Isla H Myersâ€smith

List of Publications by Year
in descending order

83 papers	12,168 citations	44069 48 h-index	58581 82 g-index
100 all docs	100 docs citations	100 times ranked	14505 citing authors

#	Article	IF	Citations
1	The tundra phenology database: more than two decades of tundra phenology responses to climate change. Arctic Science, 2022, 8, 1026-1039.	2.3	7
2	Global application of an unoccupied aerial vehicle photogrammetry protocol for predicting aboveground biomass in nonâ€forest ecosystems. Remote Sensing in Ecology and Conservation, 2022, 8, 57-71.	4.3	13
3	Tundra vegetation change and impacts on permafrost. Nature Reviews Earth & Environment, 2022, 3, 68-84.	29.7	87
4	Global maps of soil temperature. Global Change Biology, 2022, 28, 3110-3144.	9.5	113
5	Winters are changing: snow effects on Arctic and alpine tundra ecosystems. Arctic Science, 2022, 8, 572-608.	2.3	43
6	Range shifts in a foundation sedge potentially induce large Arctic ecosystem carbon losses and gains. Environmental Research Letters, 2022, 17, 045024.	5.2	5
7	Directional turnover towards largerâ€ranged plants over time and across habitats. Ecology Letters, 2022, 25, 466-482.	6.4	39
8	Flower Detection Using Object Analysis: New Ways to Quantify Plant Phenology in a Warming Tundra Biome. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 9287-9296.	4.9	2
9	Arctic tundra shrubification: a review of mechanisms and impacts on ecosystem carbon balance. Environmental Research Letters, 2021, 16, 053001.	5.2	121
10	Experimental warming differentially affects vegetative and reproductive phenology of tundra plants. Nature Communications, 2021, 12, 3442.	12.8	56
11	Accounting for year effects and sampling error in temporal analyses of invertebrate population and biodiversity change: a comment on Seibold <i>et al</i>. 2019. Insect Conservation and Diversity, 2021, 14, 149-154.	3.0	43
12	Shallow soils are warmer under trees and tall shrubs across Arctic and Boreal ecosystems. Environmental Research Letters, 2021, 16, 015001.	5.2	39
13	Status and trends in Arctic vegetation: Evidence from experimental warming and long-term monitoring. Ambio, 2020, 49, 678-692.	5.5	119
14	TRY plant trait database â€“ enhanced coverage and open access. Global Change Biology, 2020, 26, 119-188.	9.5	1,038
15	Summer warming explains widespread but not uniform greening in the Arctic tundra biome. Nature Communications, 2020, 11, 4621.	12.8	201
16	Rare and common vertebrates span a wide spectrum of population trends. Nature Communications, 2020, 11, 4394.	12.8	50
17	Divergence of Arctic shrub growth associated with sea ice decline. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 33334-33344.	7.1	43
18	Landscape-scale forest loss as a catalyst of population and biodiversity change. Science, 2020, 368, 1341-1347.	12.6	91

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19	Global plant trait relationships extend to the climatic extremes of the tundra biome. Nature Communications, 2020, 11, 1351.	12.8	52
20	Mapping human pressures on biodiversity across the planet uncovers anthropogenic threat complexes. People and Nature, 2020, 2, 380-394.	3.7	139
21	Woody plant encroachment intensifies under climate change across tundra and savanna biomes. Global Ecology and Biogeography, 2020, 29, 925-943.	5.8	105
22	SoilTemp: A global database of nearâ€surface temperature. Global Change Biology, 2020, 26, 6616-6629.	9.5	122
23	Complexity revealed in the greening of the Arctic. Nature Climate Change, 2020, 10, 106-117.	18.8	447
24	Aboveground biomass corresponds strongly with drone-derived canopy height but weakly with greenness (NDVI) in a shrub tundra landscape. Environmental Research Letters, 2020, 15, 125004.	5.2	36
25	Drone data reveal heterogeneity in tundra greenness and phenology not captured by satellites. Environmental Research Letters, 2020, 15, 125002.	5.2	35
26	The geography of biodiversity change in marine and terrestrial assemblages. Science, 2019, 366, 339-345.	12.6	385
27	Rapid retreat of permafrost coastline observed with aerial drone photogrammetry. Cryosphere, 2019, 13, 1513-1528.	3.9	51
28	Species richness change across spatial scales. Oikos, 2019, 128, 1079-1091.	2.7	160
29	Eighteen years of ecological monitoring reveals multiple lines of evidence for tundra vegetation change. Ecological Monographs, 2019, 89, e01351.	5.4	113
30	Local snow melt and temperatureâ€"but not regional sea iceâ€"explain variation in spring phenology in coastal Arctic tundra. Global Change Biology, 2019, 25, 2258-2274.	9.5	52
31	Seed predation increases from the Arctic to the Equator and from high to low elevations. Science Advances, 2019, 5, eaau4403.	10.3	61
32	Plant traits inform predictions of tundra responses to global change. New Phytologist, 2019, 221, 1742-1748.	7.3	70
33	Traditional plant functional groups explain variation in economic but not sizeâ€related traits across the tundra biome. Global Ecology and Biogeography, 2019, 28, 78-95.	5.8	49
34	Warming shortens flowering seasons of tundra plant communities. Nature Ecology and Evolution, 2019, 3, 45-52.	7.8	79
35	Vegetation monitoring using multispectral sensors â€" best practices and lessons learned from high latitudes. Journal of Unmanned Vehicle Systems, 2019, 7, 54-75.	1.2	99
36	Contrasting shrub species respond to early summer temperatures leading to correspondence of shrub growth patterns. Environmental Research Letters, 2018, 13, 034005.	5.2	29

