, 1991, 96, 20679-20698.	3.3	72
68	Polarimetric signatures of sea ice: 2. Experimental observations. Journal of Geophysical Research, 1995, 100, 13681.	3.3	72
69	Measurement of ice-sheet topography using satellite-radar interferometry. Journal of Glaciology, 1996, 42, 10-22.	1.1	72
70	Sea ice production and export from coastal polynyas in the Weddell and Ross Seas. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	72
71	Deformation of the Arctic Ocean Sea Ice Cover between November 1996 and April 1997: A Qualitative Survey. Solid Mechanics and Its Applications, 2001, , 315-322.	0.1	71
72	Arctic Ice Dynamics Joint Experiment (AIDJEX) assumptions revisited and found inadequate. Journal of Geophysical Research, 2007, 112, .	3.3	71

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73	Near zero replenishment of the Arctic multiyear sea ice cover at the end of 2005 summer. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	71
74	Arctic Snow Depth and Sea Ice Thickness From ICESat-2 and CryoSat-2 Freeboards: A First Examination. <i>Journal of Geophysical Research: Oceans</i> , 2020, 125, e2019JC016008.	1.0	71
75	Polarimetric signatures of sea ice: 1. Theoretical model. <i>Journal of Geophysical Research</i> , 1995, 100, 13665.	3.3	70
76	Relating arctic pack ice stress and deformation under winter conditions. <i>Journal of Geophysical Research</i> , 2002, 107, SHE 15-1.	3.3	70
77	The RADARSAT Geophysical Processor System. , 1998, , 235-257.		70
78	Elastic-decohesive constitutive model for sea ice. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	68
79	Using the material-point method to model sea ice dynamics. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	68
80	Backscatter characteristics of the winter ice cover in the Beaufort Sea. <i>Journal of Geophysical Research</i> , 1994, 99, 7787.	3.3	67
81	Assimilation of ice motion observations and comparisons with submarine ice thickness data. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	66
82	Variability of Nares Strait ice flux. <i>Geophysical Research Letters</i> , 2005, 32, .	1.5	66
83	Evaluation of Arctic sea ice thickness simulated by Arctic Ocean Model Intercomparison Project models. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	66
84	Comparison of Arctic Sea Ice Thickness from Satellites, Aircraft, and PIOMAS Data. <i>Remote Sensing</i> , 2016, 8, 713.	1.8	65
85	Enhanced eddy activity in the Beaufort Gyre in response to sea ice loss. <i>Nature Communications</i> , 2020, 11, 761.	5.8	65
86	Evaluating the type and state of Alaska taiga forests with imaging radar for use in ecosystem models. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 1994, 32, 353-370.	2.7	64
87	Variability of sea ice simulations assessed with RGPS kinematics. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	64
88	Airborne surveys of snow depth over Arctic sea ice. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	63
89	Simulated effects of a snow layer on retrieval of CryoSat-2 sea ice freeboard. <i>Geophysical Research Letters</i> , 2014, 41, 5014-5020.	1.5	61
90	Improvements in the estimates of ice thickness and production in the Chukchi Sea polynyas derived from AMSR-E. <i>Geophysical Research Letters</i> , 2005, 32, .	1.5	60

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91	Recent trends in Arctic Ocean mass distribution revealed by GRACE. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	58
92	Sea ice convergence along the Arctic coasts of Greenland and the Canadian Arctic Archipelago: Variability and extremes (1992â€“2014). <i>Geophysical Research Letters</i> , 2015, 42, 7598-7605.	1.5	58
