David Houben

List of Publications by Year
in descending order

35 papers	2,520 citations	279798 23 h-index	345221 36 g-index
36 all docs	36 docs citations	36 times ranked	3325 citing authors

#	Article	IF	Citations
1	Mobility, bioavailability and pH-dependent leaching of cadmium, zinc and lead in a contaminated soil amended with biochar. Chemosphere, 2013, 92, 1450-1457.	8.2	586
2	Beneficial effects of biochar application to contaminated soils on the bioavailability of Cd, Pb and Zn and the biomass production of rapeseed (Brassica napus L.). Biomass and Bioenergy, 2013, 57, 196-204.	5.7	330
3	Plant Functional Traits: Soil and Ecosystem Services. Trends in Plant Science, 2017, 22, 385-394.	8.8	311
4	Heavy metal immobilization by cost-effective amendments in a contaminated soil: Effects on metal leaching and phytoavailability. Journal of Geochemical Exploration, 2012, 123, 87-94.	3.2	197
5	Impact of biochar and root-induced changes on metal dynamics in the rhizosphere of Agrostis capillaris and Lupinus albus. Chemosphere, 2015, 139, 644-651.	8.2	94
6	Biochar from Miscanthus: a potential silicon fertilizer. Plant and Soil, 2014, 374, 871-882.	3.7	86
7	Advances and Perspectives to Improve the Phosphorus Availability in Cropping Systems for Agroecological Phosphorus Management. Advances in Agronomy, 2015, 134, 51-79.	5.2	76
8	Potential use of mealworm frass as a fertilizer: Impact on crop growth and soil properties. Scientific Reports, 2020, 10, 4659.	3.3	73
9	Comparison of EDTA-enhanced phytoextraction and phytostabilisation strategies with Lolium perenne on a heavy metal contaminated soil. Chemosphere, 2011, 85, 1290-1298.	8.2	65
10	Evaluation of the longâ€term effect of biochar on properties of temperate agricultural soil at preâ€industrial charcoal kiln sites in Wallonia, Belgium. European Journal of Soil Science, 2017, 68, 80-89.	3.9	55
11	The effect of preâ€industrial charcoal kilns on chemical properties of forest soil of <scp>W</scp>allonia, <scp>B</scp>elgium. European Journal of Soil Science, 2016, 67, 206-216.	3.9	54
12	Leachability of cadmium, lead, and zinc in a long-term spontaneously revegetated slag heap: implications for phytostabilization. Journal of Soils and Sediments, 2013, 13, 543-554.	3.0	48
13	Impact of Root-Induced Mobilization of Zinc on Stable Zn Isotope Variation in the Soilâ€“Plant System. Environmental Science & Technology, 2014, 48, 7866-7873.	10.0	47
14	Zinc mineral weathering as affected by plant roots. Applied Geochemistry, 2012, 27, 1587-1592.	3.0	44
15	Characterization of metal binding sites onto biochar using rare earth elements as a fingerprint. Heliyon, 2018, 4, e00543.	3.2	41
16	Efficiency of KOH-modified rice straw-derived biochar for reducing cadmium mobility, bioaccessibility and bioavailability risk index in red soil. Pedosphere, 2020, 30, 874-882.	4.0	41
17	The influence of weathering and soil organic matter on Zn isotopes in soils. Chemical Geology, 2017, 466, 140-148.	3.3	36
18	Response of phosphorus dynamics to sewage sludge application in an agroecosystem in northern France. Applied Soil Ecology, 2019, 137, 178-186.	4.3	34

#	Article	IF	Citations
19	Tradeoffs among phosphorus-acquisition root traits of crop species for agroecological intensification. Plant and Soil, 2021, 461, 137-150.	3.7	32
20	Phytolithâ€rich biochar increases cotton biomass and siliconâ€mineralomass in a highly weathered soil. Journal of Plant Nutrition and Soil Science, 2018, 181, 537-546.	1.9	30
21	Modeling of cobalt and copper speciation in metalliferous soils from Katanga (Democratic Republic of) Tj ETQq1 1 0.784314 rgBT /Ov	3.2	28
22	Transpiration flow controls Zn transport in Brassica napus and Lolium multiflorum under toxic levels as evidenced from isotopic fractionation. Comptes Rendus - Geoscience, 2015, 347, 386-396.	1.2	28
23	Linking biochar properties to biomass of basil, lettuce and pansy cultivated in growing media. Scientia Horticulturae, 2020, 261, 109001.	3.6	27
24	Assessment of the Short-Term Fertilizer Potential of Mealworm Frass Using a Pot Experiment. Frontiers in Sustainable Food Systems, 2021, 5, .	3.9	21
25	Response of Organic Matter Decomposition to No-Tillage Adoption Evaluated by the Tea Bag Technique. Soil Systems, 2018, 2, 42.	2.6	19
26	Unravelling the Role of Rhizosphere Microbiome and Root Traits in Organic Phosphorus Mobilization for Sustainable Phosphorus Fertilization. A Review. Agronomy, 2021, 11, 2267.	3.0	17
27	Interactions between belowâ€ground traits and rhizosheath fungal and bacterial communities for phosphorus acquisition. Functional Ecology, 2021, 35, 1603-1619.	3.6	15
28	Earthworms (Lumbricus terrestris L.) Mediate the Fertilizing Effect of Frass. Agronomy, 2020, 10, 783.	3.0	14
29	Fertilizer Potential of Struvite as Affected by Nitrogen Form in the Rhizosphere. Sustainability, 2020, 12, 2212.	3.2	13
30	Predicting the degree of phosphorus saturation using the ammonium acetateâ€“EDTA soil test. Soil Use and Management, 2011, 27, 283-293.	4.9	11
31	Metal immobilization and nitrate reduction in a contaminated soil amended with zero-valent iron (Fe0). Ecotoxicology and Environmental Safety, 2020, 201, 110868.	6.0	11
32	Biochar-Compost Interactions as Affected by Weathering: Effects on Biological Stability and Plant Growth. Agronomy, 2021, 11, 336.	3.0	11
33	Earthworm communities and microbial metabolic activity and diversity under conventional, feed and biogas cropping systems as affected by tillage practices. Applied Soil Ecology, 2022, 169, 104232.	4.3	9
34	New insights into sorption and desorption of organic phosphorus on goethite, gibbsite, kaolinite and montmorillonite. Applied Geochemistry, 2022, 143, 105378.	3.0	9
35	Editorial: Frass: The Legacy of Larvae â€“ Benefits and Risks of Residues From Insect Production. Frontiers in Sustainable Food Systems, 2022, 6, .	3.9	1