

Tomas Cajthaml

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4020401/publications.pdf>

Version: 2024-02-01

219
papers

10,353
citations

30070

54
h-index

43889

91
g-index

223
all docs

223
docs citations

223
times ranked

11357
citing authors

#	ARTICLE	IF	CITATIONS
1	Occurrence of microplastics in raw and treated drinking water. <i>Science of the Total Environment</i> , 2018, 643, 1644-1651.	8.0	669
2	Tree diversity and species identity effects on soil fungi, protists and animals are context dependent. <i>ISME Journal</i> , 2016, 10, 346-362.	9.8	307
3	Seasonal dynamics of fungal communities in a temperate oak forest soil. <i>New Phytologist</i> , 2014, 201, 269-278.	7.3	300
4	Spatial variability of enzyme activities and microbial biomass in the upper layers of <i>Quercus petraea</i> forest soil. <i>Soil Biology and Biochemistry</i> , 2008, 40, 2068-2075.	8.8	264
5	Microplastics in drinking water treatment – Current knowledge and research needs. <i>Science of the Total Environment</i> , 2019, 667, 730-740.	8.0	263
6	Ligninolytic fungi in bioremediation: extracellular enzyme production and degradation rate. <i>Soil Biology and Biochemistry</i> , 2004, 36, 1545-1551.	8.8	245
7	Responses of the extracellular enzyme activities in hardwood forest to soil temperature and seasonality and the potential effects of climate change. <i>Soil Biology and Biochemistry</i> , 2013, 56, 60-68.	8.8	226
8	Transformation of <i>Quercus petraea</i> litter: successive changes in litter chemistry are reflected in differential enzyme activity and changes in the microbial community composition. <i>FEMS Microbiology Ecology</i> , 2011, 75, 291-303.	2.7	198
9	Biodegradation of endocrine-disrupting compounds and suppression of estrogenic activity by ligninolytic fungi. <i>Chemosphere</i> , 2009, 75, 745-750.	8.2	165
10	Is the effect of trees on soil properties mediated by soil fauna? A case study from post-mining sites. <i>Forest Ecology and Management</i> , 2013, 309, 87-95.	3.2	161
11	Production of lignocellulose-degrading enzymes and degradation of leaf litter by saprotrophic basidiomycetes isolated from a <i>Quercus petraea</i> forest. <i>Soil Biology and Biochemistry</i> , 2007, 39, 2651-2660.	8.8	155
12	Enzymatic degradation of anthracene, dibenzothiophene and pyrene by manganese peroxidase in media containing acetone. <i>Chemosphere</i> , 2006, 64, 408-414.	8.2	154
13	Estimation of fungal biomass in forest litter and soil. <i>Fungal Ecology</i> , 2013, 6, 1-11.	1.6	142
14	Purification of a new manganese peroxidase of the white-rot fungus <i>Irpex lacteus</i> , and degradation of polycyclic aromatic hydrocarbons by the enzyme. <i>Research in Microbiology</i> , 2006, 157, 248-253.	2.1	134
15	Extracellular oxidative enzyme production and PAH removal in soil by exploratory mycelium of white rot fungi. <i>Biodegradation</i> , 1999, 10, 159-168.	3.0	129
16	Bioremediation of PAH-contaminated soil with fungi – From laboratory to field scale. <i>International Biodeterioration and Biodegradation</i> , 2014, 86, 238-247.	3.9	128
17	Enzyme activities and microbial biomass in topsoil layer during spontaneous succession in spoil heaps after brown coal mining. <i>Soil Biology and Biochemistry</i> , 2008, 40, 2107-2115.	8.8	126
18	When the forest dies: the response of forest soil fungi to a bark beetle-induced tree dieback. <i>ISME Journal</i> , 2014, 8, 1920-1931.	9.8	125