93	Contrasts in sea ice deformation and production in the Arctic seasonal and perennial ice zones. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	57
94	Analysis of synthetic aperture radar Data collected over the southwestern Greenland ice sheet. <i>Journal of Glaciology</i> , 1993, 39, 119-132.	1.1	56
95	Seasonal ice area and volume production of the Arctic Ocean: November 1996 through April 1997. <i>Journal of Geophysical Research</i> , 2002, 107, SHE 12-1.	3.3	54
96	Arctic Iceâ€“Ocean Coupling and Gyre Equilibration Observed With Remote Sensing. <i>Geophysical Research Letters</i> , 2018, 45, 1499-1508.	1.5	54
97	Sub-daily sea ice motion and deformation from RADARSAT observations. <i>Geophysical Research Letters</i> , 2003, 30, n/a-n/a.	1.5	53
98	Ross Sea polynyas: Response of ice concentration retrievals to large areas of thin ice. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	52
99	Winter Arctic Sea Ice Thickness From ICESatâ€“2 Freeboards. <i>Journal of Geophysical Research: Oceans</i> , 2020, 125, e2019JC015764.	1.0	52
100	Surface Height and Sea Ice Freeboard of the Arctic Ocean From ICESatâ€“2: Characteristics and Early Results. <i>Journal of Geophysical Research: Oceans</i> , 2019, 124, 6942-6959.	1.0	51
101	ICESat over Arctic sea ice: Interpretation of altimetric and reflectivity profiles. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	50
102	Dynamic topography of the ice-covered Arctic Ocean from ICESat. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	1.5	50
103	Arctic Sea Ice Volume Export Through Fram Strait From 1992 to 2014. <i>Journal of Geophysical Research: Oceans</i> , 2020, 125, e2019JC016039.	1.0	50
104	Determination of the age distribution of sea ice from Lagrangian observations of ice motion. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 1995, 33, 392-400.	2.7	49
105	On large outflows of Arctic sea ice into the Barents Sea. <i>Geophysical Research Letters</i> , 2005, 32, n/a-n/a.	1.5	49
106	Snow depth of the <sc>W</sc>eddell and <sc>B</sc>ellingshausen sea ice covers from <sc>I</sc>ce<sc>B</sc>ridge surveys in 2010 and 2011: An examination. <i>Journal of Geophysical Research: Oceans</i> , 2014, 119, 4141-4167.	1.0	49
107	The Scientific Legacy of NASAâ€™s Operation IceBridge. <i>Reviews of Geophysics</i> , 2021, 59, e2020RG000712.	9.0	49
108	Intercomparison of snow depth retrievals over Arctic sea ice from radar data acquired by Operation IceBridge. <i>Cryosphere</i> , 2017, 11, 2571-2593.	1.5	48

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109	Sea ice type maps from Alaska Synthetic Aperture Radar Facility imagery: An assessment. <i>Journal of Geophysical Research</i> , 1994, 99, 22443.	3.3	47
110	Ice motion over Lake Vostok, Antarctica: constraints on inferences regarding the accreted ice. <i>Journal of Glaciology</i> , 2000, 46, 689-694.	1.1	47
111	Arctic sea ice freeboard from IceBridge acquisitions in 2009: Estimates and comparisons with ICESat. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	47
112	Application of neural networks for sea ice classification in polarimetric SAR images. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 1995, 33, 740-748.	2.7	46
113	Tracking of Ice Edges and Ice Floes by Wavelet Analysis of SAR Images. <i>Journal of Atmospheric and Oceanic Technology</i> , 1997, 14, 1187-1198.	0.5	46
114	Sea ice concentration estimates from satellite passive microwave radiometry and openings from SAR ice motion. <i>Geophysical Research Letters</i> , 2002, 29, 25-1-25-4.	1.5	46
115	Sea ice identification using dual-polarized Ku-band scatterometer data. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 1997, 35, 560-569.	2.7	45
