Steven Douglas Siciliano

List of Publications by Year
in descending order

211 papers	11,813 citations	29994 54 h-index	31759 101 g-index
213 all docs	213 docs citations	213 times ranked	12546 citing authors

#	Article	IF	Citations
1	Biofuel Cells Select for Microbial Consortia That Self-Mediate Electron Transfer. Applied and Environmental Microbiology, 2004, 70, 5373-5382.	1.4	1,090
2	A microbial fuel cell capable of converting glucose to electricity at high rate and efficiency. Biotechnology Letters, 2003, 25, 1531-1535.	1.1	631
3	Microbes as Engines of Ecosystem Function: When Does Community Structure Enhance Predictions of Ecosystem Processes?. Frontiers in Microbiology, 2016, 7, 214.	1.5	479
4	Strain-Specific Ureolytic Microbial Calcium Carbonate Precipitation. Applied and Environmental Microbiology, 2003, 69, 4901-4909.	1.4	408
5	Selection of Specific Endophytic Bacterial Genotypes by Plants in Response to Soil Contamination. Applied and Environmental Microbiology, 2001, 67, 2469-2475.	1.4	338
6	Detection and quantification of the human-specific HF183 Bacteroides 16S rRNA genetic marker with real-time PCR for assessment of human faecal pollution in freshwater. Environmental Microbiology, 2005, 7, 249-259.	1.8	301
7	Changes in Microbial Community Composition and Function during a Polyaromatic Hydrocarbon Phytoremediation Field Trial. Applied and Environmental Microbiology, 2003, 69, 483-489.	1.4	276
8	Diversity of root-associated bacteria associated with field-grown canola (Brassica napus L.) and wheat (Triticum aestivum L.). FEMS Microbiology Ecology, 1998, 26, 43-50.	1.3	266
9	Microbial community responses to anthropogenically induced environmental change: towards a systems approach. Ecology Letters, 2013, 16, 128-139.	3.0	258
10	Soil fertility is associated with fungal and bacterial richness, whereas pH is associated with community composition in polar soil microbial communities. Soil Biology and Biochemistry, 2014, 78, 10-20.	4.2	243
11	Characterization of an Autotrophic Nitrogen-Removing Biofilm from a Highly Loaded Lab-Scale Rotating Biological Contactor. Applied and Environmental Microbiology, 2003, 69, 3626-3635.	1.4	231
12	Bioaugmentation as a Tool To Protect the Structure and Function of an Activated-Sludge Microbial Community against a 3-Chloroaniline Shock Load. Applied and Environmental Microbiology, 2003, 69, 1511-1520.	1.4	227
13	Human Colon Microbiota Transform Polycyclic Aromatic Hydrocarbons to Estrogenic Metabolites. Environmental Health Perspectives, 2005, 113, 6-10.	2.8	195
14	Taxonomic diversity of bacteria associated with the roots of modern, recent and ancient wheat cultivars. Biology and Fertility of Soils, 2001, 33, 410-415.	2.3	193
15	Impact of Agricultural Practices on the Zea mays L. Endophytic Community. Applied and Environmental Microbiology, 2004, 70, 1475-1482.	1.4	186
16	Legacy effects of soil moisture on microbial community structure and N2O emissions. Soil Biology and Biochemistry, 2016, 95, 40-50.	4.2	175
17	Effects of plant species richness and evenness on soil microbial community diversity and function. Plant and Soil, 2011, 338, 483-495.	1.8	162
18	Mechanisms of phytoremediation: biochemical and ecological interactions between plants and bacteria. Environmental Reviews, 1998, 6, 65-79.	2.1	159

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19	Microbial Reduction and Oxidation of Mercury in Freshwater Lakes. Environmental Science & Technology, 2002, 36, 3064-3068.	4.6	158
20	Differences in the microbial communities associated with the roots of different cultivars of canola and wheat. Canadian Journal of Microbiology, 1998, 44, 844-851.	0.8	149
