Gerhard Soja

List of Publications by Year
in descending order

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102	5,100	94269	95083
papers	citations	37 h-index	68 g-index

107	107	107	5588
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Characterization of Slow Pyrolysis Biochars: Effects of Feedstocks and Pyrolysis Temperature on Biochar Properties. Journal of Environmental Quality, 2012, 41, 990-1000.	1.0	736
2	Long-term effects of biochar on soil physical properties. Geoderma, 2016, 282, 96-102.	2.3	317
3	Biochar Decelerates Soil Organic Nitrogen Cycling but Stimulates Soil Nitrification in a Temperate Arable Field Trial. PLoS ONE, 2014, 9, e86388.	1.1	231
4	Biochar application to temperate soils: Effects on soil fertility and crop growth under greenhouse conditions. Journal of Plant Nutrition and Soil Science, 2014, 177, 3-15.	1.1	175
5	Complex interactive effects of drought and ozone stress on the antioxidant defence systems of two wheat cultivars. Plant Physiology and Biochemistry, 2002, 40, 691-696.	2.8	164
6	Biochar surface functional groups as affected by biomass feedstock, biochar composition and pyrolysis temperature. Carbon Resources Conversion, 2021, 4, 36-46.	3.2	155
7	Pyrolysis treatment of sewage sludge: A promising way to produce phosphorus fertilizer. Journal of Cleaner Production, 2018, 172, 1772-1778.	4.6	132
8	Iron-impregnated biochars as effective phosphate sorption materials. Environmental Science and Pollution Research, 2017, 24, 463-475.	2.7	130
9	Changes in biochar physical and chemical properties: Accelerated biochar aging in an acidic soil. Carbon, 2017, 115, 209-219.	5.4	128
10	Production, characterization and adsorption studies of bamboo-based biochar/montmorillonite composite for nitrate removal. Waste Management, 2018, 79, 385-394.	3.7	126
11	Soil microbial communities responded to biochar application in temperate soils and slowly metabolized ‹scp›‹sup›13‹/sup›C‹/scp›â€labelled biochar as revealed by ‹scp›‹sup›13‹/sup›C PLFA‹/scp› analyses: results from a shortâ€term incubation and pot experiment. European Journal of Soil Science, 2014, 65, 40-51.	1.8	125
12	Combined application of biochar, compost, and bacterial consortia with Italian ryegrass enhanced phytoremediation of petroleum hydrocarbon contaminated soil. Environmental and Experimental Botany, 2018, 153, 80-88.	2.0	125
13	The mechanisms of biochar interactions with microorganisms in soil. Environmental Geochemistry and Health, 2020, 42, 2495-2518.	1.8	125
14	Compost and biochar alter mycorrhization, tomato root exudation, and development of Fusarium oxysporum f. sp. lycopersici. Frontiers in Plant Science, 2015, 6, 529.	1.7	113
15	Biochar application to temperate soils: effects on nutrient uptake and crop yield under field conditions. Agricultural and Food Science, 2013, 22, 390-403.	0.3	104
16	Biochar and compost amendments enhance copper immobilisation and support plant growth in contaminated soils. Journal of Environmental Management, 2016, 171, 101-112.	3.8	96
17	Rhizoremediation of petroleum hydrocarbon-contaminated soils: Improvement opportunities and field applications. Environmental and Experimental Botany, 2018, 147, 202-219.	2.0	88
18	The reduction of chromium (VI) phytotoxicity and phytoavailability to wheat (Triticum aestivum L.) using biochar and bacteria. Applied Soil Ecology, 2017, 114, 90-98.	2.1	87

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19	Toward the Standardization of Biochar Analysis: The COST Action TD1107 Interlaboratory Comparison. Journal of Agricultural and Food Chemistry, 2016, 64, 513-527.	2.4	86
