Gareth K Phoenix

List of Publications by Year
in descending order

93	6,734	42	80
papers	citations	h-index (66343)	g-index (62596)

93	93	93	8381
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Atmospheric nitrogen deposition in world biodiversity hotspots: the need for a greater global perspective in assessing N deposition impacts. Global Change Biology, 2006, 12, 470-476.	9.5	471
2	Complexity revealed in the greening of the Arctic. Nature Climate Change, 2020, 10, 106-117.	18.8	447
3	Impacts of parasitic plants on natural communities. New Phytologist, 2005, 166, 737-751.	7.3	410
4	Impacts of atmospheric nitrogen deposition: responses of multiple plant and soil parameters across contrasting ecosystems in longâ€term field experiments. Global Change Biology, 2012, 18, 1197-1215.	9.5	340
5	Facilitative plant interactions and climate simultaneously drive alpine plant diversity. Ecology Letters, 2014, 17, 193-202.	6.4	274
6	Winter warming events damage subâ€Arctic vegetation: consistent evidence from an experimental manipulation and a natural event. Journal of Ecology, 2009, 97, 1408-1415.	4.0	247
7	A potential loss of carbon associated with greater plant growth in the European Arctic. Nature Climate Change, 2012, 2, 875-879.	18.8	192
8	Arctic browning: extreme events and trends reversing arctic greening. Global Change Biology, 2016, 22, 2960-2962.	9.5	187
9	Extreme winter warming events more negatively impact small rather than large soil fauna: shift in community composition explained by traits not taxa. Global Change Biology, 2012, 18, 1152-1162.	9.5	172
10	Multiple Effects of Changes in Arctic Snow Cover. Ambio, 2011, 40, 32-45.	5.5	169
11	Impacts of multiple extreme winter warming events on subâ€Arctic heathland: phenology, reproduction, growth, and CO₂flux responses. Global Change Biology, 2011, 17, 2817-2830.	9.5	163
12	Impacts of extreme winter warming in the subâ€Arctic: growing season responses of dwarf shrub heathland. Global Change Biology, 2008, 14, 2603-2612.	9.5	158
13	Alpine cushion plants inhibit the loss of phylogenetic diversity in severe environments. Ecology Letters, 2013, 16, 478-486.	6.4	151
14	Base cation depletion, eutrophication and acidification of species-rich grasslands in response to long-term simulated nitrogen deposition. Environmental Pollution, 2008, 155, 336-349.	7.5	149
15	Reviews and syntheses: Changing ecosystem influences on soil thermal regimes in northern high-latitude permafrost regions. Biogeosciences, 2018, 15, 5287-5313.	3.3	143
16	Ecosystem change and stability over multiple decades in the Swedish subarctic: complex processes and multiple drivers. Philosophical Transactions of the Royal Society B: Biological Sciences, 2013, 368, 20120488.	4.0	140
17	The influence of vegetation and soil characteristics on activeâ€layer thickness of permafrost soils in boreal forest. Global Change Biology, 2016, 22, 3127-3140.	9.5	131
18	Simulated pollutant nitrogen deposition increases P demand and enhances rootâ€surface phosphatase activities of three plant functional types in a calcareous grassland. New Phytologist, 2004, 161, 279-290.	7.3	106

