Steve P Mcgrath

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

360 papers

38,560 citations

105 h-index 185 g-index

369 ext. papers

42,043 ext. citations

6.6 avg, IF

7.32 L-index

#	Paper	IF	Citations
360	Toxicity of heavy metals to microorganisms and microbial processes in agricultural soils: a review. <i>Soil Biology and Biochemistry</i> , 1998 , 30, 1389-1414	7.5	1478
359	Soil contamination in China: current status and mitigation strategies. <i>Environmental Science & Environmental Science & Technology</i> , 2015 , 49, 750-9	10.3	988
358	Transporters of arsenite in rice and their role in arsenic accumulation in rice grain. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 9931-5	11.5	969
357	Arsenic as a food chain contaminant: mechanisms of plant uptake and metabolism and mitigation strategies. <i>Annual Review of Plant Biology</i> , 2010 , 61, 535-59	30.7	854
356	Arsenic uptake and metabolism in plants. <i>New Phytologist</i> , 2009 , 181, 777-794	9.8	837
355	Phytoextraction of metals and metalloids from contaminated soils. <i>Current Opinion in Biotechnology</i> , 2003 , 14, 277-82	11.4	799
354	Cellular compartmentation of cadmium and zinc in relation to other elements in the hyperaccumulator Arabidopsis halleri. <i>Planta</i> , 2000 , 212, 75-84	4.7	573
353	Mechanisms of arsenic hyperaccumulation in Pteris vittata. Uptake kinetics, interactions with phosphate, and arsenic speciation. <i>Plant Physiology</i> , 2002 , 130, 1552-61	6.6	491
352	Growing rice aerobically markedly decreases arsenic accumulation. <i>Environmental Science & Environmental Science & Technology</i> , 2008 , 42, 5574-9	10.3	486
351	The possibility of in situ heavy metal decontamination of polluted soils using crops of metal-accumulating plants. <i>Resources, Conservation and Recycling</i> , 1994 , 11, 41-49	11.9	471
350	A simplified method for the extraction of the metals Fe, Zn, Cu, Ni, Cd, Pb, Cr, Co and Mn from soils and sewage sludges. <i>Journal of the Science of Food and Agriculture</i> , 1985 , 36, 794-798	4.3	468
349	Selenium uptake, translocation and speciation in wheat supplied with selenate or selenite. <i>New Phytologist</i> , 2008 , 178, 92-102	9.8	456
348	Cellular compartmentation of zinc in leaves of the hyperaccumulator thlaspi caerulescens. <i>Plant Physiology</i> , 1999 , 119, 305-12	6.6	402
347	Phytoremediation of heavy metal-contaminated soils: natural hyperaccumulation versus chemically enhanced phytoextraction. <i>Journal of Environmental Quality</i> , 2001 , 30, 1919-26	3.4	401
346	A new method to measure effective soil solution concentration predicts copper availability to plants. <i>Environmental Science & Environmental &</i>	10.3	399
345	Leaching of heavy metals from contaminated soils using EDTA. Environmental Pollution, 2001, 113, 111-	- 29 03	391
344	Plant and rhizosphere processes involved in phytoremediation of metal-contaminated soils. <i>Plant and Soil</i> , 2001 , 232, 207-214	4.2	365

343	Effect of metal toxicity on the size of the soil microbial biomass. <i>Journal of Soil Science</i> , 1984 , 35, 341-3-	46	334
342	Soil pH determines microbial diversity and composition in the park grass experiment. <i>Microbial Ecology</i> , 2015 , 69, 395-406	4.4	333
341	Arsenic hyperaccumulation by different fern species. <i>New Phytologist</i> , 2002 , 156, 27-31	9.8	328
340	Phytoremediation of metals, metalloids, and radionuclides. <i>Advances in Agronomy</i> , 2002 , 75, 1-56	7.7	327
339	Field evaluation of in situ remediation of a heavy metal contaminated soil using lime and red-mud. <i>Environmental Pollution</i> , 2006 , 142, 530-9	9.3	326
338	Assessing the potential for zinc and cadmium phytoremediation with the hyperaccumulator Thlaspi caerulescens. <i>Plant and Soil</i> , 2003 , 249, 37-43	4.2	310
337	Mitigation of arsenic accumulation in rice with water management and silicon fertilization. <i>Environmental Science & Environmental Science & Environme</i>	10.3	307
336	Biofortification of UK food crops with selenium. <i>Proceedings of the Nutrition Society</i> , 2006 , 65, 169-81	2.9	305
335	Variation in mineral micronutrient concentrations in grain of wheat lines of diverse origin. <i>Journal of Cereal Science</i> , 2009 , 49, 290-295	3.8	302
334	Cadmium accumulation in populations of Thlaspi caerulescens and Thlaspi goesingense. <i>New Phytologist</i> , 2000 , 145, 11-20	9.8	299
333	Rapid reduction of arsenate in the medium mediated by plant roots. New Phytologist, 2007, 176, 590-59	99 ,8	297
332	Cellular compartmentation of nickel in the hyperaccumulators Alyssum lesbiacum, Alyssum bertolonii and Thlaspi goesingense. <i>Journal of Experimental Botany</i> , 2001 , 52, 2291-300	7	297
331	Toxicity of trace metals in soil as affected by soil type and aging after contamination: using calibrated bioavailability models to set ecological soil standards. <i>Environmental Toxicology and Chemistry</i> , 2009 , 28, 1633-42	3.8	286
330	Long-term effects of metals in sewage sludge on soils, microorganisms and plants. <i>Journal of Industrial Microbiology</i> , 1995 , 14, 94-104		286
329	Heavy metals and soil microbes. Soil Biology and Biochemistry, 2009, 41, 2031-2037	7.5	285
328	The rice aquaporin Lsi1 mediates uptake of methylated arsenic species. <i>Plant Physiology</i> , 2009 , 150, 207	716.80	283
327	Evidence of decreasing mineral density in wheat grain over the last 160 years. <i>Journal of Trace Elements in Medicine and Biology</i> , 2008 , 22, 315-24	4.1	282
326	Characteristics of cadmium uptake in two contrasting ecotypes of the hyperaccumulator Thlaspi caerulescens. <i>Journal of Experimental Botany</i> , 2002 , 53, 535-43	7	281

325	Zinc hyperaccumulation and cellular distribution in Arabidopsis halleri. <i>Plant, Cell and Environment</i> , 2000 , 23, 507-514	8.4	278
324	Variation in rice cadmium related to human exposure. <i>Environmental Science & amp; Technology</i> , 2013 , 47, 5613-8	10.3	274
323	Influence of iron status on cadmium and zinc uptake by different ecotypes of the hyperaccumulator Thlaspi caerulescens. <i>Plant Physiology</i> , 2002 , 128, 1359-67	6.6	273
322	Sulphur Assimilation and Effects on Yield and Quality of Wheat. <i>Journal of Cereal Science</i> , 1999 , 30, 1-17	7 3.8	272
321	In situ fixation of metals in soils using bauxite residue: chemical assessment. <i>Environmental Pollution</i> , 2002 , 118, 435-43	9.3	269
320	In SituMeasurements of Solution Concentrations and Fluxes of Trace Metals in Soils Using DGT. <i>Environmental Science & Environmental Science & Environ</i>	10.3	257
319	Arsenic distribution and speciation in the fronds of the hyperaccumulator Pteris vittata. <i>New Phytologist</i> , 2002 , 156, 195-203	9.8	256
318	Methylated arsenic species in plants originate from soil microorganisms. <i>New Phytologist</i> , 2012 , 193, 665-672	9.8	253
317	Field evaluation of Cd and Zn phytoextraction potential by the hyperaccumulators Thlaspi caerulescens and Arabidopsis halleri. <i>Environmental Pollution</i> , 2006 , 141, 115-25	9.3	246
316	Investigating the contribution of the phosphate transport pathway to arsenic accumulation in rice. <i>Plant Physiology</i> , 2011 , 157, 498-508	6.6	245
315	Uptake and transport of zinc in the hyperaccumulator Thlaspi caerulescens and the non-hyperaccumulator Thlaspi ochroleucum. <i>Plant, Cell and Environment,</i> 1997 , 20, 898-906	8.4	241
314	Physiological evidence for a high-affinity cadmium transporter highly expressed in a Thlaspi caerulescens ecotype. <i>New Phytologist</i> , 2001 , 149, 53-60	9.8	241
313	Biofortification and phytoremediation. Current Opinion in Plant Biology, 2009, 12, 373-80	9.9	238
312	Comparison of three wet digestion methods for the determination of plant sulphur by inductively coupled plasma atomic emission spectroscopy (ICP-AES). <i>Communications in Soil Science and Plant Analysis</i> , 1994 , 25, 407-418	1.5	237
311	Spatial imaging, speciation, and quantification of selenium in the hyperaccumulator plants Astragalus bisulcatus and Stanleya pinnata. <i>Plant Physiology</i> , 2006 , 142, 124-34	6.6	229
310	Rice is more efficient in arsenite uptake and translocation than wheat and barley. <i>Plant and Soil</i> , 2010 , 328, 27-34	4.2	228
309	Chemical extractability of heavy metals during and after long-term applications of sewage sludge to soil. <i>Journal of Soil Science</i> , 1992 , 43, 313-321		215
308	The role of phytochelatins in arsenic tolerance in the hyperaccumulator Pteris vittata. <i>New Phytologist</i> , 2003 , 159, 403-410	9.8	214

