

David S Powlson

List of Publications by Year in descending order

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Version: 2024-02-01

33
papers

3,762
citations

331259

21
h-index

414034

32
g-index

33
all docs

33
docs citations

33
times ranked

4363
citing authors

#	ARTICLE	IF	CITATIONS
1	Limited potential of no-till agriculture for climate change mitigation. <i>Nature Climate Change</i> , 2014, 4, 678-683.	8.1	594
2	New technologies reduce greenhouse gas emissions from nitrogenous fertilizer in China. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 8375-8380.	3.3	593
3	Global climate change and soil carbon stocks; predictions from two contrasting models for the turnover of organic carbon in soil. <i>Global Change Biology</i> , 2005, 11, 154-166.	4.2	318
4	Does conservation agriculture deliver climate change mitigation through soil carbon sequestration in tropical agro-ecosystems?. <i>Agriculture, Ecosystems and Environment</i> , 2016, 220, 164-174.	2.5	282
5	Major limitations to achieving 4 per 1000 increases in soil organic carbon stock in temperate regions: Evidence from long-term experiments at Rothamsted Research, United Kingdom. <i>Global Change Biology</i> , 2018, 24, 2563-2584.	4.2	238
6	Enhanced efficiency fertilizers are not a panacea for resolving the nitrogen problem. <i>Global Change Biology</i> , 2018, 24, e511-e521.	4.2	200
7	Sequestering Soil Organic Carbon: A Nitrogen Dilemma. <i>Environmental Science & Technology</i> , 2017, 51, 4738-4739.	4.6	196
8	Can N ₂ O emissions offset the benefits from soil organic carbon storage?. <i>Global Change Biology</i> , 2021, 27, 237-256.	4.2	174
9	Unused fertiliser nitrogen in arable soils—its contribution to nitrate leaching. <i>Journal of the Science of Food and Agriculture</i> , 1989, 46, 407-419.	1.7	160
10	Implications for Soil Properties of Removing Cereal Straw: Results from Long-Term Studies. <i>Agronomy Journal</i> , 2011, 103, 279-287.	0.9	155
11	Nitrogen Surplus Benchmarks for Controlling N Pollution in the Main Cropping Systems of China. <i>Environmental Science & Technology</i> , 2019, 53, 6678-6687.	4.6	125
12	Overcoming nitrogen fertilizer over-use through technical and advisory approaches: A case study from Shaanxi Province, northwest China. <i>Agriculture, Ecosystems and Environment</i> , 2015, 209, 89-99.	2.5	103
13	Long-Term Fertilizer Experiment Network in China: Crop Yields and Soil Nutrient Trends. <i>Agronomy Journal</i> , 2010, 102, 216-230.	0.9	94
14	Chinese cropping systems are a net source of greenhouse gases despite soil carbon sequestration. <i>Global Change Biology</i> , 2018, 24, 5590-5606.	4.2	81
15	Soil carbon, multiple benefits. <i>Environmental Development</i> , 2015, 13, 33-38.	1.8	75
16	Microbial metabolic response to winter warming stabilizes soil carbon. <i>Global Change Biology</i> , 2021, 27, 2011-2028.	4.2	50
17	Photosynthetic limits on carbon sequestration in croplands. <i>Geoderma</i> , 2022, 416, 115810.	2.3	48
18	Sustainable intensification of China's agriculture: the key role of nutrient management and climate change mitigation and adaptation. <i>Agriculture, Ecosystems and Environment</i> , 2015, 209, 1-4.	2.5	44

#	ARTICLE	IF	CITATIONS
19	The persistence of bacterial diversity and ecosystem multifunctionality along a disturbance intensity gradient in karst soil. <i>Science of the Total Environment</i> , 2020, 748, 142381.	3.9	39
20	Soil carbon sequestration for climate change mitigation: Mineralization kinetics of organic inputs as an overlooked limitation. <i>European Journal of Soil Science</i> , 2022, 73, .	1.8	34
21	Investigating the Chemical Characteristics of Soil Organic Matter Fractions Suitable for Modeling. <i>Soil Science Society of America Journal</i> , 2005, 69, 1248-1255.	1.2	33
22	Use of ammonium sulphate as a sulphur fertilizer: Implications for ammonia volatilization. <i>Soil Use and Management</i> , 2022, 38, 622-634.	2.6	22
23	Soil health—useful terminology for communication or meaningless concept? Or both?. <i>Frontiers of Agricultural Science and Engineering</i> , 2020, 7, 246.	0.9	22
24	Is it possible to attain the same soil organic matter content in arable agricultural soils as under natural vegetation?. <i>Outlook on Agriculture</i> , 2022, 51, 91-104.	1.8	20
25	Carbon sequestration potential through conservation agriculture in Africa has been largely overestimated. <i>Soil and Tillage Research</i> , 2020, 196, 104300.	2.6	15
26	Triaxial Testing to Determine the Effect of Soil Type and Organic Carbon Content on Soil Consolidation and Shear Deformation Characteristics. <i>Soil Science Society of America Journal</i> , 2014, 78, 1192-1200.	1.2	11
27	Reply to 'No-till agriculture and climate change mitigation'. <i>Nature Climate Change</i> , 2015, 5, 489-489.	8.1	9
28	Is 'soil health'™ meaningful as a scientific concept or as terminology?. <i>Soil Use and Management</i> , 2021, 37, 403-405.	2.6	9
29	The legacy effect of synthetic N fertiliser. <i>European Journal of Soil Science</i> , 2022, 73, .	1.8	7
30	Long-term agricultural research at Rothamsted. , 2020, , 15-36.		4
31	Significant soil degradation is associated with intensive vegetable cropping in a subtropical area: a case study in southwestern China. <i>Soil</i> , 2021, 7, 333-346.	2.2	4
32	Response to 'A well-established fact: Rapid mineralization of organic inputs is an important factor for soil carbon sequestration'™ by Angers et al.. <i>European Journal of Soil Science</i> , 2022, 73, .	1.8	2
33	Net Primary Production constraints are crucial to realistically project soil organic carbon sequestration. Response to Minasny et al.. <i>Geoderma</i> , 2022, , 115974.	2.3	1