

Bhupinder Pal Singh

List of Publications by Year in descending order

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Version: 2024-02-01

119
papers

10,013
citations

53794

45
h-index

36028

97
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122
all docs

122
docs citations

122
times ranked

7944
citing authors

#	ARTICLE	IF	CITATIONS
1	4-Formylphenyl boronic acid grafted amino MCM-41 for efficient adsorption of Cu(II) ions in aqueous medium: isotherm, kinetic and optimization studies. <i>Toxin Reviews</i> , 2022, 41, 551-563.	3.4	2
2	Compatible package-based agriculture systems: an urgent need for agro-ecological balance and climate change adaptation. <i>Soil Ecology Letters</i> , 2022, 4, 187-212.	4.5	21
3	Multifunctional applications of biochar beyond carbon storage. <i>International Materials Reviews</i> , 2022, 67, 150-200.	19.3	245
4	Biostimulants decreased nitrogen leaching and NH ₃ volatilization but increased N ₂ O emission from plastic-shed greenhouse vegetable soil. <i>Environmental Science and Pollution Research</i> , 2022, 29, 6093-6102.	5.3	4
5	Characterization of halophyte biochar and its effects on water and salt contents in saline soil. <i>Environmental Science and Pollution Research</i> , 2022, 29, 11831-11842.	5.3	8
6	Effects of slag and biochar amendments on microorganisms and fractions of soil organic carbon during flooding in a paddy field after two years in southeastern China. <i>Science of the Total Environment</i> , 2022, 824, 153783.	8.0	12
7	Biochar accelerates soil organic carbon mineralization via rhizodeposit-activated Actinobacteria. <i>Biology and Fertility of Soils</i> , 2022, 58, 565-577.	4.3	22
8	The impact of biochar on nutrient supplies in agricultural ecosystems. , 2022, , 193-201.		1
9	Intensive management of a bamboo forest significantly enhanced soil nutrient concentrations but decreased soil microbial biomass and enzyme activity: a long-term chronosequence study. <i>Journal of Soils and Sediments</i> , 2022, 22, 2640-2653.	3.0	2
10	Long-term saline water irrigation decreased soil organic carbon and inorganic carbon contents. <i>Agricultural Water Management</i> , 2022, 270, 107760.	5.6	11
11	Combined slag and biochar amendments to subtropical paddy soils lead to a short-term change of bacteria community structure and rise of soil organic carbon. <i>Applied Soil Ecology</i> , 2022, 179, 104593.	4.3	11
12	Soil organic matter turnover depending on land use change: Coupling C/N ratios, $\delta^{13}C$ and lignin biomarkers. <i>Land Degradation and Development</i> , 2021, 32, 1591-1605.	3.9	19
13	Contrasting short-term responses of soil heterotrophic and autotrophic respiration to biochar-based and chemical fertilizers in a subtropical Moso bamboo plantation. <i>Applied Soil Ecology</i> , 2021, 157, 103758.	4.3	18
14	Distribution, sources, and decomposition of soil organic matter along a salinity gradient in estuarine wetlands characterized by C:N ratio, $\delta^{13}C$ and $\delta^{15}N$, and lignin biomarker. <i>Global Change Biology</i> , 2021, 27, 417-434.	9.5	63
15	The response of soil multi-functionality to agricultural management practices can be predicted by key soil abiotic and biotic properties. <i>Agriculture, Ecosystems and Environment</i> , 2021, 307, 107206.	5.3	15
16	Nitrous oxide emissions from cow urine patches in an intensively managed grassland: Influence of nitrogen loading under contrasting soil moisture. <i>Science of the Total Environment</i> , 2021, 757, 143790.	8.0	9
17	Plant productivity is a key driver of soil respiration response to climate change in a nutrient-limited soil. <i>Basic and Applied Ecology</i> , 2021, 50, 155-168.	2.7	8
18	Biochar decreased rhizodeposits stabilization via opposite effects on bacteria and fungi: diminished fungi-promoted aggregation and enhanced bacterial mineralization. <i>Biology and Fertility of Soils</i> , 2021, 57, 533-546.	4.3	15

