Martin BrtnickÃ½

List of Publications by Year
in descending order

128 papers	3,069 citations	218662 26 h-index	197805 49 g-index
133 all docs	133 docs citations	133 times ranked	2921 citing authors

#	Article	IF	Citations
1	Influence of Boron and Drought Simulation on Germinability and Hardseededness of Black Medick Seeds (Medicago lupulina L.). Journal of Plant Growth Regulation, 2023, 42, 1704-1719.	5.1	1
2	Co-application of nanosized halloysite and biochar as soil amendments in aided phytostabilization of metal(-oid)s-contaminated soil under different temperature conditions. Chemosphere, 2022, 288, 132452.	8.2	7
3	Can rail transport-related contamination affect railway vegetation? A case study of a busy railway corridor in Poland. Chemosphere, 2022, 293, 133521.	8.2	2
4	Silver Nanoparticles (AgNPs) in Urea Solution in Laboratory Tests and Field Experiments with Crops and Vegetables. Materials, 2022, 15, 870.	2.9	23
5	Does Digestate Dose Affect Fodder Security and Nutritive Value?. Agriculture (Switzerland), 2022, 12, 133.	3.1	4
6	Cattle Manure Fermented with Biochar and Humic Substances Improve the Crop Biomass, Microbiological Properties and Nutrient Status of Soil. Agronomy, 2022, 12, 368.	3.0	8
7	Manure Maturation with Biochar: Effects on Plant Biomass, Manure Quality and Soil Microbiological Characteristics. Agriculture (Switzerland), 2022, 12, 314.	3.1	6
8	Using the Mixed Culture of Fodder Mallow (Malva verticillata L.) and White Sweet Clover (Melilotus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	3.0	8
9	Combined Use of Novel Endophytic and Rhizobacterial Strains Upregulates Antioxidant Enzyme Systems and Mineral Accumulation in Wheat. Agronomy, 2022, 12, 551.	3.0	8
10	Cadmium Phytotoxicity, Tolerance, and Advanced Remediation Approaches in Agricultural Soils; A Comprehensive Review. Frontiers in Plant Science, 2022, 13, 773815.	3.6	77
11	Influence of beech and spruce on potentially toxic elements-related health risk of edible mushrooms growing on unpolluted forest soils. Scientific Reports, 2022, 12, 5407.	3.3	3
12	A Simple Method for Quantification of Polyhydroxybutyrate and Polylactic Acid Micro-Bioplastics in Soils by Evolved Gas Analysis. Molecules, 2022, 27, 1898.	3.8	8
13	Combined Effect of Animal Manures and Di-Ammonium Phosphate (DAP) on Growth, Physiology, Root Nodulation and Yield of Chickpea. Agronomy, 2022, 12, 674.	3.0	4
14	Biochar-Assisted Phytostabilization for Potentially Toxic Element Immobilization. Sustainability, 2022, 14, 445.	3.2	7
15	Deciphering the Potential Role of Symbiotic Plant Microbiome and Amino Acid Application on Growth Performance of Chickpea Under Field Conditions. Frontiers in Plant Science, 2022, 13, .	3.6	2
16	Effect of Biochar on Metal Distribution and Microbiome Dynamic of a Phytostabilized Metalloid-Contaminated Soil Following Freezeâ€“Thaw Cycles. Materials, 2022, 15, 3801.	2.9	5
17	Physiological Responses and Phytoremediation Abilities of Cucumber (Cucumis sativus L.) under Cesium and Strontium Contaminated Soils. Agronomy, 2022, 12, 1311.	3.0	1
18	Deciphering the Effectiveness of Humic Substances and Biochar Modified Digestates on Soil Quality and Plant Biomass Accumulation. Agronomy, 2022, 12, 1587.	3.0	4

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19	Influence of Poly-3-hydroxybutyrate Micro-Bioplastics and Polyethylene Terephthalate Microplastics on the Soil Organic Matter Structure and Soil Water Properties. Environmental Science & Technology, 2022, 56, 10732-10742.	10.0	13