#	ARTICLE	IF	CITATIONS
19	<i>Irpex lacteus</i> , a white rot fungus applicable to water and soil bioremediation. <i>Applied Microbiology and Biotechnology</i> , 2000, 54, 850-853.	3.6	119
20	Distribution of microbial biomass and activity of extracellular enzymes in a hardwood forest soil reflect soil moisture content. <i>Applied Soil Ecology</i> , 2010, 46, 177-182.	4.3	119
21	Bioremediation of long-term PCB-contaminated soil by white-rot fungi. <i>Journal of Hazardous Materials</i> , 2017, 324, 701-710.	12.4	118
22	Preparation of titania mesoporous materials using a surfactant-mediated sol-gel method. <i>Journal of Materials Chemistry</i> , 2001, 11, 644-651.	6.7	116
23	Nanoscale zero-valent iron application for in situ reduction of hexavalent chromium and its effects on indigenous microorganism populations. <i>Science of the Total Environment</i> , 2014, 485-486, 739-747.	8.0	116
24	Decomposer food web in a deciduous forest shows high share of generalist microorganisms and importance of microbial biomass recycling. <i>ISME Journal</i> , 2018, 12, 1768-1778.	9.8	116
25	Ecotoxicity and biodegradability of new brominated flame retardants: A review. <i>Ecotoxicology and Environmental Safety</i> , 2014, 110, 153-167.	6.0	112
26	Biodegradation of PCBs by ligninolytic fungi and characterization of the degradation products. <i>Chemosphere</i> , 2012, 88, 1317-1323.	8.2	108
27	Bioaccumulation of silver in ectomycorrhizal and saprobic macrofungi from pristine and polluted areas. <i>Science of the Total Environment</i> , 2010, 408, 2733-2744.	8.0	102
28	Dominant trees affect microbial community composition and activity in post-mining afforested soils. <i>Soil Biology and Biochemistry</i> , 2013, 56, 105-115.	8.8	101
29	Trace concentrations of iron nanoparticles cause overproduction of biomass and lipids during cultivation of cyanobacteria and microalgae. <i>Journal of Applied Phycology</i> , 2015, 27, 1443-1451.	2.8	101
30	Effect of altitude and season on microbial activity, abundance and community structure in Alpine forest soils. <i>FEMS Microbiology Ecology</i> , 2016, 92, fiw008.	2.7	97
31	Biotransformation of fluoroquinolone antibiotics by ligninolytic fungi – Metabolites, enzymes and residual antibacterial activity. <i>Chemosphere</i> , 2015, 136, 311-320.	8.2	96
32	Activity and spatial distribution of lignocellulose-degrading enzymes during forest soil colonization by saprotrophic basidiomycetes. <i>Enzyme and Microbial Technology</i> , 2008, 43, 186-192.	3.2	92
33	Differential degradation of oak (<i>Quercus petraea</i>) leaf litter by litter-decomposing basidiomycetes. <i>Research in Microbiology</i> , 2007, 158, 447-455.	2.1	90
34	Study of fungal degradation products of polycyclic aromatic hydrocarbons using gas chromatography with ion trap mass spectrometry detection. <i>Journal of Chromatography A</i> , 2002, 974, 213-222.	3.7	88
35	Microbial transformation of synthetic estrogen 17 β -ethinylestradiol. <i>Environmental Pollution</i> , 2009, 157, 3325-3335.	7.5	88
36	<i>Irpex lacteus</i> , a white-rot fungus with biotechnological potential – review. <i>Folia Microbiologica</i> , 2009, 54, 375-390.	2.3	85

