Christian Rixen

List of Publications by Year
in descending order

102 papers	11,299 citations	26630 56 h-index	31849 101 g-index
104 all docs	104 docs citations	104 times ranked	12173 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	Upward range shift of a dominant alpine shrub related to 50Âyears of snow cover change. Remote Sensing of Environment, 2022, 268, 112773.	11.0	11
3	Winters are changing: snow effects on Arctic and alpine tundra ecosystems. Arctic Science, 2022, 8, 572-608.	2.3	43
4	Intraspecific trait variation in alpine plants relates to their elevational distribution. Journal of Ecology, 2022, 110, 860-875.	4.0	21
5	Directional turnover towards largerâ€ranged plants over time and across habitats. Ecology Letters, 2022, 25, 466-482.	6.4	39
6	A common soil temperature threshold for the upper limit of alpine grasslands in European mountains. Alpine Botany, 2021, 131, 41-52.	2.4	13
7	Climate Change Affects Vegetation Differently on Siliceous and Calcareous Summits of the European Alps. Frontiers in Ecology and Evolution, 2021, 9, .	2.2	12
8	Phenological and elevational shifts of plants, animals and fungi under climate change in the <scp>E</scp>uropean <scp>A</scp>lps. Biological Reviews, 2021, 96, 1816-1835.	10.4	102
9	Experimental warming differentially affects vegetative and reproductive phenology of tundra plants. Nature Communications, 2021, 12, 3442.	12.8	56
10	Sensitivity of recruitment and growth of alpine treeline birch to elevated temperature. Agricultural and Forest Meteorology, 2021, 304-305, 108403.	4.8	10
11	Land surface phenology and greenness in Alpine grasslands driven by seasonal snow and meteorological factors. Science of the Total Environment, 2020, 725, 138380.	8.0	22
12	SoilTemp: A global database of nearâ€surface temperature. Global Change Biology, 2020, 26, 6616-6629.	9.5	122
13	The Soil Microbiome of GLORIA Mountain Summits in the Swiss Alps. Frontiers in Microbiology, 2019, 10, 1080.	3.5	78
14	Human trampling disturbance exerts different ecological effects at contrasting elevational range limits. Journal of Applied Ecology, 2019, 56, 1389-1399.	4.0	12
15	Twelve years of low nutrient input stimulates growth of trees and dwarf shrubs in the treeline ecotone. Journal of Ecology, 2019, 107, 768-780.	4.0	23
16	Warming shortens flowering seasons of tundra plant communities. Nature Ecology and Evolution, 2019, 3, 45-52.	7.8	79
17	Accelerated increase in plant species richness on mountain summits is linked to warming. Nature, 2018, 556, 231-234.	27.8	580
18	New barcoded primers for efficient retrieval of cercozoan sequences in highâ€throughput environmental diversity surveys, with emphasis on worldwide biological soil crusts. Molecular Ecology Resources, 2018, 18, 229-239.	4.8	71

