Carly J Stevens

List of Publications by Year
in descending order

95 papers	10,326 citations	81900 39 h-index	43889 91 g-index
97 all docs	97 docs citations	97 times ranked	10944 citing authors

#	Article	IF	Citations
1	Impact of Nitrogen Deposition on the Species Richness of Grasslands. Science, 2004, 303, 1876-1879.	12.6	1,248
2	Consistent responses of soil microbial communities to elevated nutrient inputs in grasslands across the globe. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 10967-10972.	7.1	1,023
3	Herbivores and nutrients control grassland plant diversity via light limitation. Nature, 2014, 508, 517-520.	27.8	669
4	Plant diversity predicts beta but not alpha diversity of soil microbes across grasslands worldwide. Ecology Letters, 2015, 18, 85-95.	6.4	612
5	Productivity Is a Poor Predictor of Plant Species Richness. Science, 2011, 333, 1750-1753.	12.6	463
6	Eutrophication weakens stabilizing effects of diversity in natural grasslands. Nature, 2014, 508, 521-525.	27.8	409
7	Grassland productivity limited by multiple nutrients. Nature Plants, 2015, 1, 15080.	9.3	403
8	Addition of multiple limiting resources reduces grassland diversity. Nature, 2016, 537, 93-96.	27.8	355
9	Changes in species richness and composition in European acidic grasslands over the past 70 years: the contribution of cumulative atmospheric nitrogen deposition. Global Change Biology, 2010, 16, 344-357.	9.5	339
10	Nitrogen deposition threatens species richness of grasslands across Europe. Environmental Pollution, 2010, 158, 2940-2945.	7.5	316
11	Conditional vulnerability of plant diversity to atmospheric nitrogen deposition across the United States. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 4086-4091.	7.1	287
12	Nitrogen deposition causes widespread loss of species richness in British habitats. Global Change Biology, 2010, 16, 671-679.	9.5	259
13	Nitrogen in the environment. Science, 2019, 363, 578-580.	12.6	242
14	Loss of forb diversity in relation to nitrogen deposition in the UK: regional trends and potential controls. Global Change Biology, 2006, 12, 1823-1833.	9.5	200
15	Local loss and spatial homogenization of plant diversity reduce ecosystem multifunctionality. Nature Ecology and Evolution, 2018, 2, 50-56.	7.8	172
16	Lifeâ€history constraints in grassland plant species: a growthâ€defence tradeâ€off is the norm. Ecology Letters, 2013, 16, 513-521.	6.4	165
17	Contribution of acidification and eutrophication to declines in species richness of calcifuge grasslands along a gradient of atmospheric nitrogen deposition. Functional Ecology, 2010, 24, 478-484.	3.6	151
18	Anthropogenic nitrogen deposition predicts local grassland primary production worldwide. Ecology, 2015, 96, 1459-1465.	3.2	143

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19	Plant speciesâ€™ origin predicts dominance and response to nutrient enrichment and herbivores in global grasslands. Nature Communications, 2015, 6, 7710.	12.8	143
20	Ecosystem responses to reduced and oxidised nitrogen inputs in European terrestrial habitats. Environmental Pollution, 2011, 159, 665-676.	7.5	132
21	Impact of nitrogen deposition at the species level. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 984-987.	7.1	126
22	Soil heterogeneity buffers community response to climate change in species-rich grassland. Global Change Biology, 2011, 17, 2002-2011.	9.5	116
23	Atmospheric nitrogen deposition in terrestrial ecosystems: Its impact on plant communities and consequences across trophic levels. Functional Ecology, 2018, 32, 1757-1769.	3.6	116
24	Regional trends in soil acidification and exchangeable metal concentrations in relation to acid deposition rates. Environmental Pollution, 2009, 157, 313-319.	7.5	101
25	Leaf nutrients, not specific leaf area, are consistent indicators of elevated nutrient inputs. Nature Ecology and Evolution, 2019, 3, 400-406.	7.8	97
26	The Role of Nitrogen Deposition in Widespread Plant Community Change Across Semi-natural Habitats. Ecosystems, 2014, 17, 864-877.	3.4	86
27	How long do ecosystems take to recover from atmospheric nitrogen deposition?. Biological Conservation, 2016, 200, 160-167.	4.1	80
28	Nitrogen processes in terrestrial ecosystems. , 2011, , 99-125.		77
29	Sensitivity of global soil carbon stocks to combined nutrient enrichment. Ecology Letters, 2019, 22, 936-945.	6.4	75
30	General destabilizing effects of eutrophication on grassland productivity at multiple spatial scales. Nature Communications, 2020, 11, 5375.	12.8	75
31	Nitrogen as a threat to European terrestrial biodiversity. , 2011, , 463-494.		73
32	The impact of nitrogen deposition on acid grasslands in the Atlantic region of Europe. Environmental Pollution, 2011, 159, 2243-2250.	7.5	67
33	Long-term changes in calcareous grassland vegetation in North-western Germany â€“ No decline in species richness, but a shift in species composition. Biological Conservation, 2014, 172, 170-179.	4.1	64
34	Personal nitrogen footprint tool for the United Kingdom. Environmental Sciences: Processes and Impacts, 2014, 16, 1563-1569.	3.5	62
35	Increasing effects of chronic nutrient enrichment on plant diversity loss and ecosystem productivity over time. Ecology, 2021, 102, e03218.	3.2	62
36	The ecosystem services of urban soils: A review. Geoderma, 2021, 395, 115076.	5.1	62