116	Arctic Sea Level and Surface Circulation Response to the Arctic Oscillation. <i>Geophysical Research Letters</i> , 2018, 45, 6576-6584.	1.5	43
117	Inverse electromagnetic scattering models for sea ice. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 1998, 36, 1675-1704.	2.7	42
118	Potential basin-scale estimates of Arctic snow depth with sea ice freeboards from CryoSat-2 and ICESat-2: An exploratory analysis. <i>Advances in Space Research</i> , 2018, 62, 1243-1250.	1.2	41
119	Sea ice drift in the Southern Ocean: Regional patterns, variability, and trends. <i>Elementa</i> , 2017, 5, .	1.1	41
120	The Antarctic sea ice cover from ICESat-2 and CryoSat-2: freeboard, snow depth, and ice thickness. <i>Cryosphere</i> , 2020, 14, 4453-4474.	1.5	41
121	Evolution in polarimetric signatures of thin saline ice under constant growth. <i>Radio Science</i> , 1997, 32, 127-151.	0.8	40
122	Ross Sea Ice Motion, Area Flux, and Deformation. <i>Journal of Climate</i> , 2005, 18, 3759-3776.	1.2	40
123	A post-processing system for automated rectification and registration of spaceborne SAR imagery. <i>International Journal of Remote Sensing</i> , 1987, 8, 621-638.	1.3	39
124	balance velocities of the Greenland Ice Sheet. <i>Geophysical Research Letters</i> , 1997, 24, 3045-3048.	1.5	39
125	Observational assessment of Arctic Ocean sea ice motion, export, and thickness in CMIP3 climate simulations. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	39
126	Source and Pathway of the Western Arctic Upper Halocline in a Data-Constrained Coupled Ocean and Sea Ice Model. <i>Journal of Physical Oceanography</i> , 2012, 42, 802-823.	0.7	39

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127	Uncertainty of Arctic summer ice drift assessed by high-resolution SAR data. <i>Journal of Geophysical Research: Oceans</i> , 2015, 120, 5285-5301.	1.0	39
128	Retrieval of thin ice thickness from multifrequency polarimetric SAR data. <i>Remote Sensing of Environment</i> , 1995, 51, 361-374.	4.6	38
129	Landfast ice thickness in the Canadian Arctic Archipelago from observations and models. <i>Cryosphere</i> , 2016, 10, 1463-1475.	1.5	38
130	ICESat-2 Surface Height and Sea Ice Freeboard Assessed With ATM Lidar Acquisitions From Operation IceBridge. <i>Geophysical Research Letters</i> , 2019, 46, 11228-11236.	1.5	38
131	Polarization signatures of frozen and thawed forests of varying environmental state. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 1994, 32, 371-381.	2.7	37
132	A laboratory study of the effect of frost flowers on C band radar backscatter from sea ice. <i>Journal of Geophysical Research</i> , 1997, 102, 3357-3370.	3.3	37
133	Upwelling of Arctic pycnocline associated with shear motion of sea ice. <i>Geophysical Research Letters</i> , 2005, 32, .	1.5	37
134	Profiling Sea Ice with a Multiple Altimeter Beam Experimental Lidar (MABEL). <i>Journal of Atmospheric and Oceanic Technology</i> , 2014, 31, 1151-1168.	0.5	37
135	Sea-ice deformation in a coupled ocean-sea-ice model and in satellite remote sensing data. <i>Cryosphere</i> , 2017, 11, 1553-1573.	1.5	37
136	The Pan-Arctic Continental Slope: Sharp Gradients of Physical Processes Affect Pelagic and Benthic Ecosystems. <i>Frontiers in Marine Science</i> , 2020, 7, .	1.2	37
137	Linked trends in the South Pacific sea ice edge and Southern Oscillation Index. <i>Geophysical Research Letters</i> , 2016, 43, 10,295.	1.5	36
138	Arctic Snow Depth, Ice Thickness, and Volume From ICESat-2 and CryoSat-2: 2018-2021. <i>Geophysical Research Letters</i> , 2022, 49, .	1.5	35