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19	Effects of global change on a sub-Arctic heath: effects of enhanced UV-B radiation and increased summer precipitation. Journal of Ecology, 2001, 89, 256-267.	4.0	104
20	Effects of enhanced nitrogen deposition and phosphorus limitation on nitrogen budgets of semi-natural grasslands. Global Change Biology, 2003, 9, 1309-1321.	9.5	96
21	Bryophyte physiological responses to, and recovery from, longâ€term nitrogen deposition and phosphorus fertilisation in acidic grassland. New Phytologist, 2008, 180, 864-874.	7.3	92
22	Impacts of extreme winter warming events on plant physiology in a sub-Arctic heath community. Physiologia Plantarum, 2010, 140, 128-140.	5.2	90
23	The Role of Nitrogen Deposition in Widespread Plant Community Change Across Semi-natural Habitats. Ecosystems, 2014, 17, 864-877.	3.4	86
24	Importance of different components of green roof substrate on plant growth and physiological performance. Urban Forestry and Urban Greening, 2014, 13, 507-516.	5.3	83
25	Long-term nitrogen deposition depletes grassland seed banks. Nature Communications, 2015, 6, 6185.	12.8	76
26	Understanding the drivers of extensive plant damage in boreal and Arctic ecosystems: Insights from field surveys in the aftermath of damage. Science of the Total Environment, 2017, 599-600, 1965-1976.	8.0	74
27	Contrasting sensitivity to extreme winter warming events of dominant subâ€Arctic heathland bryophyte and lichen species. Journal of Ecology, 2011, 99, 1481-1488.	4.0	69
28	Limited contribution of permafrost carbon to methane release from thawing peatlands. Nature Climate Change, 2017, 7, 507-511.	18.8	69
29	Impacts of extreme winter warming events on litter decomposition in a sub-Arctic heathland. Soil Biology and Biochemistry, 2010, 42, 611-617.	8.8	68
30	Contrasting strategies for UV-B screening in sub-Arctic dwarf shrubs. Plant, Cell and Environment, 2003, 26, 957-964.	5.7	67
31	The role of mosses in carbon uptake and partitioning in arctic vegetation. New Phytologist, 2013, 199, 163-175.	7.3	65
32	The hidden potential of urban horticulture. Nature Food, 2020, 1, 155-159.	14.0	64
33	The Regulation of Plant Secondary Metabolism in Response to Abiotic Stress: Interactions Between Heat Shock and Elevated CO2. Frontiers in Plant Science, 2019, 10, 1463.	3.6	57
34	Arctic browning: Impacts of extreme climatic events on heathland ecosystem CO₂ fluxes. Global Change Biology, 2019, 25, 489-503.	9.5	56
35	Ecosystem Response to Climatic Change: The Importance of the Cold Season. Ambio, 2012, 41, 246-255.	5.5	55
36	The effects of foundation species on community assembly: a global study on alpine cushion plant communities. Ecology, 2015, 96, 2064-2069.	3.2	53

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37	Plant community composition, not diversity, regulates soil respiration in grasslands. Biology Letters, 2008, 4, 345-348.	2.3	52
38	Vegetation Type Dominates the Spatial Variability in CH4 Emissions Across Multiple Arctic Tundra Landscapes. Ecosystems, 2016, 19, 1116-1132.	3.4	52
39	Parasitic plant litter input: a novel indirect mechanism influencing plant community structure. New Phytologist, 2013, 198, 222-231.	7.3	50
40	Mapping Arctic Tundra Vegetation Communities Using Field Spectroscopy and Multispectral Satellite Data in North Alaska, USA. Remote Sensing, 2016, 8, 978.	4.0	48
41	Predicting impacts of Arctic climate change: Past lessons and future challenges. Ecological Research, 2004, 19, 65-74.	1.5	46
42	Climatic and biotic extreme events moderate longâ€term responses of aboveâ€•and belowground subâ€Arctic heathland communities to climate change. Global Change Biology, 2015, 21, 4063-4075.	9.5	45
43	Winters are changing: snow effects on Arctic and alpine tundra ecosystems. Arctic Science, 2022, 8, 572-608.	2.3	43
44	Contrasting synchrony in root and leaf phenology across multiple subâ€Arctic plant communities. Journal of Ecology, 2016, 104, 239-248.	4.0	42
45	Arctic soil microbial diversity in a changing world. Research in Microbiology, 2015, 166, 796-813.	2.1	41
46	Buffering effects of soil seed banks on plant community composition in response to land use and climate. Global Ecology and Biogeography, 2021, 30, 128-139.	5.8	41
47	Limited release of previously-frozen C and increased new peat formation after thaw in permafrost peatlands. Soil Biology and Biochemistry, 2018, 118, 115-129.	8.8	40
48	Vegetation recovery following extreme winter warming events in the sub-Arctic estimated using NDVI from remote sensing and handheld passive proximal sensors. Environmental and Experimental Botany, 2012, 81, 18-25.	4.2	39
49	Shallow soils are warmer under trees and tall shrubs across Arctic and Boreal ecosystems. Environmental Research Letters, 2021, 16, 015001.	5.2	39
50	Impacts of atmospheric pollution on the plant communities of British acid grasslands. Environmental Pollution, 2011, 159, 2602-2608.	7.5	38
51	Ecological importance of ambient solar ultraviolet radiation to a sub-arctic heath community. Plant Ecology, 2003, 165, 263-273.	1.6	35
52	Leaf and fine root carbon stocks and turnover are coupled across Arctic ecosystems. Global Change Biology, 2013, 19, 3668-3676.	9.5	35
53	Effects of climate change on parasitic plants: the root hemiparasiticOrobanchaceae. Folia Geobotanica, 2005, 40, 205-216.	0.9	34
54	Impacts of long-term enhanced UV-B radiation on bryophytes in two sub-Arctic heathland sites of contrasting water availability. Annals of Botany, 2011, 108, 557-565.	2.9	34

