Jo U Smith

List of Publications by Year
in descending order

93	8,837	109321	49909
papers	citations	35 h-index	87 g-index

96	96	96	10369
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Greenhouse gas mitigation in agriculture. Philosophical Transactions of the Royal Society B: Biological Sciences, 2008, 363, 789-813.	4.0	1,739
2	Ecosystem Service Supply and Vulnerability to Global Change in Europe. Science, 2005, 310, 1333-1337.	12.6	1,355
3	A comparison of the performance of nine soil organic matter models using datasets from seven long-term experiments. Geoderma, 1997, 81, 153-225.	5.1	974
4	Similar response of labile and resistant soil organic matter pools to changes in temperature. Nature, 2005, 433, 57-59.	27.8	629
5	Potential for carbon sequestration in European soils: preliminary estimates for five scenarios using results from long-term experiments. Global Change Biology, 1997, 3, 67-79.	9.5	320
6	Projected changes in mineral soil carbon of European croplands and grasslands, 1990-2080. Global Change Biology, 2005, 11, 2141-2152.	9.5	298
7	Meeting Europe's climate change commitments: quantitative estimates of the potential for carbon mitigation by agriculture. Global Change Biology, 2000, 6, 525-539.	9.5	294
8	Integrating plantâ€“soil interactions into global carbon cycle models. Journal of Ecology, 2009, 97, 851-863.	4.0	233
9	Preliminary estimates of the potential for carbon mitigation in European soils through noâ€till farming. Global Change Biology, 1998, 4, 679-685.	9.5	213
10	Soil salinity decreases global soil organic carbon stocks. Science of the Total Environment, 2013, 465, 267-272.	8.0	162
11	Title is missing!. Nutrient Cycling in Agroecosystems, 2001, 60, 237-252.	2.2	156
12	Salinity effects on carbon mineralization in soils of varying texture. Soil Biology and Biochemistry, 2011, 43, 1908-1916.	8.8	147
13	Climate change cannot be entirely responsible for soil carbon loss observed in England and Wales, 1978â€“2003. Global Change Biology, 2007, 13, 2605-2609.	9.5	126
14	Quantitative methods to evaluate and compare Soil Organic Matter (SOM) Models. , 1996, , 181-199.		101
15	Estimating changes in Scottish soil carbon stocks using ECOSSE. I. Model description and uncertainties. Climate Research, 2010, 45, 179-192.	1.1	99
16	When is a measured soil organic matter fraction equivalent to a model pool?. European Journal of Soil Science, 2002, 53, 405-416.	3.9	97
17	Critical Evaluation of Models and Their Parameters. Journal of Environmental Quality, 1995, 24, 803-807.	2.0	96
18	Revised estimates of the carbon mitigation potential of UK agricultural land. Soil Use and Management, 2000, 16, 293-295.	4.9	93