307	Heavy metal uptake and chemical changes in the rhizosphere of Thlaspi caerulescens and Thlaspi ochroleucum grown in contaminated soils. <i>Plant and Soil</i> , 1997 , 188, 153-159	4.2	211	
306	Positive responses to Zn and Cd by roots of the Zn and Cd hyperaccumulator Thlaspi caerulescens. <i>New Phytologist</i> , 2000 , 145, 199-210	9.8	208	
305	Subcellular localisation of Cd and Zn in the leaves of a Cd-hyperaccumulating ecotype of Thlaspi caerulescens. <i>Planta</i> , 2005 , 220, 731-6	4.7	203	
304	An inter-laboratory study to test the ability of amendments to reduce the availability of Cd, Pb, and Zn in situ. <i>Environmental Pollution</i> , 2005 , 138, 34-45	9.3	199	
303	A terrestrial biotic ligand model. 1. Development and application to Cu and Ni toxicities to barley root elongation in soils. <i>Environmental Science & Environmental Science &</i>	10.3	199	
302	Selenium biofortification of high-yielding winter wheat (Triticum aestivum L.) by liquid or granular Se fertilisation. <i>Plant and Soil</i> , 2010 , 332, 5-18	4.2	191	
301	Complexation of arsenite with phytochelatins reduces arsenite efflux and translocation from roots to shoots in Arabidopsis. <i>Plant Physiology</i> , 2010 , 152, 2211-21	6.6	188	
300	Effects of potentially toxic metals in soil derived from past applications of sewage sludge on nitrogen fixation by trifolium repens L. <i>Soil Biology and Biochemistry</i> , 1988 , 20, 415-424	7.5	185	
299	Cadmium uptake, translocation and tolerance in the hyperaccumulator Arabidopsis halleri. <i>New Phytologist</i> , 2006 , 172, 646-54	9.8	184	
298	Predicting cadmium concentrations in wheat and barley grain using soil properties. <i>Journal of Environmental Quality</i> , 2004 , 33, 532-41	3.4	176	
297	Molecular mechanisms of selenium tolerance and hyperaccumulation in Stanleya pinnata. <i>Plant Physiology</i> , 2010 , 153, 1630-52	6.6	173	
296	Lability of Cd, Cu, and Zn in polluted soils treated with lime, beringite, and red mud and identification of a non-labile colloidal fraction of metals using istopic techniques. <i>Environmental Science & Environmental Scienc</i>	10.3	167	
295	Enumeration of indigenous Rhizobium leguminosarum biovar Trifolii in soils previously treated with metal-contaminated sewage sludge. <i>Soil Biology and Biochemistry</i> , 1993 , 25, 301-309	7·5	167	
294	The role of the rice aquaporin Lsi1 in arsenite efflux from roots. <i>New Phytologist</i> , 2010 , 186, 392-9	9.8	166	
293	Zinc and cadmium uptake by the hyperaccumulator Thlaspi caerulescens in contaminated soils and its effects on the concentration and chemical speciation of metals in soil solution. <i>Plant and Soil</i> , 1997 , 197, 71-78	4.2	160	
292	Absence of nitrogen fixation in clover grown on soil subject to long-term contamination with heavy metals is due to survival of only ineffective Rhizobium. <i>Soil Biology and Biochemistry</i> , 1989 , 21, 841-848	7.5	159	
291	Copper uptake by Elsholtzia splendens and Silene vulgaris and assessment of copper phytoavailability in contaminated soils. <i>Environmental Pollution</i> , 2004 , 128, 307-15	9.3	158	
290	Selenium deficiency risk predicted to increase under future climate change. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 2848-2853	11.5	155	

289	Distribution of sulfur within oilseed rape leaves in response to sulfur deficiency during vegetative growth. <i>Plant Physiology</i> , 1998 , 118, 1337-44	6.6	155
288	Land application of sewage sludge: scientific perspectives of heavy metal loading limits in Europe and the United States. <i>Environmental Reviews</i> , 1994 , 2, 108-118	4.5	154
287	Soil factors controlling the expression of copper toxicity to plants in a wide range of European soils. <i>Environmental Toxicology and Chemistry</i> , 2006 , 25, 726-32	3.8	145
286	Terrestrial biotic ligand model. 2. Application to Ni and Cu toxicities to plants, invertebrates, and microbes in soil. <i>Environmental Science & Environmental Science & Envir</i>	10.3	144
285	Copper Speciation and Impacts on Bacterial Biosensors in the Pore Water of Copper-Contaminated Soils. <i>Environmental Science & Environmental Science &</i>	10.3	140
284	Sulphur uptake, yield responses and the interactions between nitrogen and sulphur in winter oilseed rape (Brassica napus). <i>Journal of Agricultural Science</i> , 1996 , 126, 53-62	1	138
283	Highly efficient xylem transport of arsenite in the arsenic hyperaccumulator Pteris vittata. <i>New Phytologist</i> , 2008 , 180, 434-441	9.8	135
282	Molybdenum sequestration in Brassica species. A role for anthocyanins?. <i>Plant Physiology</i> , 2001 , 126, 1391-402	6.6	135
281	Identification of low inorganic and total grain arsenic rice cultivars from Bangladesh. <i>Environmental Science & Environmental Science & Environmental</i>	10.3	133
280	Genome wide association mapping of grain arsenic, copper, molybdenum and zinc in rice (Oryza sativa L.) grown at four international field sites. <i>PLoS ONE</i> , 2014 , 9, e89685	3.7	132
279	Determination of chemical availability of cadmium and zinc in soils using inert soil moisture samplers. <i>Environmental Pollution</i> , 1998 , 99, 293-8	9.3	131
278	Biomass carbon measurements and substrate utilization patterns of microbial populations from soils amended with cadmium, copper, or zinc. <i>Applied and Environmental Microbiology</i> , 1997 , 63, 39-43	4.8	131
277	Influence of sulfur deficiency on the expression of specific sulfate transporters and the distribution of sulfur, selenium, and molybdenum in wheat. <i>Plant Physiology</i> , 2010 , 153, 327-36	6.6	130
276	In situ fixation of metals in soils using bauxite residue: biological effects. <i>Environmental Pollution</i> , 2002 , 118, 445-52	9.3	128
275	Kinetics of Zn release in soils and prediction of Zn concentration in plants using diffusive gradients in thin films. <i>Environmental Science & Environmental Science & Environ</i>	10.3	126
274	Arsenic methylation in soils and its relationship with microbial arsM abundance and diversity, and as speciation in rice. <i>Environmental Science & Environmental & Env</i>	10.3	125
273	Environmental and genetic control of arsenic accumulation and speciation in rice grain: comparing a range of common cultivars grown in contaminated sites across Bangladesh, China, and India. <i>Environmental Science & Environmental Environmenta</i>	10.3	125
272	Phytotoxicity of nickel in a range of European soils: influence of soil properties, Ni solubility and speciation. <i>Environmental Pollution</i> , 2007 , 145, 596-605	9.3	125