20	Utilization of biochar sorbents for Cd2+, Zn2+, and Cu2+ ions separation from aqueous solutions: comparative study. Environmental Monitoring and Assessment, 2015, 187, 4093.	1.3	77
21	Enhanced Cu and Cd sorption after soil aging of woodchip-derived biochar: What were the driving factors?. Chemosphere, 2019, 216, 463-471.	4.2	71
22	THE DIFFERENT FACES OF BIOCHAR: CONTAMINATION RISK VERSUS REMEDIATION TOOL. Journal of Environmental Engineering and Landscape Management, 2017, 25, 86-104.	0.4	67
23	Role of biochar, compost and plant growth promoting rhizobacteria in the management of tomato early blight disease. Scientific Reports, 2021, 11, 6092.	1.6	63
24	Effects of Biochars and Compost Mixtures and Inorganic Additives on Immobilisation of Heavy Metals in Contaminated Soils. Water, Air, and Soil Pollution, 2015, 226, 1.	1.1	60
25	Biochar affects the structure rather than the total biomass of microbial communities in temperate soils. Agricultural and Food Science, 2013, 22, 404-423.	0.3	60
26	Potential of Fusarium wilt-inducing chlamydospores, in vitro behaviour in root exudates and physiology of tomato in biochar and compost amended soil. Plant and Soil, 2016, 406, 425-440.	1.8	57
27	Trace element concentrations in leachates and mustard plant tissue (Sinapis alba L.) after biochar application to temperate soils. Science of the Total Environment, 2014, 481, 498-508.	3.9	56
28	Assessment of Cu applications in two contrasting soilsâ€"effects on soil microbial activity and the fungal community structure. Ecotoxicology, 2018, 27, 217-233.	1.1	54
29	Climate impacts on water balance of a shallow steppe lake in Eastern Austria (Lake Neusiedl). Journal of Hydrology, 2013, 480, 115-124.	2.3	49
30	BIOCHAR STANDARDIZATION AND LEGISLATION HARMONIZATION. Journal of Environmental Engineering and Landscape Management, 2017, 25, 175-191.	0.4	48
31	Sorption separation of Eu and As from single-component systems by Fe-modified biochar: kinetic and equilibrium study. Journal of the Iranian Chemical Society, 2017, 14, 521-530.	1.2	46
32	Designing biochar properties through the blending of biomass feedstock with metals: Impact on oxyanions adsorption behavior. Chemosphere, 2019, 214, 743-753.	4.2	44
33	The influence of ambient and elevated ozone concentrations on photosynthesis in Populus nigra. Plant, Cell and Environment, 1997, 20, 1061-1069.	2.8	43
34	Differentiation between physical and chemical effects of oil presence in freshly spiked soil during rhizoremediation trial. Environmental Science and Pollution Research, 2019, 26, 18451-18464.	2.7	43
35	Ozone stress and antioxidant substances in Trifolium repens and Centaurea jacea leaves. Environmental Pollution, 2007, 146, 707-714.	3.7	42
36	Phenological weighting of ozone exposures in the calculation of critical levels for wheat, bean and plantain. Environmental Pollution, 2000, 109, 517-524.	3.7	41

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37	Degradation of polycyclic aromatic hydrocarbons in a mixed contaminated soil supported by phytostabilisation, organic and inorganic soil additives. Science of the Total Environment, 2018, 628-629, 1287-1295.	3.9	39
38	Effect of biochar artificial ageing on Cd and Cu sorption characteristics. Journal of Geochemical Exploration, 2015, 159, 178-184.	1.5	37
39	Title is missing!. Water, Air, and Soil Pollution, 2003, 147, 299-315.	1.1	36
40	Compost and biochar interactions with copper immobilisation in copper-enriched vineyard soils. Applied Geochemistry, 2018, 88, 40-48.	1.4	35
