Robert Baxter

List of Publications by Year
in descending order

61 papers	3,032 citations	186265 28 h-index	161849 54 g-index
62 all docs	62 docs citations	62 times ranked	4599 citing authors

#	Article	IF	Citations
1	Slope, aspect and climate: Spatially explicit and implicit models of topographic microclimate in chalk grassland. Ecological Modelling, 2008, 216, 47-59.	2.5	406
2	The effect of elevated CO2 on the chemical composition and construction costs of leaves of 27 C3 species. Plant, Cell and Environment, 1997, 20, 472-482.	5.7	355
3	Influence of slope and aspect on long-term vegetation change in British chalk grasslands. Journal of Ecology, 2006, 94, 355-368.	4.0	269
4	SNOWMIP2: An Evaluation of Forest Snow Process Simulations. Bulletin of the American Meteorological Society, 2009, 90, 1120-1136.	3.3	186
5	Predicting spatial and temporal patterns of budâ€burst and spring frost risk in northâ€west Europe: the implications of local adaptation to climate. Global Change Biology, 2010, 16, 1503-1514.	9.5	125
6	Carbon balance of Arctic tundra under increased snow cover mediated by a plant pathogen. Nature Climate Change, 2011, 1, 220-223.	18.8	102
7	Soil respiration: implications of the plantâ€soil continuum and respiration chamber collarâ€insertion depth on measurement and modelling of soil CO₂ efflux rates in three ecosystems. European Journal of Soil Science, 2011, 62, 82-94.	3.9	96
8	Effects of an experimentally applied increase in ammonium on growth and amino-acid metabolism of Sphagnum cuspidatum Ehrh. ex. Hoffm. from differently polluted areas. New Phytologist, 1992, 120, 265-274.	7.3	81
9	Effects of elevated carbon dioxide on three montane grass species. Journal of Experimental Botany, 1994, 45, 305-315.	4.8	76
10	Evaluating global snow water equivalent products for testing land surface models. Remote Sensing of Environment, 2013, 128, 107-117.	11.0	71
11	Characterising forest gap fraction with terrestrial lidar and photography: An examination of relative limitations. Agricultural and Forest Meteorology, 2014, 189-190, 105-114.	4.8	71
12	Net ecosystem exchange over heterogeneous Arctic tundra: Scaling between chamber and eddy covariance measurements. Global Biogeochemical Cycles, 2008, 22, .	4.9	60
13	Phosphorus compounds in subarctic Fennoscandian soils at the mountain birch (Betula) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 2	8.8	57
14	Characterization of the phosphatase activities of mosses in relation to their environment. Plant, Cell and Environment, 2001, 24, 1165-1176.	5.7	55
15	Seasonal phosphatase activity in three characteristic soils of the English uplands polluted by long-term atmospheric nitrogen deposition. Environmental Pollution, 2002, 120, 313-317.	7.5	55
16	An inexpensive system for exposing plants in the field to elevated concentrations of CO2. Plant, Cell and Environment, 1992, 15, 365-372.	5.7	49
17	Effects of Warming on Shrub Abundance and Chemistry Drive Ecosystem-Level Changes in a Forestâ€“Tundra Ecotone. Ecosystems, 2012, 15, 1219-1233.	3.4	48
18	Effects of elevated carbon dioxide on three grass species from montane pasture II. Nutrient uptake, allocation and efficiency of use. Journal of Experimental Botany, 1994, 45, 1267-1278.	4.8	47

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19	Phosphorus composition of upland soils polluted by long-term atmospheric nitrogen deposition. Biogeochemistry, 2003, 65, 259-274.	3.5	45
20	Effect of elevated CO2and nutrient status on growth, dry matter partitioning and nutrient content ofPoa alpinavar.viviparaL.. Journal of Experimental Botany, 1997, 48, 1477-1486.	4.8	40
21	Pseudoviviparous Reproduction of Poa alpina var. vivipara L. (Poaceae) during Long-term Exposure to Elevated Atmospheric CO2. Annals of Botany, 2003, 91, 613-622.	2.9	40
22	Nitrogen and phosphorus in soil solutions and drainage streams in Upper Teesdale, northern England: implications of organic compounds for biological nutrient limitation. Science of the Total Environment, 2003, 314-316, 153-170.	8.0	36
23	Effects of elevated CO2 on the vasculature and phenolic secondary metabolism of Plantago maritima. Phytochemistry, 2004, 65, 2197-2204.	2.9	36
24	Nonvascular contribution to ecosystem NPP in a subarctic heath during early and late growing season. Plant Ecology, 2009, 202, 41-53.	1.6	35
25	Upscaling as ecological information transfer: a simple framework with application to Arctic ecosystem carbon exchange. Landscape Ecology, 2009, 24, 971-986.	4.2	34
26	Characterising inter-annual variation in the spatial pattern of thermal microclimate in a UK upland using a combined empiricalâ€“physical model. Agricultural and Forest Meteorology, 2010, 150, 12-19.	4.8	34
27	Plant carbon allocation drives turnover of old soil organic matter in permafrost tundra soils. Global Change Biology, 2020, 26, 4559-4571.	9.5	31
28	Effects of elevated CO2concentrations on three montane grass species. Journal of Experimental Botany, 1995, 46, 917-929.	4.8	30
29	A C-Repeat Binding Factor Transcriptional Activator (CBF/DREB1) from European Bilberry (Vaccinium) Tj ETQq1 1 0.784314 rgBT /Ove e54119.	2.5	29
30	Redox dynamics in the active layer of an Arctic headwater catchment; examining the potential for transfer of dissolved methane from soils to stream water. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 2776-2792.	3.0	28
31	Quantifying landscapeâ€level methane fluxes in subarctic Finland using a multiscale approach. Global Change Biology, 2015, 21, 3712-3725.	9.5	23
32	Postfire recruitment failure in Scots pine forests of southern Siberia. Remote Sensing of Environment, 2020, 237, 111539.	11.0	23
33	Responses of Sphagnum species to atmospheric nitrogen and sulphur deposition. Botanical Journal of the Linnean Society, 1990, 104, 255-265.	1.6	22
34	Snow-induced changes in dwarf birch chemistry increase moth larval growth rate and level of herbivory. Polar Biology, 2010, 33, 693-702.	1.2	22
35	Host plant growth characteristics as determinants of abundance and phenology in jumping plant-lice on downy willow. Ecological Entomology, 2001, 26, 376-387.	2.2	21
36	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

