Jennifer W Harden

List of Publications by Year
in descending order

69 papers	6,818 citations	61687 45 h-index	107981 68 g-index
85 all docs	85 docs citations	85 times ranked	7923 citing authors

#	Article	IF	Citations
1	Global stocks and capacity of mineral-associated soil organic carbon. Nature Communications, 2022, 13, .	5.8	146
2	Spatial heterogeneity and environmental predictors of permafrost region soil organic carbon stocks. Science Advances, 2021, 7, .	4.7	130
3	The trajectory of soil development and its relationship to soil carbon dynamics. Geoderma, 2021, 403, 115378.	2.3	11
4	An open-source database for the synthesis of soil radiocarbon data: International Soil Radiocarbon Database (ISRaD) version 1.0. Earth System Science Data, 2020, 12, 61-76.	3.7	48
5	Soils can help mitigate CO2 emissions, despite the challenges. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 10211-10212.	3.3	20
6	A sequential selective dissolution method to quantify storage and stability of organic carbon associated with Al and Fe hydroxide phases. Geoderma, 2018, 312, 24-35.	2.3	76
7	Networking our science to characterize the state, vulnerabilities, and management opportunities of soil organic matter. Global Change Biology, 2018, 24, e705-e718.	4.2	92
8	Decadal and long-term boreal soil carbon and nitrogen sequestration rates across a variety of ecosystems. Biogeosciences, 2016, 13, 4315-4327.	1.3	7
9	Radiocarbon constraints imply reduced carbon uptake by soils during the 21st century. Science, 2016, 353, 1419-1424.	6.0	149
10	Toward more realistic projections of soil carbon dynamics by Earth system models. Global Biogeochemical Cycles, 2016, 30, 40-56.	1.9	343
11	Incorporating microbial dormancy dynamics into soil decomposition models to improve quantification of soil carbon dynamics of northern temperate forests. Journal of Geophysical Research G: Biogeosciences, 2015, 120, 2596-2611.	1.3	29
12	Long-term controls on soil organic carbon with depth and time: A case study from the Cowlitz River Chronosequence, WA USA. Geoderma, 2015, 247-248, 73-87.	2.3	105
13	Effect of permafrost thaw on CO ₂ and CH ₄ exchange in a western Alaska peatland chronosequence. Environmental Research Letters, 2014, 9, 085004.	2.2	45
14	Cryostratigraphy and Permafrost Evolution in the Lacustrine Lowlands of Westâ€€central Alaska. Permafrost and Periglacial Processes, 2014, 25, 14-34.	1.5	72
15	Controls on methane released through ebullition in peatlands affected by permafrost degradation. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 418-431.	1.3	46
16	The response of soil organic carbon of a rich fen peatland in interior Alaska to projected climate change. Global Change Biology, 2013, 19, 604-620.	4.2	43
17	Permafrost and organic layer interactions over a climate gradient in a discontinuous permafrost zone. Environmental Research Letters, 2013, 8, 035028.	2.2	42
18	Controls on ecosystem and root respiration across a permafrost and wetland gradient in interior Alaska. Environmental Research Letters, 2013, 8, 045029.	2.2	30