#	ARTICLE	IF	CITATIONS
37	Combined nano-biotechnology for in-situ remediation of mixed contamination of groundwater by hexavalent chromium and chlorinated solvents. <i>Science of the Total Environment</i> , 2016, 563-564, 822-834.	8.0	83
38	Stabilization of soil organic matter by earthworms is connected with physical protection rather than with chemical changes of organic matter. <i>Geoderma</i> , 2017, 289, 29-35.	5.1	81
39	The effects of tree species and substrate on carbon sequestration and chemical and biological properties in reforested post-mining soils. <i>Geoderma</i> , 2017, 292, 9-16.	5.1	80
40	Compost-Mediated Removal of Polycyclic Aromatic Hydrocarbons from Contaminated Soil. <i>Archives of Environmental Contamination and Toxicology</i> , 2003, 44, 336-342.	4.1	79
41	Influence of soil organic matter decomposition on arbuscular mycorrhizal fungi in terms of asymbiotic hyphal growth and root colonization. <i>Mycorrhiza</i> , 2009, 19, 255-266.	2.8	79
42	Small-scale distribution of extracellular enzymes, fungal, and bacterial biomass in <i>Quercus petraea</i> forest topsoil. <i>Biology and Fertility of Soils</i> , 2010, 46, 717-726.	4.3	77
43	Polycyclic aromatic hydrocarbons degradation and microbial community shifts during co-composting of creosote-treated wood. <i>Journal of Hazardous Materials</i> , 2016, 301, 17-26.	12.4	76
44	Altitudinal, seasonal and interannual shifts in microbial communities and chemical composition of soil organic matter in Alpine forest soils. <i>Soil Biology and Biochemistry</i> , 2017, 112, 1-13.	8.8	76
45	Biodegradation of endocrine-disrupting compounds by ligninolytic fungi: mechanisms involved in the degradation. <i>Environmental Microbiology</i> , 2015, 17, 4822-4834.	3.8	75
46	Degradation of PAHs by ligninolytic enzymes of <i>Irpex lacteus</i> . <i>Folia Microbiologica</i> , 2008, 53, 289-294.	2.3	71
47	Chemical and microbiological characterization of an aged PCB-contaminated soil. <i>Science of the Total Environment</i> , 2015, 533, 177-186.	8.0	67
48	<i>Terracidiphilus gabretensis</i> gen. nov., sp. nov., an Abundant and Active Forest Soil Acidobacterium Important in Organic Matter Transformation. <i>Applied and Environmental Microbiology</i> , 2016, 82, 560-569.	3.1	67
49	Bioavailability modification and fungal biodegradation of PAHs in aged industrial soils. <i>International Biodeterioration and Biodegradation</i> , 2007, 60, 165-170.	3.9	65
50	Mycoremediation of PAH-contaminated soil. <i>Folia Microbiologica</i> , 2002, 47, 255-258.	2.3	64
51	Breakdown products on metabolic pathway of degradation of benz[a]anthracene by a ligninolytic fungus. <i>Chemosphere</i> , 2006, 64, 560-564.	8.2	64
52	Biodegradation of endocrine disruptors in urban wastewater using <i>Pleurotus ostreatus</i> bioreactor. <i>New Biotechnology</i> , 2018, 43, 53-61.	4.4	61
53	Screening for 32 per- and polyfluoroalkyl substances (PFAS) including GenX in sludges from 43 WWTPs located in the Czech Republic - Evaluation of potential accumulation in vegetables after application of biosolids. <i>Chemosphere</i> , 2020, 261, 128018.	8.2	57
54	In vivo and in vitro polycyclic aromatic hydrocarbons degradation by <i>Lentinus (Panus) tigrinus</i> CBS 577.79. <i>Bioresource Technology</i> , 2010, 101, 3004-3012.	9.6	56

#	ARTICLE	IF	CITATIONS
55	Humus accumulation, humification, and humic acid composition in soils of two post-mining chronosequences after coal mining. <i>Journal of Soils and Sediments</i> , 2013, 13, 491-500.	3.0	56
56	Combined abiotic and biotic in-situ reduction of hexavalent chromium in groundwater using nZVI and whey: A remedial pilot test. <i>Journal of Hazardous Materials</i> , 2015, 300, 670-679.	12.4	55
57	Effect of digestate and fly ash applications on soil functional properties and microbial communities. <i>European Journal of Soil Biology</i> , 2015, 71, 1-12.	3.2	55
58	Short-term impact of dry olive mill residue addition to soil on the resident microbiota. <i>Bioresource Technology</i> , 2009, 100, 6098-6106.	9.6	54
59	Hormonal activities of new brominated flame retardants. <i>Chemosphere</i> , 2012, 87, 820-824.	8.2	53
60	Influence of the bioaccessible fraction of polycyclic aromatic hydrocarbons on the ecotoxicity of historically contaminated soils. <i>Journal of Hazardous Materials</i> , 2013, 254-255, 116-124.	12.4	53
61	Effects of soil substrate quality, microbial diversity and community composition on the plant community during primary succession. <i>Soil Biology and Biochemistry</i> , 2016, 99, 75-84.	8.8	53
62	Changes in soil microbial community functionality and structure in a metal-polluted site: The effect of digestate and fly ash applications. <i>Journal of Environmental Management</i> , 2015, 162, 63-73.	7.8	52
63	Pharmaceuticals, benzene, toluene and chlorobenzene removal from contaminated groundwater by combined UV/H ₂ O ₂ photo-oxidation and aeration. <i>Water Research</i> , 2017, 120, 245-255.	11.3	49
64	<i>Trachydiscus minutus</i> , a new biotechnological source of eicosapentaenoic acid. <i>Folia Microbiologica</i> , 2010, 55, 265-269.	2.3	48
65	An efficient PAH-degrading <i>Lentinus (Panus) tigrinus</i> strain: Effect of inoculum formulation and pollutant bioavailability in solid matrices. <i>Journal of Hazardous Materials</i> , 2010, 183, 669-676.	12.4	47
66	Soil biota in post-mining sites along a climatic gradient in the USA: Simple communities in shortgrass prairie recover faster than complex communities in tallgrass prairie and forest. <i>Soil Biology and Biochemistry</i> , 2013, 67, 212-225.	8.8	46
67	Soil Food Web Changes during Spontaneous Succession at Post Mining Sites: A Possible Ecosystem Engineering Effect on Food Web Organization?. <i>PLoS ONE</i> , 2013, 8, e79694.	2.5	46
68	Assessment of degradation potential of aliphatic hydrocarbons by autochthonous filamentous fungi from a historically polluted clay soil. <i>Science of the Total Environment</i> , 2015, 505, 545-554.	8.0	44
69	Hydrocarbon deposition and soil microflora as affected by highway traffic. <i>Environmental Pollution</i> , 2001, 113, 255-262.	7.5	42
70	Estrogenic and androgenic activity of PCBs, their chlorinated metabolites and other endocrine disruptors estimated with two in vitro yeast assays. <i>Science of the Total Environment</i> , 2009, 407, 5921-5925.	8.0	41
71	Widely used pharmaceuticals present in the environment revealed as in vitro antagonists for human estrogen and androgen receptors. <i>Chemosphere</i> , 2016, 152, 284-291.	8.2	39
72	Recovery of fen peatland microbiomes and predicted functional profiles after rewetting. <i>ISME Journal</i> , 2020, 14, 1701-1712.	9.8	39