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37	Changes in species composition of European acid grasslands observed along a gradient of nitrogen deposition. Journal of Vegetation Science, 2011, 22, 207-215.	2.2	60
38	Belowground competition drives invasive plant impact on native species regardless of nitrogen availability. Oecologia, 2018, 186, 577-587.	2.0	58
39	Soil net nitrogen mineralisation across global grasslands. Nature Communications, 2019, 10, 4981.	12.8	57
40	Potential vulnerability of 348 herbaceous species to atmospheric deposition of nitrogen and sulfur in the United States. Nature Plants, 2019, 5, 697-705.	9.3	52
41	Nutrient availability controls the impact of mammalian herbivores on soil carbon and nitrogen pools in grasslands. Global Change Biology, 2020, 26, 2060-2071.	9.5	43
42	Herbivory and eutrophication mediate grassland plant nutrient responses across a global climatic gradient. Ecology, 2018, 99, 822-831.	3.2	42
43	More salt, please: global patterns, responses and impacts of foliar sodium in grasslands. Ecology Letters, 2019, 22, 1136-1144.	6.4	42
44	Environmental myopia: a diagnosis and a remedy. Trends in Ecology and Evolution, 2010, 25, 556-561.	8.7	40
45	Negative effects of nitrogen override positive effects of phosphorus on grassland legumes worldwide. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	40
46	Spatial heterogeneity in species composition constrains plant community responses to herbivory and fertilisation. Ecology Letters, 2018, 21, 1364-1371.	6.4	38
47	Nutrients cause grassland biomass to outpace herbivory. Nature Communications, 2020, 11, 6036.	12.8	35
48	Understanding how changing soil nitrogen affects plantâ€"pollinator interactions. Arthropod-Plant Interactions, 2019, 13, 671-684.	1.1	35
49	Increasing Soil Nutrient Loads of European Semi-natural Grasslands Strongly Alter Plant Functional Diversity Independently of Species Loss. Ecosystems, 2014, 17, 169-181.	3.4	34
50	Belowground Biomass Response to Nutrient Enrichment Depends on Light Limitation Across Globally Distributed Grasslands. Ecosystems, 2019, 22, 1466-1477.	3.4	34
51	The impact of air pollution on terrestrial managed and natural vegetation. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190317.	3.4	31
52	Response to Comments on â€œProductivity Is a Poor Predictor of Plant Species Richnessâ€. Science, 2012, 335, 1441-1441.	12.6	30
53	The effect of nitrogen deposition on the species richness of acid grasslands in Denmark: A comparison with a study performed on a European scale. Environmental Pollution, 2011, 159, 1778-1782.	7.5	29
54	Soil properties as key predictors of global grassland production: Have we overlooked micronutrients?. Ecology Letters, 2021, 24, 2713-2725.	6.4	28

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55	Impacts of nitrogen deposition on vascular plants in Britain: an analysis of two national observation networks. Biogeosciences, 2011, 8, 3501-3518.	3.3	27
56	Regional Contingencies in the Relationship between Aboveground Biomass and Litter in the Worldâ€™s Grasslands. PLoS ONE, 2013, 8, e54988.	2.5	27
57	Global impacts of fertilization and herbivore removal on soil net nitrogen mineralization are modulated by local climate and soil properties. Global Change Biology, 2020, 26, 7173-7185.	9.5	25
58	Nitrogen deposition and climate: an integrated synthesis. Trends in Ecology and Evolution, 2022, 37, 541-552.	8.7	25
59	Biological Flora of the British Isles: <i>Campanula rotundifolia</i>. Journal of Ecology, 2012, 100, 821-839.	4.0	23
60	Addressing the Impact of Atmospheric Nitrogen Deposition on Western European Grasslands. Environmental Management, 2011, 48, 885-894.	2.7	22
61	An integrated belowground traitâ€based understanding of nitrogenâ€driven plant diversity loss. Global Change Biology, 2022, 28, 3651-3664.	9.5	22
62	Drivers of vegetation change in grasslands of the Sheffield region, northern England, between 1965 and 2012/13. Applied Vegetation Science, 2016, 19, 187-195.	1.9	20
63	Detecting the footprint of changing atmospheric nitrogen deposition loads on acid grasslands in the context of climate change. Global Change Biology, 2011, 17, 3351-3365.	9.5	19
64	Terricolous lichens as indicators of nitrogen deposition: Evidence from national records. Ecological Indicators, 2012, 20, 196-203.	6.3	18
65	Nutrients and herbivores impact grassland stability across spatial scales through different pathways. Global Change Biology, 2022, 28, 2678-2688.	9.5	18
66	Nutrient identity modifies the destabilising effects of eutrophication in grasslands. Ecology Letters, 2022, 25, 754-765.	6.4	17
67	How will the semi-natural vegetation of the UK have changed by 2030 given likely changes in nitrogen deposition?. Environmental Pollution, 2016, 208, 879-889.	7.5	16
68	Urban soil microbial community and microbial-related carbon storage are severely limited by sealing. Journal of Soils and Sediments, 2021, 21, 1455-1465.	3.0	16
69	Differences in yield, Ellenberg N value, tissue chemistry and soil chemistry 15Âyears after the cessation of nitrogen addition. Plant and Soil, 2012, 357, 309-319.	3.7	15
70	What is the most ecologically-meaningful metric of nitrogen deposition?. Environmental Pollution, 2019, 247, 319-331.	7.5	15
71	Intraâ€specific spatial aggregation in acidic grasslands: effects of acidification and nitrogen deposition on spatial patterns of plant communities. Journal of Vegetation Science, 2013, 24, 25-32.	2.2	14
72	Effect of nitrogen addition, form and clipping on competitive interactions between grassland species. Journal of Plant Ecology, 2014, 7, 222-230.	2.3	14