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19	The benefit of leafy vegetable as catch crop to mitigate N and P leaching losses in intensive plastic-shed production system. <i>Journal of Soils and Sediments</i> , 2021, 21, 2253-2261.	3.0	5
20	Rhizosphere microbiome modulated effects of biochar on ryegrass 15N uptake and rhizodeposited 13C allocation in soil. <i>Plant and Soil</i> , 2021, 463, 359-377.	3.7	17
21	Nutrients addition regulates temperature sensitivity of maize straw mineralization. <i>Journal of Soils and Sediments</i> , 2021, 21, 2778-2790.	3.0	7
22	Decomposition of substrates with recalcitrance gradient, primed CO ₂ , and its relations with soil microbial diversity in post-fire forest soils. <i>Journal of Soils and Sediments</i> , 2021, 21, 3007-3017.	3.0	0
23	Nitrous oxide emission factors in conventionally and naturally simulated cattle urine patches. <i>Nutrient Cycling in Agroecosystems</i> , 2021, 121, 129-147.	2.2	2
24	Evaluation of proximal sensing technologies for mapping bovine urine patches under grazing pastures. <i>Computers and Electronics in Agriculture</i> , 2021, 188, 106309.	7.7	2
25	Organic matter chemistry and bacterial community structure regulate decomposition processes in post-fire forest soils. <i>Soil Biology and Biochemistry</i> , 2021, 160, 108311.	8.8	49
26	Effects of nitrogen-enriched biochar on rice growth and yield, iron dynamics, and soil carbon storage and emissions: A tool to improve sustainable rice cultivation. <i>Environmental Pollution</i> , 2021, 287, 117565.	7.5	36
27	Biochar protects hydrophilic dissolved organic matter against mineralization and enhances its microbial carbon use efficiency. <i>Science of the Total Environment</i> , 2021, 795, 148793.	8.0	14
28	Additive effects of organic and inorganic amendments can significantly improve structural stability of a sodic dispersive subsoil. <i>Geoderma</i> , 2021, 404, 115281.	5.1	13
29	Yak dung pat fragmentation decreases yield-scaled growing-season nitrous oxide emissions in an alpine steppe on the Qinghai-Tibetan Plateau. <i>Biology and Fertility of Soils</i> , 2021, 57, 1103-1115.	4.3	6
30	Effects of contrasting biochars on the leaching of inorganic nitrogen from soil. <i>Journal of Soils and Sediments</i> , 2020, 20, 3017-3026.	3.0	24
31	Rice-residue biochar influences phosphorus availability in soil with contrasting P status. <i>Archives of Agronomy and Soil Science</i> , 2020, 66, 778-791.	2.6	15
32	Wheat-derived soil organic carbon accumulates more than its maize counterpart in a wheat-maize cropping system after 21% years. <i>European Journal of Soil Science</i> , 2020, 71, 695-705.	3.9	5
33	Sewage sludge-derived hydrochar that inhibits ammonia volatilization, improves soil nitrogen retention and rice nitrogen utilization. <i>Chemosphere</i> , 2020, 245, 125558.	8.2	51
34	Nutrient stoichiometry and labile carbon content of organic amendments control microbial biomass and carbon-use efficiency in a poorly structured sodic-subsoil. <i>Biology and Fertility of Soils</i> , 2020, 56, 219-233.	4.3	52
35	Resource stoichiometric and fertility in soil. <i>Biology and Fertility of Soils</i> , 2020, 56, 1091-1092.	4.3	14
36	NosZ clade II rather than clade I determine in situ N ₂ O emissions with different fertilizer types under simulated climate change and its legacy. <i>Soil Biology and Biochemistry</i> , 2020, 150, 107974.	8.8	62