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19	Field information links permafrost carbon to physical vulnerabilities of thawing. Geophysical Research Letters, 2012, 39, .	1.5	265
20	Photodissolution of soil organic matter. Geoderma, 2012, 170, 314-321.	2.3	36
21	Persistence of soil organic matter in eroding versus depositional landform positions. Journal of Geophysical Research, 2012, 117, .	3.3	138
22	Spatiotemporal analysis of black spruce forest soils and implications for the fate of C. Journal of Geophysical Research, 2012, 117, .	3.3	20
23	The Effects of Permafrost Thaw on Soil Hydrologic, Thermal, and Carbon Dynamics in an Alaskan Peatland. Ecosystems, 2012, 15, 213-229.	1.6	162
24	The effect of fire and permafrost interactions on soil carbon accumulation in an upland black spruce ecosystem of interior Alaska: implications for post-thaw carbon loss. Global Change Biology, 2011, 17, 1461-1474.	4.2	103
25	Recent acceleration of biomass burning and carbon losses in Alaskan forests and peatlands. Nature Geoscience, 2011, 4, 27-31.	5.4	428
26	Water and heat transport in boreal soils: Implications for soil response to climate change. Science of the Total Environment, 2011, 409, 1836-1842.	3.9	21
27	The carbon budget of the northern cryosphere region. Current Opinion in Environmental Sustainability, 2010, 2, 231-236.	3.1	61
28	The role of soil drainage class in carbon dioxide exchange and decomposition in boreal black spruce (Picea mariana) forest stands. Canadian Journal of Forest Research, 2010, 40, 2123-2134.	0.8	27
29	Seasonal ice and hydrologic controls on dissolved organic carbon and nitrogen concentrations in a borealâ€rich fen. Journal of Geophysical Research, 2010, 115, .	3.3	43
30	The role of mosses in ecosystem succession and function in Alaskaâ€™s boreal forestThis article is one of a selection of papers from The Dynamics of Change in Alaskaâ€™s Boreal Forests: Resilience and Vulnerability in Response to Climate Warming.. Canadian Journal of Forest Research, 2010, 40, 1237-1264.	0.8	129
31	Interactive Effects of Fire, Soil Climate, and Moss on CO2 Fluxes in Black Spruce Ecosystems of Interior Alaska. Ecosystems, 2009, 12, 57-72.	1.6	64
32	Erosion of soil organic carbon: Implications for carbon sequestration. Geophysical Monograph Series, 2009, , 189-202.	0.1	4
33	The Effect of Moisture Content on the Thermal Conductivity of Moss and Organic Soil Horizons From Black Spruce Ecosystems in Interior Alaska. Soil Science, 2009, 174, 646-651.	0.9	143
34	Recovery of Aboveground Plant Biomass and Productivity After Fire in Mesic and Dry Black Spruce Forests of Interior Alaska. Ecosystems, 2008, 11, 209-225.	1.6	120
35	Interactive effects of wildfire and permafrost on microbial communities and soil processes in an Alaskan black spruce forest. Global Change Biology, 2008, 14, 2591-2602.	4.2	69
36	Boreal soil carbon dynamics under a changing climate: A model inversion approach. Journal of Geophysical Research, 2008, 113, .	3.3	59

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37	Linking soil organic matter dynamics and erosionâ€induced terrestrial carbon sequestration at different landform positions. Journal of Geophysical Research, 2008, 113, .	3.3	126
38	Soil Erosion: Data Say C Sink. Science, 2008, 320, 178-179.	6.0	58
39	The Significance of the Erosion-induced Terrestrial Carbon Sink. BioScience, 2007, 57, 337-346.	2.2	348
40	Wildfires threaten mercury stocks in northern soils. Geophysical Research Letters, 2006, 33, .	1.5	95
41	Geomorphic control of landscape carbon accumulation. Journal of Geophysical Research, 2006, 111, .	3.3	54
42	Modeling physical and biogeochemical controls over carbon accumulation in a boreal forest soil. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	53
43	Stable carbon isotope depth profiles and soil organic carbon dynamics in the lower Mississippi Basin. Geoderma, 2006, 131, 89-109.	2.3	166
44	Effects of wildfire and permafrost on soil organic matter and soil climate in interior Alaska. Global Change Biology, 2006, 12, 2391-2403.	4.2	123
45	Spatial Patterning of Soil Carbon Storage Across Boreal Landscapes. , 2005, , 229-255.		8
46	Comparing electronic probes for volumetric water content of lowâ€density feathermoss. Sensor Review, 2005, 25, 215-221.	1.0	9
47	Chemical weathering rates of a soil chronosequence on granitic alluvium: III. Hydrochemical evolution and contemporary solute fluxes and rates. Geochimica Et Cosmochimica Acta, 2005, 69, 1975-1996.	1.6	94
48	Moisture content measurements of moss (Sphagnum spp.) using commercial sensors. Permafrost and Periglacial Processes, 2004, 15, 309-318.	1.5	53
49	Fire dynamics and implications for nitrogen cycling in boreal forests. Journal of Geophysical Research, 2003, 108, WFX 4-1.	3.3	35
50	Isotopic composition of carbon dioxide from a boreal forest fire: Inferring carbon loss from measurements and modeling. Global Biogeochemical Cycles, 2003, 17, 1-1-1-9.	1.9	101
51	Organic carbon and carbon isotopes in modern and 100-year-old-soil archives of the Russian steppe. Global Change Biology, 2002, 8, 941-953.	4.2	121
52	Scientists unearth clues to soil contamination by comparing old and new soil samples. Eos, 2000, 81, 53.	0.1	9
53	Carbon cycling in boreal wetlands: A comparison of three approaches. Journal of Geophysical Research, 1999, 104, 27673-27682.	3.3	58
54	Soil Carbon stocks and their rates of accumulation and loss in a boreal forest landscape. Global Biogeochemical Cycles, 1998, 12, 687-701.	1.9	106

