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	TRY plant trait database â€“ enhanced coverage and open access. Global Change Biology, 2020, 26, 119-188.	9.5	1,038
2	Shrub expansion in tundra ecosystems: dynamics, impacts and research priorities. Environmental Research Letters, 2011, 6, 045509.	5.2	1,021
3	Global assessment of experimental climate warming on tundra vegetation: heterogeneity over space and time. Ecology Letters, 2012, 15, 164-175.	6.4	764
4	Plot-scale evidence of tundra vegetation change and links to recent summer warming. Nature Climate Change, 2012, 2, 453-457.	18.8	745
5	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
6	Plant functional trait change across a warming tundra biome. Nature, 2018, 562, 57-62.	27.8	451
7	Climate sensitivity of shrub growth across the tundra biome. Nature Climate Change, 2015, 5, 887-891.	18.8	447
8	Complexity revealed in the greening of the Arctic. Nature Climate Change, 2020, 10, 106-117.	18.8	447
9	Global traitâ€“environment relationships of plant communities. Nature Ecology and Evolution, 2018, 2, 1906-1917.	7.8	397
10	A synthesis of methane emissions from 71 northern, temperate, and subtropical wetlands. Global Change Biology, 2014, 20, 2183-2197.	9.5	389
11	The geography of biodiversity change in marine and terrestrial assemblages. Science, 2019, 366, 339-345.	12.6	385
12	Assessing the relative importance of neutral stochasticity in ecological communities. Oikos, 2014, 123, 1420-1430.	2.7	310
13	BioTIME: A database of biodiversity time series for the Anthropocene. Global Ecology and Biogeography, 2018, 27, 760-786.	5.8	289
14	Summer warming explains widespread but not uniform greening in the Arctic tundra biome. Nature Communications, 2020, 11, 4621.	12.8	201
15	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
16	Plant Biodiversity Change Across Scales During the Anthropocene. Annual Review of Plant Biology, 2017, 68, 563-586.	18.7	179
17	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
18	Transitions in Arctic ecosystems: Ecological implications of a changing hydrological regime. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 650-674.	3.0	167

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19	Species richness change across spatial scales. Oikos, 2019, 128, 1079-1091.	2.7	160
20	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
21	Reviews and syntheses: Changing ecosystem influences on soil thermal regimes in northern high-latitude permafrost regions. Biogeosciences, 2018, 15, 5287-5313.	3.3	143
22	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
23	Location, location, location: considerations when using lightweight drones in challenging environments. Remote Sensing in Ecology and Conservation, 2018, 4, 7-19.	4.3	141
24	Mapping human pressures on biodiversity across the planet uncovers anthropogenic threat complexes. People and Nature, 2020, 2, 380-394.	3.7	139
25	Climate warming as a driver of tundra shrubline advance. Journal of Ecology, 2018, 106, 547-560.	4.0	138
26	SoilTemp: A global database of nearâ€surface temperature. Global Change Biology, 2020, 26, 6616-6629.	9.5	122
27	Arctic tundra shrubification: a review of mechanisms and impacts on ecosystem carbon balance. Environmental Research Letters, 2021, 16, 053001.	5.2	121
28	Status and trends in Arctic vegetation: Evidence from experimental warming and long-term monitoring. Ambio, 2020, 49, 678-692.	5.5	119
29	Eighteen years of ecological monitoring reveals multiple lines of evidence for tundra vegetation change. Ecological Monographs, 2019, 89, e01351.	5.4	113
30	Global maps of soil temperature. Global Change Biology, 2022, 28, 3110-3144.	9.5	113
31	Methods for measuring arctic and alpine shrub growth: A review. Earth-Science Reviews, 2015, 140, 1-13.	9.1	112
32	Estimates of local biodiversity change over time stand up to scrutiny. Ecology, 2017, 98, 583-590.	3.2	106
33	Woody plant encroachment intensifies under climate change across tundra and savanna biomes. Global Ecology and Biogeography, 2020, 29, 925-943.	5.8	105
34	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
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	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