139	Characterization of spatial statistics of distributed targets in SAR data. <i>International Journal of Remote Sensing</i> , 1993, 14, 345-363.	1.3	34
140	Ice-stream-related patterns of ice flow in the interior of northeast Greenland. <i>Journal of Geophysical Research</i> , 2001, 106, 34035-34045.	3.3	34
141	A model with ellipsoidal scatterers for polarimetric remote sensing of anisotropic layered media. <i>Radio Science</i> , 1993, 28, 687-703.	0.8	32
142	Potential applications of polarimetry to the classification of sea ice. <i>Geophysical Monograph Series</i> , 1992, , 419-430.	0.1	30
143	Ice-sheet radar layering and the development of preferred crystal orientation fabrics between Lake Vostok and Ridge B, central East Antarctica. <i>Earth and Planetary Science Letters</i> , 2000, 179, 227-235.	1.8	30
144	Arctic Ocean Sea Ice Thickness and Kinematics: Satellite Retrievals and Modeling. <i>Oceanography</i> , 2010, 23, 134-143.	0.5	30

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145	Towards a unifying pan-arctic perspective: A conceptual modelling toolkit. Progress in Oceanography, 2020, 189, 102455.	1.5	30
146	Polarimetric scattering from layered media with multiple species of scatterers. Radio Science, 1995, 30, 835-852.	0.8	29
147	Ice flow of Humboldt, Petermann and Ryder Gletscher, northern Greenland. Journal of Glaciology, 1999, 45, 231-241.	1.1	29
148	Area balance of the Arctic Ocean perennial ice zone: October 1996 to April 1997. Journal of Geophysical Research, 1999, 104, 25747-25759.	3.3	29
149	Testing the ice-water discrimination and freeboard retrieval algorithms for the ICESat-2 mission. Remote Sensing of Environment, 2016, 183, 13-25.	4.6	28
150	Sea surface height and dynamic topography of the ice-covered oceans from CryoSat-2: 2011-2014. Journal of Geophysical Research: Oceans, 2016, 121, 674-692.	1.0	28
151	The role of cyclone activity in snow accumulation on Arctic sea ice. Nature Communications, 2019, 10, 5285.	5.8	28
152	Seasonal characteristics of the perennial ice cover of the Beaufort Sea. Journal of Geophysical Research, 1996, 101, 28417-28439.	3.3	26
153	Hydrographic changes in the Lincoln Sea in the Arctic Ocean with focus on an upper ocean freshwater anomaly between 2007 and 2010. Journal of Geophysical Research: Oceans, 2013, 118, 4699-4715.	1.0	26
154	A study of the onset of melt over the Arctic Ocean in RADARSAT synthetic aperture radar data. Journal of Geophysical Research, 2003, 108, .	3.3	25
155	Declassified high-resolution visible imagery for Arctic sea ice investigations: An overview. Remote Sensing of Environment, 2014, 142, 44-56.	4.6	25
156	Three years of sea ice freeboard, snow depth, and ice thickness of the Weddell Sea from Operation IceBridge and CryoSat-2. Cryosphere, 2018, 12, 2789-2801.	1.5	25
157	ARCTIC CHANGE AND POSSIBLE INFLUENCE ON MID-LATITUDE CLIMATE AND WEATHER: A US CLIVAR White Paper. , 2018, n/a, .		25
158	Determination of sea ice motion from satellite images. Geophysical Monograph Series, 1992, , 343-354.	0.1	24
159	Electromagnetic fluctuations for anisotropic media and the generalized Kirchhoff's law. Radio Science, 1993, 28, 471-480.	0.8	24
160	Polarimetric thermal emission from periodic water surfaces. Radio Science, 1994, 29, 87-96.	0.8	24
161	An electrothermodynamic model with distributed properties for effective permittivities of sea ice. Radio Science, 1996, 31, 297-311.	0.8	24
162	Laser altimetry sampling strategies over sea ice. Annals of Glaciology, 2011, 52, 69-76.	2.8	24

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163	50 Years of Satellite Remote Sensing of the Ocean. <i>Meteorological Monographs</i> , 2019, 59, 5.1-5.46.	5.0	24