271	Long-term changes in the polychlorinated biphenyl content of United Kingdom soils. <i>Environmental Science & Environmental Scie</i>	10.3	125
270	Combined NanoSIMS and synchrotron X-ray fluorescence reveal distinct cellular and subcellular distribution patterns of trace elements in rice tissues. <i>New Phytologist</i> , 2014 , 201, 104-115	9.8	120
269	Long-Term Changes in the Extractability and Bioavailability of Zinc and Cadmium after Sludge Application. <i>Journal of Environmental Quality</i> , 2000 , 29, 875-883	3.4	120
268	Arsenic bioavailability to rice is elevated in Bangladeshi paddy soils. <i>Environmental Science & Environmental Science & Technology</i> , 2010 , 44, 8515-21	10.3	119
267	Uptake and distribution of nickel and other metals in the hyperaccumulator Berkheya coddii. <i>New Phytologist</i> , 2003 , 158, 279-285	9.8	119
266	An explanation for the apparent losses of metals in a long-term field experiment with sewage sludge. <i>Environmental Pollution</i> , 1989 , 60, 235-56	9.3	117
265	Predicting the activity of Cd2+ and Zn2+ in soil pore water from the radio-labile metal fraction. <i>Geochimica Et Cosmochimica Acta</i> , 2003 , 67, 375-385	5.5	116
264	NanoSIMS analysis of arsenic and selenium in cereal grain. <i>New Phytologist</i> , 2010 , 185, 434-45	9.8	115
263	Speciation of Cadmium and Zinc with Application to Soil Solutions. <i>Journal of Environmental Quality</i> , 1995 , 24, 183-190	3.4	115
262	Mineral Availability as a Key Regulator of Soil Carbon Storage. <i>Environmental Science & Emp;</i> Technology, 2017 , 51, 4960-4969	10.3	111
261	Expression and functional analysis of metal transporter genes in two contrasting ecotypes of the hyperaccumulator Thlaspi caerulescens. <i>Journal of Experimental Botany</i> , 2007 , 58, 1717-28	7	111
260	High-resolution secondary ion mass spectrometry reveals the contrasting subcellular distribution of arsenic and silicon in rice roots. <i>Plant Physiology</i> , 2011 , 156, 913-24	6.6	109
259	Variation in grain arsenic assessed in a diverse panel of rice (Oryza sativa) grown in multiple sites. <i>New Phytologist</i> , 2012 , 193, 650-664	9.8	108
258	Effect of soil characteristics on Cd uptake by the hyperaccumulator Thlaspi caerulescens. <i>Environmental Pollution</i> , 2006 , 139, 167-75	9.3	108
257	Extractable sulphate and organic sulphur in soils and their availability to plants. <i>Plant and Soil</i> , 1994 , 164, 243-250	4.2	107
256	Isotopic Character of Lead Deposited from the Atmosphere at a Grassland Site in the United	10.3	106
	Kingdom Since 1860. Environmental Science & Technology, 1996 , 30, 2511-2518		
255	Phytotoxicity and bioavailability of cobalt to plants in a range of soils. <i>Chemosphere</i> , 2009 , 75, 979-86	8.4	105

253	Selenium speciation in soil and rice: influence of water management and Se fertilization. <i>Journal of Agricultural and Food Chemistry</i> , 2010 , 58, 11837-43	5.7	101
252	Applications of fertilizer cations affect cadmium and zinc concentrations in soil solutions and uptake by plants. <i>European Journal of Soil Science</i> , 1994 , 45, 159-165	3.4	101
251	A study of the impacts of Zn and Cu on two rhizobial species in soils of a long-term field experiment. <i>Plant and Soil</i> , 2000 , 221, 167-179	4.2	100
250	Effect of nitrogen form on the rhizosphere dynamics and uptake of cadmium and zinc by the hyperaccumulator Thlaspi caerulescens. <i>Plant and Soil</i> , 2009 , 318, 205-215	4.2	99
249	The effects of soil organic matter levels on soil solution concentrations and extractabilities of manganese, zinc and copper. <i>Geoderma</i> , 1988 , 42, 177-188	6.7	97
248	Enhanced dissipation of chrysene in planted soil: the impact of a rhizobial inoculum. <i>Soil Biology and Biochemistry</i> , 2004 , 36, 33-38	7.5	94
247	Nematode communities under stress: the long-term effects of heavy metals in soil treated with sewage sludge. <i>Applied Soil Ecology</i> , 2002 , 20, 27-42	5	92
246	Arsenic speciation in phloem and xylem exudates of castor bean. <i>Plant Physiology</i> , 2010 , 154, 1505-13	6.6	90
245	Arsenic hyperaccumulation by Pteris vittata from arsenic contaminated soils and the effect of liming and phosphate fertilisation. <i>Environmental Pollution</i> , 2004 , 132, 113-20	9.3	90
244	Assessment of the toxicity of metals in soils amended with sewage sludge using a chemical speciation technique and a lux-based biosensor. <i>Environmental Toxicology and Chemistry</i> , 1999 , 18, 659-	6 6 8	89
243	Heavy metals from past applications of sewage sludge decrease the genetic diversity of rhizobium leguminosarum biovar trifolii populations. <i>Soil Biology and Biochemistry</i> , 1993 , 25, 1485-1490	7.5	89
242	Selenium concentration and speciation in biofortified flour and bread: Retention of selenium during grain biofortification, processing and production of Se-enriched food. <i>Food Chemistry</i> , 2011 , 126, 1771-8	8.5	88
241	Evidence of low selenium concentrations in UK bread-making wheat grain. <i>Journal of the Science of Food and Agriculture</i> , 2002 , 82, 1160-1165	4.3	88
240	Soil microbial response during the phytoremediation of a PAH contaminated soil. <i>Soil Biology and Biochemistry</i> , 2005 , 37, 2334-2336	7.5	88
239	Identification of the form of Cd in the leaves of a superior Cd-accumulating ecotype of Thlaspi caerulescens using 113Cd-NMR. <i>Planta</i> , 2005 , 221, 928-36	4.7	87
238	Cadmium and zinc in plants and soil solutions from contaminated soils. <i>Plant and Soil</i> , 1997 , 189, 21-31	4.2	86
237	Mycorrhizal infection of clover is delayed in soils contaminated with heavy metals from past sewage sludge applications. <i>Soil Biology and Biochemistry</i> , 1990 , 22, 871-873	7.5	84
236	Variation in root-to-shoot translocation of cadmium and zinc among different accessions of the hyperaccumulators Thlaspi caerulescens and Thlaspi praecox. <i>New Phytologist</i> , 2008 , 178, 315-325	9.8	83

235	Long-term removal of wheat straw decreases soil amorphous silica at Broadbalk, Rothamsted. <i>Plant and Soil</i> , 2012 , 352, 173-184	4.2	82	
234	The dynamics of arsenic in four paddy fields in the Bengal delta. <i>Environmental Pollution</i> , 2011 , 159, 94	7-5.3	82	
233	Diagnosing sulfur deficiency in field-grown oilseed rape (Brassica napus L.) and wheat (Triticum aestivum L.). <i>Plant and Soil</i> , 2000 , 225, 95-107	4.2	81	
232	Determining uptake of Bon-labileßoil cadmium by Thlaspi caerulescens using isotopic dilution techniques. <i>New Phytologist</i> , 2000 , 146, 453-460	9.8	80	
231	Variation in the Breadmaking Quality and Rheological Properties of Wheat in Relation to Sulphur Nutrition under Field Conditions. <i>Journal of Cereal Science</i> , 1999 , 30, 19-31	3.8	80	
230	Metal residues in soils previously treated with sewage-sludge and their effects on growth and nitrogen fixation by blue-green algae. <i>Soil Biology and Biochemistry</i> , 1986 , 18, 345-353	7.5	80	
229	Low biodegradability of fluoxetine HCl, diazepam and their human metabolites in sewage sludge-amended soil. <i>Journal of Soils and Sediments</i> , 2008 , 8, 217-230	3.4	79	
228	Assessment of the use of industrial by-products to remediate a copper- and arsenic-contaminated soil. <i>Journal of Environmental Quality</i> , 2004 , 33, 902-10	3.4	79	
227	Long-Term Impact of Field Applications of Sewage Sludge on Soil Antibiotic Resistome. <i>Environmental Science & Environmental S</i>	10.3	78	
226	A risk assessment of sulphur deficiency in cereals using soil and atmospheric deposition data. <i>Soil Use and Management</i> , 1995 , 11, 110-114	3.1	78	
225	Comparison of the chemical changes in the rhizosphere of the nickel hyperaccumulator Alyssum murale with the non-accumulator Raphanus sativus. <i>Plant and Soil</i> , 1994 , 164, 251-259	4.2	78	
224	Survival of the indigenous population of rhizobium leguminosarum biovar trifolii in soil spiked with Cd, Zn, Cu and Ni salts. <i>Soil Biology and Biochemistry</i> , 1992 , 24, 625-632	7.5	78	
223	Nanomaterials in Biosolids Inhibit Nodulation, Shift Microbial Community Composition, and Result in Increased Metal Uptake Relative to Bulk/Dissolved Metals. <i>Environmental Science & Eamp; Technology</i> , 2015 , 49, 8751-8	10.3	77	
222	Comparison of soil solution speciation and diffusive gradients in thin-films measurement as an indicator of copper bioavailability to plants. <i>Environmental Toxicology and Chemistry</i> , 2006 , 25, 733-42	3.8	77	
221	Comparison of root absorption, translocation and tolerance of arsenic in the hyperaccumulator Pteris vittata and the nonhyperaccumulator Pteris tremula. <i>New Phytologist</i> , 2005 , 165, 755-61	9.8	77	
220	Polynuclear aromatic hydrocarbons in crops from long-term field experiments amended with sewage sludge. <i>Environmental Pollution</i> , 1992 , 76, 25-32	9.3	77	
219	Phytoremediation of arsenic contaminated paddy soils with Pteris vittata markedly reduces arsenic uptake by rice. <i>Environmental Pollution</i> , 2011 , 159, 3739-43	9.3	75	
218	Does cadmium play a physiological role in the hyperaccumulator Thlaspi caerulescens?. Chemosphere, 2008, 71, 1276-83	8.4	75	