20	Environmental impact assessment of risk elements from railway transport with the use of pollution indices, a biotest and bioindicators. Human and Ecological Risk Assessment (HERA), 2021, 27, 517-540.	3.4	9
21	Human health and ecological risk assessment of trace elements in urban soils of 101 cities in China: A meta-analysis. Chemosphere, 2021, 267, 129215.	8.2	46
22	Biochar Role in Soil Carbon Stabilization and Crop Productivity. , 2021, , 1-46.		1
23	Deep placement of nitrogen fertilizer improves yield, nitrogen use efficiency and economic returns of transplanted fine rice. PLoS ONE, 2021, 16, e0247529.	2.5	25
24	Compost mixed fruits and vegetable waste biochar with ACC deaminase rhizobacteria can minimize lead stress in mint plants. Scientific Reports, 2021, 11, 6606.	3.3	41
25	Effect of Seed Coating and PEG-Induced Drought on the Germination Capacity of Five Clover Crops. Plants, 2021, 10, 724.	3.5	12
26	Vertical Distribution of Mercury in Forest Soils and Its Transfer to Edible Mushrooms in Relation to Tree Species. Forests, 2021, 12, 539.	2.1	3
27	Can the Application of Municipal Sewage Sludge Compost in the Aided Phytostabilization Technique Provide an Effective Waste Management Method?. Energies, 2021, 14, 1984.	3.1	10
28	Nano Zero Valent Iron (nZVI) as an Amendment for Phytostabilization of Highly Multi-PTE Contaminated Soil. Materials, 2021, 14, 2559.	2.9	9
29	Evaluation of Jatropha curcas L. leaves mulching on wheat growth and biochemical attributes under water stress. BMC Plant Biology, 2021, 21, 303.	3.6	10
30	Insight into metal immobilization and microbial community structure in soil from a steel disposal dump phytostabilized with composted, pyrolyzed or gasified wastes. Chemosphere, 2021, 272, 129576.	8.2	39
31	Fourier Transform Infrared Spectroscopy vibrational bands study of Spinacia oleracea and Trigonella corniculata under biochar amendment in naturally contaminated soil. PLoS ONE, 2021, 16, e0253390.	2.5	21
32	The Potential of Biochar Made from Agricultural Residues to Increase Soil Fertility and Microbial Activity: Impacts on Soils with Varying Sand Content. Agronomy, 2021, 11, 1174.	3.0	9
33	Assessment of Soil Contamination with Potentially Toxic Elements and Soil Ecotoxicity of Botanical Garden in Brno, Czech Republic: Are Urban Botanical Gardens More Polluted Than Urban Parks?. International Journal of Environmental Research and Public Health, 2021, 18, 7622.	2.6	6
34	Effect of carbon-enriched digestate on the microbial soil activity. PLoS ONE, 2021, 16, e0252262.	2.5	15
35	Recycling of Blast Furnace and Coal Slags in Aided Phytostabilisation of Soils Highly Polluted with Heavy Metals. Energies, 2021, 14, 4300.	3.1	1
36	Polluted brownfield site converted into a public urban park: A place providing ecosystem services or a hidden health threat?. Journal of Environmental Management, 2021, 291, 112669.	7.8	14

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37	Assessing the potential of biochar aged by humic substances to enhance plant growth and soil biological activity. Chemical and Biological Technologies in Agriculture, 2021, 8, .	4.6	10
38	Rhizosphere Bacteria in Plant Growth Promotion, Biocontrol, and Bioremediation of Contaminated Sites: A Comprehensive Review of Effects and Mechanisms. International Journal of Molecular Sciences, 2021, 22, 10529.	4.1	149
39	A critical review of the possible adverse effects of biochar in the soil environment. Science of the Total Environment, 2021, 796, 148756.	8.0	113
40	Microbial Potential for Carbon Fixation and Stabilization. , 2021, , 125-168.		1
41	Glomalin: A Key Indicator for Soil Carbon Stabilization. , 2021, , 47-81.		2