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37	Comment on â€œPrecipitation drives global variation in natural selectionâ€. Science, 2018, 359, .	12.6	5
38	Climate warming as a driver of tundra shrubline advance. Journal of Ecology, 2018, 106, 547-560.	4.0	138
39	Location, location, location: considerations when using lightweight drones in challenging environments. Remote Sensing in Ecology and Conservation, 2018, 4, 7-19.	4.3	141
40	Plantâ€“plant interactions could limit recruitment and range expansion of tall shrubs into alpine and Arctic tundra. Polar Biology, 2018, 41, 2211-2219.	1.2	11
41	Global traitâ€“environment relationships of plant communities. Nature Ecology and Evolution, 2018, 2, 1906-1917.	7.8	397
42	Tundra Trait Team: A database of plant traits spanning the tundra biome. Global Ecology and Biogeography, 2018, 27, 1402-1411.	5.8	57
43	Plant functional trait change across a warming tundra biome. Nature, 2018, 562, 57-62.	27.8	451
44	Reviews and syntheses: Changing ecosystem influences on soil thermal regimes in northern high-latitude permafrost regions. Biogeosciences, 2018, 15, 5287-5313.	3.3	143
45	BioTIME: A database of biodiversity time series for the Anthropocene. Global Ecology and Biogeography, 2018, 27, 760-786.	5.8	289
46	A warmer and greener cold world: summer warming increases shrub growth in the alpine and high Arctic tundra. Erdkunde, 2018, 72, 63-85.	0.8	23
47	Effect of Terrain Characteristics on Soil Organic Carbon and Total Nitrogen Stocks in Soils of Herschel Island, Western Canadian Arctic. Permafrost and Periglacial Processes, 2017, 28, 92-107.	3.4	46
48	Plant Biodiversity Change Across Scales During the Anthropocene. Annual Review of Plant Biology, 2017, 68, 563-586.	18.7	179
49	Different parts, different stories: climate sensitivity of growth is stronger in root collars vs. stems in tundra shrubs. Global Change Biology, 2017, 23, 3281-3291.	9.5	38
50	Greater temperature sensitivity of plant phenology at colder sites: implications for convergence across northern latitudes. Global Change Biology, 2017, 23, 2660-2671.	9.5	171
51	Trait covariance: the functional warp of plant diversity?. New Phytologist, 2017, 216, 976-980.	7.3	22
52	Background invertebrate herbivory on dwarf birch (Betula glandulosa-nana complex) increases with temperature and precipitation across the tundra biome. Polar Biology, 2017, 40, 2265-2278.	1.2	47
53	Estimates of local biodiversity change over time stand up to scrutiny. Ecology, 2017, 98, 583-590.	3.2	106
54	Shrub growth and expansion in the Arctic tundra: an assessment of controlling factors using an evidence-based approach. Environmental Research Letters, 2017, 12, 085007.	5.2	101