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37	Gain in carbon: Deciphering the abiotic and biotic mechanisms of biochar-induced negative priming effects in contrasting soils. <i>Science of the Total Environment</i> , 2020, 746, 141057.	8.0	29
38	Rusty sink of rhizodeposits and associated keystone microbiomes. <i>Soil Biology and Biochemistry</i> , 2020, 147, 107840.	8.8	73
39	Silicon Effects on Biomass Carbon and Phytolith-Occluded Carbon in Grasslands Under High-Salinity Conditions. <i>Frontiers in Plant Science</i> , 2020, 11, 657.	3.6	15
40	Unexpected increases in soil carbon eventually fell in low rainfall farming systems. <i>Journal of Environmental Management</i> , 2020, 261, 110192.	7.8	9
41	Steel slag and biochar amendments decreased CO ₂ emissions by altering soil chemical properties and bacterial community structure over two-year in a subtropical paddy field. <i>Science of the Total Environment</i> , 2020, 740, 140403.	8.0	30
42	Multiple trade-offs between maximizing yield and minimizing greenhouse gas production in Chinese rice croplands. <i>Land Degradation and Development</i> , 2020, 31, 1287-1299.	3.9	12
43	Priming of soil organic carbon induced by sugarcane residues and its biochar control the source of nitrogen for plant uptake: A dual ¹³ C and ¹⁵ N isotope three-source-partitioning study. <i>Soil Biology and Biochemistry</i> , 2020, 146, 107792.	8.8	31
44	Balanced nutrient stoichiometry of organic amendments enhances carbon priming in a poorly structured sodic subsoil. <i>Soil Biology and Biochemistry</i> , 2020, 145, 107800.	8.8	26
45	Balancing nutrient stoichiometry facilitates the fate of wheat residue's carbon in physically defined soil organic matter fractions. <i>Geoderma</i> , 2019, 354, 113883.	5.1	35
46	Tillage history and crop residue input enhanced native carbon mineralisation and nutrient supply in contrasting soils under long-term farming systems. <i>Soil and Tillage Research</i> , 2019, 193, 71-84.	5.6	38
47	Defluoridation of water using micelle templated MCM-41: adsorption and RSM studies. <i>Journal of Water Supply: Research and Technology - AQUA</i> , 2019, 68, 282-294.	1.4	5
48	A scientometric review of biochar research in the past 20 years (1998–2018). <i>Biochar</i> , 2019, 1, 23-43.	12.6	160
49	Responses of soil greenhouse gas emissions to different application rates of biochar in a subtropical Chinese chestnut plantation. <i>Agricultural and Forest Meteorology</i> , 2019, 271, 168-179.	4.8	74
50	Effect of crop residue addition on soil organic carbon priming as influenced by temperature and soil properties. <i>Geoderma</i> , 2019, 347, 70-79.	5.1	39
51	The impact of crop residue biochars on silicon and nutrient cycles in croplands. <i>Science of the Total Environment</i> , 2019, 659, 673-680.	8.0	94
52	Assessment of radon and potentially toxic metals in agricultural soils of Punjab, India. <i>Microchemical Journal</i> , 2019, 146, 444-454.	4.5	23
53	Biochar increased field soil inorganic carbon content five years after application. <i>Soil and Tillage Research</i> , 2019, 186, 36-41.	5.6	51
54	Biochar has little effect on soil dissolved organic carbon pool 5 years after biochar application under field condition. <i>Soil Use and Management</i> , 2019, 35, 466-477.	4.9	27