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73	Temporal rarity is a better predictor of local extinction risk than spatial rarity. Ecology, 2021, 102, e03504.	3.2	14
74	Recent advances in understanding grasslands. F1000Research, 2018, 7, 1363.	1.6	14
75	Effects of the frequency and the rate of N enrichment on community structure in a temperate grassland. Journal of Plant Ecology, 2018, 11, 685-695.	2.3	12
76	Spatial turnover of multiple ecosystem functions is more associated with plant than soil microbial Î²â€diversity. Ecosphere, 2021, 12, e03644.	2.2	12
77	Dominant native and nonâ€native graminoids differ in key leaf traits irrespective of nutrient availability. Global Ecology and Biogeography, 2020, 29, 1126-1138.	5.8	11
78	The effects of sealing on urban soil carbon and nutrients. Soil, 2021, 7, 661-675.	4.9	11
79	Nitrogen but not phosphorus addition affects symbiotic N2 fixation by legumes in natural and semi-natural grasslands located on four continents. Plant and Soil, 2022, 478, 689-707.	3.7	11
80	Ambient nitrogen deposition drives plantâ€diversity decline by nitrogen accumulation in a closed grassland ecosystem. Journal of Applied Ecology, 2021, 58, 1888-1898.	4.0	10
81	Grassland species composition and biogeochemistry in 153 sites along environmental gradients in Europe. Ecology, 2011, 92, 1544-1544.	3.2	9
82	Testing the influence of topography and material properties on catchmentâ€scale soil moisture patterns using remotely sensed vegetation patterns in a humid temperate catchment, northern Britain. Hydrological Processes, 2013, 27, 1223-1237.	2.6	9
83	Differential Effects of Oxidised and Reduced Nitrogen on Vegetation and Soil Chemistry of Species-Rich Acidic Grasslands. Water, Air, and Soil Pollution, 2013, 224, 1.	2.4	8
84	Spatial gradient in nitrogen deposition affects plant species frequency in acidic grasslands. Oecologia, 2015, 177, 39-51.	2.0	8
85	Point Source Ammonia Emissions are Having a Detrimental Impact On Prairie Vegetation. Water, Air, and Soil Pollution, 2010, 211, 435-441.	2.4	7
86	Disparities between plant community responses to nitrogen deposition and critical loads in UK semi-natural habitats. Atmospheric Environment, 2020, 239, 117478.	4.1	7
87	Using Minecraft to engage children with science at public events. Research for All, 0, 3, .	0.4	7
88	Impacts of nutrient addition on soil carbon and nitrogen stoichiometry and stability in globally-distributed grasslands. Biogeochemistry, 2022, 159, 353-370.	3.5	5
89	Framing nitrogen pollution in the British press: 1984â€“2018. Discourse and Communication, 2020, 14, 84-103.	1.7	4
90	Science Hunters: teaching science concepts in schools using Minecraft. , 2019, 2, 13-21.		4

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91	C4 trees have a broader niche than their close C3 relatives. Journal of Experimental Botany, 2022, 73, 3189-3204.	4.8	4
92	Towards the integration of urban planning and biodiversity conservation through collaboration. Environmental Technology and Innovation, 2015, 4, 218-226.	6.1	3
93	Raising awareness about food security using a massive open online course. Plants People Planet, 2020, 2, 140-143.	3.3	2
94	Spatio-temporal challenges in representing wildlife disturbance within a GIS. Environmental Technology and Innovation, 2017, 7, 44-53.	6.1	1
95	Investing in the future of science: Assessing UK environmental science engagement with schoolâ€aged children. Plants People Planet, 0, , .	3.3	0