164	Baffin Bay ice drift and export: 2002–2007. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	23
165	An automated system for mosaicking spaceborne SAR imagery. <i>International Journal of Remote Sensing</i> , 1990, 11, 209-223.	1.3	22
166	New High-Resolution Images of Summer Arctic Sea Ice. <i>Eos</i> , 2011, 92, 53-54.	0.1	22
167	The Regional, Seasonal, and Lagged Influence of the Amundsen Sea Low on Antarctic Sea Ice. <i>Geophysical Research Letters</i> , 2018, 45, 11,227.	1.5	22
168	Sea Surface Salinity as a Proxy for Arctic Ocean Freshwater Changes. <i>Journal of Geophysical Research: Oceans</i> , 2020, 125, e2020JC016110.	1.0	22
169	Fine-Resolution Radar Altimeter Measurements on Land and Sea Ice. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2015, 53, 2547-2564.	2.7	21
170	Effects of radar side-lobes on snow depth retrievals from Operation IceBridge. <i>Journal of Glaciology</i> , 2015, 61, 576-584.	1.1	21
171	Deformation of the Arctic Ocean ice cover after the 2007 record minimum in summer ice extent. <i>Cold Regions Science and Technology</i> , 2012, 76-77, 17-23.	1.6	19
172	Polarimetric remote sensing of geophysical medium structures. <i>Radio Science</i> , 1993, 28, 1111-1130.	0.8	18
173	Diurnal thermal cycling effects on microwave signatures of thin sea ice. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 1998, 36, 111-124.	2.7	18
174	The Greenland Sea Jet: A mechanism for wind-driven sea ice export through Fram Strait. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	1.5	18
175	The Cyclonic Mode of Arctic Ocean Circulation. <i>Journal of Physical Oceanography</i> , 2021, 51, 1053-1075.	0.7	18
176	Ice flow of Humboldt, Petermann and Ryder Gletscher, northern Greenland. <i>Journal of Glaciology</i> , 1999, 45, 231-241.	1.1	17
177	Contributions of growth and deformation to monthly variability in sea ice thickness north of the coasts of Greenland and the Canadian Arctic Archipelago. <i>Geophysical Research Letters</i> , 2016, 43, 8097-8105.	1.5	17
178	Snow Property Controls on Modeled Ku-Band Altimeter Estimates of First-Year Sea Ice Thickness: Case Studies From the Canadian and Norwegian Arctic. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2020, 13, 1082-1096.	2.3	17
179	Detection of Melt Ponds on Arctic Summer Sea Ice From ICESat-2. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL090644.	1.5	16
180	Microwave Radiometry at Frequencies From 500 to 1400 MHz: An Emerging Technology for Earth Observations. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2021, 14, 4894-4914.	2.3	16

#	ARTICLE	IF	CITATIONS
181	Refining the sea surface identification approach for determining freeboards in the ICESat-2 sea ice products. <i>Cryosphere</i> , 2021, 15, 821-833.	1.5	16
182	Ocean Measurements from Space in 2025. <i>Oceanography</i> , 2010, 23, 144-161.	0.5	16
183	Polarimetric thermal emission from rough ocean surfaces. <i>Journal of Electromagnetic Waves and Applications</i> , 1994, 8, 43-59.	1.0	15
184	Remote Sensing of Sea Ice Thickness and Salinity With 0.5-2 GHz Microwave Radiometry. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2019, 57, 8672-8684.	2.7	15
185	Divergent movements of walrus and sea ice in the northern Bering Sea. <i>Marine Ecology - Progress Series</i> , 2010, 407, 293-302.	0.9	15
186	An approach to identification of sea ice types from spaceborne SAR data. <i>Geophysical Monograph Series</i> , 1992, , 355-360.	0.1	14
187	Laboratory measurements of sea ice: connections to microwave remote sensing. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 1998, 36, 1716-1730.	2.7	14