217	Cadmium hyperaccumulation protects Thlaspi caerulescens from leaf feeding damage by thrips (Frankliniella occidentalis). <i>New Phytologist</i> , 2005 , 167, 805-14	9.8	75
216	Accumulation, distribution, and speciation of arsenic in wheat grain. <i>Environmental Science & Environmental Science & Technology</i> , 2010 , 44, 5464-8	10.3	74
215	Responses of two wheat varieties to sulphur addition and diagnosis of sulphur deficiency. <i>Plant and Soil</i> , 1996 , 181, 317-327	4.2	72
214	The Potential for the Use of Metal-Accumulating Plants for the in Situ Decontamination of Metal-Polluted Soils. <i>Soil & Environment</i> , 1993 , 673-676		72
213	Influence of soil properties and aging on arsenic phytotoxicity. <i>Environmental Toxicology and Chemistry</i> , 2006 , 25, 1663-70	3.8	71
212	Changes in trace metal species and other components of the rhizosphere during growth of radish. <i>Plant, Cell and Environment,</i> 1995 , 18, 749-756	8.4	71
211	Agronomic selenium biofortification in Triticum durum under Mediterranean conditions: from grain to cooked pasta. <i>Food Chemistry</i> , 2014 , 146, 378-84	8.5	70
210	Grain and shoot zinc accumulation in winter wheat affected by nitrogen management. <i>Plant and Soil</i> , 2012 , 361, 153-163	4.2	70
209	Modelling phytoremediation by the hyperaccumulating fern, Pteris vittata, of soils historically contaminated with arsenic. <i>Environmental Pollution</i> , 2009 , 157, 1589-96	9.3	70
208	Evaluating a firee Ion Activity Model[applied to metal uptake by Lolium perenne L. grown in contaminated soils <i>Plant and Soil</i> , 2005 , 270, 1-12	4.2	70
207			70
	Chromium and Nickel 1995 , 152-178		
206	Chromium and Nickel 1995 , 152-178 Hyperaccumulation of Zn by Thlaspi caerulescens can ameliorate Zn toxicity in the rhizosphere of cocropped Thlaspi arvense. <i>Environmental Science & Environmental & Envi</i>	10.3	69
206	Hyperaccumulation of Zn by Thlaspi caerulescens can ameliorate Zn toxicity in the rhizosphere of	10.3	69 68
	Hyperaccumulation of Zn by Thlaspi caerulescens can ameliorate Zn toxicity in the rhizosphere of cocropped Thlaspi arvense. <i>Environmental Science & Dougy</i> , 2001 , 35, 3237-41 Soil factors affecting selenium concentration in wheat grain and the fate and speciation of Se		
205	Hyperaccumulation of Zn by Thlaspi caerulescens can ameliorate Zn toxicity in the rhizosphere of cocropped Thlaspi arvense. <i>Environmental Science & Description of Science</i>	4.2	68
205	Hyperaccumulation of Zn by Thlaspi caerulescens can ameliorate Zn toxicity in the rhizosphere of cocropped Thlaspi arvense. <i>Environmental Science & Die Composed Thlaspi arvense</i> . <i>Science & Die Composed Thlaspi </i>	4.2	68 67
205	Hyperaccumulation of Zn by Thlaspi caerulescens can ameliorate Zn toxicity in the rhizosphere of cocropped Thlaspi arvense. <i>Environmental Science & Discourse amp; Technology</i> , 2001 , 35, 3237-41 Soil factors affecting selenium concentration in wheat grain and the fate and speciation of Se fertilisers applied to soil. <i>Plant and Soil</i> , 2010 , 332, 19-30 New culture medium containing ionic concentrations of nutrients similar to concentrations found in the soil solution. <i>Applied and Environmental Microbiology</i> , 1991 , 57, 3674-6 The role of nodes in arsenic storage and distribution in rice. <i>Journal of Experimental Botany</i> , 2015 , 66, 3717-24 Sulphur speciation and turnover in soils: evidence from sulphur K-edge XANES spectroscopy and	4.2 4.8	68 67 66

199	Influence of Complexation on the Uptake by Plants of Iron, Manganese, Copper and Zinc. <i>Journal of Experimental Botany</i> , 1991 , 42, 509-513	7	66
198	Phytoextraction of cadmium and zinc by Salix from soil historically amended with sewage sludge. <i>Plant and Soil</i> , 2007 , 290, 157-172	4.2	65
197	Estimates of ambient background concentrations of trace metals in soils for risk assessment. <i>Environmental Pollution</i> , 2007 , 148, 221-9	9.3	65
196	Metal concentrations in sludges and soil from a long-term field trial. <i>Journal of Agricultural Science</i> , 1984 , 103, 25-35	1	65
195	Phytoextraction of cadmium and zinc from arable soils amended with sewage sludge using Thlaspi caerulescens: development of a predictive model. <i>Environmental Pollution</i> , 2007 , 150, 363-72	9.3	64
194	Determination of Acute Zn Toxicity in Pore Water from Soils Previously Treated with Sewage Sludge Using Bioluminescence Assays. <i>Environmental Science & Environmental Science</i>	10.3	64
193	Differences between soil solutions obtained from rhizosphere and non-rhizosphere soils by water displacement and soil centrifugation. <i>European Journal of Soil Science</i> , 1994 , 45, 431-438	3.4	64
192	Zinc, copper and nickel concentrations in soil extracts and crops grown on four soils treated with metalloaded sewage sludges. <i>Environmental Pollution</i> , 1987 , 44, 193-210	9.3	64
191	Soil microbial biomass estimates in soils contaminated with metals. <i>Soil Biology and Biochemistry</i> , 1986 , 18, 383-388	7.5	64
190	Impact of sulphur fertilisation on crop response to selenium fertilisation. <i>Plant and Soil</i> , 2010 , 332, 31-4	104.2	63
189	Assessing the labile arsenic pool in contaminated paddy soils by isotopic dilution techniques and simple extractions. <i>Environmental Science & Environmental Science & Environ</i>	10.3	61
188	Co-segregation analysis of cadmium and zinc accumulation in Thlaspi caerulescens interecotypic crosses. <i>New Phytologist</i> , 2004 , 163, 299-312	9.8	60
187	Comparison of methods to investigate microbial populations in soils under different agricultural management. <i>FEMS Microbiology Ecology</i> , 2000 , 33, 129-137	4.3	60
186	Zinc, copper and nickel concentrations in ryegrass grown on sewage sludge-contaminated soils of different pH. <i>Journal of the Science of Food and Agriculture</i> , 1986 , 37, 961-968	4.3	59
185	THE UPTAKE AND TRANSLOCATION OF TRI-AND HEXA-VALENT CHROMIUM AND EFFECTS ON THE GROWTH OF OAT IN FLOWING NUTRIENT SOLUTION AND IN SOIL. <i>New Phytologist</i> , 1982 , 92, 381-390	9.8	59
184	The Nodulin 26-like intrinsic membrane protein OsNIP3;2 is involved in arsenite uptake by lateral roots in rice. <i>Journal of Experimental Botany</i> , 2017 , 68, 3007-3016	7	58
183	Ca. Nitrososphaera and Bradyrhizobium are inversely correlated and related to agricultural practices in long-term field experiments. <i>Frontiers in Microbiology</i> , 2013 , 4, 104	5.7	58
182	Synthesis of low molecular weight thiols in response to Cd exposure in Thlaspi caerulescens. <i>Plant, Cell and Environment,</i> 2006 , 29, 1422-9	8.4	58