41	Discrimination between ginseng from Korea and China by light stable isotope analysis. Analytica Chimica Acta, 2010, 682, 77-81.	2.6	32
42	Activated biochar alters activities of carbon and nitrogen acquiring soil enzymes. Pedobiologia, 2018, 69, 1-10.	0.5	31
43	Ozone indices based on simple meteorological parameters: potentials and limitations of regression and neural network models. Atmospheric Environment, 1999, 33, 4299-4307.	1.9	29
44	Sorption and desorption of pertechnetate on biochar under static batch and dynamic conditions. Journal of Radioanalytical and Nuclear Chemistry, 2016, 310, 253-261.	0.7	29
45	Immobilisation of metals in a contaminated soil with biochar-compost mixtures and inorganic additives: 2-year greenhouse and field experiments. Environmental Science and Pollution Research, 2018, 25, 2506-2516.	2.7	28
46	Photosynthetic parameters as early indicators of ozone injury in apple leaves. Physiologia Plantarum, 1998, 104, 639-645.	2.6	27
47	Ozone effects on dry matter partitioning and chlorophyll fluorescence during plant development of wheat. Water, Air, and Soil Pollution, 1995, 85, 1461-1466.	1.1	26
48	Test of the short-term critical levels for acute ozone injury on plantsâ€"improvements by ozone uptake modelling and the use of an effect threshold. Atmospheric Environment, 2004, 38, 2237-2245.	1.9	26
49	Long-term ozone exposure and ozone uptake of grapevines in open-top chambers. Atmospheric Environment, 2004, 38, 2313-2321.	1.9	26
50	Growth and yield of winter wheat (Triticum aestivumL.) and corn (Zea maysL.) near a high voltage transmission line. Bioelectromagnetics, 2003, 24, 91-102.	0.9	24
51	Trace element biogeochemistry in the soil-water-plant system of a temperate agricultural soil amended with different biochars. Environmental Science and Pollution Research, 2015, 22, 4513-4526.	2.7	24
52	Sorption separation of cobalt and cadmium by straw-derived biochar: a radiometric study. Journal of Radioanalytical and Nuclear Chemistry, 2017, 311, 85-97.	0.7	24
53	Biochar from Wood Chips and Corn Cobs for Adsorption of Thioflavin T and Erythrosine B. Materials, 2022, 15, 1492.	1.3	24
54	Free radicals in the fruit of three strawberry cultivars exposed to drought stress in the field. Plant Physiology and Biochemistry, 2002, 40, 709-717.	2.8	22

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55	Control of Origin of Sesame Oil from Various Countries by Stable Isotope Analysis and DNA Based Markersâ€"A Pilot Study. PLoS ONE, 2015, 10, e0123020.	1.1	22
56	Engineered biochar as a tool for nitrogen pollutants removal: preparation, characterization and sorption study. , 0, 191, 318-331.		22
57	Emissions of greenhouse gases from Lake Neusiedl, a shallow steppe lake in Eastern Austria. Hydrobiologia, 2014, 731, 125-138.	1.0	21
58	Harvest Dates, Fertilizer and Varietal Effects on Yield, Concentration and Molecular Distribution of Fructan in Jerusalem Artichoke (Helianthus tuberosus L.). Journal of Agronomy and Crop Science, 1990, 165, 181-189.	1.7	19
59	Leaf gas exchange and tuber yield in Jerusalem artichoke (Helianthus tuberosus) cultivars. Field Crops Research, 1991, 26, 241-252.	2.3	18
60	Soil organic carbon and microbial communities respond to vineyard management. Soil Use and Management, 2015, 31, 528-533.	2.6	18
61	Translocation of 14C-assimilates in Jerusalem Artichoke (Helianthus tuberosus L.). Journal of Plant Physiology, 1989, 134, 218-223.	1.6	16