42	Using Waste Sulfur from Biogas Production in Combination with Nitrogen Fertilization of Maize (Zea) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	3.5	3
43	Biochar and Sulphur Enriched Digestate: Utilization of Agriculture Associated Waste Products for Improved Soil Carbon and Nitrogen Content, Microbial Activity, and Plant Growth. Agronomy, 2021, 11, 2041.	3.0	14
44	Clover Species Specific Influence on Microbial Abundance and Associated Enzyme Activities in Rhizosphere and Non-Rhizosphere Soils. Agronomy, 2021, 11, 2214.	3.0	6
45	Co-composted Biochar Enhances Growth, Physiological, and Phytostabilization Efficiency of Brassica napus and Reduces Associated Health Risks Under Chromium Stress. Frontiers in Plant Science, 2021, 12, 775785.	3.6	24
46	Remediation of Smelter Contaminated Soil by Sequential Washing Using Biosurfactants. International Journal of Environmental Research and Public Health, 2021, 18, 12875.	2.6	3
47	Large-scale permafrost degradation as a primary factor in Larix sibirica forest dieback in the Khentii massif, northern Mongolia. Journal of Forestry Research, 2020, 31, 197-208.	3.6	17
48	The Digestion of Waste from Vegetables and Maize Processing. Waste and Biomass Valorization, 2020, 11, 2467-2473.	3.4	8
49	Determination of soil properties using thermogravimetry under laboratory conditions. European Journal of Soil Science, 2020, 71, 415-419.	3.9	5
50	Evaluation of natural forest regeneration as a part of land restoration in the Khentii massif, Mongolia. Journal of Forestry Research, 2020, 31, 1773-1786.	3.6	9
51	Primary rare earth element enrichment in carbonatites: Evidence from melt inclusions in Ulgii Khiid carbonatite, Mongolia. Ore Geology Reviews, 2020, 117, 103294.	2.7	16
52	Assisted phytostabilization of soil from a former military area with mineral amendments. Ecotoxicology and Environmental Safety, 2020, 188, 109934.	6.0	21
53	Humic Acid Mitigates the Negative Effects of High Rates of Biochar Application on Microbial Activity. Sustainability, 2020, 12, 9524.	3.2	17
54	Coupling Phosphate-Solubilizing Bacteria with Phosphorus Supplements Improve Maize Phosphorus Acquisition and Growth under Lime Induced Salinity Stress. Plants, 2020, 9, 900.	3.5	143

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55	Potential role of compost mixed biochar with rhizobacteria in mitigating lead toxicity in spinach. Scientific Reports, 2020, 10, 12159.	3.3	71
56	Bentonite-Based Organic Amendment Enriches Microbial Activity in Agricultural Soils. Land, 2020, 9, 258.	2.9	11
57	Drought Stress Alleviation by ACC Deaminase Producing Achromobacter xylosoxidans and Enterobacter cloacae, with and without Timber Waste Biochar in Maize. Sustainability, 2020, 12, 6286.	3.2	89
58	Effect of Cadmium-Tolerant Rhizobacteria on Growth Attributes and Chlorophyll Contents of Bitter Gourd under Cadmium Toxicity. Plants, 2020, 9, 1386.	3.5	62
59	The Need to Improve Riparian Forests Management in Uranium Mining Areas Based on Assessment of Heavy Metal and Uranium Contamination. Forests, 2020, 11, 952.	2.1	1
60	Successful Outcome of Phytostabilization in Cr(VI) Contaminated Soils Amended with Alkalizing Additives. International Journal of Environmental Research and Public Health, 2020, 17, 6073.	2.6	6
61	Sustainable Management with Mycorrhizae and Phosphate Solubilizing Bacteria for Enhanced Phosphorus Uptake in Calcareous Soils. Agriculture (Switzerland), 2020, 10, 334.	3.1	92
62	Alleviation of Cadmium Adverse Effects by Improving Nutrients Uptake in Bitter Gourd through Cadmium Tolerant Rhizobacteria. Environments - MDPI, 2020, 7, 54.	3.3	52