21	A High Arctic soil ecosystem resists longâ€term environmental manipulations. Global Change Biology, 2011, 17, 3187-3194.	4.2	140
22	Response of ammonia oxidizing archaea and bacteria to changing water filled pore space. Soil Biology and Biochemistry, 2010, 42, 1888-1891.	4.2	134
23	The seasonal pattern of soil microbial community structure in mesic low arctic tundra. Soil Biology and Biochemistry, 2013, 65, 338-347.	4.2	131
24	Relationship between nitrifier and denitrifier community composition and abundance in predicting nitrous oxide emissions from ephemeral wetland soils. Soil Biology and Biochemistry, 2008, 40, 1114-1123.	4.2	112
25	Effect of long-term herbicide applications on the bacterial community structure and function in an agricultural soil. FEMS Microbiology Ecology, 2003, 46, 139-146.	1.3	106
26	Microbial diversity at Mitchell Peninsula, Eastern Antarctica: a potential biodiversity â€œhotspotâ€. Polar Biology, 2016, 39, 237-249.	0.5	101
27	Polycyclic Aromatic Hydrocarbon Release from a Soil Matrix in the In Vitro Gastrointestinal Tract. Journal of Environmental Quality, 2004, 33, 1343-1353.	1.0	97
28	Adhesion and Enrichment of Metals on Human Hands from Contaminated Soil at an Arctic Urban Brownfield. Environmental Science & Technology, 2009, 43, 6385-6390.	4.6	94
29	Gross Photoreduction Kinetics of Mercury in Temperate Freshwater Lakes and Rivers:Â Application to a General Model of DGM Dynamics. Environmental Science & Technology, 2006, 40, 837-843.	4.6	91
30	Nitrous oxide emissions from permafrost-affected soils. Nature Reviews Earth & Environment, 2020, 1, 420-434.	12.2	90
31	Assessing the potential of ammonia oxidizing bacteria to produce nitrous oxide in soils of a high arctic lowland ecosystem on Devon Island, Canada. Soil Biology and Biochemistry, 2007, 39, 2001-2013.	4.2	86
32	Effect of Dissolved Organic Carbon on the Photoproduction of Dissolved Gaseous Mercury in Lakes:Â Potential Impacts of Forestry. Environmental Science & Technology, 2004, 38, 2664-2672.	4.6	85
33	Bioaugmenting Bioreactors for the Continuous Removal of 3-Chloroaniline by a Slow Release Approach. Environmental Science & Technology, 2002, 36, 4698-4704.	4.6	84
34	Snowmelt Sources of Methylmercury to High Arctic Ecosystems. Environmental Science & Technology, 2004, 38, 3004-3010.	4.6	83
35	Gastrointestinal Microbes Increase Arsenic Bioaccessibility of Ingested Mine Tailings Using the Simulator of the Human Intestinal Microbial Ecosystem. Environmental Science & Technology, 2007, 41, 5542-5547.	4.6	83
36	Abiotic Production of Methylmercury by Solar Radiation. Environmental Science & Technology, 2005, 39, 1071-1077.	4.6	82

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37	Topography as a key factor driving atmospheric nitrogen exchanges in arctic terrestrial ecosystems. Soil Biology and Biochemistry, 2014, 70, 96-112.	4.2	78
38	Continuous Analysis of Dissolved Gaseous Mercury (DGM) and Mercury Flux in Two Freshwater Lakes in Kejimkujik Park, Nova Scotia:Â Evaluating Mercury Flux Models with Quantitative Data. Environmental Science & Technology, 2003, 37, 2226-2235.	4.6	77
39	METHYLMERCURY PRODUCTION IN HIGH ARCTIC WETLANDS. Environmental Toxicology and Chemistry, 2004, 23, 17.	2.2	77
40	Bacterial Targets as Potential Indicators of Diesel Fuel Toxicity in Subantarctic Soils. Applied and Environmental Microbiology, 2014, 80, 4021-4033.	1.4	73
41	A PCR-DGGE method for detecting arbuscular mycorrhizal fungi in cultivated soils. Soil Biology and Biochemistry, 2005, 37, 1589-1597.	4.2	70
