

Pete Smith

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

575 papers	47,280 citations	114 h-index	201 g-index
641 ext. papers	56,574 ext. citations	7.9 avg, IF	7.76 L-index

#	Paper	IF	Citations
575	Greenhouse gas mitigation in agriculture. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2008 , 363, 789-813	5.8	1409
574	Ecosystem service supply and vulnerability to global change in Europe. <i>Science</i> , 2005 , 310, 1333-7	33.3	1181
573	Climate extremes and the carbon cycle. <i>Nature</i> , 2013 , 500, 287-95	50.4	974
572	Agriculture. Sustainable intensification in agriculture: premises and policies. <i>Science</i> , 2013 , 341, 33-4	33.3	957
571	Natural climate solutions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 11645-11650	11.5	921
570	Climate-smart soils. <i>Nature</i> , 2016 , 532, 49-57	50.4	883
569	A comparison of the performance of nine soil organic matter models using datasets from seven long-term experiments. <i>Geoderma</i> , 1997 , 81, 153-225	6.7	857
568	The significance of soils and soil science towards realization of the United Nations Sustainable Development Goals. <i>Soil</i> , 2016 , 2, 111-128	5.8	795
567	Biophysical and economic limits to negative CO2 emissions. <i>Nature Climate Change</i> , 2016 , 6, 42-50	21.4	684
566	Microorganisms and climate change: terrestrial feedbacks and mitigation options. <i>Nature Reviews Microbiology</i> , 2010 , 8, 779-90	22.2	642
565	Carbon sequestration in the agricultural soils of Europe. <i>Geoderma</i> , 2004 , 122, 1-23	6.7	635
564	Agricultural soils as a sink to mitigate CO2 emissions. <i>Soil Use and Management</i> , 1997 , 13, 230-244	3.1	619
563	Global agriculture and nitrous oxide emissions. <i>Nature Climate Change</i> , 2012 , 2, 410-416	21.4	542
562	Similar response of labile and resistant soil organic matter pools to changes in temperature. <i>Nature</i> , 2005 , 433, 57-9	50.4	534
561	Global nitrogen deposition and carbon sinks. <i>Nature Geoscience</i> , 2008 , 1, 430-437	18.3	533
560	Europe's terrestrial biosphere absorbs 7 to 12% of European anthropogenic CO2 emissions. <i>Science</i> , 2003 , 300, 1538-42	33.3	497
559	The technological and economic prospects for CO utilization and removal. <i>Nature</i> , 2019 , 575, 87-97	50.4	479

558	Effects of climate extremes on the terrestrial carbon cycle: concepts, processes and potential future impacts. <i>Global Change Biology</i> , 2015 , 21, 2861-80	11.4	454
557	Negative emissionsPart 2: Costs, potentials and side effects. <i>Environmental Research Letters</i> , 2018 , 13, 063002	6.2	431
556	Importance of food-demand management for climate mitigation. <i>Nature Climate Change</i> , 2014 , 4, 924-929	11.4	423
555	Enhanced top soil carbon stocks under organic farming. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 18226-31	11.5	406
554	Global change pressures on soils from land use and management. <i>Global Change Biology</i> , 2016 , 22, 1008-114	11.4	403
553	Soil carbon sequestration and biochar as negative emission technologies. <i>Global Change Biology</i> , 2016 , 22, 1315-24	11.4	393
552	The Impacts of Dietary Change on Greenhouse Gas Emissions, Land Use, Water Use, and Health: A Systematic Review. <i>PLoS ONE</i> , 2016 , 11, e0165797	3.7	389
551	Policy and technological constraints to implementation of greenhouse gas mitigation options in agriculture. <i>Agriculture, Ecosystems and Environment</i> , 2007 , 118, 6-28	5.7	382
550	Carbon sequestration in croplands: the potential in Europe and the global context. <i>European Journal of Agronomy</i> , 2004 , 20, 229-236	5	380
549	A coherent set of future land use change scenarios for Europe. <i>Agriculture, Ecosystems and Environment</i> , 2006 , 114, 57-68	5.7	377
548	Greenhouse gas mitigation potentials in the livestock sector. <i>Nature Climate Change</i> , 2016 , 6, 452-461	11.4	376
547	Bioenergy and climate change mitigation: an assessment. <i>GCB Bioenergy</i> , 2015 , 7, 916-944	5.6	362
546	How much land-based greenhouse gas mitigation can be achieved without compromising food security and environmental goals?. <i>Global Change Biology</i> , 2013 , 19, 2285-302	11.4	358
545	Assessing "dangerous climate change": required reduction of carbon emissions to protect young people, future generations and nature. <i>PLoS ONE</i> , 2013 , 8, e81648	3.7	318
544	The FAOSTAT database of greenhouse gas emissions from agriculture. <i>Environmental Research Letters</i> , 2013 , 8, 015009	6.2	309
543	The top 100 questions of importance to the future of global agriculture. <i>International Journal of Agricultural Sustainability</i> , 2010 , 8, 219-236	2.2	305
542	Competition for land. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2010 , 365, 2941-57	5.8	304
541	Energy crops: current status and future prospects. <i>Global Change Biology</i> , 2006 , 12, 2054-2076	11.4	296

