

# Benjamin Jones

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3121923/publications.pdf>

Version: 2024-02-01

120  
papers

5,005  
citations

81900

39  
h-index

110387

64  
g-index

146  
all docs

146  
docs citations

146  
times ranked

4438  
citing authors

#	ARTICLE	IF	CITATIONS
1	Sensitivity of Multifrequency Polarimetric SAR Data to Postfire Permafrost Changes and Recovery Processes in Arctic Tundra. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2022, 60, 1-15.	6.3	2
2	Lake and drained lake basin systems in lowland permafrost regions. <i>Nature Reviews Earth &amp; Environment</i> , 2022, 3, 85-98.	29.7	41
3	Drivers, dynamics and impacts of changing Arctic coasts. <i>Nature Reviews Earth &amp; Environment</i> , 2022, 3, 39-54.	29.7	74
4	Spatial snowdrift modelling for an open natural terrain using a physically-based linear particle distribution equation. <i>Hydrological Processes</i> , 2022, 36, .	2.6	3
5	The shifting mosaic of ice-wedge degradation and stabilization in response to infrastructure and climate change, Prudhoe Bay Oilfield, Alaska, USA. <i>Arctic Science</i> , 2022, 8, 498-530.	2.3	12
6	Yedoma Cryostratigraphy of Recently Excavated Sections of the CRREL Permafrost Tunnel Near Fairbanks, Alaska. <i>Frontiers in Earth Science</i> , 2022, 9, .	1.8	7
7	Understanding Effects of Permafrost Degradation and Coastal Erosion on Civil Infrastructure in Arctic Coastal Villages: A Community Survey and Knowledge Co-Production. <i>Journal of Marine Science and Engineering</i> , 2022, 10, 422.	2.6	9
8	A new Stefan equation to characterize the evolution of thermokarst lake and talik geometry. <i>Cryosphere</i> , 2022, 16, 1247-1264.	3.9	5
9	Expanding beaver pond distribution in Arctic Alaska, 1949 to 2019. <i>Scientific Reports</i> , 2022, 12, 7123.	3.3	8
10	The Role of Thermal Denudation in Erosion of Ice-Rich Permafrost Coasts in an Enclosed Bay (Gulf of Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.8	16
11	Geochemistry of Coastal Permafrost and Erosion-Driven Organic Matter Fluxes to the Beaufort Sea Near Drew Point, Alaska. <i>Frontiers in Earth Science</i> , 2021, 8, .	1.8	6
12	An Object-Based Approach for Mapping Tundra Ice-Wedge Polygon Troughs from Very High Spatial Resolution Optical Satellite Imagery. <i>Remote Sensing</i> , 2021, 13, 558.	4.0	17
13	Decadal-scale hotspot methane ebullition within lakes following abrupt permafrost thaw. <i>Environmental Research Letters</i> , 2021, 16, 035010.	5.2	21
14	Landsat-derived bathymetry of lakes on the Arctic Coastal Plain of northern Alaska. <i>Earth System Science Data</i> , 2021, 13, 1135-1150.	9.9	6
15	Fluvio-thermal erosion and thermal denudation in the yedoma region of northern Alaska: Revisiting the Itkilik River exposure. <i>Permafrost and Periglacial Processes</i> , 2021, 32, 277-298.	3.4	14
16	Geophysical Observations of Taliks Below Drained Lake Basins on the Arctic Coastal Plain of Alaska. <i>Journal of Geophysical Research: Solid Earth</i> , 2021, 126, e2020JB020889.	3.4	9
17	Tussocks Enduring or Shrubs Greening: Alternate Responses to Changing Fire Regimes in the Noatak River Valley, Alaska. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2021, 126, e2020JG006009.	3.0	8
18	Remote Sensing-Based Statistical Approach for Defining Drained Lake Basins in a Continuous Permafrost Region, North Slope of Alaska. <i>Remote Sensing</i> , 2021, 13, 2539.	4.0	8