42	Human Exposure Assessment: A Case Study of 8 PAH Contaminated Soils Using <i>in Vitro</i> Digestors and the Juvenile Swine Model. Environmental Science & Technology, 2011, 45, 4586-4593.	4.6	70
43	Hg(II) Adsorption by Bacteria:Â A Surface Complexation Model and Its Application to Shallow Acidic Lakes and Wetlands in Kejimkujik National Park, Nova Scotia, Canada. Environmental Science & Technology, 2002, 36, 1546-1553.	4.6	69
44	Use of 16S-23S rRNA Intergenic Spacer Region PCR and Repetitive Extragenic Palindromic PCR Analyses of Escherichia coli Isolates To Identify Nonpoint Fecal Sources. Applied and Environmental Microbiology, 2003, 69, 4942-4950.	1.4	68
45	Bacterial inoculants of forage grasses that enhance degradation of 2â€chlorobenzoic acid in soil. Environmental Toxicology and Chemistry, 1997, 16, 1098-1104.	2.2	66
46	Long-term effects of mineral versus organic fertilizers on activity and structure of the methanotrophic community in agricultural soils. Environmental Microbiology, 2003, 5, 867-877.	1.8	62
47	Calcium removal from industrial wastewater by bio-catalytic CaCO3 precipitation. Journal of Chemical Technology and Biotechnology, 2003, 78, 670-677.	1.6	61
48	Biolog analysis and fatty acid methyl ester profiles indicate that pseudomonad inoculants that promote phytoremediation alter the root-associated microbial community of Bromus biebersteinii. Soil Biology and Biochemistry, 1998, 30, 1717-1723.	4.2	59
49	Smooth brome invasion increases rare soil bacterial species prevalence, bacterial species richness and evenness. Journal of Ecology, 2015, 103, 386-396.	1.9	59
50	Nitrifier dominance of Arctic soil nitrous oxide emissions arises due to fungal competition with denitrifiers for nitrate. Soil Biology and Biochemistry, 2009, 41, 1104-1110.	4.2	58
51	Bryophyte-cyanobacterial associations as a key factor in N2-fixation across the Canadian Arctic. Plant and Soil, 2011, 344, 335-346.	1.8	58
52	Cell density related H2 consumption in relation to anoxic Fe(0) corrosion and precipitation of corrosion products by Shewanella oneidensis MR-1. Environmental Microbiology, 2003, 5, 1192-1202.	1.8	57
53	Combined effect of fertilizer and herbicide applications on the abundance, community structure and performance of the soil methanotrophic community. Soil Biology and Biochemistry, 2005, 37, 187-193.	4.2	57
54	Mercury transformations and fluxes in sediments of a riverine wetland. Geochimica Et Cosmochimica Acta, 2007, 71, 3393-3406.	1.6	57

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55	Bioaccessibility of mercury from traditional northern country foods measured using an in vitro gastrointestinal model is independent of mercury concentration. Science of the Total Environment, 2009, 407, 6003-6008.	3.9	57
56	Structural equation modeling of a winnowed soil microbiome identifies how invasive plants re-structure microbial networks. ISME Journal, 2019, 13, 1988-1996.	4.4	57
57	The influence of forestry activity on the structure of dissolved organic matter in lakes: Implications for mercury photoreactions. Science of the Total Environment, 2006, 366, 880-893.	3.9	55
58	Fertilization Stimulates Anaerobic Fuel Degradation of Antarctic Soils by Denitrifying Microorganisms. Environmental Science & Technology, 2006, 40, 2011-2017.	4.6	54
59	Variability of bioaccessibility results using seventeen different methods on a standard reference material, NIST 2710. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2013, 48, 641-655.	0.9	54
60	Effects and bioavailability of 2,4,6â€trinitrotoluene in spiked and fieldâ€contaminated soils to indigenous microorganisms. Environmental Toxicology and Chemistry, 1999, 18, 2681-2688.	2.2	51