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55	Microbial mechanisms of carbon priming effects revealed during the interaction of crop residue and nutrient inputs in contrasting soils. <i>Global Change Biology</i> , 2018, 24, 2775-2790.	9.5	201
56	Agricultural management practices impacted carbon and nutrient concentrations in soil aggregates, with minimal influence on aggregate stability and total carbon and nutrient stocks in contrasting soils. <i>Soil and Tillage Research</i> , 2018, 178, 209-223.	5.6	118
57	The accumulation of rhizodeposits in organo-mineral fractions promoted biochar-induced negative priming of native soil organic carbon in Ferralsol. <i>Soil Biology and Biochemistry</i> , 2018, 118, 91-96.	8.8	23
58	Nitrilotriacetic acid modified bamboo charcoal (NTA-MBC): An effective adsorbent for the removal of Cr (III) and Cr (VI) from aqueous solution. <i>Journal of Environmental Chemical Engineering</i> , 2018, 6, 2965-2974.	6.7	20
59	Carbon and nutrient mineralisation dynamics in aggregate-size classes from different tillage systems after input of canola and wheat residues. <i>Soil Biology and Biochemistry</i> , 2018, 116, 22-38.	8.8	88
60	Impact of agricultural management practices on the nutrient supply potential of soil organic matter under long-term farming systems. <i>Soil and Tillage Research</i> , 2018, 175, 71-81.	5.6	80
61	Biochar application constrained native soil organic carbon accumulation from wheat residue inputs in a long-term wheat-maize cropping system. <i>Agriculture, Ecosystems and Environment</i> , 2018, 252, 200-207.	5.3	49
62	Biochar carbon dynamics in physically separated fractions and microbial use efficiency in contrasting soils under temperate pastures. <i>Soil Biology and Biochemistry</i> , 2018, 116, 399-409.	8.8	35
63	Interactive effects of rice-residue biochar and N-fertilizer on soil functions and crop biomass in contrasting soils. <i>Journal of Soil Science and Plant Nutrition</i> , 2018, , 0-0.	3.4	18
64	Nutrient supply enhanced wheat residue-carbon mineralization, microbial growth, and microbial carbon-use efficiency when residues were supplied at high rate in contrasting soils. <i>Soil Biology and Biochemistry</i> , 2018, 126, 168-178.	8.8	57
65	Soil health and climate change: a critical nexus. <i>Burleigh Dodds Series in Agricultural Science</i> , 2018, , 39-68.	0.2	2
66	Biochar lowers ammonia emission and improves nitrogen retention in poultry litter composting. <i>Waste Management</i> , 2017, 61, 129-137.	7.4	155
67	Biochar built soil carbon over a decade by stabilizing rhizodeposits. <i>Nature Climate Change</i> , 2017, 7, 371-376.	18.8	232
68	Soil aggregation and associated microbial communities modify the impact of agricultural management on carbon content. <i>Environmental Microbiology</i> , 2017, 19, 3070-3086.	3.8	180
69	Biochar increases nitrogen retention and lowers greenhouse gas emissions when added to composting poultry litter. <i>Waste Management</i> , 2017, 61, 138-149.	7.4	119
70	Fabrication and characterization of Ti-Nb-HA alloy by mechanical alloying and spark plasma sintering for hard tissue replacements. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 225, 012051.	0.6	12
71	Fabrication of Biodegradable Low Elastic Porous Mg-Zn-Mn-HA Alloy by Spark Plasma Sintering for Orthopaedic Applications. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 225, 012050.	0.6	6
72	Temperature sensitivity and priming of organic matter with different stabilities in a Vertisol with aged biochar. <i>Soil Biology and Biochemistry</i> , 2017, 115, 346-356.	8.8	44