#	ARTICLE	IF	CITATIONS
19	First pan-Arctic assessment of dissolved organic carbon in lakes of the permafrost region. <i>Biogeosciences</i> , 2021, 18, 3917-3936.	3.3	12
20	Unpiloted Aerial Vehicle Retrieval of Snow Depth Over Freshwater Lake Ice Using Structure From Motion. <i>Frontiers in Remote Sensing</i> , 2021, 2, .	3.5	5
21	A Quantitative Graph-Based Approach to Monitoring Ice-Wedge Trough Dynamics in Polygonal Permafrost Landscapes. <i>Remote Sensing</i> , 2021, 13, 3098.	4.0	12
22	Shallow soils are warmer under trees and tall shrubs across Arctic and Boreal ecosystems. <i>Environmental Research Letters</i> , 2021, 16, 015001.	5.2	39
23	Potential of Full-Polarimetric P-and L-Band SAR Data in Characterizing Post-Fire Recovery of Arctic Tundra. , 2021, , .		0
24	Seven Decades of Coastal Change at Barter Island, Alaska: Exploring the Importance of Waves and Temperature on Erosion of Coastal Permafrost Bluffs. <i>Remote Sensing</i> , 2021, 13, 4420.	4.0	8
25	Recent warming reverses forty-year decline in catastrophic lake drainage and hastens gradual lake drainage across northern Alaska. <i>Environmental Research Letters</i> , 2021, 16, 124019.	5.2	13
26	Multi-Dimensional Remote Sensing Analysis Documents Beaver-Induced Permafrost Degradation, Seward Peninsula, Alaska. <i>Remote Sensing</i> , 2021, 13, 4863.	4.0	5
27	Thermokarst acceleration in Arctic tundra driven by climate change and fire disturbance. <i>One Earth</i> , 2021, 4, 1718-1729.	6.8	14
28	Feasibility of tundra vegetation height retrieval from Sentinel-1 and Sentinel-2 data. <i>Remote Sensing of Environment</i> , 2020, 237, 111515.	11.0	42
29	Understanding the Effects of Optimal Combination of Spectral Bands on Deep Learning Model Predictions: A Case Study Based on Permafrost Tundra Landform Mapping Using High Resolution Multispectral Satellite Imagery. <i>Journal of Imaging</i> , 2020, 6, 97.	3.0	22
30	Understanding the synergies of deep learning and data fusion of multispectral and panchromatic high resolution commercial satellite imagery for automated ice-wedge polygon detection. <i>ISPRS Journal of Photogrammetry and Remote Sensing</i> , 2020, 170, 174-191.	11.1	32
31	Transferability of the Deep Learning Mask R-CNN Model for Automated Mapping of Ice-Wedge Polygons in High-Resolution Satellite and UAV Images. <i>Remote Sensing</i> , 2020, 12, 1085.	4.0	33
32	Influence of surface water on coarse resolution C-band backscatter: Implications for freeze/thaw retrieval from scatterometer data. <i>Remote Sensing of Environment</i> , 2020, 247, 111911.	11.0	7
33	Geometric and Material Variability Influences Stress States Relevant to Coastal Permafrost Bluff Failure. <i>Frontiers in Earth Science</i> , 2020, 8, .	1.8	8
34	Mapping Exposure to Flooding in Three Coastal Communities on the North Slope of Alaska Using Airborne LiDAR. <i>Coastal Management</i> , 2020, 48, 96-117.	2.0	12
35	Taliks, cryopegs, and permafrost dynamics related to channel migration, Colville River Delta, Alaska. <i>Permafrost and Periglacial Processes</i> , 2020, 31, 239-254.	3.4	14
36	Increase in beaver dams controls surface water and thermokarst dynamics in an Arctic tundra region, Baldwin Peninsula, northwestern Alaska. <i>Environmental Research Letters</i> , 2020, 15, 075005.	5.2	20