181	Comparison of toxicity of zinc for soil microbial processes between laboratory-contamined and polluted field soils. <i>Environmental Toxicology and Chemistry</i> , 2003 , 22, 2592-8	3.8	58
180	Effects of pH and heavy metal concentrations in solution culture on the proton release, growth and elemental composition of Alyssum murale and Raphanus sativus L <i>Plant and Soil</i> , 1994 , 166, 83-92	4.2	58
179	Distribution and speciation of iron and zinc in grain of two wheat genotypes. <i>Journal of Agricultural and Food Chemistry</i> , 2014 , 62, 708-16	5.7	56
178	Long-term impacts of zinc and copper enriched sewage sludge additions on bacterial, archaeal and fungal communities in arable and grassland soils. <i>Soil Biology and Biochemistry</i> , 2011 , 43, 932-941	7.5	56
177	Assessment of free-living nitrogen fixation activity as a biological indicator of heavy metal toxicity in soil. <i>Soil Biology and Biochemistry</i> , 1992 , 24, 601-606	7.5	56
176	Arsenic translocation in rice investigated using radioactive 73As tracer. <i>Plant and Soil</i> , 2012 , 350, 413-4	24.2	55
175	Silicon has opposite effects on the accumulation of inorganic and methylated arsenic species in rice. <i>Plant and Soil</i> , 2014 , 376, 423-431	4.2	54
174	Metal uptake by plants from sludge-amended soils: caution is required in the plateau interpretation. <i>Plant and Soil</i> , 1999 , 216, 53-64	4.2	54
173	Lead in rice: analysis of baseline lead levels in market and field collected rice grains. <i>Science of the Total Environment</i> , 2014 , 485-486, 428-434	10.2	53
172	Metal tolerance of isolates of Rhizobium leguminosarum biovar Trifolii from soil contaminated by past applications of sewage sludge. <i>Soil Biology and Biochemistry</i> , 1992 , 24, 83-88	7.5	53
171	. Environmental Toxicology and Chemistry, 1999 , 18, 659	3.8	53
170	Predicting molybdenum toxicity to higher plants: influence of soil properties. <i>Environmental Pollution</i> , 2010 , 158, 3095-102	9.3	52
169	Assessment of Zn mobilization in the rhizosphere of Thlaspi caerulescens by bioassay with non-accumulator plants and soil extraction. <i>Plant and Soil</i> , 2001 , 237, 147-156	4.2	52
168	Nanoparticles within WWTP sludges have minimal impact on leachate quality and soil microbial community structure and function. <i>Environmental Pollution</i> , 2016 , 211, 399-405	9.3	51
167	Arsenic shoot-grain relationships in field grown rice cultivars. <i>Environmental Science & Environmental Science & Environmenta</i>	10.3	51
166	Speciation and solubility of Cu, Ni and Pb in contaminated soils. <i>European Journal of Soil Science</i> , 2004 , 55, 579-590	3.4	51
165	Localisation of iron in wheat grain using high resolution secondary ion mass spectrometry. <i>Journal of Cereal Science</i> , 2012 , 55, 183-187	3.8	50
164	Arsenite efflux is not enhanced in the arsenate-tolerant phenotype of Holcus lanatus. <i>New Phytologist</i> , 2009 , 183, 340-348	9.8	50

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163	Predicting molybdenum toxicity to higher plants: estimation of toxicity threshold values. <i>Environmental Pollution</i> , 2010 , 158, 3085-94	9.3	50	
162	Long-Term Effects of Land Use and Fertilizer Treatments on Sulfur Cycling. <i>Journal of Environmental Quality</i> , 2000 , 29, 1867-1874	3.4	50	
161	Assessing Risks of Heavy Metal Toxicity in Agricultural Soils: Do Microbes Matter?. <i>Human and Ecological Risk Assessment (HERA)</i> , 1999 , 5, 683-689	4.9	50	
160	Uptake of Metals by Plants Sharing a Rhizosphere with the Hyperaccumulator Thlaspi caerulescens. <i>International Journal of Phytoremediation</i> , 2002 , 4, 267-281	3.9	49	
159	Long-term effects of land use and fertiliser treatments on sulphur transformations in soils from the Broadbalk experiment. <i>Soil Biology and Biochemistry</i> , 2001 , 33, 1797-1804	7.5	49	
158	A multi-technique investigation of copper and zinc distribution, speciation and potential bioavailability in biosolids. <i>Environmental Pollution</i> , 2012 , 166, 57-64	9.3	48	
157	Population size of indigenous Rhizobium leguminosarum biovar trifolii in long-term field experiments with sewage sludge cake, metal-amended liquid sludge or metal salts: Effects of zinc, copper and cadmium. <i>Soil Biology and Biochemistry</i> , 2008 , 40, 1670-1680	7.5	48	
156	Accumulation and distribution of aluminium and other elements in tea (Camellia sinensis) leaves. <i>Agronomy for Sustainable Development</i> , 2003 , 23, 705-710		48	
155	Factors affecting the concentrations of lead in British wheat and barley grain. <i>Environmental Pollution</i> , 2004 , 131, 461-8	9.3	48	
154	A comparison of soil tests for available phosphorus in long-term field experiments in Europe. <i>European Journal of Soil Science</i> , 2017 , 68, 873-885	3.4	47	
153	Solubility of zinc and interactions between zinc and phosphorus in the hyperaccumulator Thlaspi caerulescens. <i>Plant, Cell and Environment</i> , 1998 , 21, 108-114	8.4	47	
152	Effects of soil compaction and irrigation on the concentrations of selenium and arsenic in wheat grains. <i>Science of the Total Environment</i> , 2007 , 372, 433-9	10.2	47	
151	A review of the impacts of degradation threats on soil properties in the UK. <i>Soil Use and Management</i> , 2015 , 31, 1-15	3.1	45	
150	Speciation of zinc in contaminated soils. <i>Environmental Pollution</i> , 2008 , 155, 208-16	9.3	45	
149	Effects of sulphur nutrition on growth and nitrogen fixation of pea (Pisum sativum L.). <i>Plant and Soil</i> , 1999 , 212, 207-217	4.2	45	
148	Predicting Cadmium Concentrations in Wheat and Barley Grain Using Soil Properties 2004 , 33, 532		45	
147	Development of an acute and chronic ecotoxicity assay using lux-marked Rhizobium leguminosarum biovar trifolii. <i>Letters in Applied Microbiology</i> , 1997 , 24, 296-300	2.9	44	
146	Yield responses of arable crops to liming - An evaluation of relationships between yields and soil pH from a long-term liming experiment. <i>European Journal of Agronomy</i> , 2019 , 105, 176-188	5	43	