62	Soil microbial community dynamics and phenanthrene degradation as affected by rape oil application. Applied Soil Ecology, 2010, 46, 329-334.	2.1	16
63	The Response of Artificial Aging to Sorption Properties of Biochar for Potentially Toxic Heavy Metals. Nova Biotechnologica Et Chimica, 2014, 13, 137-147.	0.1	15
64	Effects of Rapeseed Oil on the Rhizodegradation of Polyaromatic Hydrocarbons in Contaminated Soil. International Journal of Phytoremediation, 2014, 16, 671-683.	1.7	15
65	Effect Of Wood-Based Biochar And Sewage Sludge Amendments For Soil Phosphorus Availability. Nova Biotechnologica Et Chimica, 2015, 14, 104-115.	0.1	15
66	Organic and chemical amendments positively modulate the bacterial proliferation for effective rhizoremediation of PCBs-contaminated soil. Ecological Engineering, 2019, 138, 412-419.	1.6	14
67	Fungicide application increased copper-bioavailability and impaired nitrogen fixation through reduced root nodule formation on alfalfa. Ecotoxicology, 2019, 28, 599-611.	1.1	14
68	The Impact of Biochar Incorporation on Inorganic Nitrogen Fertilizer Plant Uptake; An Opportunity for Carbon Sequestration in Temperate Agriculture. Geosciences (Switzerland), 2018, 8, 420.	1.0	13
69	Simultaneous analyses of chromosomes in root meristems and of the biochemical status of needle tissues of three different clones of Norway spruce trees challenged with moderate ozone levels. Forest Pathology, 1999, 29, 281-294.	0.5	12
70	Changes in ice phenology characteristics of two Central European steppe lakes from 1926 to 2012 - influences of local weather and large scale oscillation patterns. Climatic Change, 2014, 126, 119-133.	1.7	12
71	Investigations of microbial degradation of polycyclic aromatic hydrocarbons based on 13C-labeled phenanthrene in a soil co-contaminated with trace elements using a plant assisted approach. Environmental Science and Pollution Research, 2018, 25, 6364-6377.	2.7	11
72	Leachate Composition of Temperate Agricultural Soils in Response to Biochar Application. Water, Air, and Soil Pollution, 2016, 227, 1.	1.1	10

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73	Plant development and hormonal status in the Jerusalem artichoke (Helianthus tuberosus L.). Industrial Crops and Products, 1992, 1, 219-228.	2.5	9
74	Bush bean (Phaseolus vulgaris L) leaf injury, photosynthesis and stomatal functions under elevated ozone levels. Water, Air, and Soil Pollution, 1995, 85, 1533-1538.	1.1	8
75	Stress-physiological investigations and chromosomal analyses on cloned Norway spruce trees exposed to various levels of ozone in open-top chambers. Chemosphere, 1998, 36, 709-714.	4.2	8
76	Pyrogenic carbon for decontamination of low-level radioactive effluents: Simultaneous separation of 137Cs and 60Co. Progress in Nuclear Energy, 2020, 129, 103484.	1.3	8
77	Physicochemical Characterization of Cherry Pits-Derived Biochar. Materials, 2022, 15, 408.	1.3	8
78	Assessment of Pyrogenic Carbonaceous Materials for Effective Removal of Radiocesium. Key Engineering Materials, 0, 838, 103-110.	0.4	7
79	Assessing the ecological vulnerability of the shallow steppe Lake Neusiedl (Austria-Hungary) to climate-driven hydrological changes using a palaeolimnological approach. Journal of Great Lakes Research, 2021, 47, 1327-1344.	0.8	7
80	Risk assessment of conventional crop plants in analogy to transgenic plants. Environmental Science and Pollution Research, 1998, 5, 89-93.	2.7	6
81	Steady state levels of free radicals in tomato fruit exposed to drought and ozone stress in a field experiment. Plant Physiology and Biochemistry, 2003, 41, 921-927.	2.8	6