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55	Surface morphology, leaf and cuticle thickness of four dwarf shrubs from a sub-Arctic heath following long-term exposure to enhanced levels of UV-B. Physiologia Plantarum, 2003, 117, 289-294.	5.2	30
56	The Arctic. Bulletin of the American Meteorological Society, 2020, 101, S239-S286.	3.3	29
57	Impacts of winter icing events on the growth, phenology and physiology of subâ€arctic dwarf shrubs. Physiologia Plantarum, 2012, 146, 460-472.	5.2	28
58	Nitrogen accumulation and partitioning in a High Arctic tundra ecosystem from extreme atmospheric N deposition events. Science of the Total Environment, 2016, 554-555, 303-310.	8.0	28
59	Upscaling CH4 Fluxes Using High-Resolution Imagery in Arctic Tundra Ecosystems. Remote Sensing, 2017, 9, 1227.	4.0	26
60	Sustaining ecosystem services in ancient limestone grassland: importance of major component plants and community composition. Journal of Ecology, 2008, 96, 894-902.	4.0	25
61	Niche differentiation and plasticity in soil phosphorus acquisition among co-occurring plants. Nature Plants, 2020, 6, 349-354.	9.3	25
62	Delayed responses of an Arctic ecosystem to an extreme summer: impacts on net ecosystem exchange and vegetation functioning. Biogeosciences, 2014, 11, 5877-5888.	3.3	24
63	Increasing green roof plant drought tolerance through substrate modification and the use of water retention gels. Urban Water Journal, 2017, 14, 551-560.	2.1	23
64	The Arctic. Bulletin of the American Meteorological Society, 2021, 102, S263-S316.	3.3	23
65	Impacts of burning and increased nitrogen deposition on nitrogen pools and leaching in an upland moor. Journal of Ecology, 2007, 95, 1195-1207.	4.0	22
66	Recovery of soil nitrogen pools in species-rich grasslands after 12 years of simulated pollutant nitrogen deposition: a 6-year experimental analysis. Global Change Biology, 2011, 17, 2615-2628.	9.5	21
67	Photosynthesis and productivity in heterogeneous arctic tundra: consequences for ecosystem function of mixing vegetation types at stand edges. Journal of Ecology, 2012, 100, 441-451.	4.0	21
68	Variation in bacterial, archaeal and fungal community structure and abundance in High Arctic tundra soil. Polar Biology, 2015, 38, 1009-1024.	1.2	21
69	Using AMF inoculum to improve the nutritional status of Prunella vulgaris plants in green roof substrate during establishment. Urban Forestry and Urban Greening, 2015, 14, 959-967.	5.3	21
70	Transition zones between vegetation patches in a heterogeneous Arctic landscape: how plant growth and photosynthesis change with abundance at small scales. Oecologia, 2010, 163, 47-56.	2.0	20
71	Soil C, N and P cycling enzyme responses to nutrient limitation under elevated CO2. Biogeochemistry, 2020, 151, 221-235.	3.5	18
72	Impact of early and late winter icing events on subâ€arctic dwarf shrubs. Plant Biology, 2014, 16, 125-132.	3.8	17