#	ARTICLE	IF	CITATIONS
73	Effect of pyrolysis temperature on removal of organic pollutants present in anaerobically stabilized sewage sludge. <i>Chemosphere</i> , 2021, 265, 129082.	8.2	39
74	Organic matter transformation and detoxification in dry olive mill residue by the saprophytic fungus <i>Paecilomyces farinosus</i> . <i>Process Biochemistry</i> , 2009, 44, 216-225.	3.7	37
75	Biotransformation of the Antibiotic Agent Flumequine by Ligninolytic Fungi and Residual Antibacterial Activity of the Transformation Mixtures. <i>Environmental Science & Technology</i> , 2013, 47, 14128-14136.	10.0	37
76	Inoculum carrier and contaminant bioavailability affect fungal degradation performances of PAH-contaminated solid matrices from a wood preservation plant. <i>Chemosphere</i> , 2010, 79, 855-864.	8.2	36
77	Mechanistic Study of 17 β -Ethinylestradiol Biodegradation by <i>Pleurotus ostreatus</i> : Tracking of Extracellular and Intracellular Degradation Mechanisms. <i>Environmental Science & Technology</i> , 2012, 46, 13377-13385.	10.0	36
78	Real-time PCR quantification of arbuscular mycorrhizal fungi: does the use of nuclear or mitochondrial markers make a difference?. <i>Mycorrhiza</i> , 2017, 27, 577-585.	2.8	36
79	Complete genome sequence of <i>Pseudomonas alcaliphila</i> JAB1 (=DSM 26533), a versatile degrader of organic pollutants. <i>Standards in Genomic Sciences</i> , 2018, 13, 3.	1.5	36
80	Structure selectivity in degradation and translocation of polychlorinated biphenyls (Delor 103) with a <i>Pleurotus ostreatus</i> (oyster mushroom) culture. <i>Chemosphere</i> , 2005, 61, 1370-1378.	8.2	35
81	The effect of lignin photodegradation on decomposability of <i>Calamagrostis epigeios</i> grass litter. <i>Biodegradation</i> , 2011, 22, 1247-1254.	3.0	35
82	Microbiology Meets Archaeology: Soil Microbial Communities Reveal Different Human Activities at Archaic Monte Iato (Sixth Century BC). <i>Microbial Ecology</i> , 2017, 73, 925-938.	2.8	35
83	Bioremediation of PAH-contaminated soil by composting: A case study. <i>Folia Microbiologica</i> , 2002, 47, 696-700.	2.3	34
84	Chemical composition of litter affects the growth and enzyme production by the saprotrophic basidiomycete <i>Hypholoma fasciculare</i> . <i>Fungal Ecology</i> , 2011, 4, 417-426.	1.6	34
85	Biodegradation of chlorobenzoic acids by ligninolytic fungi. <i>Journal of Hazardous Materials</i> , 2011, 196, 386-394.	12.4	34
86	Long-term impact of <i>Heracleum mantegazzianum</i> invasion on soil chemical and biological characteristics. <i>Soil Biology and Biochemistry</i> , 2014, 68, 270-278.	8.8	34
87	Molecular structure effects in photodegradation of phenol and its chlorinated derivatives with phthalocyanines. <i>Applied Catalysis B: Environmental</i> , 2008, 80, 321-326.	20.2	33
88	Characterization of soil bacterial, archaeal and fungal communities inhabiting archaeological human-impacted layers at Monte Iato settlement (Sicily, Italy). <i>Scientific Reports</i> , 2018, 8, 1903.	3.3	33
89	Major mechanisms contributing to the macrofauna-mediated slow down of litter decomposition. <i>Soil Biology and Biochemistry</i> , 2015, 91, 23-31.	8.8	32
90	<i>Silvibacterium bohemicum</i> gen. nov. sp. nov., an acidobacterium isolated from coniferous soil in the Bohemian Forest National Park. <i>Systematic and Applied Microbiology</i> , 2016, 39, 14-19.	2.8	31