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37	Expansion of Canopy-Forming Willows Over the Twentieth Century on Herschel Island, Yukon Territory, Canada. Ambio, 2011, 40, 610-623.	5.5	91
38	Landscape-scale forest loss as a catalyst of population and biodiversity change. Science, 2020, 368, 1341-1347.	12.6	91
39	Temperatureâ€induced recruitment pulses of Arctic dwarf shrub communities. Journal of Ecology, 2015, 103, 489-501.	4.0	90
40	Tundra vegetation change and impacts on permafrost. Nature Reviews Earth & Environment, 2022, 3, 68-84.	29.7	87
41	Warming shortens flowering seasons of tundra plant communities. Nature Ecology and Evolution, 2019, 3, 45-52.	7.8	79
42	Wetland succession in a permafrost collapse: interactions between fire and thermokarst. Biogeosciences, 2008, 5, 1273-1286.	3.3	70
43	Plant traits inform predictions of tundra responses to global change. New Phytologist, 2019, 221, 1742-1748.	7.3	70
44	Recent dynamics of arctic and sub-arctic vegetation. Environmental Research Letters, 2013, 8, 015040.	5.2	62
45	Seed predation increases from the Arctic to the Equator and from high to low elevations. Science Advances, 2019, 5, eaau4403.	10.3	61
46	Tundra Trait Team: A database of plant traits spanning the tundra biome. Global Ecology and Biogeography, 2018, 27, 1402-1411.	5.8	57
47	Experimental warming differentially affects vegetative and reproductive phenology of tundra plants. Nature Communications, 2021, 12, 3442.	12.8	56
48	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
49	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
50	Global plant trait relationships extend to the climatic extremes of the tundra biome. Nature Communications, 2020, 11, 1351.	12.8	52
51	Rapid retreat of permafrost coastline observed with aerial drone photogrammetry. Cryosphere, 2019, 13, 1513-1528.	3.9	51
52	Rare and common vertebrates span a wide spectrum of population trends. Nature Communications, 2020, 11, 4394.	12.8	50
53	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
54	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

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55	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
56	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
57	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
58	Winters are changing: snow effects on Arctic and alpine tundra ecosystems. Arctic Science, 2022, 8, 572-608.	2.3	43
59	Shallow soils are warmer under trees and tall shrubs across Arctic and Boreal ecosystems. Environmental Research Letters, 2021, 16, 015001.	5.2	39
60	Directional turnover towards largerâ€ranged plants over time and across habitats. Ecology Letters, 2022, 25, 466-482.	6.4	39
61	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
62	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
63	Drone data reveal heterogeneity in tundra greenness and phenology not captured by satellites. Environmental Research Letters, 2020, 15, 125002.	5.2	35
64	Cumulative impacts on Alaskan arctic tundra of a quarter century of road dust. Ecoscience, 2006, 13, 503-510.	1.4	33
65	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
66	Influence of disturbance on carbon exchange in a permafrost collapse and adjacent burned forest. Journal of Geophysical Research, 2007, 112, .	3.3	29
67	Contrasting shrub species respond to early summer temperatures leading to correspondence of shrub growth patterns. Environmental Research Letters, 2018, 13, 034005.	5.2	29
68	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
69	Uniform female-biased sex ratios in alpine willows. American Journal of Botany, 2012, 99, 1243-1248.	1.7	24
70	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
71	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
72	Trait covariance: the functional warp of plant diversity?. New Phytologist, 2017, 216, 976-980.	7.3	22

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73	Resilience: Easy to use but hard to define. Ideas in Ecology and Evolution, 2012, 5, .	0.1	20
74	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
75	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
76	The tundra phenology database: more than two decades of tundra phenology responses to climate change. Arctic Science, 2022, 8, 1026-1039.	2.3	7
77	Comment on â€œPrecipitation drives global variation in natural selectionâ€. Science, 2018, 359, .	12.6	5
78	Shrub Line Advance in Alpine Tundra of the Kluane Region: Mechanisms of Expansion and Ecosystem Impacts. Arctic, 2009, 60, .	0.4	5
79	Range shifts in a foundation sedge potentially induce large Arctic ecosystem carbon losses and gains. Environmental Research Letters, 2022, 17, 045024.	5.2	5
80	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
81	Tips for Effective Communication in Ecology. Bulletin of the Ecological Society of America, 2007, 88, 206-215.	0.2	0
82	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
83	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