Saran P Sohi

List of Publications by Year
in descending order

68 papers	9,050 citations	61977 43 h-index	98792 67 g-index
71 all docs	71 docs citations	71 times ranked	9061 citing authors

#	Article	IF	Citations
1	A Review of Biochar and Its Use and Function in Soil. Advances in Agronomy, 2010, 105, 47-82.	5.2	1,490
2	Black carbon affects the cycling of non-black carbon in soil. Organic Geochemistry, 2010, 41, 206-213.	1.8	530
3	How much landâ€based greenhouse gas mitigation can be achieved without compromising food security and environmental goals?. Global Change Biology, 2013, 19, 2285-2302.	9.5	454
4	The priming potential of biochar products in relation to labile carbon contents and soil organic matter status. Soil Biology and Biochemistry, 2011, 43, 2127-2134.	8.8	414
5	The effect of pyrolysis conditions on biochar stability as determined by three methods. GCB Bioenergy, 2013, 5, 122-131.	5.6	372
6	Adsorption kinetics of magnetic biochar derived from peanut hull on removal of Cr (VI) from aqueous solution: Effects of production conditions and particle size. Chemosphere, 2016, 145, 336-341.	8.2	354
7	Carbon Storage with Benefits. Science, 2012, 338, 1034-1035.	12.6	343
8	Australian climateâ€“carbon cycle feedback reduced by soil black carbon. Nature Geoscience, 2008, 1, 832-835.	12.9	326
9	A Procedure for Isolating Soil Organic Matter Fractions Suitable for Modeling. Soil Science Society of America Journal, 2001, 65, 1121-1128.	2.2	321
10	Biocharâ€“root interactions are mediated by biochar nutrient content and impacts on soil nutrient availability. European Journal of Soil Science, 2014, 65, 173-185.	3.9	294
11	Stability of biomass-derived black carbon in soils. Geochimica Et Cosmochimica Acta, 2008, 72, 6069-6078.	3.9	287
12	Influence of production conditions on the yield and environmental stability of biochar. Fuel, 2013, 103, 151-155.	6.4	250
13	The way forward in biochar research: targeting tradeâ€offs between the potential wins. GCB Bioenergy, 2015, 7, 1-13.	5.6	228
14	The Impact of Biochar Application on Soil Properties and Plant Growth of Pot Grown Lettuce (Lactuca) Tj ETQq0 0 0 rgBT /Overlock 10 T	3.6	185
15	Prospective life cycle carbon abatement for pyrolysis biochar systems in the UK. Energy Policy, 2011, 39, 2646-2655.	8.8	179
16	A method for screening the relative longâ€term stability of biochar. GCB Bioenergy, 2013, 5, 215-220.	5.6	175
17	Sustainable gasificationâ€“biochar systems? A case-study of rice-husk gasification in Cambodia, Part I: Context, chemical properties, environmental and health and safety issues. Energy Policy, 2012, 42, 49-58.	8.8	174
18	Trends in the recovery of phosphorus in bioavailable forms from wastewater. Chemosphere, 2017, 186, 381-395.	8.2	150