61	Differentiation of genes extracted from non-viable versus viable micro-organisms in environmental samples using ethidium monoazide bromide. Journal of Microbiological Methods, 2007, 71, 312-318.	0.7	51
62	Quantifying the effects of soil temperature, moisture and sterilization on elemental mercury formation in boreal soils. Environmental Pollution, 2014, 193, 138-146.	3.7	51
63	Geological connectivity drives microbial community structure and connectivity in polar, terrestrial ecosystems. Environmental Microbiology, 2016, 18, 1834-1849.	1.8	51
64	Archaea and bacteria mediate the effects of native species root loss on fungi during plant invasion. ISME Journal, 2017, 11, 1261-1275.	4.4	50
65	Enhanced phytoremediation of chlorobenzoates in rhizosphere soil. Soil Biology and Biochemistry, 1999, 31, 299-305.	4.2	49
66	Greenhouse gas soil production and surface fluxes at a high arctic polar oasis. Soil Biology and Biochemistry, 2012, 52, 1-12.	4.2	47
67	Plantâ€Bacterial Combinations to Phytoremediate Soil Contaminated with High Concentrations of 2,4,6â€Trinitrotoluene. Journal of Environmental Quality, 2000, 29, 311-316.	1.0	45
68	Small-scale spatial patterns in N2-fixation and nutrient availability in an arctic hummockâ€“hollow ecosystem. Soil Biology and Biochemistry, 2011, 43, 133-140.	4.2	45
69	Petroleum hydrocarbon remediation in frozen soil using a meat and bonemeal biochar plus fertilizer. Chemosphere, 2017, 173, 330-339.	4.2	42
70	Continuous analysis of dissolved gaseous mercury in freshwater lakes. Science of the Total Environment, 2003, 304, 285-294.	3.9	41
71	Microbial Source Tracking for Identification of Fecal Pollution. Reviews in Environmental Science and Biotechnology, 2005, 4, 19-37.	3.9	41
72	SOIL BIOGEOCHEMICAL TOXICITY END POINTS FOR SUB-ANTARCTIC ISLANDS CONTAMINATED WITH PETROLEUM HYDROCARBONS. Environmental Toxicology and Chemistry, 2007, 26, 890.	2.2	41

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73	Polycyclic aromatic hydrocarbons are enriched but bioaccessibility reduced in brownfield soils adhered to human hands. Chemosphere, 2010, 80, 1101-1108.	4.2	41
74	Assessment of Pollution-Induced Microbial Community Tolerance to Heavy Metals in Soil Using Ammonia-Oxidizing Bacteria and Biolog Assay. Human and Ecological Risk Assessment (HERA), 2002, 8, 1067-1081.	1.7	40
75	Oribatid mites in soil toxicity testingâ€”the use of<i>Oppia nitens</i>(C.L. Koch) as a new test species. Environmental Toxicology and Chemistry, 2010, 29, 971-979.	2.2	40
76	Factors Driving Potential Ammonia Oxidation in Canadian Arctic Ecosystems: Does Spatial Scale Matter?. Applied and Environmental Microbiology, 2012, 78, 346-353.	1.4	40
77	Core and Differentially Abundant Bacterial Taxa in the Rhizosphere of Field Grown Brassica napus Genotypes: Implications for Canola Breeding. Frontiers in Microbiology, 2019, 10, 3007.	1.5	39
78	Smooth brome changes gross soil nitrogen cycling processes during invasion of a rough fescue grassland. Plant Ecology, 2015, 216, 235-246.	0.7	38
79	Assessment of 2,4,6â€trinitrotoluene toxicity in field soils by pollutionâ€induced community tolerance, denaturing gradient gel electrophoresis, and seed germination assay. Environmental Toxicology and Chemistry, 2000, 19, 2154-2160.	2.2	37
80	Reduction in denitrification activity in field soils exposed to long term contamination by 2,4,6-trinitrotoluene (TNT). FEMS Microbiology Ecology, 2000, 32, 61-68.	1.3	37
81	Soil Formate Regulates the Fungal Nitrous Oxide Emission Pathway. Applied and Environmental Microbiology, 2008, 74, 6690-6696.	1.4	37
82	Spatially explicit structural equation modeling. Ecology, 2014, 95, 2434-2442.	1.5	37