145	Effects of nitrogen on the distribution and chemical speciation of iron and zinc in pearling fractions of wheat grain. <i>Journal of Agricultural and Food Chemistry</i> , 2014 , 62, 4738-46	5.7	43
144	Historical arsenic contamination of soil due to long-term phosphate fertiliser applications. <i>Environmental Pollution</i> , 2013 , 180, 259-64	9.3	43
143	Sulphur nutrition: An important factor for the quality of wheat and rapeseed. <i>Soil Science and Plant Nutrition</i> , 1997 , 43, 1137-1142	1.6	43
142	Initial results from a long-term, multi-site field study of the effects on soil fertility and microbial activity of sludge cakes containing heavy metals. <i>Soil Use and Management</i> , 2006 , 22, 11-21	3.1	43
141	Use of Sulfur Isotope Ratios To Determine Anthropogenic Sulfur Signals in a Grassland Ecosystem. <i>Environmental Science & Environmental Science & Envi</i>	10.3	42
140	Responses of breadmaking quality to sulphur in three wheat varieties. <i>Journal of the Science of Food and Agriculture</i> , 1999 , 79, 1865-1874	4.3	42
139	Selenium accumulation and speciation in biofortified chickpea (Cicer arietinum L.) under Mediterranean conditions. <i>Journal of the Science of Food and Agriculture</i> , 2014 , 94, 1101-6	4.3	41
138	Nitrogen to sulphur ratio in rapeseed and in rapeseed protein and its use in diagnosing sulphur deficiency. <i>Journal of Plant Nutrition</i> , 1997 , 20, 549-558	2.3	41
137	Stable sulfur isotope ratio indicates long-term changes in sulfur deposition in the Broadbalk experiment since 1845. <i>Journal of Environmental Quality</i> , 2003 , 32, 33-9	3.4	41
136	Sulphur fractionation in calcareous soils and bioavailability to plants. <i>Plant and Soil</i> , 2005 , 268, 103-109	4.2	41
135	Zinc accumulation by Thlaspi caerulescens from soils with different Zn availability: a pot study. <i>Plant and Soil</i> , 2001 , 236, 11-18	4.2	41
134	Phytochelatins play a key role in arsenic accumulation and tolerance in the aquatic macrophyte Wolffia globosa. <i>Environmental Pollution</i> , 2012 , 165, 18-24	9.3	40
133	Trends in (13)C/ (12)C ratios and C isotope discrimination of wheat since 1845. <i>Oecologia</i> , 2001 , 128, 336-342	2.9	40
132	Historical changes in the concentrations of selenium in soil and wheat grain from the Broadbalk experiment over the last 160 years. <i>Science of the Total Environment</i> , 2008 , 389, 532-8	10.2	39
131	Cadmium content of wheat grain from a long-term field experiment with sewage sludge. <i>Journal of Environmental Quality</i> , 2001 , 30, 1575-80	3.4	39
130	The Cadmium Content of British Wheat Grain. <i>Journal of Environmental Quality</i> , 1995 , 24, 850-855	3.4	39
129	Chlorobenzenes in field soil with a history of multiple sewage sludge applications. <i>Environmental Science & Environmental Sci</i>	10.3	39
128	PCDD/Fs and non-o-PCBs in digested U.K. sewage sludges. <i>Chemosphere</i> , 1995 , 30, 51-67	8.4	39

(2018-2015)

127	Non-labile silver species in biosolids remain stable throughout 50 years of weathering and ageing. <i>Environmental Pollution</i> , 2015 , 205, 78-86	9.3	38
126	Use of Co speciation and soil properties to explain variation in Co toxicity to root growth of barley (Hordeum vulgare L.) in different soils. <i>Environmental Pollution</i> , 2008 , 156, 883-90	9.3	38
125	Response of a Rhizobium-based luminescence biosensor to Zn and Cu in soil solutions from sewage sludge treated soils. <i>Soil Biology and Biochemistry</i> , 2000 , 32, 383-388	7.5	38
124	Effects of sulphur on yield and malting quality of barley. <i>Journal of Cereal Science</i> , 2006 , 43, 369-377	3.8	37
123	Rhizobium meliloti is less sensitive to heavy-metal contamination in soil than R. leguminosarum bv. trifolii or R. loti. <i>Soil Biology and Biochemistry</i> , 1993 , 25, 273-278	7.5	37
122	Pollution-induced community tolerance of soil microbes in response to a zinc gradient. <i>Environmental Toxicology and Chemistry</i> , 2004 , 23, 2665-72	3.8	36
121	Plant-microbe networks in soil are weakened by century-long use of inorganic fertilizers. <i>Microbial Biotechnology</i> , 2019 , 12, 1464-1475	6.3	35
120	Inoculation effects on legumes grown in soil previously treated with sewage sludge. <i>Soil Biology and Biochemistry</i> , 1993 , 25, 575-580	7.5	35
119	Long-term impact of sewage sludge application on soil microbial biomass: An evaluation using meta-analysis. <i>Environmental Pollution</i> , 2016 , 219, 1021-1035	9.3	35
118	Atmospheric SO2 emissions since the late 1800s change organic sulfur forms in humic substance extracts of soils. <i>Environmental Science & Environmental Science & Environmenta</i>	10.3	34
117	Kinetics of metal fixation in soils: measurement and modeling by isotopic dilution. <i>Environmental Toxicology and Chemistry</i> , 2006 , 25, 659-63	3.8	34
116	Effect of long-term equilibration on the toxicity of molybdenum to soil organisms. <i>Environmental Pollution</i> , 2012 , 162, 1-7	9.3	33
115	Predicting arsenic solubility in contaminated soils using isotopic dilution techniques. <i>Environmental Science & Environmental Science & Environmental</i>	10.3	33
114	Changes in the sulphur status of British wheat grain in the last decade, and its geographical distribution. <i>Journal of the Science of Food and Agriculture</i> , 1995 , 68, 507-514	4.3	33
113	The effects of increasing yields on the macro- and microelement concentrations and offtakes in the grain of winter wheat. <i>Journal of the Science of Food and Agriculture</i> , 1985 , 36, 1073-1083	4.3	33
112	Over 150 years of long-term fertilization alters spatial scaling of microbial biodiversity. <i>MBio</i> , 2015 , 6,	7.8	32
111	Knocking out ACR2 does not affect arsenic redox status in Arabidopsis thaliana: implications for as detoxification and accumulation in plants. <i>PLoS ONE</i> , 2012 , 7, e42408	3.7	32
110	Risk of Silver Transfer from Soil to the Food Chain Is Low after Long-Term (20 Years) Field Applications of Sewage Sludge. <i>Environmental Science & Environmental Science & En</i>	10.3	31

109	Selenium hyperaccumulator plants Stanleya pinnata and Astragalus bisulcatus are colonized by Se-resistant, Se-excluding wasp and beetle seed herbivores. <i>PLoS ONE</i> , 2012 , 7, e50516	3.7	31
108	Temporal and spatial prediction of radiocaesium transfer to food products. <i>Radiation and Environmental Biophysics</i> , 2001 , 40, 227-35	2	30
107	Monte Carlo simulations of the transformation and removal of Ag, TiO2, and ZnO nanoparticles in wastewater treatment and land application of biosolids. <i>Science of the Total Environment</i> , 2015 , 511, 535-43	10.2	29
106	Selenium speciation in malt, wort, and beer made from selenium-biofortified two-rowed barley grain. <i>Journal of Agricultural and Food Chemistry</i> , 2014 , 62, 5948-53	5.7	28
105	What's new about cadmium hyperaccumulation?. <i>New Phytologist</i> , 2001 , 149, 2-3	9.8	28
104	Predicting the lime requirement of soils under permanent grassland and arable crops. <i>Soil Use and Management</i> , 1989 , 5, 54-58	3.1	28
103	THE INFLUENCE OF NITROGEN SOURCE ON THE TOLERANCE OF HOLCUS LANATUS L.* AND BROMUS ERECTUS HUDS. TO MANGANESE. <i>New Phytologist</i> , 1982 , 91, 443-452	9.8	28
102	The nutritional quality of cereals varies geospatially in Ethiopia and Malawi. <i>Nature</i> , 2021 , 594, 71-76	50.4	28
101	Arsenic influence on genetic variation in grain trace-element nutrient content in Bengal delta grown rice. <i>Environmental Science & Environmental & En</i>	10.3	27
100	Pollution by toxic metals on agricultural soils. <i>Nature</i> , 1988 , 335, 676-676	50.4	27
99	Phosphate stable oxygen isotope variability within a temperate agricultural soil. <i>Geoderma</i> , 2017 , 285, 64-75	6.7	26
98	Using plant analysis to predict yield losses caused by sulphur deficiency. <i>Annals of Applied Biology</i> , 2001 , 138, 123-127	2.6	26
97	The Effect of Different Organic Fertilizers on Yield and Soil and Crop Nutrient Concentrations. <i>Agronomy</i> , 2019 , 9, 776	3.6	26
96	African soil properties and nutrients mapped at 30lm spatial resolution using two-scale ensemble machine learning. <i>Scientific Reports</i> , 2021 , 11, 6130	4.9	25
95	Selenium speciation in soil extracts using LC-ICP-MS. <i>International Journal of Environmental Analytical Chemistry</i> , 2012 , 92, 222-236	1.8	24
94	Thiosulphate and tetrathionate oxidation in arable soils. Soil Biology and Biochemistry, 1998, 30, 553-55	.5 9 ₇ .5	24
93	Initial results from long-term field studies at three sites on the effects of heavy metal-amended liquid sludges on soil microbial activity. <i>Soil Use and Management</i> , 2006 , 22, 180-187	3.1	24
92	The influence of multiple sewage sludge amendments on the PCB content of an agricultural soil over time. <i>Environmental Toxicology and Chemistry</i> , 1995 , 14, 553-560	3.8	24