82	Monitoring of methylated naphthalenes in sludge-derived pyrogenic carbonaceous materials. Chemosphere, 2019, 217, 456-462.	4.2	6
83	Conazole fungicides epoxiconazole and tebuconazole in biochar amended soils: Degradation and bioaccumulation in earthworms. Chemosphere, 2021, 274, 129700.	4.2	6
84	Carbon Sequestration in Support of the â€œ4 per 1000â€•Initiative Using Compost and Stable Biochar from Hazelnut Shells and Sunflower Husks. Processes, 2020, 8, 764.	1.3	5
85	Leaf Nitrogen, Photosynthesis and Crop Productivity in Jerusalem Artichoke (Helianthus Tuberosus L.). Studies in Plant Science, 1993, , 39-44.	0.5	5
86	Pyrogenic Materials-Induced Immobilization of Eu in Aquatic and Soil Systems: Comparative Study. Water, Air, and Soil Pollution, 2018, 229, 1.	1.1	4
87	Potassium nickel(II) hexacyanoferrate(III)-functionalized biochar for selective separation of radiocesium from liquid wastes. Journal of Radiation Research and Applied Sciences, 2020, 13, 343-355.	0.7	4
88	Preparation and Characterization of Novel Magnesium Composite/Walnut Shells-Derived Biochar for As and P Sorption from Aqueous Solutions. Agriculture (Switzerland), 2021, 11, 714.	1.4	4
89	Utilization of Sewage Sludge-Derived Pyrogenic Material as a Promising Soil Amendment. Agriculture (Switzerland), 2022, 12, 360.	1.4	4
90	Assessment of sustainability in Austrian wine production. BIO Web of Conferences, 2015, 5, 01022.	0.1	3

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91	Determination of Soil Organic Matter Features of Extractable Fractions Using Capillary Electrophoresis: An Organic Matter Stabilization Study in a Carbon-14-Labeled Long-Term Field Experiment. SSSA Special Publication Series, 2015, , 23-40.	0.2	3
92	Interactions of Biochar and Biological Degradation of Aromatic Hydrocarbons in Contaminated Soil. , 2016, , 247-267.		3
93	Agro-Environmental Benefit and Risk of Manure- and Bone Meal-Derived Pyrogenic Carbonaceous Materials as Soil Amendments: Availability of PAHs, PTEs, and P. Agronomy, 2019, 9, 802.	1.3	3
94	Unravelling the process of petroleum hydrocarbon biodegradation in different filter materials of constructed wetlands by stable isotope fractionation and labelling studies. Biodegradation, 2021, 32, 343-359.	1.5	3
95	Biochar Applications to Agricultural Soils in Temperate Climates â€“ More Than Carbon Sequestration?. , 2016, , 291-314.		2
96	Pyrolysis Products as Soil Fertilizers: Screening of Potentially Hazardous Aromatic Compounds. Nova Biotechnologica Et Chimica, 2016, 15, 35-46.	0.1	2
97	Engineered Pyrogenic Materials as Tools to Affect Arsenic Mobility in Old Mine Site Soil of Mediterranean Region. Bulletin of Environmental Contamination and Toxicology, 2020, 104, 265-272.	1.3	2
98	Biokohle fÃ¼r landwirtschaftliche BÃ¶denBiochar for Agricultural Soils. Gaia, 2012, 21, 236-238.	0.3	2
99	Effects of biochar on the fate of conazole fungicides in soils and their bioavailability to earthworms and plants. Environmental Science and Pollution Research, 2022, 29, 23323-23337.	2.7	2
100	Biological characteristics of composts and biochar as determined by plant response analysis. Acta Horticulturae, 2017, , 407-412.	0.1	1
101	Temporal Changes in the Efficiency of Biochar- and Compost-Based Amendments on Copper Immobilization in Vineyard Soils. Soil Systems, 2019, 3, 78.	1.0	1
102	The Applicability of Enzymatic Methods for the Quantitative Analysis of Fructan-Containing Plant Extracts. Studies in Plant Science, 1993, 3, 101-106.	0.5	1