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19	How do the heterotrophic and the total soil respiration of an oil palm plantation on peat respond to nitrogen fertilizer application?. Geoderma, 2016, 268, 41-51.	5.1	76
20	Soil carbon, multiple benefits. Environmental Development, 2015, 13, 33-38.	4.1	75
21	A European network of long-term sites for studies on soil organic matter. Soil and Tillage Research, 1998, 47, 263-274.	5.6	70
22	Projected changes in the organic carbon stocks of cropland mineral soils of European Russia and the Ukraine, 1990?2070. Global Change Biology, 2007, 13, 342-356.	9.5	67
23	Simulation of soil nitrogen, nitrous oxide emissions and mitigation scenarios at 3 European cropland sites using the ECOSSE model. Nutrient Cycling in Agroecosystems, 2012, 92, 161-181.	2.2	65
24	Introducing a Decomposition Rate Modifier in the Rothamsted Carbon Model to Predict Soil Organic Carbon Stocks in Saline Soils. Environmental Science & Technology, 2011, 45, 6396-6403.	10.0	60
25	Climate- and crop-responsive emission factors significantly alter estimates of current and future nitrous oxide emissions from fertilizer use. Global Change Biology, 2005, 11, 1522-1536.	9.5	52
26	Overview of holistic application of biogas for small scale farmers in Sub-Saharan Africa. Biomass and Bioenergy, 2014, 70, 4-16.	5.7	51
27	What is the potential for biogas digesters to improve soil fertility and crop production in Sub-Saharan Africa?. Biomass and Bioenergy, 2014, 70, 58-72.	5.7	50
28	Can biogas digesters help to reduce deforestation in Africa?. Biomass and Bioenergy, 2014, 70, 87-98.	5.7	49
29	Spatial and temporal dynamics of soil organic carbon in landscapes of the upper Blue Nile Basin of the Ethiopian Highlands. Agriculture, Ecosystems and Environment, 2016, 218, 190-208.	5.3	48
30	Dis-adoption of Household Biogas technologies in Central Uganda. Energy for Sustainable Development, 2017, 37, 124-132.	4.5	48
31	Highâ€resolution spatial modelling of greenhouse gas emissions from landâ€use change to energy crops in the United Kingdom. GCB Bioenergy, 2017, 9, 627-644.	5.6	47
32	Incorporating microorganisms as decomposers into models to simulate soil organic matter decomposition. Geoderma, 2005, 129, 139-146.	5.1	46
33	Sustainable use of organic resources for bioenergy, food and water provision in rural Sub-Saharan Africa. Renewable and Sustainable Energy Reviews, 2015, 50, 903-917.	16.4	44
34	Effect of natural and agricultural factors on long-term soil organic matter dynamics in arable soddy-podzolic soilsâ€"modeling and observation. Geoderma, 2003, 116, 165-189.	5.1	41
35	Simulation of Salinity Effects on Past, Present, and Future Soil Organic Carbon Stocks. Environmental Science & Technology, 2012, 46, 1624-1631.	10.0	41
36	Tropical wetland ecosystem service assessments in East Africa; A review of approaches and challenges. Environmental Modelling and Software, 2018, 102, 260-273.	4.5	41

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37	Including trace gas fluxes in estimates of the carbon mitigation potential of UK agricultural land. Soil Use and Management, 2000, 16, 251-259.	4.9	33
38	Assessing existing peatland models for their applicability for modelling greenhouse gas emissions from tropical peat soils. Current Opinion in Environmental Sustainability, 2011, 3, 339-349.	6.3	33
39	What is the potential for biogas digesters to improve soil carbon sequestration in Sub-Saharan Africa? Comparison with other uses of organic residues. Biomass and Bioenergy, 2014, 70, 73-86.	5.7	32
40	EuroSOMNETÂâ€“Âa European database of long-term experiments on soil organic matter: the WWW metadatabase. Journal of Agricultural Science, 2002, 138, 123-134.	1.3	31
41	Comparison of methods for quantifying soil carbon in tropical peats. Geoderma, 2014, 214-215, 177-183.	5.1	30
42	Commentary: Switching to biogas â€“ What effect could it have on indoor air quality and human health?. Biomass and Bioenergy, 2014, 70, 125-129.	5.7	30
43	Nitrogen Challenges and Opportunities for Agricultural and Environmental Science in India. Frontiers in Sustainable Food Systems, 2021, 5, .	3.9	29
44	Impact of partial fuel switch on household air pollutants in sub-Sahara Africa. Environmental Pollution, 2017, 231, 1021-1029.	7.5	26
45	Potential yield challenges to scale-up of zero budget natural farming. Nature Sustainability, 2020, 3, 247-252.	23.7	26
46	Simulation of soil organic carbon response at forest cultivation sequences using 13C measurements. Organic Geochemistry, 2010, 41, 41-54.	1.8	25
47	Nitrous oxide emissions along a gradient of tropical forest disturbance on mineral soils in Sumatra. Agriculture, Ecosystems and Environment, 2015, 214, 107-117.	5.3	25
48	Household energy and recycling of nutrients and carbon to the soil in integrated cropâ€livestock farming systems: a case study in Kumbursa village, Central Highlands of Ethiopia. GCB Bioenergy, 2017, 9, 1588-1601.	5.6	22
49	Water for smallâ€scale biogas digesters in subâ€Saharan Africa. GCB Bioenergy, 2017, 9, 339-357.	5.6	21
50	Economic potential of flexible balloon biogas digester among smallholder farmers: A case study from Uganda. Renewable Energy, 2018, 120, 392-400.	8.9	21
51	Agricultural methane emissions and the potential formitigation. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200451.	3.4	21
52	Soil organic carbon dynamics of croplands in European Russia: estimates from the â€œmodel of humus balanceâ€. Regional Environmental Change, 2007, 7, 93-104.	2.9	20
53	Wind farms on undegraded peatlands are unlikely to reduce future carbon emissions. Energy Policy, 2014, 66, 585-591.	8.8	18
54	Are smallholder farmers willing to pay for a flexible balloon biogas digester? Evidence from a case study in Uganda. Energy for Sustainable Development, 2018, 43, 123-129.	4.5	18