#	ARTICLE	IF	CITATIONS
37	Identifying historical and future potential lake drainage events on the western Arctic coastal plain of Alaska. <i>Permafrost and Periglacial Processes</i> , 2020, 31, 110-127.	3.4	30
38	Recurring outburst floods from drained lakes: an emerging Arctic hazard. <i>Frontiers in Ecology and the Environment</i> , 2020, 18, 384-390.	4.0	18
39	Prevention and control measures for coastal erosion in northern high-latitude communities: a systematic review based on Alaskan case studies. <i>Environmental Research Letters</i> , 2020, 15, 093002.	5.2	18
40	High potential for loss of permafrost landforms in a changing climate. <i>Environmental Research Letters</i> , 2020, 15, 104065.	5.2	28
41	The catastrophic thermokarst lake drainage events of 2018 in northwestern Alaska: fast-forward into the future. <i>Cryosphere</i> , 2020, 14, 4279-4297.	3.9	51
42	Spatiotemporal remote sensing of ecosystem change and causation across Alaska. <i>Global Change Biology</i> , 2019, 25, 1171-1189.	9.5	91
43	Ice roads through lake-rich Arctic watersheds: Integrating climate uncertainty and freshwater habitat responses into adaptive management. <i>Arctic, Antarctic, and Alpine Research</i> , 2019, 51, 9-23.	1.1	22
44	Potential shifts in zooplankton community structure in response to changing ice regimes and hydrologic connectivity. <i>Arctic, Antarctic, and Alpine Research</i> , 2019, 51, 327-345.	1.1	15
45	Rapid initialization of retrogressive thaw slumps in the Canadian high Arctic and their response to climate and terrain factors. <i>Environmental Research Letters</i> , 2019, 14, 055006.	5.2	80
46	Timing and Potential Causes of 19th-Century Glacier Advances in Coastal Alaska Based on Tree-Ring Dating and Historical Accounts. <i>Frontiers in Earth Science</i> , 2019, 7, .	1.8	7
47	Traumatic Resin Ducts in Alaska Mountain Hemlock Trees Provide a New Proxy for Winter Storminess. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2019, 124, 1923-1938.	3.0	11
48	Organic Carbon and Nitrogen Stocks Along a Thermokarst Lake Sequence in Arctic Alaska. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2019, 124, 1230-1247.	3.0	16
49	Surface nuclear magnetic resonance observations of permafrost thaw below floating, bedfast, and transitional ice lakes. <i>Geophysics</i> , 2019, 84, EN33-EN45.	2.6	13
50	Size Distributions of Arctic Waterbodies Reveal Consistent Relations in Their Statistical Moments in Space and Time. <i>Frontiers in Earth Science</i> , 2019, 7, .	1.8	25
51	Analyzing floating and bedfast lake ice regimes across Arctic Alaska using 25 years of space-borne SAR imagery. <i>Remote Sensing of Environment</i> , 2018, 209, 660-676.	11.0	57
52	Aeolian stratigraphy describes ice-age paleoenvironments in unglaciated Arctic Alaska. <i>Quaternary Science Reviews</i> , 2018, 182, 175-190.	3.0	33
53	Modelling the impacts of projected sea ice decline on the low atmosphere and near-surface permafrost on the North Slope of Alaska. <i>International Journal of Climatology</i> , 2018, 38, 5491-5504.	3.5	5
54	Alaskan marine transgressions record out-of-phase Arctic Ocean glaciation during the last interglacial. <i>Geology</i> , 2018, 46, 783-786.	4.4	11