#	Article	IF	Citations
19	Axial xylem architecture of Larix decidua exposed to CO 2 enrichment and soil warming at the tree line. Functional Ecology, 2018, 32, 273-287.	3.6	27
20	Increase in the risk of exposure of forest and fruit trees to spring frosts at higher elevations in Switzerland over the last four decades. Agricultural and Forest Meteorology, 2018, 248, 60-69.	4.8	142
21	Enough space in a warmer world? Microhabitat diversity and smallâ€scale distribution of alpine plants on mountain summits. Diversity and Distributions, 2018, 24, 252-261.	4.1	49
22	Tundra Trait Team: A database of plant traits spanning the tundra biome. Global Ecology and Biogeography, 2018, 27, 1402-1411.	5.8	57
23	Local trampling disturbance effects on alpine plant populations and communities: Negative implications for climate change vulnerability. Ecology and Evolution, 2018, 8, 7921-7935.	1.9	13
24	Plant functional trait change across a warming tundra biome. Nature, 2018, 562, 57-62.	27.8	451
25	Shrub growth and plant diversity along an elevation gradient: Evidence of indirect effects of climate on alpine ecosystems. PLoS ONE, 2018, 13, e0196653.	2.5	46
26	Xylem anatomical and growth responses of the dwarf shrub Vaccinium myrtillus to experimental CO2 enrichment and soil warming at treeline. Science of the Total Environment, 2018, 642, 1172-1183.	8.0	12
27	Biotic and abiotic drivers of tree seedling recruitment across an alpine treeline ecotone. Scientific Reports, 2018, 8, 10894.	3.3	37
28	BioTIME: A database of biodiversity time series for the Anthropocene. Global Ecology and Biogeography, 2018, 27, 760-786.	5.8	289
29	Unchanged risk of frost exposure for subalpine and alpine plants after snowmelt in Switzerland despite climate warming. International Journal of Biometeorology, 2018, 62, 1755-1762.	3.0	23
30	Soil warming opens the nitrogen cycle at the alpine treeline. Global Change Biology, 2017, 23, 421-434.	9.5	96
31	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
32	Experimental soil warming shifts the fungal community composition at the alpine treeline. New Phytologist, 2017, 215, 766-778.	7.3	66
33	Responses of soil extracellular enzyme activities to experimental warming and CO2 enrichment at the alpine treeline. Plant and Soil, 2017, 416, 527-537.	3.7	31
34	â€˜Hearingâ€™ alpine plants growing after snowmelt: ultrasonic snow sensors provide long-term series of alpine plant phenology. International Journal of Biometeorology, 2017, 61, 349-361.	3.0	26
35	Non-equilibrium in Alpine Plant Assemblages: Shifts in Europeâ€™s Summit Floras. Advances in Global Change Research, 2017, , 285-303.	1.6	28
36	SGH: stress or strain gradient hypothesis? Insights from an elevation gradient on the roof of the world. Annals of Botany, 2017, 120, 29-38.	2.9	56

#	Article	IF	Citations
37	The rich sides of mountain summits â€“ a panâ€European view on aspect preferences of alpine plants. Journal of Biogeography, 2016, 43, 2261-2273.	3.0	107
38	Shorter snow cover duration since 1970 in the Swiss Alps due to earlier snowmelt more than to later snow onset. Climatic Change, 2016, 139, 637-649.	3.6	160
39	Evolutionary potential in the Alpine: trait heritabilities and performance variation of the dwarf willow <i>Salix herbacea</i> from different elevations and microhabitats. Ecology and Evolution, 2016, 6, 3940-3952.	1.9	98
40	The snow and the willows: earlier spring snowmelt reduces performance in the lowâ€lying alpine shrub <i>Salix herbacea</i>. Journal of Ecology, 2016, 104, 1041-1050.	4.0	110
41	Small-scale drivers: the importance of nutrient availability and snowmelt timing on performance of the alpine shrub Salix herbacea. Oecologia, 2016, 180, 1015-1024.	2.0	92
42	The effects of foundation species on community assembly: a global study on alpine cushion plant communities. Ecology, 2015, 96, 2064-2069.	3.2	53
43	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
44	Soil warming and <scp>CO</scp>₂ enrichment induce biomass shifts in alpine tree line vegetation. Global Change Biology, 2015, 21, 2005-2021.	9.5	65
45	Climate sensitivity of shrub growth across the tundra biome. Nature Climate Change, 2015, 5, 887-891.	18.8	447
46	Bud freezing resistance in alpine shrubs across snow depth gradients. Environmental and Experimental Botany, 2015, 118, 95-101.	4.2	20
47	With a little help from my friends: Community facilitation increases performance in the dwarf shrub Salix herbacea. Basic and Applied Ecology, 2015, 16, 202-209.	2.7	59
48	Observation bias and its causes in botanical surveys on highâ€alpine summits. Journal of Vegetation Science, 2015, 26, 191-200.	2.2	43
49	Methods for measuring arctic and alpine shrub growth: A review. Earth-Science Reviews, 2015, 140, 1-13.	9.1	112
50	The Response of the Alpine Dwarf Shrub Salix herbacea to Altered Snowmelt Timing: Lessons from a Multi-Site Transplant Experiment. PLoS ONE, 2015, 10, e0122395.	2.5	101
51	Soil erosion and organic carbon export by wet snow avalanches. Cryosphere, 2014, 8, 651-658.	3.9	19
52	Growth and Phenology of Three Dwarf Shrub Species in a Six-Year Soil Warming Experiment at the Alpine Treeline. PLoS ONE, 2014, 9, e100577.	2.5	36
53	Faster, higher, more? Past, present and future dynamics of alpine and arctic flora under climate change. Alpine Botany, 2014, 124, 77-79.	2.4	24
54	CO 2 enrichment alters diurnal stem radius fluctuations of 36â€yrâ€old L arix decidua growing at the alpine tree line. New Phytologist, 2014, 202, 1237-1248.	7.3	16