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19	The chemical composition of measurable soil organic matter pools. Organic Geochemistry, 2005, 36, 1174-1189.	1.8	148
20	Establishing release dynamics for plant nutrients from biochar. GCB Bioenergy, 2013, 5, 221-226.	5.6	133
21	Localisation of nitrate in the rhizosphere of biochar-amended soils. Soil Biology and Biochemistry, 2011, 43, 2243-2246.	8.8	126
22	Optimising the recovery and re-use of phosphorus from wastewater effluent for sustainable fertiliser development. Water Research, 2016, 94, 155-165.	11.3	118
23	Adsorption and reductive degradation of Cr(VI) and TCE by a simply synthesized zero valent iron magnetic biochar. Journal of Environmental Management, 2019, 235, 276-281.	7.8	108
24	Assessing the chemical and biological accessibility of the herbicide isoproturon in soil amended with biochar. Chemosphere, 2012, 88, 77-83.	8.2	99
25	SYNERGISTIC USE OF PEAT AND CHARRED MATERIAL IN GROWING MEDIA â€“ AN OPTION TO REDUCE THE PRESSURE ON PEATLANDS?. Journal of Environmental Engineering and Landscape Management, 2017, 25, 160-174.	1.0	94
26	A comparative study on biochar properties and Cd adsorption behavior under effects of ageing processes of leaching, acidification and oxidation. Environmental Pollution, 2019, 254, 113123.	7.5	94
27	Consistency of biochar properties over time and production scales: A characterisation of standard materials. Journal of Analytical and Applied Pyrolysis, 2018, 132, 200-210.	5.5	91
28	Toward the Standardization of Biochar Analysis: The COST Action TD1107 Interlaboratory Comparison. Journal of Agricultural and Food Chemistry, 2016, 64, 513-527.	5.2	86
29	Impact of pine chip biochar on trace greenhouse gas emissions and soil nutrient dynamics in an annual ryegrass system in California. Agriculture, Ecosystems and Environment, 2014, 191, 17-26.	5.3	81
30	USE OF THERMOGRAVIMETRYâ€“DIFFERENTIAL SCANNING CALORIMETRY TO CHARACTERIZE MODELABLE SOIL ORGANIC MATTER FRACTIONS. Soil Science Society of America Journal, 2005, 69, 136-140.	2.2	76
31	Biochar â€“ synergies and tradeâ€offs between soil enhancing properties and C sequestration potential. GCB Bioenergy, 2015, 7, 1161-1175.	5.6	75
32	Biochar and enhanced phosphate capture: Mapping mechanisms to functional properties. Chemosphere, 2017, 179, 57-74.	8.2	65
33	Characterising the biophysical, economic and social impacts of soil carbon sequestration as a greenhouse gas removal technology. Global Change Biology, 2020, 26, 1085-1108.	9.5	65
34	Starving the soil of plant inputs for 50 years reduces abundance but not diversity of soil bacterial communities. Soil Biology and Biochemistry, 2009, 41, 2021-2024.	8.8	63
35	Insight into mechanism of aged biochar for adsorption of PAEs: Reciprocal effects of ageing and coexisting Cd2+. Environmental Pollution, 2018, 242, 1098-1107.	7.5	63
36	Biochar Diminishes Nitrous Oxide and Nitrate Leaching from Diverse Nutrient Sources. Journal of Environmental Quality, 2013, 42, 672-682.	2.0	61