#	ARTICLE	IF	CITATIONS
55	Contrasting lake ice responses to winter climate indicate future variability and trends on the Alaskan Arctic Coastal Plain. <i>Environmental Research Letters</i> , 2018, 13, 125001.	5.2	11
56	A decade of remotely sensed observations highlight complex processes linked to coastal permafrost bluff erosion in the Arctic. <i>Environmental Research Letters</i> , 2018, 13, 115001.	5.2	73
57	Remote sensing quantifies widespread abundance of permafrost region disturbances across the Arctic and Subarctic. <i>Nature Communications</i> , 2018, 9, 5423.	12.8	179
58	Transient Electromagnetic Surveys for the Determination of Talik Depth and Geometry Beneath Thermokarst Lakes. <i>Journal of Geophysical Research: Solid Earth</i> , 2018, 123, 9310-9323.	3.4	21
59	Reviews and syntheses: Changing ecosystem influences on soil thermal regimes in northern high-latitude permafrost regions. <i>Biogeosciences</i> , 2018, 15, 5287-5313.	3.3	143
60	Sedimentary and geochemical characteristics of two small permafrost-dominated Arctic river deltas in northern Alaska. <i>Arktos</i> , 2018, 4, 1-18.	1.0	4
61	Tundra be dammed: Beaver colonization of the Arctic. <i>Global Change Biology</i> , 2018, 24, 4478-4488.	9.5	66
62	Estimation of snow accumulation over frozen Arctic lakes using repeat ICESat laser altimetry observations – A case study in northern Alaska. <i>Remote Sensing of Environment</i> , 2018, 216, 529-543.	11.0	10
63	Temporal and spatial variability in coastline response to declining sea-ice in northwest Alaska. <i>Marine Geology</i> , 2018, 404, 71-83.	2.1	47
64	Remotely Sensing the Morphometrics and Dynamics of a Cold Region Dune Field Using Historical Aerial Photography and Airborne LiDAR Data. <i>Remote Sensing</i> , 2018, 10, 792.	4.0	18
65	21st-century modeled permafrost carbon emissions accelerated by abrupt thaw beneath lakes. <i>Nature Communications</i> , 2018, 9, 3262.	12.8	187
66	Remote Sensing Leads to Better Understanding of Polar Regions. <i>Eos</i> , 2018, 99, .	0.1	3
67	Younger-Dryas cooling and sea-ice feedbacks were prominent features of the Pleistocene-Holocene transition in Arctic Alaska. <i>Quaternary Science Reviews</i> , 2017, 169, 330-343.	3.0	36
68	A lake-centric geospatial database to guide research and inform management decisions in an Arctic watershed in northern Alaska experiencing climate and land-use changes. <i>Ambio</i> , 2017, 46, 769-786.	5.5	19
69	Landsat-Based Trend Analysis of Lake Dynamics across Northern Permafrost Regions. <i>Remote Sensing</i> , 2017, 9, 640.	4.0	110
70	PeRL: a Circum-Arctic Permafrost Region Pond and Lake database. <i>Earth System Science Data</i> , 2017, 9, 317-348.	9.9	62
71	Presence of rapidly degrading permafrost plateaus in south-central Alaska. <i>Cryosphere</i> , 2016, 10, 2673-2692.	3.9	34
72	Evidence of multiple thermokarst lake generations from an 11,800-year-old permafrost core on the northern Seward Peninsula, Alaska. <i>Boreas</i> , 2016, 45, 584-603.	2.4	24