63	Application of Single Superphosphate with Humic Acid Improves the Growth, Yield and Phosphorus Uptake of Wheat (Triticum aestivum L.) in Calcareous Soil. Agronomy, 2020, 10, 1224.	3.0	77
64	Environmental Impact Assessment of Potentially Toxic Elements in Soils Near the Runway at the International Airport in Central Europe. Sustainability, 2020, 12, 7224.	3.2	17
65	Thermal regime of semi-natural dew collectorâ€™s perspective for afforestation of semi-arid landscapes. Environmental Technology and Innovation, 2020, 20, 101125.	6.1	3
66	Possibilities of Using White Sweetclover Grown in Mixture with Maize for Biomethane Production. Agronomy, 2020, 10, 1407.	3.0	17
67	The Effect of Synthesis Procedure on Hydrogen Peroxidase-Like Catalytic Activity of Iron Oxide Magnetic Particles. Applied Sciences (Switzerland), 2020, 10, 6756.	2.5	1
68	Air Quality in Brno City Parks. Atmosphere, 2020, 11, 510.	2.3	5
69	Assessment of Antioxidants in Selected Plant Rootstocks. Antioxidants, 2020, 9, 209.	5.1	6
70	Chemical Composition and Hazardous Effects of Leachate from the Active Municipal Solid Waste Landfill Surrounded by Farmlands. Sustainability, 2020, 12, 4531.	3.2	48
71	Comparison of the Agricultural Use of Products from Organic Waste Processing with Conventional Mineral Fertilizer: Potential Effects on Mineral Nitrogen Leaching and Soil Quality. Agronomy, 2020, 10, 226.	3.0	9
72	Immobilization of Potentially Toxic Elements (PTE) by Mineral-Based Amendments: Remediation of Contaminated Soils in Post-Industrial Sites. Minerals (Basel, Switzerland), 2020, 10, 87.	2.0	16

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73	The impact of tourism on extremely visited volcanic island: Link between environmental pollution and transportation modes. Chemosphere, 2020, 249, 126118.	8.2	30
74	Enantiomers of Carbohydrates and Their Role in Ecosystem Interactions: A Review. Symmetry, 2020, 12, 470.	2.2	13
75	Impact of Agrochemicals on Soil Microbiota and Management: A Review. Land, 2020, 9, 34.	2.9	397
76	Novel combined amendments for sustainable remediation of the Pb-contaminated soil. AIMS Environmental Science, 2020, 7, 1-12.	1.4	0
77	Valorization of Fish Waste Compost as a Fertilizer for Agricultural Use. Waste and Biomass Valorization, 2019, 10, 2537-2545.	3.4	64
78	Mixed Culture of Corn and White Lupine as an Alternative to Silage Made from Corn Monoculture Intended for Biogas Production. Bioenergy Research, 2019, 12, 694-702.	3.9	15
79	Using Mosses as Bioindicators of Potentially Toxic Element Contamination in Ecologically Valuable Areas Located in the Vicinity of a Road: A Case Study. International Journal of Environmental Research and Public Health, 2019, 16, 3963.	2.6	8
80	Allelic Variants for Candidate Nitrogen Fixation Genes Revealed by Sequencing in Red Clover (Trifolium pratense L.). International Journal of Molecular Sciences, 2019, 20, 5470.	4.1	8
81	The combined effect of phytostabilization and different amendments on remediation of soils from post-military areas. Science of the Total Environment, 2019, 688, 37-45.	8.0	36
82	The applicability of compost, zeolite and calcium oxide in assisted remediation of acidic soil contaminated with Cr(III) and Cr(VI). Environmental Science and Pollution Research, 2019, 26, 21351-21362.	5.3	20
83	Biodegradation/Disintegration of Selected Range of Polymers: Impact on the Compost Quality. Journal of Polymers and the Environment, 2019, 27, 892-899.	5.0	24
84	Long-Term Effects of Biochar-Based Organic Amendments on Soil Microbial Parameters. Agronomy, 2019, 9, 747.	3.0	50
85	Assessment of phytotoxicity, environmental and health risks of historical urban park soils. Chemosphere, 2019, 220, 678-686.	8.2	53
