David S Powlson

List of Publications by Year
in descending order

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	Use of ammonium sulphate as a sulphur fertilizer: Implications for ammonia volatilization. Soil Use and Management, 2022, 38, 622-634.	2.6	22
2	Soil carbon sequestration for climate change mitigation: Mineralization kinetics of organic inputs as an overlooked limitation. European Journal of Soil Science, 2022, 73, .	1.8	34
3	Is it possible to attain the same soil organic matter content in arable agricultural soils as under natural vegetation?. Outlook on Agriculture, 2022, 51, 91-104.	1.8	20
4	The legacy effect of synthetic N fertiliser. European Journal of Soil Science, 2022, 73, .	1.8	7
5	Photosynthetic limits on carbon sequestration in croplands. Geoderma, 2022, 416, 115810.	2.3	48
6	Net Primary Production constraints are crucial to realistically project soil organic carbon sequestration. Response to Minasny et al.. Geoderma, 2022, , 115974.	2.3	1
7	Response to â€˜A wellâ€established fact: Rapid mineralization of organic inputs is an important factor for soil carbon sequestrationâ€™ by Angers et al.. European Journal of Soil Science, 2022, 73, .	1.8	2
8	Can N₂O emissions offset the benefits from soil organic carbon storage?. Global Change Biology, 2021, 27, 237-256.	4.2	174
9	Microbial metabolic response to winter warming stabilizes soil carbon. Global Change Biology, 2021, 27, 2011-2028.	4.2	50
10	Is â€˜soil healthâ€™ meaningful as a scientific concept or as terminology?. Soil Use and Management, 2021, 37, 403-405.	2.6	9
11	Significant soil degradation is associated with intensive vegetable cropping in a subtropical area: a case study in southwestern China. Soil, 2021, 7, 333-346.	2.2	4
12	Carbon sequestration potential through conservation agriculture in Africa has been largely overestimated. Soil and Tillage Research, 2020, 196, 104300.	2.6	15
13	The persistence of bacterial diversity and ecosystem multifunctionality along a disturbance intensity gradient in karst soil. Science of the Total Environment, 2020, 748, 142381.	3.9	39
14	Long-term agricultural research at Rothamsted. , 2020, , 15-36.		4
15	Soil health—useful terminology for communication or meaningless concept? Or both?. Frontiers of Agricultural Science and Engineering, 2020, 7, 246.	0.9	22
16	Nitrogen Surplus Benchmarks for Controlling N Pollution in the Main Cropping Systems of China. Environmental Science & Technology, 2019, 53, 6678-6687.	4.6	125
17	Major limitations to achieving â€œ4 per 1000â€•increases in soil organic carbon stock in temperate regions: Evidence from longâ€term experiments at Rothamsted Research, United Kingdom. Global Change Biology, 2018, 24, 2563-2584.	4.2	238
18	Enhancedâ€efficiency fertilizers are not a panacea for resolving the nitrogen problem. Global Change Biology, 2018, 24, e511-e521.	4.2	200

#	Article	IF	Citations
19	Chinese cropping systems are a net source of greenhouse gases despite soil carbon sequestration. Global Change Biology, 2018, 24, 5590-5606.	4.2	81
20	Sequestering Soil Organic Carbon: A Nitrogen Dilemma. Environmental Science & Technology, 2017, 51, 4738-4739.	4.6	196
21	Does conservation agriculture deliver climate change mitigation through soil carbon sequestration in tropical agro-ecosystems?. Agriculture, Ecosystems and Environment, 2016, 220, 164-174.	2.5	282
22	Reply to 'No-till agriculture and climate change mitigation'. Nature Climate Change, 2015, 5, 489-489.	8.1	9
23	Sustainable intensification of China's agriculture: the key role of nutrient management and climate change mitigation and adaptation. Agriculture, Ecosystems and Environment, 2015, 209, 1-4.	2.5	44
24	Overcoming nitrogen fertilizer over-use through technical and advisory approaches: A case study from Shaanxi Province, northwest China. Agriculture, Ecosystems and Environment, 2015, 209, 89-99.	2.5	103
25	Soil carbon, multiple benefits. Environmental Development, 2015, 13, 33-38.	1.8	75
26	Triaxial Testing to Determine the Effect of Soil Type and Organic Carbon Content on Soil Consolidation and Shear Deformation Characteristics. Soil Science Society of America Journal, 2014, 78, 1192-1200.	1.2	11
27	Limited potential of no-till agriculture for climate change mitigation. Nature Climate Change, 2014, 4, 678-683.	8.1	594
28	New technologies reduce greenhouse gas emissions from nitrogenous fertilizer in China. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 8375-8380.	3.3	593
29	Implications for Soil Properties of Removing Cereal Straw: Results from Longâ€Term Studies¹. Agronomy Journal, 2011, 103, 279-287.	0.9	155
30	Longâ€Term Fertilizer Experiment Network in China: Crop Yields and Soil Nutrient Trends. Agronomy Journal, 2010, 102, 216-230.	0.9	94
31	Global climate change and soil carbon stocks; predictions from two contrasting models for the turnover of organic carbon in soil. Global Change Biology, 2005, 11, 154-166.	4.2	318
32	Investigating the Chemical Characteristics of Soil Organic Matter Fractions Suitable for Modeling. Soil Science Society of America Journal, 2005, 69, 1248-1255.	1.2	33
33	Unused fertiliser nitrogen in arable soilsâ€”its contribution to nitrate leaching. Journal of the Science of Food and Agriculture, 1989, 46, 407-419.	1.7	160