#	ARTICLE	IF	CITATIONS
73	Threshold sensitivity of shallow Arctic lakes and sublake permafrost to changing winter climate. <i>Geophysical Research Letters</i> , 2016, 43, 6358-6365.	4.0	68
74	Arctic sea ice decline contributes to thinning lake ice trend in northern Alaska. <i>Environmental Research Letters</i> , 2016, 11, 074022.	5.2	22
75	Spatial distribution of thermokarst terrain in Arctic Alaska. <i>Geomorphology</i> , 2016, 273, 116-133.	2.6	66
76	Mid- to Wisconsin to Holocene Permafrost and Landscape Dynamics based on a Drained Lake Basin Core from the Northern Seward Peninsula, Northwest Alaska. <i>Permafrost and Periglacial Processes</i> , 2016, 27, 56-75.	3.4	26
77	Impacts of shore expansion and catchment characteristics on lacustrine thermokarst records in permafrost lowlands, Alaska Arctic Coastal Plain. <i>Arktos</i> , 2016, 2, 1.	1.0	16
78	High-resolution records detect human-caused changes to the boreal forest wildfire regime in interior Alaska. <i>Holocene</i> , 2016, 26, 1064-1074.	1.7	11
79	The evolution of a thermokarst-lake landscape: Late Quaternary permafrost degradation and stabilization in interior Alaska. <i>Sedimentary Geology</i> , 2016, 340, 3-14.	2.1	35
80	Recent Arctic tundra fire initiates widespread thermokarst development. <i>Scientific Reports</i> , 2015, 5, 15865.	3.3	139
81	Depth, ice thickness, and ice-out timing cause divergent hydrologic responses among Arctic lakes. <i>Water Resources Research</i> , 2015, 51, 9379-9401.	4.2	66
82	A global database of lake surface temperatures collected by in situ and satellite methods from 1985 to 2009. <i>Scientific Data</i> , 2015, 2, 150008.	5.3	153
83	Observing a Catastrophic Thermokarst Lake Drainage in Northern Alaska. <i>Permafrost and Periglacial Processes</i> , 2015, 26, 119-128.	3.4	76
84	Reconstructing Turbidity in a Glacially Influenced Lake Using the Landsat TM and ETM+ Surface Reflectance Climate Data Record Archive, Lake Clark, Alaska. <i>Remote Sensing</i> , 2015, 7, 13692-13710.	4.0	26
85	Distribution and biophysical processes of beaded streams in Arctic permafrost landscapes. <i>Biogeosciences</i> , 2015, 12, 29-47.	3.3	25
86	Radiocarbon age-offsets in an arctic lake reveal the long-term response of permafrost carbon to climate change. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2014, 119, 1630-1651.	3.0	49
87	Seasonal thaw settlement at drained thermokarst lake basins, Arctic Alaska. <i>Cryosphere</i> , 2014, 8, 815-826.	3.9	50
88	Spatio-Temporal Analysis of Gyres in Oriented Lakes on the Arctic Coastal Plain of Northern Alaska Based on Remotely Sensed Images. <i>Remote Sensing</i> , 2014, 6, 9170-9193.	4.0	11
89	InSAR detects increase in surface subsidence caused by an Arctic tundra fire. <i>Geophysical Research Letters</i> , 2014, 41, 3906-3913.	4.0	64
90	Detecting unfrozen sediments below thermokarst lakes with surface nuclear magnetic resonance. <i>Geophysical Research Letters</i> , 2013, 40, 535-540.	4.0	45

#	ARTICLE	IF	CITATIONS
91	Classification of freshwater ice conditions on the Alaskan Arctic Coastal Plain using ground penetrating radar and TerraSAR-X satellite data. <i>International Journal of Remote Sensing</i> , 2013, 34, 8267-8279.	2.9	27
92	Quantifying landscape change in an arctic coastal lowland using repeat airborne LiDAR. <i>Environmental Research Letters</i> , 2013, 8, 045025.	5.2	47
93	Recent lake ice-out phenology within and among lake districts of Alaska, U.S.A. <i>Limnology and Oceanography</i> , 2013, 58, 2013-2028.	3.1	59
94	Identification of unrecognized tundra fire events on the north slope of Alaska. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2013, 118, 1334-1344.	3.0	58
95	Process-Based Coastal Erosion Modeling for Drew Point, North Slope, Alaska. <i>Journal of Waterway, Port, Coastal and Ocean Engineering</i> , 2012, 138, 122-130.	1.2	36
96	The footprint of Alaskan tundra fires during the past half-century: implications for surface properties and radiative forcing. <i>Environmental Research Letters</i> , 2012, 7, 044039.	5.2	98
97	Assessment of pingo distribution and morphometry using an IfSAR derived digital surface model, western Arctic Coastal Plain, Northern Alaska. <i>Geomorphology</i> , 2012, 138, 1-14.	2.6	37
98	Drainage Network Structure and Hydrologic Behavior of Three Lake-Rich Watersheds on the Arctic Coastal Plain, Alaska. <i>Arctic, Antarctic, and Alpine Research</i> , 2012, 44, 385-398.	1.1	41
99	Peat accumulation in drained thermokarst lake basins in continuous, ice-rich permafrost, northern Seward Peninsula, Alaska. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	84
100	Shifting balance of thermokarst lake ice regimes across the Arctic Coastal Plain of northern Alaska. <i>Geophysical Research Letters</i> , 2012, 39, .	4.0	73
101	Characterizing Post-Drainage Succession in Thermokarst Lake Basins on the Seward Peninsula, Alaska with TerraSAR-X Backscatter and Landsat-based NDVI Data. <i>Remote Sensing</i> , 2012, 4, 3741-3765.	4.0	33
102	Rapid movement of frozen debris-lobes: implications for permafrost degradation and slope instability in the south-central Brooks Range, Alaska. <i>Natural Hazards and Earth System Sciences</i> , 2012, 12, 1521-1537.	3.6	37
103	Modern thermokarst lake dynamics in the continuous permafrost zone, northern Seward Peninsula, Alaska. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	250
104	Expansion rate and geometry of floating vegetation mats on the margins of thermokarst lakes, northern Seward Peninsula, Alaska, USA. <i>Earth Surface Processes and Landforms</i> , 2011, 36, 1889-1897.	2.5	21
105	Hydrogeomorphic processes of thermokarst lakes with grounded-ice and floating-ice regimes on the Arctic coastal plain, Alaska. <i>Hydrological Processes</i> , 2011, 25, 2422-2438.	2.6	106
106	Spatial distribution of pingos in northern Asia. <i>Cryosphere</i> , 2011, 5, 13-33.	3.9	44
107	Two mechanisms of aquatic and terrestrial habitat change along an Alaskan Arctic coastline. <i>Polar Biology</i> , 2010, 33, 1629-1640.	1.2	42
108	Lake Temperature and Ice Cover Regimes in the Alaskan Subarctic and Arctic: Integrated Monitoring, Remote Sensing, and Modeling. <i>Journal of the American Water Resources Association</i> , 2010, 46, 777-791.	2.4	30