[1996-1986]

91	Experimental determinations and computer predictions of trace metal ion concentrations in dilute complex solutions. <i>Analyst, The</i> , 1986 , 111, 459	5	24
90	Impacts of sulphur nutrition on selenium and molybdenum concentrations in wheat grain. <i>Journal of Cereal Science</i> , 2010 , 52, 111-113	3.8	23
89	Measured Soil Water Concentrations of Cadmium and Zinc in Plant Pots and Estimated Leaching Outflows from Contaminated Soils. <i>Water, Air, and Soil Pollution</i> , 1998 , 102, 105-115	2.6	23
88	A method to buffer the concentrations of free Zn and Cd ions using a cation exchange resin in bacterial toxicity studies. <i>Environmental Toxicology and Chemistry</i> , 1995 , 14, 2033-2039	3.8	23
87	Influence of Complexation on the Uptake by Plants of Iron, Manganese, Copper and Zinc. <i>Journal of Experimental Botany</i> , 1991 , 42, 515-519	7	23
86	Adenylate energy charge in metal-contaminated soil. Soil Biology and Biochemistry, 1987, 19, 219-220	7.5	23
85	Modelling the effects of copper on soil organisms and processes using the free ion approach: towards a multi-species toxicity model. <i>Environmental Pollution</i> , 2013 , 178, 244-53	9.3	22
84	Contrasting effects of dwarfing alleles and nitrogen availability on mineral concentrations in wheat grain. <i>Plant and Soil</i> , 2012 , 360, 93-107	4.2	22
83	Comparison of different microbial bioassays to assess metal-contaminated soils. <i>Environmental Toxicology and Chemistry</i> , 2005 , 24, 530-6	3.8	22
82	Availability of different forms of sulphur fertilisers to wheat and oilseed rape. <i>Plant and Soil</i> , 2000 , 222, 139-147	4.2	22
81	Towards bioavailability-based soil criteria: past, present and future perspectives. <i>Environmental Science and Pollution Research</i> , 2015 , 22, 8779-85	5.1	21
80	Concentrations of metals and metalloids in soils that have the potential to lead to exceedance of maximum limit concentrations of contaminants in food and feed. <i>Soil Use and Management</i> , 2015 , 31, 34-45	3.1	21
79	Evaluation of an electrostatic toxicity model for predicting Ni(2+) toxicity to barley root elongation in hydroponic cultures and in soils. <i>New Phytologist</i> , 2011 , 192, 414-27	9.8	20
78	A survey of the sulphur content of wheat grown in Britain. <i>Journal of the Science of Food and Agriculture</i> , 1987 , 38, 151-166	4.3	20
77	Effectiveness and genetic diversity of Rhizobium leguminosarum bv. trifolii isolates in Portuguese soils polluted by industrial effluents. <i>Soil Biology and Biochemistry</i> , 1997 , 29, 1209-1213	7.5	19
76	Survival and plasmid stability of rhizobia introduced into a contaminated soil. <i>Soil Biology and Biochemistry</i> , 2003 , 35, 49-54	7.5	18
<i>75</i>	USE OF THE ENRICHED STABLE ISOTOPE 34S TO STUDY SULPHUR UPTAKE AND DISTRIBUTION IN WHEAT. <i>Journal of Plant Nutrition</i> , 2001 , 24, 1551-1560	2.3	18
74	Toxicity of organic compounds to the indigenous population of Rhizobium leguminosarum biovar Trifolii in soil. <i>Soil Biology and Biochemistry</i> , 1996 , 28, 1483-1487	7.5	18

73	DISJUNCTIVE KRIGING FOR ENVIRONMENTAL MANAGEMENT. Environmetrics, 1996, 7, 333-357	1.3	18
72	Morphological responses of wheat (Triticum aestivum L.) roots to phosphorus supply in two contrasting soils. <i>Journal of Agricultural Science</i> , 2016 , 154, 98-108	1	18
71	Determining the fate of selenium in wheat biofortification: an isotopically labelled field trial study. <i>Plant and Soil</i> , 2017 , 420, 61-77	4.2	17
70	Evidence for effects of manufactured nanomaterials on crops is inconclusive. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, E3336; author reply E3337	11.5	16
69	Effects of media components on toxicity of Cd to rhizobia. Water, Air, and Soil Pollution, 1992, 64, 627-6	5323 6	16
68	The use of acid insoluble residue to correct for the presence of soil-derived metals in the gut of earthworms used as bio-indicator organisms. <i>Environmental Pollution Series A, Ecological and Biological</i> , 1986 , 42, 233-246		16
67	Biofortification of zinc in wheat grain by the application of sewage sludge. <i>Plant and Soil</i> , 2012 , 361, 97	′-1 ₄ 0 <u>8</u>	15
66	Development of a real-time PCR assay for detection and quantification of Rhizobium leguminosarum bacteria and discrimination between different biovars in zinc-contaminated soil. <i>Applied and Environmental Microbiology</i> , 2011 , 77, 4626-33	4.8	15
65	Relative impact of soil, metal source and metal concentration on bacterial community structure and community tolerance. <i>Soil Biology and Biochemistry</i> , 2010 , 42, 1408-1417	7.5	15
64	Method to determine elemental sulphur in soils applied to measure sulphur oxidation. <i>Soil Biology and Biochemistry</i> , 1996 , 28, 1083-1087	7.5	15
63	The chlorobenzene content of archived sewage sludges. <i>Science of the Total Environment</i> , 1992 , 121, 159-175	10.2	15
62	Century long fertilization reduces stochasticity controlling grassland microbial community succession. <i>Soil Biology and Biochemistry</i> , 2020 , 151, 108023	7.5	15
61	Plastics in biosolids from 1950 to 2016: A function of global plastic production and consumption. <i>Water Research</i> , 2021 , 201, 117367	12.5	15
60	What is a good level of soil organic matter? An index based on organic carbon to clay ratio. European Journal of Soil Science, 2020,	3.4	14
59	Pentachlorophenol utilization by indigenous soil microorganisms. <i>Soil Biology and Biochemistry</i> , 2000 , 32, 429-432	7.5	14
58	Soil Solid-Phase Controls Lead Activity in Soil Solution 2002 , 31, 162		14
57	Influence of EDTA complexation on plant uptake of manganese (II). Plant Science, 1995, 109, 231-235	5.3	13
56	Long-term effects of metal contamination on soil microorganisms. <i>Soil Biology and Biochemistry</i> , 1994 , 26, 421-422	7.5	13

