Clayton R Butterly

List of Publications by Year
in descending order

50	1,928	218677	254184
papers	citations	26 h-index	43 g-index

52	52	52	2075
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Carbon pulses but not phosphorus pulses are related to decreases in microbial biomass during repeated drying and rewetting of soils. Soil Biology and Biochemistry, 2009, 41, 1406-1416.	8.8	215
2	Adsorbent materials for ammonium and ammonia removal: A review. Journal of Cleaner Production, 2021, 283, 124611.	9.3	129
3	Rhizosphere priming effect on soil organic carbon decomposition under plant species differing in soil acidification and root exudation. New Phytologist, 2016, 211, 864-873.	7.3	114
4	The contribution of crop residues to changes in soil pH under field conditions. Plant and Soil, 2013, 366, 185-198.	3.7	112
5	Effect of crop residue biochar on soil acidity amelioration in strongly acidic tea garden soils. Soil Use and Management, 2014, 30, 119-128.	4.9	87
6	Rewetting CO2 pulses in Australian agricultural soils and the influence of soil properties. Biology and Fertility of Soils, 2010, 46, 739-753.	4.3	78
7	Carbon and nitrogen partitioning of wheat and field pea grown with two nitrogen levels under elevated CO2. Plant and Soil, 2015, 391, 367-382.	3.7	71
8	Long-term effects of elevated CO2 on carbon and nitrogen functional capacity of microbial communities in three contrasting soils. Soil Biology and Biochemistry, 2016, 97, 157-167.	8.8	65
9	Model organic compounds differ in their effects on pH changes of two soils differing in initial pH. Biology and Fertility of Soils, 2011, 47, 51-62.	4.3	62
10	Spectroscopic evidence for hyperthermophilic pretreatment intensifying humification during pig manure and rice straw composting. Bioresource Technology, 2019, 294, 122131.	9.6	61
11	Factors affecting the measurement of soil <scp>pH</scp> buffer capacity: approaches to optimize the methods. European Journal of Soil Science, 2015, 66, 53-64.	3.9	59
12	Rapid changes in carbon and phosphorus after rewetting of dry soil. Biology and Fertility of Soils, 2011, 47, 41-50.	4.3	55
13	Model organic compounds differ in priming effects on alkalinity release in soils through carbon and nitrogen mineralisation. Soil Biology and Biochemistry, 2012, 51, 35-43.	8.8	54
14	Interactive effects of initial pH and nitrogen status on soil organic carbon priming by glucose and lignocellulose. Soil Biology and Biochemistry, 2018, 123, 33-44.	8.8	54
15	Long-term stabilization of crop residues and soil organic carbon affected by residue quality and initial soil pH. Science of the Total Environment, 2017, 587-588, 502-509.	8.0	50
16	The short-term effects of liming on organic carbon mineralisation in two acidic soils as affected by different rates and application depths of lime. Biology and Fertility of Soils, 2017, 53, 431-443.	4.3	49
17	Organic anion-to-acid ratio influences pH change of soils differing in initial pH. Journal of Soils and Sediments, 2014, 14, 407-414.	3.0	44
18	Effects of fertilizer types on nitrogen and phosphorous loss from rice-wheat rotation system in the Taihu Lake region of China. Agriculture, Ecosystems and Environment, 2019, 285, 106605.	5.3	43