#	Article	IF	Citations
55	Increased spring freezing vulnerability for alpine shrubs under early snowmelt. Oecologia, 2014, 175, 219-229.	2.0	139
56	Management, winter climate and plantâ€“soil feedbacks on ski slopes: a synthesis. Ecological Research, 2014, 29, 583-592.	1.5	20
57	Facilitative plant interactions and climate simultaneously drive alpine plant diversity. Ecology Letters, 2014, 17, 193-202.	6.4	274
58	Small-scale patterns in snowmelt timing affect gene flow and the distribution of genetic diversity in the alpine dwarf shrub Salix herbacea. Heredity, 2014, 113, 233-239.	2.6	101
59	Alpine cushion plants inhibit the loss of phylogenetic diversity in severe environments. Ecology Letters, 2013, 16, 478-486.	6.4	151
60	Snow Fungiâ€"Induced Mortality of <i>Pinus cembra</i> at the Alpine Treeline: Evidence from Plantations. Arctic, Antarctic, and Alpine Research, 2013, 45, 455-470.	1.1	56
61	Biodiversity simultaneously enhances the production and stability of community biomass, but the effects are independent. Ecology, 2013, 94, 1697-1707.	3.2	146
62	An alpine treeline in a carbon dioxide-rich world: synthesis of a nine-year free-air carbon dioxide enrichment study. Oecologia, 2013, 171, 623-637.	2.0	73
63	Linking traits between plants and invertebrate herbivores to track functional effects of landâ€use changes. Journal of Vegetation Science, 2013, 24, 949-962.	2.2	68
64	Elevation gradient of successful plant traits for colonizing alpine summits under climate change. Environmental Research Letters, 2013, 8, 024043.	5.2	95
65	The oldest monitoring site of the Alps revisited: accelerated increase in plant species richness on Piz Linard summit since 1835. Plant Ecology and Diversity, 2013, 6, 447-455.	2.4	84
66	Glaziale und periglaziale LebensrÃume im Raum Obergurgl. Mountain Research and Development, 2012, 32, 257.	1.0	0
67	Zwei AlpentÃler im Klimawandel. Mountain Research and Development, 2012, 32, 256.	1.0	0
68	Factors driving mortality and growth at treeline: a 30â€year experiment of 92â€‰000 conifers. Ecology, 2012, 93, 389-401.	3.2	111
69	Plot-scale evidence of tundra vegetation change and links to recent summer warming. Nature Climate Change, 2012, 2, 453-457.	18.8	745
70	The relationship between plant species richness and soil aggregate stability can depend on disturbance. Plant and Soil, 2012, 355, 87-102.	3.7	60
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	Evidence of enhanced freezing damage in treeline plants during six years of CO₂ enrichment and soil warming. Oikos, 2012, 121, 1532-1543.	2.7	77