#	ARTICLE	IF	CITATIONS
91	Novel PCB-degrading <i>Rhodococcus</i> strains able to promote plant growth for assisted rhizoremediation of historically polluted soils. <i>PLoS ONE</i> , 2019, 14, e0221253.	2.5	31
92	Investigating the coagulation of non-proteinaceous algal organic matter: Optimizing coagulation performance and identification of removal mechanisms. <i>Journal of Environmental Sciences</i> , 2019, 79, 25-34.	6.1	31
93	PAH desorption from river floodplain soils using supercritical fluid extraction. <i>Environmental Pollution</i> , 2008, 156, 745-752.	7.5	30
94	New in vitro reporter gene bioassays for screening of hormonal active compounds in the environment. <i>Applied Microbiology and Biotechnology</i> , 2010, 88, 839-847.	3.6	30
95	Application of Supercritical Fluid Extraction (SFE) to Predict Bioremediation Efficacy of Long-Term Composting of PAH-Contaminated Soil. <i>Environmental Science & Technology</i> , 2005, 39, 8448-8452.	10.0	29
96	The effect of traditional slash&burn agriculture on soil organic matter, nutrient content, and microbiota in tropical ecosystems of Papua New Guinea. <i>Land Degradation and Development</i> , 2019, 30, 166-177.	3.9	29
97	Partial photocatalytic oxidation of cyclopentene over titanium(IV) oxide. <i>Journal of Molecular Catalysis A</i> , 2005, 242, 62-67.	4.8	28
98	Super/subcritical fluid extractions for preparation of the crystalline titania. <i>Journal of Supercritical Fluids</i> , 2010, 52, 215-221.	3.2	28
99	Identification of regioisomers and enantiomers of triacylglycerols in different yeasts using reversed&chiral&phase LC&MS. <i>Journal of Separation Science</i> , 2013, 36, 3310-3320.	2.5	28
100	Biodegradation of PCBs in contaminated water using spent oyster mushroom substrate and a trickle-bed bioreactor. <i>Water Research</i> , 2020, 170, 115274.	11.3	28
101	Polycyclic aromatic hydrocarbon accumulation in aged and unaged polyurethane microplastics in contaminated soil. <i>Science of the Total Environment</i> , 2021, 770, 145254.	8.0	28
102	Non thermal preparation of photoactive titanium (IV) oxide thin layers. <i>Thin Solid Films</i> , 2006, 495, 18-23.	1.8	27
103	Intraspecific variability in allelopathy of <i>Heracleum mantegazzianum</i> is linked to the metabolic profile of root exudates. <i>Annals of Botany</i> , 2015, 115, 821-831.	2.9	26
104	Bioaugmentation of PAH-contaminated soils: A novel procedure for introduction of bacterial degraders into contaminated soil. <i>Ecological Engineering</i> , 2018, 118, 93-96.	3.6	26
105	Nano zero-valent iron aging interacts with the soil microbial community: a microcosm study. <i>Environmental Science: Nano</i> , 2019, 6, 1189-1206.	4.3	26
106	Litter decomposition along a primary post-mining chronosequence. <i>Biology and Fertility of Soils</i> , 2014, 50, 827-837.	4.3	25
107	Assessment of biodegradation potential at a site contaminated by a mixture of BTEX, chlorinated pollutants and pharmaceuticals using passive sampling methods " Case study. <i>Science of the Total Environment</i> , 2017, 607-608, 1451-1465.	8.0	25
108	Environmental fate of sulfidated nZVI particles: the interplay of nanoparticle corrosion and toxicity during aging. <i>Environmental Science: Nano</i> , 2020, 7, 1794-1806.	4.3	25