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37	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
38	The Effect of Snow on Plant Chemistry and Invertebrate Herbivory: Experimental Manipulations Along a Natural Snow Gradient. Ecosystems, 2010, 13, 741-751.	3.4	19
39	Fast assimilate turnover revealed by in situ 13CO2 pulse-labelling in Subarctic tundra. Polar Biology, 2012, 35, 1209-1219.	1.2	17
40	Biogeochemistry of â€œpristineâ€•freshwater stream and lake systems in the western Canadian Arctic. Biogeochemistry, 2016, 130, 191-213.	3.5	17
41	Effects of the bisulphite ion on growth and photosynthesis in Sphagnum cuspidatum Hoffm.. New Phytologist, 1989, 111, 457-462.	7.3	16
42	Could competition between plants and microbes regulate plant nutrition and atmospheric CO2 concentrations?. Science of the Total Environment, 1998, 220, 181-184.	8.0	16
43	Standardisation of temperature observed by automatic weather stations. Environmental Monitoring and Assessment, 2001, 68, 127-136.	2.7	16
44	Environmental and Vegetation Drivers of Seasonal CO2 Fluxes in a Sub-arctic Forestâ€“Mire Ecotone. Ecosystems, 2014, 17, 377-393.	3.4	15
45	The relationship between extracellular metal accumulation and bisulphite tolerance in Sphagnum cuspidatum Hoffm.. New Phytologist, 1989, 111, 463-472.	7.3	13
46	Biases in Reanalysis Snowfall Found by Comparing the JULES Land Surface Model to GlobSnow. Journal of Climate, 2014, 27, 624-632.	3.2	13
47	Some Ecophysiological and Production Responses of Grasslands to Long-Term Elevated CO2 under Continental and Atlantic Climatesa. Annals of the New York Academy of Sciences, 1998, 851, 241-250.	3.8	12
48	Ecosystem carbon dynamics differ between tundra shrub types in the western Canadian Arctic. Environmental Research Letters, 2018, 13, 084014.	5.2	12
49	Transpiration from subarctic deciduous woodlands: Environmental controls and contribution to ecosystem evapotranspiration. Ecohydrology, 2020, 13, e2190.	2.4	12
50	Evaluating the carbon balance estimate from an automated groundâ€level flux chamber system in artificial grass mesocosms. Ecology and Evolution, 2013, 3, 4998-5010.	1.9	11
51	Short term effects of bisulphite on pollution-tolerant and pollution sensitive populations of Sphagnum cuspidatum Ehrh. (ex. Hoffm.). New Phytologist, 1991, 118, 425-431.	7.3	10
52	Architectural and physiological heterogeneity within the synflorescence of the pseudoviviparous grass Poa alpina var. vivipara L.. Journal of Experimental Botany, 2000, 51, 1705-1712.	4.8	10
53	Climate Variability May Delay Post-Fire Recovery of Boreal Forest in Southern Siberia, Russia. Remote Sensing, 2021, 13, 2247.	4.0	7
54	Vegetation Responses to Local Climatic Changes Induced by a Water-Storage Reservoir. Global Ecology and Biogeography Letters, 1998, 7, 241.	0.6	6

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55	Vegetation responses to local climatic changes induced by a water-storage reservoir. Global Ecology and Biogeography, 1998, 7, 241-257.	5.8	5
56	The influence of secondary senescence processes within the culm of a pseudoviviparous grass (Poa) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 1067-1075.	4.8	5
57	Export of carbon from leaf blades of Poa alpina L. at elevated CO2 and two nutrient regimes. Journal of Experimental Botany, 1999, 50, 1215-1221.	4.8	5
58	Transition metals and the ability of Sphagnum to withstand the phytotoxic effects of the bisulphite ion. New Phytologist, 1991, 118, 433-439.	7.3	4
59	Species-specific effects of elevated CO2 on resource allocation in Plantago maritima and Armeria maritima. Biochemical Systematics and Ecology, 2007, 35, 121-129.	1.3	4
60	Seasonal controls on net branch CO2 assimilation in sub-Arctic Mountain Birch (Betula pubescens) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	4.8	3
61	Abundance and accessibility of forage for reindeer in forests of Northern Sweden: Impacts of landscape and winter climate regime. Ecology and Evolution, 2022, 12, e8820.	1.9	3