83	Molecular, biochemical and ecological characterisation of a bio-catalytic calcification reactor. Applied Microbiology and Biotechnology, 2003, 62, 191-201.	1.7	36
84	Evaluation of a new battery of toxicity tests for boreal forest soils: Assessment of the impact of hydrocarbons and salts. Environmental Toxicology and Chemistry, 2012, 31, 766-777.	2.2	35
85	Effects of observed and experimental climate change on terrestrial ecosystems in northern Canada: results from the Canadian IPY program. Climatic Change, 2012, 115, 207-234.	1.7	34
86	Total Phosphate Influences the Rate of Hydrocarbon Degradation but Phosphate Mineralogy Shapes Microbial Community Composition in Cold-Region Calcareous Soils. Environmental Science & Technology, 2016, 50, 5197-5206.	4.6	33
87	How is nitrogen fixation in the high arctic linked to greenhouse gas emissions?. Plant and Soil, 2013, 362, 215-229.	1.8	32
88	The ecological controls on the prevalence of candidate division TM7 in polar regions. Frontiers in Microbiology, 2014, 5, 345.	1.5	32
89	Methyltransferase: An enzyme assay for microbial methylmercury formation in acidic soils and sediments. Environmental Toxicology and Chemistry, 2002, 21, 1184-1190.	2.2	31
90	The mechanisms associated with the development of hypertension after exposure to lead, mercury species or their mixtures differs with the metal and the mixture ratio. Toxicology, 2016, 339, 1-8.	2.0	30

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91	N2O flux from plant-soil systems in polar deserts switch between sources and sinks under different light conditions. Soil Biology and Biochemistry, 2012, 48, 69-77.	4.2	29
92	The fungicides thiram and captan affect the phenotypic characteristics of Rhizobium leguminosarum strain C1 as determined by FAME and Biolog analyses. Biology and Fertility of Soils, 2000, 31, 303-309.	2.3	28
93	Accumulation and toxicity of metals (copper, zinc, cadmium, and lead) and organic compounds (geraniol and benzo[<i>a</i>]pyrene) in the oribatid mite <i>Oppia nitens</i>. Environmental Toxicology and Chemistry, 2012, 31, 1639-1648.	2.2	28
94	Greenhouse gas production and consumption in High Arctic deserts. Soil Biology and Biochemistry, 2014, 68, 158-165.	4.2	28
95	Identification of human fecal pollution sources in a coastal area: a case study at Oostende (Belgium). Journal of Water and Health, 2006, 4, 167-175.	1.1	25
96	Advancing soil ecological risk assessments for petroleum hydrocarbon contaminated soils in Canada: Persistence, organic carbon normalization and relevance of species assemblages. Science of the Total Environment, 2019, 668, 400-410.	3.9	25
97	Liquid chromatographyâ€"mass spectrometry analysis of hydroxylated polycyclic aromatic hydrocarbons, formed in a simulator of the human gastrointestinal tract. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2004, 806, 245-253.	1.2	24
98	Bioaccessibility of Metal Cations in Soil Is Linearly Related to Its Water Exchange Rate Constant. Environmental Science & Technology, 2011, 45, 4139-4144.	4.6	24
99	Degradation of chlorinated benzoic acid mixtures by plantâ€"bacteria associations. Environmental Toxicology and Chemistry, 1998, 17, 728-733.	2.2	23
100	Assessing the Bioavailability and Risk from Metal-Contaminated Soils and Dusts. Human and Ecological Risk Assessment (HERA), 2014, 20, 272-286.	1.7	23
101	Cardiovascular responses to lead are biphasic, while methylmercury, but not inorganic mercury, monotonically increases blood pressure in rats. Toxicology, 2015, 328, 1-11.	2.0	23
102	Petroleum hydrocarbon mixture toxicity and a traitâ€based approach to soil invertebrate species for siteâ€specific risk assessments. Environmental Toxicology and Chemistry, 2018, 37, 2222-2234.	2.2	23