540	Achieving mitigation and adaptation to climate change through sustainable agroforestry practices in Africa. <i>Current Opinion in Environmental Sustainability</i> , 2014 , 6, 8-14	7.2	287
539	Negative emissionsPart 1: Research landscape and synthesis. <i>Environmental Research Letters</i> , 2018 , 13, 063001	6.2	283
538	Land use change and soil organic carbon dynamics. <i>Nutrient Cycling in Agroecosystems</i> , 2008 , 81, 169-178	3.3	281
537	Measured soil organic matter fractions can be related to pools in the RothC model. <i>European Journal of Soil Science</i> , 2007 , 58, 658-667	3.4	275
536	Importance of methane and nitrous oxide for Europe's terrestrial greenhouse-gas balance. <i>Nature Geoscience</i> , 2009 , 2, 842-850	18.3	272
535	Potential for carbon sequestration in European soils: preliminary estimates for five scenarios using results from long-term experiments. <i>Global Change Biology</i> , 1997 , 3, 67-79	11.4	266
534	Projected changes in mineral soil carbon of European croplands and grasslands, 1990-2080.. <i>Global Change Biology</i> , 2005 , 11, 2141-2152	11.4	262
533	Meeting Europe's climate change commitments: quantitative estimates of the potential for carbon mitigation by agriculture. <i>Global Change Biology</i> , 2000 , 6, 525-539	11.4	259
532	The role of soil organic matter in maintaining the productivity and yield stability of cereals in China. <i>Agriculture, Ecosystems and Environment</i> , 2009 , 129, 344-348	5.7	256
531	Strategies for feeding the world more sustainably with organic agriculture. <i>Nature Communications</i> , 2017 , 8, 1290	17.4	255
530	The Contribution of Agriculture, Forestry and other Land Use activities to Global Warming, 1990-2012. <i>Global Change Biology</i> , 2015 , 21, 2655-2660	11.4	251
529	Global assessment of agricultural system redesign for sustainable intensification. <i>Nature Sustainability</i> , 2018 , 1, 441-446	22.1	250
528	Comparing and evaluating process-based ecosystem model predictions of carbon and water fluxes in major European forest biomes.. <i>Global Change Biology</i> , 2005 , 11, 2211-2233	11.4	231
527	Yield and spatial supply of bioenergy poplar and willow short-rotation coppice in the UK. <i>New Phytologist</i> , 2008 , 178, 358-370	9.8	228
526	Carbon losses from soil and its consequences for land-use management. <i>Science of the Total Environment</i> , 2007 , 382, 165-90	10.2	227
525	Delivering food security without increasing pressure on land. <i>Global Food Security</i> , 2013 , 2, 18-23	8.3	210
524	Integrating plant-soil interactions into global carbon cycle models. <i>Journal of Ecology</i> , 2009 , 97, 851-863	6	205
523	How long before a change in soil organic carbon can be detected?. <i>Global Change Biology</i> , 2004 , 10, 1878-1883	11.4	204