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73	Tillage and nitrogen fertilization enhanced belowground carbon allocation and plant nitrogen uptake in a semi-arid canola crop's soil system. <i>Scientific Reports</i> , 2017, 7, 10726.	3.3	25
74	Amino-functionalized mesoporous MCM-41: an efficient adsorbent for the removal of chromium (III) ions from aqueous solution. <i>Journal of Water Supply: Research and Technology - AQUA</i> , 2016, 65, 480-493.	1.4	14
75	In situ assessment of new carbon and nitrogen assimilation and allocation in contrastingly managed dryland wheat crop's soil systems. <i>Agriculture, Ecosystems and Environment</i> , 2016, 235, 80-90.	5.3	27
76	Designing advanced biochar products for maximizing greenhouse gas mitigation potential. <i>Critical Reviews in Environmental Science and Technology</i> , 2016, 46, 1367-1401.	12.8	86
77	Discrimination in Degradability of Soil Pyrogenic Organic Matter Follows a Return-On-Energy-Investment Principle. <i>Environmental Science & Technology</i> , 2016, 50, 8578-8585.	10.0	20
78	Comparative Performance Evaluation of Axial Flow and Tangential Axial Flow Threshing System for Basmati Rice (<i>Oryza sativa</i>). <i>Agricultural Research</i> , 2015, 4, 303-308.	1.7	2
79	Plant-biochar interactions drive the negative priming of soil organic carbon in an annual ryegrass field system. <i>Soil Biology and Biochemistry</i> , 2015, 90, 111-121.	8.8	75
80	Effect of temperature on biochar priming effects and its stability in soils. <i>Soil Biology and Biochemistry</i> , 2015, 80, 136-145.	8.8	161
81	In Situ Persistence and Migration of Biochar Carbon and Its Impact on Native Carbon Emission in Contrasting Soils under Managed Temperate Pastures. <i>PLoS ONE</i> , 2015, 10, e0141560.	2.5	45
82	Biochar carbon stability in four contrasting soils. <i>European Journal of Soil Science</i> , 2014, 65, 60-71.	3.9	190
83	Oil mallee biochar improves soil structural properties: A study with x-ray micro-CT. <i>Agriculture, Ecosystems and Environment</i> , 2014, 191, 142-149.	5.3	94
84	Temperature sensitivity of biochar and native carbon mineralisation in biochar-amended soils. <i>Agriculture, Ecosystems and Environment</i> , 2014, 191, 158-167.	5.3	83
85	An incubation study investigating the mechanisms that impact N ₂ O flux from soil following biochar application. <i>Agriculture, Ecosystems and Environment</i> , 2014, 191, 53-62.	5.3	170
86	Determination of carbonate-C in biochars. <i>Soil Research</i> , 2014, 52, 495.	1.1	49
87	Biochar's role in mitigating soil nitrous oxide emissions: A review and meta-analysis. <i>Agriculture, Ecosystems and Environment</i> , 2014, 191, 5-16.	5.3	746
88	Characterization of an enriched biochar. <i>Journal of Analytical and Applied Pyrolysis</i> , 2014, 108, 26-34.	5.5	74
89	Assessing Biochar Stability Indices Using near Infrared Spectroscopy. <i>Journal of Near Infrared Spectroscopy</i> , 2014, 22, 313-328.	1.5	15
90	Long-term influence of biochar on native organic carbon mineralisation in a low-carbon clayey soil. <i>Scientific Reports</i> , 2014, 4, 3687.	3.3	244