103	Spatially tripartite interactions of denitrifiers in arctic ecosystems: activities, functional groups and soil resources. Environmental Microbiology, 2012, 14, 2601-2613.	1.8	22
104	Combined exposure to lead, inorganic mercury and methylmercury shows deviation from additivity for cardiovascular toxicity in rats. Journal of Applied Toxicology, 2015, 35, 918-926.	1.4	22
105	A high-throughput belowground plant diversity assay using next-generation sequencing of the trnL intron. Plant and Soil, 2016, 404, 361-372.	1.8	22
106	Chemical speciation and fate of tripolyphosphate after application to a calcareous soil. Geochemical Transactions, 2018, 19, 1.	1.8	22
107	The Role of Soil Microbial Tests in Ecological Risk Assessment: Differentiating between Exposure and Effects. Human and Ecological Risk Assessment (HERA), 1999, 5, 671-682.	1.7	21
108	Are Methylmercury Concentrations in the Wetlands of Kejimkujik National Park, Nova Scotia, Canada, Dependent on Geology?. Journal of Environmental Quality, 2003, 32, 2085-2094.	1.0	21

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109	Methyl mercury production and loss in Arctic soil. Science of the Total Environment, 2009, 407, 1691-1700.	3.9	21
110	Influence of liquid water and soil temperature on petroleum hydrocarbon toxicity in Antarctic soil. Environmental Toxicology and Chemistry, 2009, 28, 1409-1415.	2.2	21
111	Can avoidance behavior of the mite <i>Oppia nitens</i> be used as a rapid toxicity test for soils contaminated with metals or organic chemicals?. Environmental Toxicology and Chemistry, 2011, 30, 2594-2601.	2.2	21
112	Checkerboard scoreâ€“area relationships reveal spatial scales of plant community structure. Oikos, 2018, 127, 415-426.	1.2	21
113	Soil invertebrate avoidance behavior identifies petroleum hydrocarbon contaminated soils toxic to sensitive plant species. Journal of Hazardous Materials, 2019, 361, 338-347.	6.5	21
114	Spiking regional vis-NIR calibration models with local samples to predict soil organic carbon in two High Arctic polar deserts using a vis-NIR probe. Canadian Journal of Soil Science, 2015, 95, 237-249.	0.5	20
115	Toxicity assessment of metal mixtures to soil enzymes is influenced by metal dosing method. Chemosphere, 2019, 232, 366-376.	4.2	20
116	DEGRADATION OF CHLORINATED BENZOIC ACID MIXTURES BY PLANTâ€“BACTERIA ASSOCIATIONS. Environmental Toxicology and Chemistry, 1998, 17, 728.	2.2	20
117	Nitrous Oxide Emissions from Ephemeral Wetland Soils are Correlated with Microbial Community Composition. Frontiers in Microbiology, 2011, 2, 110.	1.5	19
118	Deriving siteâ€specific soil cleanâ€up values for metals and metalloids: Rationale for including protection of soil microbial processes. Integrated Environmental Assessment and Management, 2014, 10, 388-400.	1.6	19
119	Introducing the Adverse Ecosystem Service Pathway as a Tool in Ecological Risk Assessment. Environmental Science & Technology, 2020, 54, 8144-8157.	4.6	19
120	Evidence of High Microbial Abundance and Spatial Dependency in Three Arctic Soil Ecosystems. Soil Science Society of America Journal, 2011, 75, 2227-2232.	1.2	18
121	The forgotten role of toxicodynamics: How habitat quality alters the mite, Oppia nitens, susceptibility to zinc, independent of toxicokinetics.. Chemosphere, 2019, 227, 444-454.	4.2	18
122	Pollution induced community tolerance (PICT) and analysis of 16S rRNA genes to evaluate the long-term effects of herbicides on methanotrophic communities in soil. European Journal of Soil Science, 2003, 54, 679-684.	1.8	17