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55	A wetland ecosystem service assessment tool; Development and application in a tropical peatland in Uganda. Ecological Indicators, 2019, 103, 434-445.	6.3	16
56	Systems approaches in global change and biogeochemistry research. Philosophical Transactions of the Royal Society B: Biological Sciences, 2012, 367, 311-321.	4.0	15
57	Soil-derived Nature's Contributions to People and their contribution to the UN Sustainable Development Goals. Philosophical Transactions of the Royal Society B: Biological Sciences, 2021, 376, 20200185.	4.0	15
58	Seasonal patterns of greenhouse gas emissions from a forestâ€toâ€bog restored site in northern Scotland: Influence of microtopography and vegetation on carbon dioxide and methane dynamics. European Journal of Soil Science, 2021, 72, 1332-1353.	3.9	13
59	Bridging barriers to advance multisector approaches to improve food security, nutrition and population health in Nepal: transdisciplinary perspectives. BMC Public Health, 2019, 19, 961.	2.9	12
60	Treatment of organic resources before soil incorporation in semi-arid regions improves resilience to El NiÃ±o, and increases crop production and economic returns. Environmental Research Letters, 2019, 14, 085004.	5.2	12
61	Model inter-comparison between statistical and dynamic model assessments of the long-term stability of blanket peat in Great Britain (1940â€“2099). Climate Research, 2010, 45, 227-248.	1.1	12
62	Moving the British cattle herd. Nature, 1996, 381, 15-15.	27.8	11
63	Simulation of soil carbon changes due to land use change in urban areas in China. Frontiers of Environmental Science and Engineering, 2013, 7, 255-266.	6.0	10
64	Constructing regional scenarios for sustainable agriculture in European Russia and Ukraine for 2000 to 2070. Regional Environmental Change, 2007, 7, 63-77.	2.9	9
65	The dynamics of Household labor allocation to biogas production, farm and non-farm activities in central Uganda. Renewable Energy, 2019, 142, 461-467.	8.9	9
66	The Tropical Peatland Plantation-Carbon Assessment Tool: estimating CO2 emissions from tropical peat soils under plantations. Mitigation and Adaptation Strategies for Global Change, 2014, 19, 863-885.	2.1	8
67	The role of soils in provision of energy. Philosophical Transactions of the Royal Society B: Biological Sciences, 2021, 376, 20200180.	4.0	8
68	Type and extent of trans-disciplinary co-operation to improve food security, health and household environment in low and middle income countries: systematic review. BMC Public Health, 2016, 16, 1093.	2.9	7
69	Evaluation of the <scp>ECOSSE</scp> model to predict heterotrophic soil respiration by direct measurements. European Journal of Soil Science, 2017, 68, 384-393.	3.9	7
70	Projecting Soil C Under Future Climate and Land-Use Scenarios (Modeling). , 2018, , 281-309.		7
71	Avoid constructing wind farms on peat. Nature, 2012, 489, 33-33.	27.8	6
72	Estimating the effect of nitrogen fertilizer on the greenhouse gas balance of soils in Wales under current and future climate. Regional Environmental Change, 2016, 16, 2357-2368.	2.9	6