522	Reducing emissions from agriculture to meet the 2 °C target. <i>Global Change Biology</i> , 2016 , 22, 3859-3864	11.4	203
521	Estimating the size of the inert organic matter pool from total soil organic carbon content for use in the Rothamsted carbon model. <i>Soil Biology and Biochemistry</i> , 1998 , 30, 1207-1211	7.5	200
520	Food vs. fuel: the use of land for lignocellulosic next generation energy crops that minimize competition with primary food production. <i>GCB Bioenergy</i> , 2012 , 4, 1-19	5.6	196
519	Mitigating climate change: the role of domestic livestock. <i>Animal</i> , 2010 , 4, 323-33	3.1	189
518	Biogeochemical cycles and biodiversity as key drivers of ecosystem services provided by soils. <i>Soil</i> , 2015 , 1, 665-685	5.8	188
517	Preliminary estimates of the potential for carbon mitigation in European soils through no-till farming. <i>Global Change Biology</i> , 1998 , 4, 679-685	11.4	188
516	Challenges in quantifying biosphere-atmosphere exchange of nitrogen species. <i>Environmental Pollution</i> , 2007 , 150, 125-39	9.3	186
515	Synergies between the mitigation of, and adaptation to, climate change in agriculture. <i>Journal of Agricultural Science</i> , 2010 , 148, 543-552	1	185
514	Impact of Global Warming on Soil Organic Carbon. <i>Advances in Agronomy</i> , 2008 , 97, 1-43	7.7	182
513	Critical review of the impacts of grazing intensity on soil organic carbon storage and other soil quality indicators in extensively managed grasslands. <i>Agriculture, Ecosystems and Environment</i> , 2018 , 253, 62-81	5.7	181
512	The potential distribution of bioenergy crops in Europe under present and future climate. <i>Biomass and Bioenergy</i> , 2006 , 30, 183-197	5.3	179
511	The carbon footprints of food crop production. <i>International Journal of Agricultural Sustainability</i> , 2009 , 7, 107-118	2.2	176
510	Spatial distribution of soil organic carbon stocks in France. <i>Biogeosciences</i> , 2011 , 8, 1053-1065	4.6	172
509	Measurements necessary for assessing the net ecosystem carbon budget of croplands. <i>Agriculture, Ecosystems and Environment</i> , 2010 , 139, 302-315	5.7	168
508	The European carbon balance. Part 2: croplands. <i>Global Change Biology</i> , 2010 , 16, 1409-1428	11.4	165
507	Long-Term Soil Experiments: Keys to Managing Earth's Rapidly Changing Ecosystems. <i>Soil Science Society of America Journal</i> , 2007 , 71, 266-279	2.5	160
506	The carbon budget of terrestrial ecosystems at country-scale: a European case study. <i>Biogeosciences</i> , 2005 , 2, 15-26	4.6	159
505	Management effects on net ecosystem carbon and GHG budgets at European crop sites. <i>Agriculture, Ecosystems and Environment</i> , 2010 , 139, 363-383	5.7	158