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73	Nitrogen Deposition and Terrestrial Biodiversity. , 2013, , 519-536.		15
74	Rapid photosynthetic recovery of a snow-covered feather moss and<i>Peltigera</i>lichen during sub-Arctic midwinter warming. Plant Ecology and Diversity, 2013, 6, 383-392.	2.4	14
75	Seasonal dynamics of soil and plant nutrients at three environmentally contrasting sites along a sub-Arctic catchment sequence. Polar Biology, 2017, 40, 1821-1834.	1.2	13
76	Responses of sub-arctic dwarf shrubs to low oxygen and high carbon dioxide conditions. Environmental and Experimental Botany, 2013, 85, 7-15.	4.2	12
77	Persistent reduction of segment growth and photosynthesis in a widespread and important subâ€Arctic moss species after cessation of three years of experimental winter warming. Functional Ecology, 2017, 31, 127-134.	3.6	12
78	Transpiration from subarctic deciduous woodlands: Environmental controls and contribution to ecosystem evapotranspiration. Ecohydrology, 2020, 13, e2190.	2.4	12
79	Accumulation of Pollutant Nitrogen in Calcareous and Acidic Grasslands: Evidence from N Flux and 15N Tracer Studies. Water, Air and Soil Pollution, 2004, 4, 159-167.	0.8	11
80	Tight Coupling Between Shoot Level Foliar N and P, Leaf Area, and Shoot Growth in Arctic Dwarf Shrubs Under Simulated Climate Change. Ecosystems, 2016, 19, 326-338.	3.4	11
81	Development of new metrics to assess and quantify climatic drivers of extreme event driven Arctic browning. Remote Sensing of Environment, 2020, 243, 111749.	11.0	11
82	The need to understand the stability of arctic vegetation during rapid climate change: An assessment of imbalance in the literature. Ambio, 2022, 51, 1034-1044.	5.5	9
83	Boreal permafrost thaw amplified by fire disturbance and precipitation increases. Environmental Research Letters, 2020, 15, 114050.	5.2	9
84	Arctic greening and browning: Challenges and a cascade of complexities. Global Change Biology, 2022, 28, 3481-3483.	9.5	8
85	Peatlands in a changing world. New Phytologist, 2011, 191, 309-311.	7.3	7
86	Tight coupling of leaf area index to canopy nitrogen and phosphorus across heterogeneous tallgrass prairie communities. Oecologia, 2016, 182, 889-898.	2.0	7
87	Extreme event impacts on CO₂ fluxes across a range of high latitude, shrub-dominated ecosystems. Environmental Research Letters, 2020, 15, 104084.	5.2	7
88	Impact of Multiple Ecological Stressors on a Sub-Arctic Ecosystem: No Interaction Between Extreme Winter Warming Events, Nitrogen Addition and Grazing. Frontiers in Plant Science, 2018, 9, 1787.	3.6	6
89	The missing pieces for better future predictions in subarctic ecosystems: A TornetrÃsk case study. Ambio, 2021, 50, 375-392.	5.5	6
90	Organic phosphorus cycling may control grassland responses to nitrogen deposition: a long-term field manipulation and modelling study. Biogeosciences, 2021, 18, 4021-4037.	3.3	5

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91	Ecology of Hemiparasitic Orobanchaceae with Special Reference to Their Interaction with Plant Communities. , 2013, , 287-305.		5
92	Stressâ€induced secondary leaves of a boreal deciduous shrub (<i>Vaccinium myrtillus</i>) overwinter then regain activity the following growing season. Nordic Journal of Botany, 2018, 36, e01894.	0.5	4
93	Accumulation of pollutant nitrogen in calcareous and acidic grasslands: Evidence from N flux and 15N tracer studies. Water, Air and Soil Pollution, 2005, 4, 159-167.	0.8	0