#	Article	IF	Citations
19	Contribution of soluble and insoluble fractions of agricultural residues to short-term pH changes. European Journal of Soil Science, 2011, 62, 718-727.	3.9	41
20	Elevated CO2 temporally enhances phosphorus immobilization in the rhizosphere of wheat and chickpea. Plant and Soil, 2013, 368, 315-328.	3.7	38
21	Fertilization alters microbial community composition and functional patterns by changing the chemical nature of soil organic carbon: A field study in a Halosol. Geoderma, 2017, 292, 17-24.	5.1	37
22	Enhanced nitrogen retention by lignite during poultry litter composting. Journal of Cleaner Production, 2020, 277, 122422.	9.3	36
23	Long-term effect of lime application on the chemical composition of soil organic carbon in acid soils varying in texture and liming history. Biology and Fertility of Soils, 2016, 52, 295-306.	4.3	35
24	Residue addition and liming history interactively enhance mineralization of native organic carbon in acid soils. Biology and Fertility of Soils, 2017, 53, 61-75.	4.3	35
25	Free-air CO₂enrichment (FACE) reduces the inhibitory effect of soil nitrate on N₂fixation ofPisum sativum. Annals of Botany, 2016, 117, 177-185.	2.9	30
26	pH change, carbon and nitrogen mineralization in paddy soils as affected by Chinese milk vetch addition and soil water regime. Journal of Soils and Sediments, 2013, 13, 654-663.	3.0	27
27	Effects of fertilization practices on aluminum fractions and species in a wheat soil. Journal of Soils and Sediments, 2016, 16, 1933-1943.	3.0	24
28	Gas emissions during cattle manure composting and stockpiling. Journal of Environmental Quality, 2020, 49, 228-235.	2.0	24
29	Lignite as additives accelerates the removal of antibiotic resistance genes during poultry litter composting. Bioresource Technology, 2020, 315, 123841.	9.6	19
30	Use of crop residues with alkaline slag to ameliorate soil acidity in an Ultisol. Soil Use and Management, 2012, 28, 148-156.	4.9	16
31	Soil organic carbon contributes to alkalinity priming induced by added organic substrates. Soil Biology and Biochemistry, 2013, 65, 217-226.	8.8	16
32	Effectiveness of innovative organic amendments in acid soils depends on their ability to supply P and alleviate Al and Mn toxicity in plants. Journal of Soils and Sediments, 2020, 20, 3951-3962.	3.0	16
33	Surface Amendments Can Ameliorate Subsoil Acidity in Tea Garden Soils of High-Rainfall Environments. Pedosphere, 2016, 26, 180-191.	4.0	13
34	Impact of novel materials on alkalinity movement down acid soil profiles when combined with lime. Journal of Soils and Sediments, 2021, 21, 52-62.	3.0	12
35	Effects of Exotic Spartina alterniflora Invasion on Soil Phosphorus and Carbon Pools and Associated Soil Microbial Community Composition in Coastal Wetlands. ACS Omega, 2021, 6, 5730-5738.	3.5	11
36	Changes in water content of two agricultural soils does not alter labile P and C pools. Plant and Soil, 2011, 348, 185-201.	3.7	10

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37	Residue decomposition and soil carbon priming in three contrasting soils previously exposed to elevated CO2. Biology and Fertility of Soils, 2019, 55, 17-29.	4.3	10
38	Alkalinity movement down acid soil columns was faster when lime and plant residues were combined than when either was applied separately. European Journal of Soil Science, 2021, 72, 313-325.	3.9	10
39	Modified lignite and black coal reduce ammonia volatilization from cattle manure. Journal of Environmental Management, 2022, 301, 113807.	7.8	10
40	An agricultural practise with climate and food security benefits: â€œClayingâ€•with kaolinitic clay subsoil decreased soil carbon priming and mineralisation in sandy cropping soils. Science of the Total Environment, 2020, 709, 134488.	8.0	9
41	Elevated CO2 induced rhizosphere effects on the decomposition and N recovery from crop residues. Plant and Soil, 2016, 408, 55-71.	3.7	7
42	Biochars and their feedstocks differ in their short-term effects in ameliorating acid soils grown with aluminium-sensitive wheat. Journal of Soils and Sediments, 2021, 21, 2805-2816.	3.0	7
43	Liming and priming: the long-term impact of pH amelioration on mineralisation may negate carbon sequestration gains.. Soil Security, 2021, 3, 100007.	2.3	7
44	Lignite, dewatered lignite and modified subbituminous coal reduce nitrogen loss from broiler litter. Waste Management, 2021, 136, 113-121.	7.4	7
45	Liming effect of non-legume residues promotes the biological amelioration of soil acidity via nitrate uptake. Plant and Soil, 2021, 464, 63-73.	3.7	4
46	Soil Microbial Biomass and pH as Affected by the Addition of Plant Residues. , 2010, , 320-322.		4
47	Surface modification of coal tailings by thermal air oxidation for ammonia capture. Journal of Cleaner Production, 2022, 362, 132525.	9.3	4
48	Elevated CO2 in semi-arid cropping systems: A synthesis of research from the Australian Grains Free Air CO2 Enrichment (AGFACE) research program. Advances in Agronomy, 2022, , 1-73.	5.2	3
49	Carbon Compounds Differ in Their Effects on Soil pH and Microbial Respiration. , 2010, , 331-333.		2
50	Combined nitrate and phosphorus application promotes rhizosphere alkalization and nitrogen uptake by wheat but not canola in acid subsoils. Journal of Soils and Sediments, 2021, 21, 2995-3006.	3.0	1