123	The effect of residence time and fluid volume to soil mass (LS) ratio on<i>in vitro</i>arsenic bioaccessibility from poorly crystalline scorodite. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2010, 45, 732-739.	0.9	17
124	Validating the Scalability of Soft X-ray Spectromicroscopy for Quantitative Soil Ecology and Biogeochemistry Research. Environmental Science & Technology, 2015, 49, 1035-1042.	4.6	17
125	Evaluation of prairie grass species as bioindicators of halogenated aromatics in soil. Environmental Toxicology and Chemistry, 1997, 16, 521-527.	2.2	16
126	Development of a simulated earthworm gut for determining bioaccessible arsenic, copper, and zinc from soil. Environmental Toxicology and Chemistry, 2009, 28, 1439-1446.	2.2	16

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127	Responses of a mountain peatland to increasing temperature: A microcosm study of greenhouse gas emissions and microbial community dynamics. Soil Biology and Biochemistry, 2017, 110, 22-33.	4.2	16
128	Multigenerational exposure of populations of <i>Oppia nitens</i> to zinc under pulse and continuous exposure scenarios. Environmental Toxicology and Chemistry, 2019, 38, 896-904.	2.2	16
129	The role of monodentate tetrahedral borate complexes in boric acid binding to a soil organic matter analogue. Chemosphere, 2021, 276, 130150.	4.2	16
130	Hydrocarbon Contamination Increases the Liquid Water Content of Frozen Antarctic Soils. Environmental Science & Technology, 2008, 42, 8324-8329.	4.6	15
131	Plant belowground diversity and species segregation by depth in a semi-arid grassland. Ecoscience, 2018, 25, 1-7.	0.6	15
132	Extent and Mechanism of Interaction between Phosphate and Citrate in a Calcareous Soil. Soil Science Society of America Journal, 2018, 82, 315-322.	1.2	15
133	Nutritional Status and Gastrointestinal Microbes Affect Arsenic Bioaccessibility from Soils and Mine Tailings in the Simulator of the Human Intestinal Microbial Ecosystem. Environmental Science & Technology, 2009, 43, 8652-8657.	4.6	14
134	Soil Spatial Dependence in Three Arctic Ecosystems. Soil Science Society of America Journal, 2011, 75, 591-594.	1.2	14
135	Validating potential toxicity assays to assess petroleum hydrocarbon toxicity in polar soil. Environmental Toxicology and Chemistry, 2012, 31, 402-407.	2.2	14
136	<i>Oppia nitens</i> C.L. Koch, 1836 (Acari: Oribatida): Current Status of Its Bionomics and Relevance as a Model Invertebrate in Soil Ecotoxicology. Environmental Toxicology and Chemistry, 2019, 38, 2593-2613.	2.2	14
137	A survey of invasive plants on grassland soil microbial communities and ecosystem services. Scientific Data, 2020, 7, 86.	2.4	14
138	Comparison of human exposure pathways in an urban brownfield: Reduced risk from paving roads. Environmental Toxicology and Chemistry, 2012, 31, 2423-2430.	2.2	13
139	Brassica napus phyllosphere bacterial composition changes with growth stage. Plant and Soil, 2021, 464, 501-516.	1.8	13
140	An investigation of the effect of gastrointestinal microbial activity on oral arsenic bioavailability. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2013, 48, 612-619.	0.9	12
141	Predicting Polycyclic Aromatic Hydrocarbon Bioavailability to Mammals from Incidentally Ingested Soils Using Partitioning and Fugacity. Environmental Science & Technology, 2016, 50, 1338-1346.	4.6	12
142	Application Method and Biochar Type Affect Petroleum Hydrocarbon Degradation in Northern Landfarms. Journal of Environmental Quality, 2017, 46, 751-759.	1.0	12
143	Citrate Addition Increased Phosphorus Bioavailability and Enhanced Gasoline Bioremediation. Journal of Environmental Quality, 2017, 46, 975-983.	1.0	12