504	Selenium deficiency risk predicted to increase under future climate change. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 2848-2853	11.5	155
503	Combined inorganic/organic fertilization enhances N efficiency and increases rice productivity through organic carbon accumulation in a rice paddy from the Tai Lake region, China. <i>Agriculture, Ecosystems and Environment</i> , 2009 , 131, 274-280	5.7	151
502	UK land use and soil carbon sequestration. <i>Land Use Policy</i> , 2009 , 26, S274-S283	5.6	150
501	Contribution of the land sector to a 1.5 °C world. <i>Nature Climate Change</i> , 2019 , 9, 817-828	21.4	150
500	Soil carbon stock and its changes in northern China's grasslands from 1980s to 2000s. <i>Global Change Biology</i> , 2010 , 16, 3036-3047	11.4	149
499	Significant soil acidification across northern China's grasslands during 1980s-2000s. <i>Global Change Biology</i> , 2012 , 18, 2292-2300	11.4	147
498	Greedy or needy? Land use and climate impacts of food in 2050 under different livestock futures. <i>Global Environmental Change</i> , 2017 , 47, 1-12	10.1	146
497	How to measure, report and verify soil carbon change to realize the potential of soil carbon sequestration for atmospheric greenhouse gas removal. <i>Global Change Biology</i> , 2020 , 26, 219-241	11.4	142
496	Carbon footprint of China's crop production: An estimation using agro-statistics data over 1993-2007. <i>Agriculture, Ecosystems and Environment</i> , 2011 , 142, 231-237	5.7	141
495	A farm-focused calculator for emissions from crop and livestock production. <i>Environmental Modelling and Software</i> , 2011 , 26, 1070-1078	5.2	141
494	Livestock greenhouse gas emissions and mitigation potential in Europe. <i>Global Change Biology</i> , 2013 , 19, 3-18	11.4	140
493	Impacts of feeding less food-competing feedstuffs to livestock on global food system sustainability. <i>Journal of the Royal Society Interface</i> , 2015 , 12, 20150891	4.1	140
492	The development of MISCANFOR, a new Miscanthus crop growth model: towards more robust yield predictions under different climatic and soil conditions. <i>GCB Bioenergy</i> , 2009 , 1, 154-170	5.6	140
491	Negative emissions: Part 3: Innovation and upscaling. <i>Environmental Research Letters</i> , 2018 , 13, 063003	6.2	140
490	Do grasslands act as a perpetual sink for carbon?. <i>Global Change Biology</i> , 2014 , 20, 2708-11	11.4	138
489	Strategies for greenhouse gas emissions mitigation in Mediterranean agriculture: A review. <i>Agriculture, Ecosystems and Environment</i> , 2017 , 238, 5-24	5.7	137
488	A critical review of the impacts of cover crops on nitrogen leaching, net greenhouse gas balance and crop productivity. <i>Global Change Biology</i> , 2019 , 25, 2530-2543	11.4	134
487	First 20 years of DNDC (DeNitrification DeComposition): Model evolution. <i>Ecological Modelling</i> , 2014 , 292, 51-62	3	133

486	The potential for land sparing to offset greenhouse gas emissions from agriculture. <i>Nature Climate Change</i> , 2016 , 6, 488-492	21.4	132
485	Climate change and sustainable food production. <i>Proceedings of the Nutrition Society</i> , 2013 , 72, 21-8	2.9	132
484	The net biome production of full crop rotations in Europe. <i>Agriculture, Ecosystems and Environment</i> , 2010 , 139, 336-345	5.7	132
483	Enhancing the carbon sink in European agricultural soils: including trace gas fluxes in estimates of carbon mitigation potential. <i>Nutrient Cycling in Agroecosystems</i> , 2001 , 60, 237-252	3.3	132
482	Soil physics meets soil biology: Towards better mechanistic prediction of greenhouse gas emissions from soil. <i>Soil Biology and Biochemistry</i> , 2012 , 47, 78-92	7.5	131
481	Matching policy and science: Rationale for the £ per 1000 - soils for food security and climate initiative. <i>Soil and Tillage Research</i> , 2019 , 188, 3-15	6.5	131
480	The role of soil carbon in natural climate solutions. <i>Nature Sustainability</i> , 2020 , 3, 391-398	22.1	130
479	The environmental costs and benefits of high-yield farming. <i>Nature Sustainability</i> , 2018 , 1, 477-485	22.1	130
478	Direct nitrous oxide emissions in Mediterranean climate cropping systems: Emission factors based on a meta-analysis of available measurement data. <i>Agriculture, Ecosystems and Environment</i> , 2017 , 238, 25-35	5.7	129
477	Young people's burden: requirement of negative CO ₂ emissions. <i>Earth System Dynamics</i> , 2017 , 8, 577-616	4.8	127
476	An increase in topsoil SOC stock of China's croplands between 1985 and 2006 revealed by soil monitoring. <i>Agriculture, Ecosystems and Environment</i> , 2010 , 136, 133-138	5.7	127
475	Greenhouse gas emissions from four bioenergy crops in England and Wales: Integrating spatial estimates of yield and soil carbon balance in life cycle analyses. <i>GCB Bioenergy</i> , 2009 , 1, 267-281	5.6	125
474	REVIEW: The role of ecosystems and their management in regulating climate, and soil, water and air quality. <i>Journal of Applied Ecology</i> , 2013 , 50, 812-829	5.8	123
473	Soils and climate change. <i>Current Opinion in Environmental Sustainability</i> , 2012 , 4, 539-544	7.2	122
472	Innovation can accelerate the transition towards a sustainable food system. <i>Nature Food</i> , 2020 , 1, 266-272	14.4	121
471	Salinity effects on carbon mineralization in soils of varying texture. <i>Soil Biology and Biochemistry</i> , 2011 , 43, 1908-1916	7.5	120
470	Carbon sequestration potential in European croplands has been overestimated.. <i>Global Change Biology</i> , 2005 , 11, 2153-2163	11.4	119
469	Modelling refractory soil organic matter. <i>Biology and Fertility of Soils</i> , 2000 , 30, 388-398	6.1	118