188	Polarimetric C-band SAR observations of sea ice in the Greenland Sea. , 1998, , .		14
189	Arctic sea ice extent and melt onset from NSCAT observations. <i>Geophysical Research Letters</i> , 1998, 25, 4369-4372.	1.5	14
190	Toward global inverse solutions for current and past ice mass variations: Contribution of secular satellite gravity and topography change measurements. <i>Journal of Geophysical Research</i> , 2002, 107, ETC 9-1-ETC 9-11.	3.3	13
191	Assessment of ICESat-2 Sea Ice Surface Classification with Sentinel-2 Imagery: Implications for Freeboard and New Estimates of Lead and Floe Geometry. <i>Earth and Space Science</i> , 2021, 8, e2020EA001491.	1.1	13
192	Decay of the Snow Cover Over Arctic Sea Ice From ICESat-2 Acquisitions During Summer Melt in 2019. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL088209.	1.5	13
193	Calibration of beam deflection produced by cellular forces in the 10 ⁻⁹ -10 ⁻⁶ gram range. <i>Cell Biophysics</i> , 1980, 2, 99-112.	0.4	12
194	Synthetic Aperture Radar Polarimetry Of Sea Ice. , 0, , .		12
195	Polarimetric passive remote sensing of wind-generated sea surfaces and ocean wind vectors. , 0, , .		12
196	Ice thickness derived from high-resolution radar imagery. <i>Eos</i> , 1999, 80, 495-497.	0.1	12
197	Spatial compression of Seasat SAR imagery. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 1988, 26, 673-685.	2.7	11
198	Arctic sea-ice area and volume production:1996/97 versus 1997/98. <i>Annals of Glaciology</i> , 2002, 34, 447-453.	2.8	11

#	ARTICLE	IF	CITATIONS
199	Comparing Coincident Elevation and Freeboard From IceBridge and Five Different CryoSat-2 Retracker. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 1219-1229.	2.7	11
200	Sea Surface Height Anomalies of the Arctic Ocean From ICESat-2: A First Examination and Comparisons With CryoSat-2. Geophysical Research Letters, 2021, 48, e2021GL093155.	1.5	11
201	Ice lead orientation characteristics in the winter Beaufort Sea. , 0, , .		10
202	Application Of Neural Networks To Sea Ice Classification Using Polarimetric SAR Images. , 0, , .		9
203	Symmetrization of cross-polarized responses in polarimetric radar images using reciprocity. IEEE Transactions on Geoscience and Remote Sensing, 1993, 31, 1180-1185.	2.7	9
204	Comparison of a polarimetric scattering and emission model with ocean backscatter and brightness measurements. , 0, , .		9
205	Remote-sensing techniques. , 2004, , 59-114.		9
206	Halo of ice deformation observed over the Maud Rise seamount. Geophysical Research Letters, 2008, 35, .	1.5	9
207	Synthetic aperture radar detection of the snowline on Commonwealth and Howard Glaciers, Taylor Valley, Antarctica. Annals of Glaciology, 2002, 34, 177-183.	2.8	8
208	Ocean Wave Products From The Alaska Sar Facility Geophysical Processor System. , 0, , .		7
209	Satellite Views of the Arctic Ocean Freshwater Balance. , 2000, , 409-451.		7
210	New Earth Orbiter Provides a Sharper Look at a Changing Planet. Eos, 2019, 100, .	0.1	7
211	Introduction to special section: Small-Scale Sea Ice Kinematics and Dynamics. Journal of Geophysical Research, 2006, 111, .	3.3	6
212	Estimation of ice-sheet motion using satellite radar interferometry: method and error analysis with application to Humboldt Glacier, Greenland. Journal of Glaciology, 1996, 42, 564-575.	1.1	6
213	Construction and analysis of simulated Venera and Magellan images of Venus. Icarus, 1988, 76, 163-181.	1.1	5
214	The perennial ice cover of the Beaufort Sea from active- and passive-microwave observations. Annals of Glaciology, 1997, 25, 376-381.	2.8	5