55	. Environmental Toxicology and Chemistry, 1993 , 12, 1643	3.8	13
54	Stable Sulfur Isotope Ratio Indicates Long-Term Changes in Sulfur Deposition in the Broadbalk Experiment since 1845 2003 , 32, 33		13
53	Adverse Effects of Cadmium on Soil Microflora and Fauna 1999 , 199-218		13
52	Spatial prediction of the concentration of selenium (Se) in grain across part of Amhara Region, Ethiopia. <i>Science of the Total Environment</i> , 2020 , 733, 139231	10.2	12
51	High resolution SIMS analysis of arsenic in rice. Surface and Interface Analysis, 2013, 45, 309-311	1.5	12
50	INTER-LABORATORY COMPARISON OF SULPHUR AND NITROGEN ANALYSIS IN PLANTS AND SOILS. <i>Communications in Soil Science and Plant Analysis</i> , 2001 , 32, 685-695	1.5	12
49	The effects of interactions between cadmium and aluminium on the growth of two metal-tolerant races of Holcus lanatus L <i>Environmental Pollution Series A, Ecological and Biological,</i> 1980 , 23, 267-277		12
48	Historical trends in iodine and selenium in soil and herbage at the Park Grass Experiment, Rothamsted Research, UK. <i>Soil Use and Management</i> , 2017 , 33, 252-262	3.1	11
47	Screening of isolates and strains of Rhizobium leguminosarum biovar Trifolii for heavy metal resistance using buffered media. <i>Environmental Toxicology and Chemistry</i> , 1993 , 12, 1643-1651	3.8	11
46	Comparison of sulphur uptake by oilseed rape and the soil sulphur status of two adjacent fields with different soil series. <i>Soil Use and Management</i> , 1994 , 10, 47-50	3.1	11
45	A comparison of the extractabilities of Zn, Cu, Ni and Cr from sewage sludges prepared by treating raw sewage with the metal salts before or after anaerobic digestion. <i>Environmental Pollution Series B: Chemical and Physical</i> , 1982 , 3, 193-198		11
44	Derivation of ecological standards for risk assessment of molybdate in soil. <i>Environmental Chemistry</i> , 2016 , 13, 168	3.2	11
43	Long-term Effects of Biosolids on Soil Quality and Fertility. Soil Science, 2018, 183, 89-98	0.9	11
42	Distribution of the stable isotopes 57Fe and 68Zn in grain tissues of various wheat lines differing in their phytate content. <i>Plant and Soil</i> , 2015 , 396, 73-83	4.2	10
41	Contact uptake of metal compounds and their molluscicidal effect on the field slug, Deroceras reticulatum (Mller) (Pulmonata: Limacidae). <i>Crop Protection</i> , 1992 , 11, 329-334	2.7	10
40	Computerized quality control, statistics and regional mapping of the concentrations of trace and major elements in the soil of England and Wales. <i>Soil Use and Management</i> , 1987 , 3, 31-38	3.1	10
39	An Interlaboratory Comparison of a Standardised EDTA Extraction Procedure for the Analysis of Available Trace Elements in Two Quality Control Soils. <i>International Journal of Environmental Analytical Chemistry</i> , 1993 , 51, 153-160	1.8	9
38	Studies of the distribution and bioavailability of soil zinc fractions. <i>Journal of the Science of Food and Agriculture</i> , 1991 , 57, 325-334	4.3	9

37	Population collapse of Lumbricus terrestris in conventional arable cultivations and response to straw applications. <i>Applied Soil Ecology</i> , 2016 , 108, 72-75	5	9
36	Plant and rhizosphere processes involved in phytoremediation of metal-contaminated soils 2002 , 207-2	14	8
35	Soil Quality in Relation to Agricultural Uses. Soil & Environment, 1993, 187-200		8
34	Continental-scale controls on soil organic carbon across sub-Saharan Africa. <i>Soil</i> , 2021 , 7, 305-332	5.8	7
33	A comparison of soil texture measurements using mid-infrared spectroscopy (MIRS) and laser diffraction analysis (LDA) in diverse soils. <i>Scientific Reports</i> , 2021 , 11, 16	4.9	7
32	A Practical Evaluation of Microwave and Conventional Wet Digestion Techniques for the Determination of Cd, Cu And Zn in Wheat Grain. <i>International Journal of Environmental Analytical Chemistry</i> , 2003 , 83, 307-314	1.8	6
31	The Relationship between Topsoil and Stream Sediment Heavy Metal Concentrations and Acidification. <i>Water, Air, and Soil Pollution</i> , 2001 , 130, 1067-1072	2.6	6
30	The Importance of Long and Short-Term Air-Soil Exchanges of Organic Contaminants. <i>International Journal of Environmental Analytical Chemistry</i> , 1995 , 59, 167-178	1.8	6
29	Experimental measurements and computer predictions of copper complex formation by soluble soil organic matter. <i>Environmental Pollution</i> , 1988 , 49, 63-76	9.3	6
28	Simulation of Phosphorus Chemistry, Uptake and Utilisation by Winter Wheat. <i>Plants</i> , 2019 , 8,	4.5	5
27	Gene transfer in bacteria from soils contaminated with heavy metals. <i>Letters in Applied Microbiology</i> , 1999 , 28, 317-320	2.9	5
26	The grain mineral composition of barley, oat and wheat on soils with pH and soil phosphorus gradients. <i>European Journal of Agronomy</i> , 2021 , 126, 126281	5	5
25	Assessing the evolution of wheat grain traits during the last 166 years using archived samples. <i>Scientific Reports</i> , 2020 , 10, 21828	4.9	4
24	Long-term Impact of Sewage Sludge Application on biovar: An Evaluation Using Meta-Analysis. <i>Journal of Environmental Quality</i> , 2016 , 45, 1572-1587	3.4	4
23	Plant Available Zinc Is Influenced by Landscape Position in the Amhara Region, Ethiopia. <i>Plants</i> , 2021 , 10,	4.5	4
22	Arguments surrounding the essentiality of boron to vascular plants. <i>New Phytologist</i> , 2020 , 226, 1225-1	23.8	3
21	Response to the Comment by Van Geen and Duxbury. <i>Environmental Science & Environmental Science & Envi</i>	10.3	3
20	Comprehensive nutrient analysis in agricultural organic amendments through non-destructive assays using machine learning. <i>PLoS ONE</i> , 2020 , 15, e0242821	3.7	3

(1999-2018)

19	Advancing the Understanding of Environmental Transformations, Bioavailability and Effects of Nanomaterials, an International US Environmental Protection Agency-UK Environmental Nanoscience Initiative Joint Program. <i>Journal of Environmental Protection</i> , 2018 , 9, 385-404	0.6	3
18	Sulphur nutrition: An important factor for the quality of wheat and rapeseed 1997 , 917-922		3
17	Sampling To Monitor Soil In England And Wales. <i>Quantitative Geology and Geostatistics</i> , 1999 , 465-476		3
16	Liming impacts barley yield over a wide concentration range of soil exchangeable cations. <i>Nutrient Cycling in Agroecosystems</i> , 2021 , 120, 131-144	3.3	3
15	A new method for the determination of the 34S/32S ratio of water-soluble sulphur in soil. <i>International Journal of Environmental Analytical Chemistry</i> , 2004 , 84, 323-329	1.8	2
14	Modelling the Effect of Cultivation on the Dispersion of Pollutants in Soil 1994 , 43, 537		2
13	The Mineral Composition of Wild-Type and Cultivated Varieties of Pasture Species. <i>Agronomy</i> , 2020 , 10, 1463	3.6	2
12	The effect of soil properties on zinc lability and solubility in soils of Ethiopia lan isotopic dilution study. <i>Soil</i> , 2021 , 7, 255-268	5.8	2
11	Sulphur supply and the optimisation of the yield of wheat 2001 , 836-837		2
10	Revisiting strategies to incorporate gender-responsiveness into maize breeding in southern Africa. Outlook on Agriculture,003072702110454	2.9	1
9	Dynamics of soil phosphorus measured by ammonium lactate extraction as a function of the soil phosphorus balance and soil properties. <i>Geoderma</i> , 2021 , 385, 114855	6.7	1
8	Investigation of the soil properties that affect Olsen P critical values in different soil types and impact on P fertiliser recommendations. <i>European Journal of Soil Science</i> , 2021 , 72, 1802	3.4	1
7	Changes in organic carbon to clay ratios in different soils and land uses in England and Wales over time <i>Scientific Reports</i> , 2022 , 12, 5162	4.9	1
6	Soil and landscape factors influence geospatial variation in maize grain zinc concentration in Malawi <i>Scientific Reports</i> , 2022 , 12, 7986	4.9	1
5	Portable X-ray fluorescence (pXRF) calibration for analysis of nutrient concentrations and trace element contaminants in fertilisers <i>PLoS ONE</i> , 2022 , 17, e0262460	3.7	О
4	The effect of soil organic matter on long-term availability of phosphorus in soil: Evaluation in a biological P mining experiment. <i>Geoderma</i> , 2022 , 423, 115965	6.7	Ο
3	The Relationship Between Topsoil and Stream Sediment Heavy Metal Concentrations and Acidification 2001 , 1067-1072		
2	Chrom und Nickel 1999 , 183-210		

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