468	Towards an integrated global framework to assess the impacts of land use and management change on soil carbon: current capability and future vision. <i>Global Change Biology</i> , 2012 , 18, 2089-2101	11.4	117
467	Future energy potential of Miscanthus in Europe. <i>GCB Bioenergy</i> , 2009 , 1, 180-196	5.6	116
466	The permafrost carbon inventory on the Tibetan Plateau: a new evaluation using deep sediment cores. <i>Global Change Biology</i> , 2016 , 22, 2688-701	11.4	116
465	Soils as carbon sinks: the global context. <i>Soil Use and Management</i> , 2004 , 20, 212-218	3.1	114
464	Changes in topsoil carbon stock in the Tibetan grasslands between the 1980s and 2004. <i>Global Change Biology</i> , 2009 , 15, 2723-2729	11.4	113
463	Climate change cannot be entirely responsible for soil carbon loss observed in England and Wales, 1978-2003. <i>Global Change Biology</i> , 2007 , 13, 2605-2609	11.4	113
462	Reducing greenhouse gas emissions in agriculture without compromising food security?. <i>Environmental Research Letters</i> , 2017 , 12, 105004	6.2	112
461	Simulating SOC changes in long-term experiments with RothC and CENTURY: model evaluation for a regional scale application. <i>Soil Use and Management</i> , 2006 , 18, 101-111	3.1	110
460	Greenhouse gas emissions from agricultural food production to supply Indian diets: Implications for climate change mitigation. <i>Agriculture, Ecosystems and Environment</i> , 2017 , 237, 234-241	5.7	109
459	Decoupling of greenhouse gas emissions from global agricultural production: 1970-2050. <i>Global Change Biology</i> , 2016 , 22, 763-81	11.4	108
458	Co-benefits, trade-offs, barriers and policies for greenhouse gas mitigation in the agriculture, forestry and other land use (AFOLU) sector. <i>Global Change Biology</i> , 2014 , 20, 3270-90	11.4	107
457	The natural abundance of ¹³ C, ¹⁵ N, ³⁴ S and ¹⁴ C in archived (1923-2000) plant and soil samples from the Askov long-term experiments on animal manure and mineral fertilizer. <i>Rapid Communications in Mass Spectrometry</i> , 2005 , 19, 3216-26	2.2	107
456	Review and analysis of strengths and weaknesses of agro-ecosystem models for simulating C and N fluxes. <i>Science of the Total Environment</i> , 2017 , 598, 445-470	10.2	106
455	Direct measurement of soil organic carbon content change in the croplands of China. <i>Global Change Biology</i> , 2011 , 17, 1487-1496	11.4	106
454	Soil salinity decreases global soil organic carbon stocks. <i>Science of the Total Environment</i> , 2013 , 465, 267-272	10.2	100
453	Global change, soil biodiversity, and nitrogen cycling in terrestrial ecosystems: three case studies. <i>Global Change Biology</i> , 1998 , 4, 729-743	11.4	99
452	Management opportunities to mitigate greenhouse gas emissions from Chinese agriculture. <i>Agriculture, Ecosystems and Environment</i> , 2015 , 209, 108-124	5.7	98
451	A synopsis of land use, land-use change and forestry (LULUCF) under the Kyoto Protocol and Marrakech Accords. <i>Environmental Science and Policy</i> , 2007 , 10, 271-282	6.2	96