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37	Comment on "Fire-Derived Charcoal Causes Loss of Forest Humus". Science, 2008, 321, 1295-1295.	12.6	60
38	New insights into contrasting mechanisms for PAE adsorption on millimeter, micron- and nano-scale biochar. Environmental Science and Pollution Research, 2019, 26, 18636-18650.	5.3	52
39	Effect of soil pH on the chemical composition of organic matter in physically separated soil fractions in two broadleaf woodland sites at Rothamsted, UK. European Journal of Soil Science, 2010, 61, 970-979.	3.9	48
40	Oxidative ageing induces change in the functionality of biochar and hydrochar: Mechanistic insights from sorption of atrazine. Environmental Pollution, 2019, 249, 1002-1010.	7.5	48
41	Biochars in soils: new insights and emerging research needs. European Journal of Soil Science, 2014, 65, 22-27.	3.9	47
42	Driving forces and barriers in the removal of phosphorus from water using crop residue, wood and sewage sludge derived biochars. Science of the Total Environment, 2019, 675, 623-631.	8.0	44
43	Modelling the potential for soil carbon sequestration using biochar from sugarcane residues in Brazil. Scientific Reports, 2020, 10, 19479.	3.3	44
44	Re-use of sugarcane residue as a novel biochar fertiliser - Increased phosphorus use efficiency and plant yield. Journal of Cleaner Production, 2020, 262, 121406.	9.3	43
45	Effect of biochar produced from different biomass sources and at different process temperatures on methane production and ammonia concentrations in vitro. Animal Feed Science and Technology, 2018, 237, 1-7.	2.2	39
46	Investigating the Chemical Characteristics of Soil Organic Matter Fractions Suitable for Modeling. Soil Science Society of America Journal, 2005, 69, 1248-1255.	2.2	33
47	Biochar engineering and ageing influence the spatiotemporal dynamics of soil pH in the charosphere. Geoderma, 2021, 386, 114919.	5.1	26
48	Bioavailability of phosphorus, other nutrients and potentially toxic elements from marginal biomass-derived biochar assessed in barley (Hordeum vulgare) growth experiments. Science of the Total Environment, 2017, 584-585, 448-457.	8.0	22
49	An anticipatory life cycle assessment of the use of biochar from sugarcane residues as a greenhouse gas removal technology. Journal of Cleaner Production, 2021, 312, 127764.	9.3	22
50	A RECONNAISSANCE-SCALE GIS-BASED MULTICRITERIA DECISION ANALYSIS TO SUPPORT SUSTAINABLE BIOCHAR USE: POLAND AS A CASE STUDY. Journal of Environmental Engineering and Landscape Management, 2017, 25, 208-222.	1.0	21
51	Biochar Phosphorus Release Is Limited by High pH and Excess Calcium. Journal of Environmental Quality, 2018, 47, 1298-1303.	2.0	17
52	Bioenergy driven land use change impacts on soil greenhouse gas regulation under Short Rotation Forestry. Biomass and Bioenergy, 2015, 82, 40-48.	5.7	16
53	The Indian Nitrogen Challenge in a Global Perspective. , 2017, , 9-28.		16
54	Expert Perceptions of the Role of Biochar as a Carbon Abatement Option with Ancillary Agronomic and Soil-Related Benefits. Energy and Environment, 2011, 22, 167-187.	4.6	14

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55	Testing a practical indicator for changing soil organic matter. Soil Use and Management, 2010, 26, 108-117.	4.9	11
56	Resolving the spatial variability of soil N using fractions of soil organic matter. Agriculture, Ecosystems and Environment, 2012, 147, 66-72.	5.3	11
57	Pyrolysis bioenergy with biochar production â€“ greater carbon abatement and benefits to soil. GCB Bioenergy, 2013, 5, i.	5.6	10
58	Biochar stability scores from analytical pyrolysis (Py-GC-MS). Journal of Analytical and Applied Pyrolysis, 2022, 161, 105412.	5.5	10
59	An empirical model approach for assessing soil organic carbon stock changes following biomass crop establishment in Britain. Biomass and Bioenergy, 2015, 83, 141-151.	5.7	9
60	CASPER: A modelling framework to link mineral carbonation with the turnover of organic matter in soil. Computers and Geosciences, 2019, 124, 58-71.	4.2	9
61	How to trace back an unknown production temperature of biochar from chemical characterization methods in a feedstock independent way. Journal of Analytical and Applied Pyrolysis, 2020, 151, 104926.	5.5	8
62	Biochar from sawmill residues: characterization and evaluation for its potential use in the horticultural growing media. Biochar, 2021, 3, 201-212.	12.6	8
63	Biochar, Tool for Climate Change Mitigation and Soil Management. , 2013, , 73-140.		7
64	Free and intraâ€aggregate organic matter as indicators of soil quality change in volcanic soils under contrasting crop rotations. Soil Use and Management, 2013, 29, 531-539.	4.9	7
65	Research Spotlight: The ELUM project: Ecosystem Land-Use Modeling and Soil Carbon GHG Flux Trial. Biofuels, 2014, 5, 111-116.	2.4	7
66	GEOTECHNICAL REQUIREMENTS FOR CAPTURING CO2 THROUGH HIGHWAYS LAND. International Journal of GEOMATE, 0, , .	0.3	5
67	The priming potential of environmentally weathered pyrogenic carbon during landâ€use transition to biomass crop production. GCB Bioenergy, 2016, 8, 805-817.	5.6	4
68	Effect of no-tillage on turnover of organic matter in a Rhodic Ferralsol. Soil Use and Management, 2003, 19, 250-256.	4.9	3