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73	How does replacing natural forests with rubber and oil palm plantations affect soil respiration and methane fluxes?. Ecosphere, 2020, 11, e03284.	2.2	5
74	Environmental and financial benefits of improved cookstove technologies in the central highlands of Ethiopia. Biomass and Bioenergy, 2021, 150, 106089.	5.7	5
75	Carbon Sequestration and Greenhouse Gas Fluxes from Cropland Soils â€“ Climate Opportunities and Threats. Environmental Science and Engineering, 2009, , 81-111.	0.2	5
76	Mathematical Modeling of Greenhouse Gas Emissions from Agriculture for Different End Users. Advances in Agricultural Systems Modeling, 0, , 197-227.	0.3	4
77	Integrated soil fertility management for sustainable teff (Eragrostistef) production in Halaba, Southern Ethiopia. Cogent Food and Agriculture, 2018, 4, 1519008.	1.4	4
78	Seasonal variability of resources: The unexplored adversary of biogas use in rural Ethiopia. Current Research in Environmental Sustainability, 2021, 3, 100072.	3.5	4
79	A New Approach Using Modeling to Interpret Measured Changes in Soil Organic Carbon in Forests; The Case of a 200 Year Pine Chronosequence on a Podzolic Soil in Scotland. Frontiers in Environmental Science, 2020, 8, .	3.3	4
80	Changes in Soil Properties Following the Establishment of Exclosures in Ethiopia: A Meta-Analysis. Frontiers in Ecology and Evolution, 2022, 10, .	2.2	4
81	Testing the adequacy of measured data for evaluating nitrogen turnover models by the dot-to-dot method. European Journal of Soil Science, 2003, 54, 175-186.	3.9	3
82	Modeling long-term attainable soil organic carbon sequestration across the highlands of Ethiopia. Environment, Development and Sustainability, 0, , 1.	5.0	3
83	Using a Rotational Modelling System to Explore the Effect of Straw Incorporation on the Efficiency of Nitrogen Use. , 1999, , 58-64.		2
84	Weekly Weather Generation for a Nitrogen Turnover Model. Nutrient Cycling in Agroecosystems, 2005, 73, 257-266.	2.2	2
85	An explicit and computationally efficient method to initialise first-order-based soil organic matter modelsâ€"The Geometric Series Solution (GSS). Ecological Modelling, 2013, 267, 48-53.	2.5	2
86	A systems model describing the impact of organic resource use on farming households in low to middle income countries. Agricultural Systems, 2020, 184, 102895.	6.1	2
87	Impacts of different treatment methods for cattle manure on the spread of faecal indicator organisms from soil to lettuce in Nigeria. Journal of Applied Microbiology, 2022, 132, 618-632.	3.1	2
88	AGRICULTURAL CARBON MITIGATION OPTIONS IN EUROPE: IMPROVED ESTIMATES AND THE GLOBAL PERSPECTIVE. Acta Agronomica Hungarica: an International Multidisciplinary Journal in Agricultural Science, 2000, 48, 209-216.	0.2	1
89	A Simple Modelling Framework for Shallow Subsurface Water Storage and Flow. Water (Switzerland), 2019, 11, 1725.	2.7	1
90	Assessing soil carbon dioxide and methane fluxes from a Scots pine raised bog-edge-woodland. Journal of Environmental Management, 2022, 302, 114061.	7.8	1

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91	Effect of plant species, nitrogen fertilizer and grass age on the dynamics of intra-aggregate SOM. Soil Biology and Biochemistry, 2011, 43, 1104-1107.	8.8	0
92	A simple approach to modelling the soil water budget in cool temperate mineral topsoils. Environmental Modelling and Software, 2020, 127, 104700.	4.5	0
93	Temporal Variability in Heterotrophic Carbon Dioxide Emissions From A Drained Tropical Peatland in Uganda. Frontiers in Soil Science, 0, 2, .	2.2	0