450	Land-Management Options for Greenhouse Gas Removal and Their Impacts on Ecosystem Services and the Sustainable Development Goals. <i>Annual Review of Environment and Resources</i> , 2019 , 44, 255-286 ^{17.2}	95
449	Developing greenhouse gas marginal abatement cost curves for agricultural emissions from crops and soils in the UK. <i>Agricultural Systems</i> , 2010 , 103, 198-209	6.1 95
448	Research priorities for negative emissions. <i>Environmental Research Letters</i> , 2016 , 11, 115007	6.2 95
447	Soil carbon sequestration rates under Mediterranean woody crops using recommended management practices: A meta-analysis. <i>Agriculture, Ecosystems and Environment</i> , 2016 , 235, 204-214	5.7 92
446	Conservation tillage systems: a review of its consequences for greenhouse gas emissions. <i>Soil Use and Management</i> , 2013 , 29, 199-209	3.1 92
445	The potential of Miscanthus to sequester carbon in soils: comparing field measurements in Carlow, Ireland to model predictions. <i>GCB Bioenergy</i> , 2009 , 1, 413-425	5.6 90
444	Agriculture: sustainable crop and animal production to help mitigate nitrous oxide emissions. <i>Current Opinion in Environmental Sustainability</i> , 2014 , 9-10, 46-54	7.2 89
443	Testing DayCent and DNDC model simulations of N ₂ O fluxes and assessing the impacts of climate change on the gas flux and biomass production from a humid pasture. <i>Atmospheric Environment</i> , 2010 , 44, 2961-2970	5.3 88
442	Regional estimates of carbon sequestration potential: linking the Rothamsted Carbon Model to GIS databases. <i>Biology and Fertility of Soils</i> , 1998 , 27, 236-241	6.1 86
441	Estimating the pre-harvest greenhouse gas costs of energy crop production. <i>Biomass and Bioenergy</i> , 2008 , 32, 442-452	5.3 86
440	Revised estimates of the carbon mitigation potential of UK agricultural land. <i>Soil Use and Management</i> , 2000 , 16, 293-295	3.1 86
439	Bioclimatic envelope model of climate change impacts on blanket peatland distribution in Great Britain. <i>Climate Research</i> , 2010 , 45, 151-162	1.6 86
438	An overview of the permanence of soil organic carbon stocks: influence of direct human-induced, indirect and natural effects. <i>European Journal of Soil Science</i> , 2005 , 56, 673-680	3.4 84
437	Management swing potential for bioenergy crops. <i>GCB Bioenergy</i> , 2013 , 5, 623-638	5.6 82
436	Simulation of soil organic carbon stocks in a Mediterranean olive grove under different soil-management systems using the RothC model. <i>Soil Use and Management</i> , 2010 , 26, 118-125	3.1 82
435	Historical and future perspectives of global soil carbon response to climate and land-use changes. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2010 , 62, 700-718	3.3 82
434	The 4p1000 initiative: Opportunities, limitations and challenges for implementing soil organic carbon sequestration as a sustainable development strategy. <i>Ambio</i> , 2020 , 49, 350-360	6.5 82
433	Getting the message right on nature-based solutions to climate change. <i>Global Change Biology</i> , 2021 , 27, 1518-1546	11.4 82