144	In vitro prediction of polycyclic aromatic hydrocarbon bioavailability of 14 different incidentally ingested soils in juvenile swine. Science of the Total Environment, 2018, 618, 682-689.	3.9	12

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145	Protecting vulnerable individuals in a population: is the avoidance response of juvenile soil invertebrates more sensitive than the adults response?. Chemosphere, 2019, 220, 658-667.	4.2	12
146	Uptake, toxicity, and maternal transfer of cadmium in the oribatid soil mite, Oppia nitens: Implication in the risk assessment of cadmium to soil invertebrates. Environmental Pollution, 2020, 259, 113912.	3.7	12
147	From the Outside in: An Overview of Positron Imaging of Plant and Soil Processes. Molecular Imaging, 2020, 19, 153601212096640.	0.7	12
148	Inclusion of molecular descriptors in predictive models improves pesticide soil-air partitioning estimates. Chemosphere, 2020, 248, 126031.	4.2	12
149	Phenotypic plasticity of Pseudomonas aureofaciens (lacZY) introduced into and recovered from field and laboratory microcosm soils. FEMS Microbiology Ecology, 1998, 27, 133-139.	1.3	11
150	Solidâ€"liquid separation method governs the in vitro bioaccessibility of metals in contaminated soil-like test materials. Chemosphere, 2015, 134, 544-549.	4.2	11
151	Spectroscopic Quantification of Inner- and Outer-Sphere Oxyanion Complexation Kinetics: Ionic Strength and Background Cation Effect on Sulfate Adsorption to Hematite. ACS Earth and Space Chemistry, 2020, 4, 1765-1776.	1.2	11
152	Natural attenuation: extant microbial activity forever and ever?. Environmental Microbiology, 2002, 4, 315-317.	1.8	10
153	In situ transformations of bonechar and tri-poly phosphate amendments in phosphorus-limited subsurface soils. Applied Geochemistry, 2019, 109, 104398.	1.4	10
154	Phenology-dependent root bacteria enhance yield of Brassica napus. Soil Biology and Biochemistry, 2022, 166, 108468.	4.2	10
155	Brassica napus Bacterial Assembly Processes Vary with Plant Compartment and Growth Stage but Not between Lines. Applied and Environmental Microbiology, 2022, 88, e0027322.	1.4	10
156	Isolation of denitrifying bacteria from hydrocarbon-contaminated Antarctic soil. Polar Biology, 2006, 30, 69-74.	0.5	9
157	Physical, chemical and microbial soil properties of frost boils at Browning Peninsula, Antarctica. Polar Biology, 2012, 35, 463-468.	0.5	9
158	The potentiation of zinc toxicity by soil moisture in a boreal forest ecosystem. Environmental Toxicology and Chemistry, 2015, 34, 600-607.	2.2	9
159	Assessing human metal accumulations in an urban superfund site. Environmental Toxicology and Pharmacology, 2017, 54, 112-119.	2.0	9
160	Contamination, regulation, and remediation: an introduction to bioremediation of petroleum hydrocarbons in cold regions. , 2008, , 1-37.		8
161	Single metal and metal mixture toxicity of five metals to Oppia nitens in five different Canadian soils. Journal of Hazardous Materials, 2020, 392, 122341.	6.5	8
162	Measurement of Carbon Dioxide, Methane, Nitrous oxide, and Water Potential in Soil Ecosystems. Methods in Enzymology, 2011, 496, 115-137.	0.4	7

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163	The bioavailability of polycyclic aromatic hydrocarbons from different dose media after single and sub-chronic exposure in juvenile swine. Science of the Total Environment, 2015, 506-507, 308-314.	3.9	7
164	A Hypothetical Application of the Pollution-Induced Community Tolerance Concept in Megafaunal Communities Found at Contaminated Sites. Human and Ecological Risk Assessment (HERA), 2002, 8, 1057-1066.	1.7	6
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