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91	Influence of soil texture and mineralogy on organic matter content and composition in physically separated fractions soils of Thailand. <i>Geoderma</i> , 2013, 195-196, 207-219.	5.1	62
92	Microbial utilisation of biochar-derived carbon. <i>Science of the Total Environment</i> , 2013, 465, 288-297.	8.0	292
93	Pyrolysing poultry litter reduces N ₂ O and CO ₂ fluxes. <i>Science of the Total Environment</i> , 2013, 465, 279-287.	8.0	57
94	Challenges and opportunities for mitigating nitrous oxide emissions from fertilized cropping systems. <i>Frontiers in Ecology and the Environment</i> , 2012, 10, 562-570.	4.0	220
95	Biochar Carbon Stability in a Clayey Soil As a Function of Feedstock and Pyrolysis Temperature. <i>Environmental Science & Technology</i> , 2012, 46, 11770-11778.	10.0	456
96	Is sustainability certification for biochar the answer to environmental risks?. <i>Pesquisa Agropecuaria Brasileira</i> , 2012, 47, 637-648.	0.9	20
97	Interactive Priming of Biochar and Labile Organic Matter Mineralization in a Smectite-Rich Soil. <i>Environmental Science & Technology</i> , 2011, 45, 9611-9618.	10.0	282
98	Soil Health Indicators Under Climate Change: A Review of Current Knowledge. <i>Soil Biology</i> , 2011, , 25-45.	0.8	96
99	Soil Organic Matter, Soil Health and Climate Change. <i>Soil Biology</i> , 2011, , 87-106.	0.8	9
100	Biochar in Soil for Climate Change Mitigation and Adaptation. <i>Soil Biology</i> , 2011, , 345-368.	0.8	19
101	Soil Respiration in Future Global Change Scenarios. <i>Soil Biology</i> , 2011, , 131-153.	0.8	3
102	Tillage and Crop Stubble Management and Soil Health in a Changing Climate. <i>Soil Biology</i> , 2011, , 181-206.	0.8	2
103	Dynamics of soil organic carbon and nitrogen associated with physically separated fractions in a grassland-cultivation sequence in the Qinghai-Tibetan plateau. <i>Biology and Fertility of Soils</i> , 2010, 46, 103-111.	4.3	33
104	Influence of Biochars on Nitrous Oxide Emission and Nitrogen Leaching from Two Contrasting Soils. <i>Journal of Environmental Quality</i> , 2010, 39, 1224-1235.	2.0	630
105	Influence of biochar application to soil on the availability of As, Cd, Cu, Pb, and Zn to maize (<i>Zea mays</i>) Tj ETQq1 1 0.784314 1.1 337 /Over	1.1	337
106	An investigation into the reactions of biochar in soil. <i>Soil Research</i> , 2010, 48, 501.	1.1	840
107	Characterisation and evaluation of biochars for their application as a soil amendment. <i>Soil Research</i> , 2010, 48, 516.	1.1	763
108	Nitrous oxide and methane emissions from soil are reduced following afforestation of pasture lands in three contrasting climatic zones. <i>Soil Research</i> , 2009, 47, 443.	1.1	38

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109	A quantitative size-density separation method to recover and characterise decomposing crop residues added to soil. <i>Biology and Fertility of Soils</i> , 2009, 45, 423-434.	4.3	5
110	Partitioning of soil respiration into its autotrophic and heterotrophic components by means of tree-girdling in old boreal spruce forest. <i>Forest Ecology and Management</i> , 2009, 257, 1764-1767.	3.2	70
111	Soil physical properties and their relations to organic carbon pools as affected by land use in an alpine pastureland. <i>Geoderma</i> , 2007, 139, 98-105.	5.1	126
112	Increase in pH stimulates mineralization of "native" organic carbon and nitrogen in naturally salt-affected sandy soils. <i>Plant and Soil</i> , 2007, 290, 269-282.	3.7	43
113	Decomposition of maize straw in saline soil. <i>Biology and Fertility of Soils</i> , 2006, 42, 366-370.	4.3	34
114	Carbon, nitrogen and sulphur cycling following incorporation of canola residue of different sizes into a nutrient-poor sandy soil. <i>Soil Biology and Biochemistry</i> , 2006, 38, 32-42.	8.8	61
115	Characterization of recently ¹⁴ C pulse-labelled carbon from roots by fractionation of soil organic matter. <i>European Journal of Soil Science</i> , 2005, 56, 329-341.	3.9	12
116	Uncertainties in static closed chamber measurements of the carbon isotopic ratio of soil-respired CO ₂ . <i>Soil Biology and Biochemistry</i> , 2005, 37, 2273-2276.	8.8	41
117	In situ dynamics of recently allocated ¹⁴ C in pasture soil and soil solution collected with Rhizon Soil Moisture Samplers. <i>Soil Research</i> , 2005, 43, 659.	1.1	7
118	Tree root and soil heterotrophic respiration as revealed by girdling of boreal Scots pine forest: extending observations beyond the first year. <i>Plant, Cell and Environment</i> , 2003, 26, 1287-1296.	5.7	281
119	Regional Considerations for Targeted Use of Biochar in Agriculture and Remediation in Australia. <i>SSSA Special Publication Series</i> , 0, , 445-474.	0.2	2