215	Sea State Bias of ICESat in the Subarctic Seas. IEEE Geoscience and Remote Sensing Letters, 2018, 15, 1144-1148.	1.4	5
216	Status Of The Ice Classification Algorithm In The Alaska Sar Facility Geophysical Processor System. , 0, , .		4

#	ARTICLE	IF	CITATIONS
217	SWOT and the ice-covered polar oceans: An exploratory analysis. <i>Advances in Space Research</i> , 2021, 68, 829-842.	1.2	4
218	Relationship between specular returns in CryoSat-2 data, surface albedo, and Arctic summer minimum ice extent. <i>Elementa</i> , 2018, 6, .	1.1	4
219	Combining Satellite Altimetry, Time-Variable Gravity, and Bottom Pressure Observations to Understand the Arctic Ocean: A Transformative Opportunity. , 2010, , .		4
220	Polarization Signatures Of Frozen And Thawed Forests Of Varying Biomass. , 0, , .		3
221	Use of time series SAR data to resolve ice type ambiguities in newly-opened leads. , 0, , .		3
222	Sea ice identification using dual-polarized Ku-band scatterometer data. , 0, , .		3
223	C-band polarimetric backscatter observations of Great Lakes ice. , 1998, , .		3
224	The Thinning of Arctic Ice. <i>AIP Conference Proceedings</i> , 2011, , .	0.3	3
225	Multi-peak Retracking of CryoSat-2 SARIn Waveforms Over Arctic Sea Ice. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2021, 59, 3776-3792.	2.7	3
226	Stokes Matrix Statistics In Sea Ice Polarimetric SAR Images. , 0, , .		2
227	Preliminary Results From The Asf/gps Ice Classification Algorithm. , 0, , .		2
228	Analysis of synthetic aperture radar Data collected over the southwestern Greenland ice sheet. <i>Journal of Glaciology</i> , 1993, 39, 119-132.	1.1	2
229	Algorithm development for satellite Synthetic Aperture Radar (SAR) classification and mapping of Great Lakes ice cover. , 1998, , .		2
230	Ice flow of Humboldt, Petermann and Ryder Gletscher, northern Greenland. <i>Journal of Glaciology</i> , 1999, 45, 231-241.	1.1	2
231	Analysis of C-band Polarimetric Signatures of Arctic Lead Ice using Data from AIRSAR and RADARSAT-1. , 2008, , .		2
232	Polarimetric backscattering from thin saline ice related to ice physical and morphological characteristics. , 0, , .		1
233	Polarimetric Emission from Anisotropic Media for Passive Remote Sensing of Sea Ice. , 0, , .		1
234	Ice tracking techniques, implementation, performance, and applications. <i>Advances in Space Research</i> , 1992, 12, 141-147.	1.2	1

#	ARTICLE	IF	CITATIONS
235	Sea ice polarimetric backscatter signatures at C band. , 0, , .		1
236	Ice flow in northeast Greenland derived using balance velocities as control. , 1998, , .		1
237	Monitoring Great Lakes ice cover with satellite synthetic aperture radar (SAR). , 0, , .		1
238	Corrections to "Fine-Resolution Radar Altimeter Measurements on Land and Sea Ice" [May 15 2547-2564]. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 1853-1853.	2.7	1
239	Classification of Multifrequency Multilook Synthetic Aperture Radar Data. , 0, , .		0
240	Performance Of The Ice Motion Tracker At The Alaska SAR Facility. , 0, , .		0
241	Effective Permittivity of Saline Ice Under Thermal Variation. , 0, , .		0
242	Polarimetric backscattering signatures from thin saline ice under controlled laboratory conditions. , 0, , .		0
243	Near real-time RADARSAT data system for NOAA CoastWatch applications. , 0, , .		0
244	Remote sensing of sea ice surface thermal states under cloud cover. , 1998, , .		0
245	Change monitoring of Antarctic sea ice using NSCAT dual-polarized backscatter measurements. , 1998, , .		0
246	RADARSAT Geophysical Processor System: 2 years of production. , 0, , .		0
247	Flying over thin ice. Physics Today, 2011, 64, 10-10.	0.3	0
248	Spaceborne Radar. , 0, , .		0