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55	Transitions in Arctic ecosystems: Ecological implications of a changing hydrological regime. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 650-674.	3.0	167
56	Vegetation composition and shrub extent on the Yukon coast, Canada, are strongly linked to ice-wedge polygon degradation. Polar Research, 2016, 35, 27489.	1.6	33
57	Temperatureâ€induced recruitment pulses of Arctic dwarf shrub communities. Journal of Ecology, 2015, 103, 489-501.	4.0	90
58	Experiment, monitoring, and gradient methods used to infer climate change effects on plant communities yield consistent patterns. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 448-452.	7.1	200
59	Climate sensitivity of shrub growth across the tundra biome. Nature Climate Change, 2015, 5, 887-891.	18.8	447
60	Methods for measuring arctic and alpine shrub growth: A review. Earth-Science Reviews, 2015, 140, 1-13.	9.1	112
61	A synthesis of methane emissions from 71 northern, temperate, and subtropical wetlands. Global Change Biology, 2014, 20, 2183-2197.	9.5	389
62	Assessing the relative importance of neutral stochasticity in ecological communities. Oikos, 2014, 123, 1420-1430.	2.7	310
63	Global meta-analysis reveals no net change in local-scale plant biodiversity over time. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 19456-19459.	7.1	464
64	Historical ecology: Using unconventional data sources to test for effects of global environmental change. American Journal of Botany, 2013, 100, 1294-1305.	1.7	143
65	Recent dynamics of arctic and sub-arctic vegetation. Environmental Research Letters, 2013, 8, 015040.	5.2	62
66	Shrub canopies influence soil temperatures but not nutrient dynamics: An experimental test of tundra snowâ€“shrub interactions. Ecology and Evolution, 2013, 3, 3683-3700.	1.9	142
67	An Early-Career Scientist's Guide to Delving Into Data Synthesis. Bulletin of the Ecological Society of America, 2013, 94, 265-272.	0.2	0
68	Uniform female-biased sex ratios in alpine willows. American Journal of Botany, 2012, 99, 1243-1248.	1.7	24
69	Resilience: Easy to use but hard to define. Ideas in Ecology and Evolution, 2012, 5, .	0.1	20
70	Plot-scale evidence of tundra vegetation change and links to recent summer warming. Nature Climate Change, 2012, 2, 453-457.	18.8	745
71	Global assessment of experimental climate warming on tundra vegetation: heterogeneity over space and time. Ecology Letters, 2012, 15, 164-175.	6.4	764
72	Shrub expansion in tundra ecosystems: dynamics, impacts and research priorities. Environmental Research Letters, 2011, 6, 045509.	5.2	1,021

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73	Expansion of Canopy-Forming Willows Over the Twentieth Century on Herschel Island, Yukon Territory, Canada. Ambio, 2011, 40, 610-623.	5.5	91
74	Multi-Decadal Changes in Tundra Environments and Ecosystems: Synthesis of the International Polar Year-Back to the Future Project (IPY-BTF). Ambio, 2011, 40, 705-716.	5.5	98
75	Reply to comment on â€˜Kane <i>et al</i>. 2008. Precipitation control over inorganic nitrogen importâ€export budgets across watersheds: a synthesis of longâ€term ecological research. <i>Ecohydrology</i> 1: 105â€“117â€™. Ecohydrology, 2010, 3, 370-372.	2.4	0
76	Shrub Line Advance in Alpine Tundra of the Kluane Region: Mechanisms of Expansion and Ecosystem Impacts. Arctic, 2009, 60, .	0.4	5
77	Precipitation control over inorganic nitrogen importâ€“export budgets across watersheds: a synthesis of longâ€term ecological research. Ecohydrology, 2008, 1, 105-117.	2.4	26
78	Changing climate sensitivity of black spruce (Picea mariana Mill.) in a peatlandâ€“forest landscape in Interior Alaska. Dendrochronologia, 2008, 25, 167-175.	2.2	55
79	Wetland succession in a permafrost collapse: interactions between fire and thermokarst. Biogeosciences, 2008, 5, 1273-1286.	3.3	70
80	Influence of disturbance on carbon exchange in a permafrost collapse and adjacent burned forest. Journal of Geophysical Research, 2007, 112, .	3.3	29
81	Tips for Effective Communication in Ecology. Bulletin of the Ecological Society of America, 2007, 88, 206-215.	0.2	0
82	Cumulative impacts on Alaskan arctic tundra of a quarter century of road dust. Ecoscience, 2006, 13, 503-510.	1.4	33
83	HOW DO BROWN-HEADED COWBIRDS (MOLOTHRUS ATER) CAUSE NEST FAILURES IN SONG SPARROWS (MELOSPIZA MELODIA)? A REMOVAL EXPERIMENT. Auk, 2003, 120, 772.	1.4	22