86	Soils from an iron and steel scrap storage yard remediated with aided phytostabilization. Land Degradation and Development, 2019, 30, 202-211.	3.9	8
87	Effects of glufosinateâ€ammonium herbicide and pod sealant on spider Pardosa agrestis. Journal of Applied Entomology, 2019, 143, 196-203.	1.8	11
88	Landfill Leachate Effects on Germination and Seedling Growth of Hemp Cultivars (Cannabis Sativa L.). Waste and Biomass Valorization, 2019, 10, 369-376.	3.4	18
89	The role of carbonate-fluoride melt immiscibility in shallow REE deposit evolution. Geoscience Frontiers, 2019, 10, 527-537.	8.4	16
90	Mining as a catalyst of overgrazing resulting in risk of forest retreat, Erdenet Mongolia. Geography, Environment, Sustainability, 2019, 12, 184-198.	1.3	2

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91	Influence of manure with activators of organic matter on physical properties of soil. , 2019, , .		0
92	Activators of biological transformation and their effect on pig manure quality and barn condition aggregate. , 2019, , .		0
93	EFFECT OF MAIZE AND LEGUME MIXED CROPPING ON SOIL QUALITY IN RELATION TO PLANTING DENSITY. , 2019, , .		1
94	Assessment of Retention Potential and Soil Organic Carbon Density of Agriculturally used Chernozems, Cambisols and Fluvisols. Acta Universitatis Agriculturae Et Silviculturae Mendelianae Brunensis, 2019, 67, 1131-1137.	0.4	1
95	Europium and terbium Schiff base peptide complexes as potential antimicrobial agents against Salmonella typhimurium and Pseudomonas aeruginosa. Chemical Papers, 2018, 72, 1437-1449.	2.2	2
96	Iron Oxide Nanoparticles: Innovative Tool in Cancer Diagnosis and Therapy. Advanced Healthcare Materials, 2018, 7, 1700932.	7.6	91
97	Ecotoxicity of In-Situ Produced Compost Intended for Landfill Restoration. Environments - MDPI, 2018, 5, 111.	3.3	4
98	Effect of arsenic (III and V) on oxidative stress parameters in resistant and susceptible Staphylococcus aureus. Environmental Research, 2018, 166, 394-401.	7.5	8
99	Environmental risk assessment and consequences of municipal solid waste disposal. Chemosphere, 2018, 208, 569-578.	8.2	23
100	Fast and simple glucose assay based on filter paper as enzymes carrier using phone camera detection. Chemical Papers, 2018, 72, 2719-2728.	2.2	9
101	Seasonal Changes and Toxic Potency of Landfill Leachate for White Mustard (Sinapis alba L.). Acta Universitatis Agriculturae Et Silviculturae Mendelianae Brunensis, 2018, 66, 235-242.	0.4	14
102	SEM Analysis and Degradation Behavior of Conventional and Bio-Based Plastics During Composting. Acta Universitatis Agriculturae Et Silviculturae Mendelianae Brunensis, 2018, 66, 349-356.	0.4	17
103	Rain water not in sewers but in the garden â€“ the study case of the Netherlands and Polish experience. Acta Scientiarum Polonorum Architectura, 2018, 17, 79-88.	0.3	0
104	EFFECT OF SOIL AMENDMENTS AND MANURE APPLICATION ON SOIL REACTION. , 2018, , .		0
105	Changes in Grassland Chemical Soil Parameters Four Years after Cessation of Different Fertilisation with Compost and Slurry. Acta Universitatis Agriculturae Et Silviculturae Mendelianae Brunensis, 2018, 66, 211-218.	0.4	0
106	Effect of inoculation with white-rot fungi and fungal consortium on the composting efficiency of municipal solid waste. Waste Management, 2017, 61, 157-164.	7.4	117
107	Origin of heavy rare earth mineralization in South China. Nature Communications, 2017, 8, 14598.	12.8	72
108	Changes in the oxidative stress/anti-oxidant system after exposure to sulfur mustard and antioxidant strategies in the therapy, a review. Toxicology Mechanisms and Methods, 2017, 27, 408-416.	2.7	13