432	The carbon sequestration potential of terrestrial ecosystems. <i>Journal of Soils and Water Conservation</i> , 2018 , 73, 145A-152A	2.2	81
431	Decadal soil carbon accumulation across Tibetan permafrost regions. <i>Nature Geoscience</i> , 2017 , 10, 420-428	2.3	80
430	Climate change 2007: spring-time for sinks. <i>Nature</i> , 2007 , 446, 727-8	50.4	80
429	Estimating changes in Scottish soil carbon stocks using ECOSSE. I. Model description and uncertainties. <i>Climate Research</i> , 2010 , 45, 179-192	1.6	80
428	Saturation of the Terrestrial Carbon Sink 2007 , 59-78		79
427	Carbon footprint of crop production in China: an analysis of National Statistics data. <i>Journal of Agricultural Science</i> , 2015 , 153, 422-431	1	78
426	National mitigation potential from natural climate solutions in the tropics. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2020 , 375, 20190126	5.8	77
425	When is a measured soil organic matter fraction equivalent to a model pool?. <i>European Journal of Soil Science</i> , 2002 , 53, 405-416	3.4	77
424	Spatially explicit estimates of N ₂ O emissions from croplands suggest climate mitigation opportunities from improved fertilizer management. <i>Global Change Biology</i> , 2016 , 22, 3383-94	11.4	77
423	A global assessment of the effects of climate policy on the impacts of climate change. <i>Nature Climate Change</i> , 2013 , 3, 512-519	21.4	76
422	How will organic carbon stocks in mineral soils evolve under future climate? Global projections using RothC for a range of climate change scenarios. <i>Biogeosciences</i> , 2012 , 9, 3151-3171	4.6	76
421	Which practices co-deliver food security, climate change mitigation and adaptation, and combat land degradation and desertification?. <i>Global Change Biology</i> , 2020 , 26, 1532-1575	11.4	75
420	Assessing uncertainties in crop and pasture ensemble model simulations of productivity and N ₂ O emissions. <i>Global Change Biology</i> , 2018 , 24, e603-e616	11.4	74
419	Increase in soil organic carbon stock over the last two decades in China's Jiangsu Province. <i>Global Change Biology</i> , 2009 , 15, 861-875	11.4	74
418	Quantitative methods to evaluate and compare Soil Organic Matter (SOM) Models 1996 , 181-199		74
417	The impacts of climate change across the globe: A multi-sectoral assessment. <i>Climatic Change</i> , 2016 , 134, 457-474	4.5	72
416	Nitrous oxide fluxes and denitrification sensitivity to temperature in Irish pasture soils. <i>Soil Use and Management</i> , 2009 , 25, 376-388	3.1	70
415	Simulating the Earth system response to negative emissions. <i>Environmental Research Letters</i> , 2016 , 11, 095012	6.2	69

4 ¹⁴	Emissions of methane from northern peatlands: a review of management impacts and implications for future management options. <i>Ecology and Evolution</i> , 2016 , 6, 7080-7102	2.8	68
4 ¹³	Agricultural greenhouse gas mitigation potential globally, in Europe and in the UK: what have we learnt in the last 20 years?. <i>Global Change Biology</i> , 2012 , 18, 35-43	11.4	65
4 ¹²	Global projections of future cropland expansion to 2050 and direct impacts on biodiversity and carbon storage. <i>Global Change Biology</i> , 2018 , 24, 5895-5908	11.4	65
4 ¹¹	A European network of long-term sites for studies on soil organic matter. <i>Soil and Tillage Research</i> , 1998 , 47, 263-274	6.5	61
4 ¹⁰	The vulnerabilities of agricultural land and food production to future water scarcity. <i>Global Environmental Change</i> , 2019 , 58, 101944	10.1	60
4 ⁰⁹	Key questions and uncertainties associated with the assessment of the cropland greenhouse gas balance. <i>Agriculture, Ecosystems and Environment</i> , 2010 , 139, 293-301	5.7	60
4 ⁰⁸	Soil biota and global change at the ecosystem level: describing soil biota in mathematical models. <i>Global Change Biology</i> , 1998 , 4, 773-784	11.4	60
4 ⁰⁷	Cost-effective opportunities for climate change mitigation in Indian agriculture. <i>Science of the Total Environment</i> , 2019 , 655, 1342-1354	10.2	60
4 ⁰⁶	Mitigating Greenhouse Gas and Ammonia Emissions from Swine Manure Management: A System Analysis. <i>Environmental Science & Technology</i> , 2017 , 51, 4503-4511	10.3	59
4 ⁰⁵	A Review of Criticisms of Integrated Assessment Models and Proposed Approaches to Address These, through the Lens of BECCS. <i>Energies</i> , 2019 , 12, 1747	3.1	59
4 ⁰⁴	Potential of Miscanthus grasses to provide energy and hence reduce greenhouse gas emissions. <i>Agronomy for Sustainable Development</i> , 2008 , 28, 465-472	6.8	59
4 ⁰³	Nitrogen Surplus Benchmarks for Controlling N Pollution in the Main Cropping Systems of China. <i>Environmental Science & Technology</i> , 2019 , 53, 6678-6687	10.3	58
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