#	Article	IF	Citations
73	Speciesâ€specific tree growth responses to 9â€ƒyears of CO₂ enrichment at the alpine treeline. Journal of Ecology, 2011, 99, 383-394.	4.0	50
74	Winter Tourism, Climate Change, and Snowmaking in the Swiss Alps: Tourists' Attitudes and Regional Economic Impacts. Mountain Research and Development, 2011, 31, 357-362.	1.0	50
75	Shrub expansion in tundra ecosystems: dynamics, impacts and research priorities. Environmental Research Letters, 2011, 6, 045509.	5.2	1,021
76	Long-term impacts of ski piste management on alpine vegetation and soils. Journal of Applied Ecology, 2011, 48, 906-915.	4.0	54
77	Growth and community responses of alpine dwarf shrubs to <i>in situ</i> CO₂ enrichment and soil warming. New Phytologist, 2011, 191, 806-818.	7.3	66
78	The interacting effects of land use change, climate change and suppression of natural disturbances on landscape forest structure in the Swiss Alps. Oikos, 2011, 120, 216-225.	2.7	91
79	Using historical plant surveys to track biodiversity on mountain summits. Plant Ecology and Diversity, 2011, 4, 415-425.	2.4	72
80	Winter Tourism and Climate Change in the Alps: An Assessment of Resource Consumption, Snow Reliability, and Future Snowmaking Potential. Mountain Research and Development, 2011, 31, 229-236.	1.0	106
81	Functional traits and root morphology of alpine plants. Annals of Botany, 2011, 108, 537-545.	2.9	57
82	Short-term responses of ecosystem carbon fluxes to experimental soil warming at the Swiss alpine treeline. Biogeochemistry, 2010, 97, 7-19.	3.5	111
83	Interrill erosion at disturbed alpine sites: Effects of plant functional diversity and vegetation cover. Basic and Applied Ecology, 2010, 11, 619-626.	2.7	66
84	Reduced early growing season freezing resistance in alpine treeline plants under elevated atmospheric CO₂. Global Change Biology, 2010, 16, 1057-1070.	9.5	71
85	A review of snow manipulation experiments in Arctic and alpine tundra ecosystems. Polar Research, 2010, 29, 95-109.	1.6	316
86	Winter climate change at different temporal scales in Vaccinium myrtillus, an Arctic and alpine dwarf shrub. Polar Research, 2010, 29, 85-94.	1.6	55
87	Changes in alpine plant growth under future climate conditions. Biogeosciences, 2010, 7, 2013-2024.	3.3	64
88	Species removal and experimental warming in a subarctic tundra plant community. Oecologia, 2009, 161, 173-186.	2.0	18
89	Higher plant diversity enhances soil stability in disturbed alpine ecosystems. Plant and Soil, 2009, 324, 91-102.	3.7	186
90	Snow avalanche disturbances in forest ecosystemsâ€"State of research and implications for management. Forest Ecology and Management, 2009, 257, 1883-1892.	3.2	189

#	Article	IF	Citations
91	How alpine plant growth is linked to snow cover and climate variability. Journal of Geophysical Research, 2008, 113, .	3.3	175
92	A plant diversityÃ—water chemistry experiment in subalpine grassland. Perspectives in Plant Ecology, Evolution and Systematics, 2008, 10, 51-61.	2.7	14
93	Altered Snow Density and Chemistry Change Soil Nitrogen Mineralization and Plant Growth. Arctic, Antarctic, and Alpine Research, 2008, 40, 568-575.	1.1	65
94	Alpine Grassland Phenology as Seen in AVHRR, VEGETATION, and MODIS NDVI Time Series - a Comparison with In Situ Measurements. Sensors, 2008, 8, 2833-2853.	3.8	100
95	Natural avalanche disturbance shapes plant diversity and species composition in subalpine forest belt. Journal of Vegetation Science, 2007, 18, 735-742.	2.2	43
96	Changes in forest structure and in the relative importance of climatic stress as a result of suppression of avalanche disturbances. Forest Ecology and Management, 2006, 223, 66-74.	3.2	37
97	Advanced snowmelt causes shift towards positive neighbour interactions in a subarctic tundra community. Global Change Biology, 2006, 12, 1496-1506.	9.5	136
98	Effects of ski piste preparation on alpine vegetation. Journal of Applied Ecology, 2005, 42, 306-316.	4.0	178
99	Improved water retention links high species richness with increased productivity in arctic tundra moss communities. Oecologia, 2005, 146, 287-299.	2.0	60
100	Ground Temperatures under Ski Pistes with Artificial and Natural Snow. Arctic, Antarctic, and Alpine Research, 2004, 36, 419-427.	1.1	61
101	Impact of artificial snow and ski-slope grooming on snowpack properties and soil thermal regime in a sub-alpine ski area. Annals of Glaciology, 2004, 38, 314-318.	1.4	45
102	Does artificial snow production affect soil and vegetation of ski pistes? A review. Perspectives in Plant Ecology, Evolution and Systematics, 2003, 5, 219-230.	2.7	92