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109	Leaching of mineral nitrogen in the soil influenced by addition of compost and N-mineral fertilizer. Acta Agriculturae Scandinavica - Section B Soil and Plant Science, 2017, 67, 607-614.	0.6	17
110	Can Soil Properties Determine Vegetation of Spontaneously Recovered Postmined Areas? Case Study of Limestone Quarry MokrÃ¡. Environmental Engineering Science, 2017, 34, 638-647.	1.6	2
111	DNA interaction with platinum-based cytostatics revealed by DNA sequencing. Analytical Biochemistry, 2017, 539, 22-28.	2.4	4
112	Oxidative Stress and Heavy Metals in Plants. Reviews of Environmental Contamination and Toxicology, 2017, 245, 129-156.	1.3	69
113	Environmental assessment of the effects of a municipal landfill on the content and distribution of heavy metals in Tanacetum vulgare L.. Chemosphere, 2017, 185, 1011-1018.	8.2	69
114	Comparative study on toxicity of extracellularly biosynthesized and laboratory synthesized CdTe quantum dots. Journal of Biotechnology, 2017, 241, 193-200.	3.8	41
115	Anticarcinogenic Effect of Spices Due to Phenolic and Flavonoid Compoundsâ€"In Vitro Evaluation on Prostate Cells. Molecules, 2017, 22, 1626.	3.8	7
116	Amalgam Electrode-Based Electrochemical Detector for On-Site Direct Determination of Cadmium(II) and Lead(II) from Soils. Sensors, 2017, 17, 1835.	3.8	9
117	Size-related cytotoxicological aspects of polyvinylpyrrolidone-capped platinum nanoparticles. Food and Chemical Toxicology, 2017, 105, 337-346.	3.6	24
118	Metal Pollution of Forest Phytomass from Uranium Industry in Czech Republic and Its Ecological Management Perspectives. Acta Universitatis Agriculturae Et Silviculturae Mendelianae Brunensis, 2017, 65, 51-59.	0.4	1
119	Study on the (bio)degradation Process of Bioplastic Materials under Industrial Composting Conditions. Acta Universitatis Agriculturae Et Silviculturae Mendelianae Brunensis, 2017, 65, 791-798.	0.4	7
120	Changes in Soil Aggregate Stability Induced by Mineral Nitrogen Fertilizer Application. Acta Universitatis Agriculturae Et Silviculturae Mendelianae Brunensis, 2017, 65, 1477-1482.	0.4	4
121	IMPACT OF WATER EROSION ON TOTAL NITROGEN CONTENT. , 2017, , .		0
122	Jatropha seed cake and organic waste compost: the potential for improvement of soil fertility. Ecological Chemistry and Engineering S, 2016, 23, 131-141.	1.5	7
123	Construction of remains of small-scale mining activities as a possible innovative way how to prevent desertification. International Journal of Environmental Science and Technology, 2016, 13, 1405-1418.	3.5	10
124	Impacts of Water Erosion on Soil Physical Properties. Acta Universitatis Agriculturae Et Silviculturae Mendelianae Brunensis, 2016, 64, 1523-1527.	0.4	5
125	Effect of Water Erosion on Soil Respiration Characteristics of Chernozem Topsoil. Acta Universitatis Agriculturae Et Silviculturae Mendelianae Brunensis, 2016, 64, 1517-1521.	0.4	0
126	Main Feedbacks Between Oxidizable Carbon Content and Selected Soil Characteristic of Chernozem. Acta Universitatis Agriculturae Et Silviculturae Mendelianae Brunensis, 2015, 63, 471-476.	0.4	0

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127	Modelling of yields and soil nitrogen dynamics for crop rotations by HERMES under different climate and soil conditions in the Czech Republic. Journal of Agricultural Science, 2014, 152, 188-204.	1.3	27
128	Effects of so-called "environmentally friendly" agrochemicals on the harlequin ladybird Harmonia axyridis (Coleoptera: Coccinelidae). European Journal of Entomology, 0, 116, 173-177.	1.2	8