#	ARTICLE	IF	CITATIONS
109	Sikuliqirug: ice dynamics of the Meade River " Arctic Alaska, from freezeup to breakup from time-series ground imagery. <i>Polar Geography</i> , 2010, 33, 115-137.	1.9	2
110	Fire Behavior, Weather, and Burn Severity of the 2007 Anaktuvuk River Tundra Fire, North Slope, Alaska. <i>Arctic, Antarctic, and Alpine Research</i> , 2009, 41, 309-316.	1.1	115
111	Arctic Lake Physical Processes and Regimes with Implications for Winter Water Availability and Management in the National Petroleum Reserve Alaska. <i>Environmental Management</i> , 2009, 43, 1071-1084.	2.7	70
112	Erosional history of Cape Halkett and contemporary monitoring of bluff retreat, Beaufort Sea coast, Alaska. <i>Polar Geography</i> , 2009, 32, 129-142.	1.9	26
113	Increase in the rate and uniformity of coastline erosion in Arctic Alaska. <i>Geophysical Research Letters</i> , 2009, 36, .	4.0	252
114	Advancing Landscape Change Research through the Incorporation of Iñupiaq Knowledge. <i>Arctic</i> , 2009, 62, .	0.4	22
115	Modern Erosion Rates and Loss of Coastal Features and Sites, Beaufort Sea Coastline, Alaska. <i>Arctic</i> , 2009, 61, .	0.4	14
116	Radar imaging of winter seismic survey activity in the National Petroleum Reserve-Alaska. <i>Polar Record</i> , 2008, 44, 227-231.	0.8	1
117	Methods to assess natural and anthropogenic thaw lake drainage on the western Arctic coastal plain of northern Alaska. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	134
118	Application of ground-penetrating radar imagery for three-dimensional visualisation of near-surface structures in ice-rich permafrost, Barrow, Alaska. <i>Permafrost and Periglacial Processes</i> , 2007, 18, 309-321.	3.4	51
119	Paleoenvironmental analyses of an organic deposit from an erosional landscape remnant, Arctic Coastal Plain of Alaska. <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , 2005, 217, 187-204.	2.3	34
120	The Polar WRF Downscaled Historical and Projected Twenty-First Century Climate for the Coast and Foothills of Arctic Alaska. <i>Frontiers in Earth Science</i> , 0, 5, .	1.8	13