Nathalie Fenner

List of Publications by Year
in descending order

41 papers	4,569 citations	236925 25 h-index	289244 40 g-index
41 all docs	41 docs citations	41 times ranked	4670 citing authors

#	Article	IF	Citations
1	Export of organic carbon from peat soils. Nature, 2001, 412, 785-785.	27.8	837
2	Export of dissolved organic carbon from peatlands under elevated carbon dioxide levels. Nature, 2004, 430, 195-198.	27.8	543
3	Drought-induced carbon loss in peatlands. Nature Geoscience, 2011, 4, 895-900.	12.9	481
4	Atmospheric nitrogen deposition promotes carbon loss from peat bogs. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 19386-19389.	7.1	367
5	A regulatory role for phenol oxidase during decomposition in peatlands. Soil Biology and Biochemistry, 2004, 36, 1663-1667.	8.8	356
6	Terrestrial export of organic carbon. Nature, 2002, 415, 862-862.	27.8	212
7	Observations of a seasonally shifting thermal optimum in peatland carbon-cycling processes; implications for the global carbon cycle and soil enzyme methodologies. Soil Biology and Biochemistry, 2005, 37, 1814-1821.	8.8	154
8	Additional carbon sequestration benefits of grassland diversity restoration. Journal of Applied Ecology, 2011, 48, 600-608.	4.0	145
9	Comparative analysis of soil microbial communities and their responses to the short-term drought in bog, fen, and riparian wetlands. Soil Biology and Biochemistry, 2008, 40, 2874-2880.	8.8	133
10	Interactions between Elevated CO2and Warming Could Amplify DOC Exports from Peatland Catchments. Environmental Science & Technology, 2007, 41, 3146-3152.	10.0	130
11	Hydrological effects on the diversity of phenolic degrading bacteria in a peatland: implications for carbon cycling. Soil Biology and Biochemistry, 2005, 37, 1277-1287.	8.8	127
12	Summer drought effects upon soil and litter extracellular phenol oxidase activity and soluble carbon release in an upland Calluna heathland. Soil Biology and Biochemistry, 2008, 40, 1519-1532.	8.8	116
13	Summer drought decreases soil fungal diversity and associated phenol oxidase activity in upland Calluna heathland soil. FEMS Microbiology Ecology, 2008, 66, 426-436.	2.7	98
14	Elevated CO2 Effects on Peatland Plant Community Carbon Dynamics and DOC Production. Ecosystems, 2007, 10, 635-647.	3.4	81
15	UV-visible absorbance spectroscopy as a proxy for peatland dissolved organic carbon (DOC) quantity and quality: considerations on wavelength and absorbance degradation. Environmental Sciences: Processes and Impacts, 2014, 16, 1445.	3.5	74
16	Peatland carbon afflux partitioning reveals that Sphagnum photosynthate contributes to the DOC pool. Plant and Soil, 2004, 259, 345-354.	3.7	64
17	Woody litter protects peat carbon stocks during drought. Nature Climate Change, 2020, 10, 363-369.	18.8	64
18	Infilled Ditches are Hotspots of Landscape Methane Flux Following Peatland Re-wetting. Ecosystems, 2014, 17, 1227-1241.	3.4	57

#	Article	IF	Citations
19	The interactive effects of elevated carbon dioxide and water table draw-down on carbon cycling in a Welsh ombrotrophic bog. Ecological Engineering, 2009, 35, 978-986.	3.6	49
20	Shifts of soil enzyme activities in wetlands exposed to elevated CO2. Science of the Total Environment, 2005, 337, 207-212.	8.0	48
21	Peatland geoengineering: an alternative approach to terrestrial carbon sequestration. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2012, 370, 4404-4421.	3.4	47
22	Decomposition â€˜hotspotsâ€™ in a rewetted peatland: implications for water quality and carbon cycling. Hydrobiologia, 2011, 674, 51-66.	2.0	46
23	Longâ€term drainage for forestry inhibits extracellular phenol oxidase activity in Finnish boreal mire peat. European Journal of Soil Science, 2010, 61, 950-957.	3.9	44
24	Functional and structural responses of bacterial and methanogen communities to 3-year warming incubation in different depths of peat mire. Applied Soil Ecology, 2012, 57, 23-30.	4.3	38
25	Molecular weight spectra of dissolved organic carbon in a rewetted Welsh peatland and possible implications for water quality. Soil Use and Management, 2001, 17, 106-112.	4.9	32
26	Evaluation of algal bloom mitigation and nutrient removal in floating constructed wetlands with different macrophyte species. Ecological Engineering, 2017, 108, 581-588.	3.6	29
27	Impeded drainage stimulates extracellular phenol oxidase activity in riparian peat cores. Soil Use and Management, 2008, 24, 357-365.	4.9	27
28	The effect of peatland drainage and rewetting (ditch blocking) on extracellular enzyme activities and water chemistry. Soil Use and Management, 2015, 31, 67-76.	4.9	24
29	Using chemical, microbial and fluorescence techniques to understand contaminant sources and pathways to wetlands in a conservation site. Science of the Total Environment, 2015, 511, 703-710.	8.0	21
30	Subtle shifts in microbial communities occur alongside the release of carbon induced by drought and rewetting in contrasting peatland ecosystems. Scientific Reports, 2017, 7, 11314.	3.3	20
31	Natural revegetation of bog pools after peatland restoration involving ditch blockingâ€”The influence of pool depth and implications for carbon cycling. Ecological Engineering, 2013, 57, 297-301.	3.6	18
32	Quantifying dissolved organic carbon concentrations in upland catchments using phenolic proxy measurements. Journal of Hydrology, 2013, 477, 251-260.	5.4	15
33	Evidence for sensitivity of dune wetlands to groundwater nutrients. Science of the Total Environment, 2014, 490, 106-113.	8.0	15
34	Carbon preservation in humic lakes; a hierarchical regulatory pathway. Global Change Biology, 2013, 19, 775-784.	9.5	13
35	Small changes in water levels and groundwater nutrients alter nitrogen and carbon processing in dune slack soils. Soil Biology and Biochemistry, 2016, 99, 28-35.	8.8	11
36	A novel approach to studying the effects of temperature on soil biogeochemistry using a thermal gradient bar. Soil Use and Management, 2006, 22, 267-273.	4.9	9

#	Article	IF	Citations
37	Hydrological Controls on Dissolved Organic Carbon Production and Release from UK Peatlands. Geophysical Monograph Series, 0, , 237-249.	0.1	8
38	Influence of Water Table Depth on Pore Water Chemistry and Trihalomethane Formation Potential in Peatlands. Water Environment Research, 2016, 88, 107-117.	2.7	5
39	Effects of Climate Change on Peatland Reservoirs: A DOC Perspective. Global Biogeochemical Cycles, 2021, 35, e2021GB006992.	4.9	5
40	An iron-reduction-mediated cascade mechanism increases the risk of carbon loss from mineral-rich peatlands. Applied Soil Ecology, 2022, 172, 104361.	4.3	5
41	Substantial uptake of atmospheric and groundwater nitrogen by dune slacks under different water table regimes. Journal of Coastal Conservation, 2018, 22, 615-622.	1.6	1