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55	Carbon Cycling in Terrestrial Environments. , 1998, , 577-610.		12
56	Chemical weathering rates of a soil chronosequence on granitic alluvium: I. Quantification of mineralogical and surface area changes and calculation of primary silicate reaction rates. Geochimica Et Cosmochimica Acta, 1996, 60, 2533-2550.	1.6	315
57	Quaternary soils and dust deposition in southern Nevada and California. Bulletin of the Geological Society of America, 1995, 107, 1003-1022.	1.6	159
58	Isotopic Approach to Soil Carbonate Dynamics and Implications for Paleoclimatic Interpretations. Quaternary Research, 1994, 42, 60-71.	1.0	66
59	Dynamics of Soil Carbon During Deglaciation of the Laurentide Ice Sheet. Science, 1992, 258, 1921-1924.	6.0	198
60	Morphology and genesis of carbonate soils on the Kyle Canyon fan, Nevada, U.S.A.. Geoderma, 1992, 52, 303-342.	2.3	75
61	Rates of Soil Development from Four Soil Chronosequences in the Southern Great Basin. Quaternary Research, 1991, 35, 383-399.	1.0	77
62	Soil development on stable landforms and implications for landscape studies. Geomorphology, 1990, 3, 391-398.	1.1	37
63	Holocene and late Pleistocene slip rates on the San Andreas fault in Yucaipa, California, using displaced alluvial-fan deposits and soil chronology. Bulletin of the Geological Society of America, 1989, 101, 1107-1117.	1.6	52
64	Development Rates of Late Quaternary Soils, Silver Lake Playa, California. Soil Science Society of America Journal, 1989, 53, 1127-1140.	1.2	90
65	Genetic interpretations of elemental and chemical differences in a soil chronosequence, California. Geoderma, 1988, 43, 179-193.	2.3	40
66	Distribution of calcium carbonate in desert soils: A model. Geology, 1988, 16, 303.	2.0	65
67	MEASUREMENTS OF WATER PENETRATION AND VOLUME PERCENTAGE WATER-HOLDING CAPACITY FOR UNDISTURBED, COARSE-TEXTURED SOILS IN SOUTHWESTERN CALIFORNIA. Soil Science, 1988, 146, 374-383.	0.9	8
68	A Quantitative Comparison of Soil Development in Four Climatic Regimes. Quaternary Research, 1983, 20, 342-359.	1.0	178
69	A quantitative index of soil development from field descriptions: Examples from a chronosequence in central California. Geoderma, 1982, 28, 1-28.	2.3	440