#	ARTICLE	IF	CITATIONS
109	Coagulation of polyvinyl chloride microplastics by ferric and aluminium sulphate: Optimisation of reaction conditions and removal mechanisms. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 106465.	6.7	25
110	Changes in soil microbial communities as affected by intensive cattle husbandry. <i>Applied Soil Ecology</i> , 2012, 58, 56-65.	4.3	24
111	Comparative assessment of fungal augmentation treatments of a fine-textured and historically oil-contaminated soil. <i>Science of the Total Environment</i> , 2016, 566-567, 250-259.	8.0	24
112	Tree species identity alters decomposition of understory litter and associated microbial communities: a case study. <i>Biology and Fertility of Soils</i> , 2019, 55, 525-538.	4.3	24
113	Degradation of BTEX and PAHs by Co(II) and Cu(II)-based radical-generating systems. <i>Applied Catalysis B: Environmental</i> , 2004, 51, 159-164.	20.2	23
114	Deep, subsurface microflora after excavation respiration and biomass and its potential role in degradation of fossil organic matter. <i>Folia Microbiologica</i> , 2011, 56, 389-396.	2.3	23
115	TiO ₂ powders synthesized by pressurized fluid extraction and supercritical drying: Effect of water and methanol on structural properties and purity. <i>Materials Research Bulletin</i> , 2012, 47, 3573-3579.	5.2	23
116	Ecotoxicity and environmental safety related to nano-scale zerovalent iron remediation applications. <i>Applied Microbiology and Biotechnology</i> , 2016, 100, 9809-9819.	3.6	23
117	Novel assay for the toxicity evaluation of nanoscale zero-valent iron and derived nanomaterials based on lipid peroxidation in bacterial species. <i>Chemosphere</i> , 2018, 213, 568-577.	8.2	23
118	Laccase and horseradish peroxidase for green treatment of phenolic micropollutants in real drinking water and wastewater. <i>Environmental Science and Pollution Research</i> , 2021, 28, 31566-31574.	5.3	23
119	Discovering the potential of an nZVI-biochar composite as a material for the nanobioremediation of chlorinated solvents in groundwater: Degradation efficiency and effect on resident microorganisms. <i>Chemosphere</i> , 2021, 281, 130915.	8.2	23
120	Source Impact Determination using Airborne and Ground Measurements of Industrial Plumes. <i>Environmental Science & Technology</i> , 2016, 50, 9881-9888.	10.0	22
121	Method for analysis of psychopharmaceuticals in real industrial wastewater and groundwater with suspended organic particulate matter using solid phase extraction disks extraction and ultra-high performance liquid chromatography/time-of-flight mass spectrometry. <i>Journal of Chromatography A</i> , 2016, 1440, 15-22.	3.7	22
122	Retention of dead standing plant biomass (marcescence) increases subsequent litter decomposition in the soil organic layer. <i>Plant and Soil</i> , 2017, 418, 571-579.	3.7	22
123	Oxidative stress in microbes after exposure to iron nanoparticles: analysis of aldehydes as oxidative damage products of lipids and proteins. <i>Environmental Science and Pollution Research</i> , 2019, 26, 33670-33682.	5.3	22
124	Long-term decomposition of litter in the montane forest and the definition of fungal traits in the successional space. <i>Fungal Ecology</i> , 2020, 46, 100913.	1.6	22
125	Use of fungal technology in soil remediation: A Case Study. <i>Water, Air and Soil Pollution</i> , 2003, 3, 5-14.	0.8	21
126	Does the addition of leaf litter affect soil respiration in the same way as addition of macrofauna excrements (of <i>Bibio marci</i> Diptera larvae) produced from the same litter?. <i>Applied Soil Ecology</i> , 2013, 72, 7-13.	4.3	21

#	ARTICLE	IF	CITATIONS
127	Novel full logistic model for estimation of the estrogenic activity of chemical mixtures. <i>Toxicology</i> , 2016, 359-360, 58-70.	4.2	21
128	Adaptive traits of bark and ambrosia beetle-associated fungi. <i>Fungal Ecology</i> , 2019, 41, 165-176.	1.6	21
129	Immobilized Inocula of White-Rot Fungi Accelerate both Detoxification and Organic Matter Transformation in Two-Phase Dry Olive-Mill Residue. <i>Journal of Agricultural and Food Chemistry</i> , 2009, 57, 5452-5460.	5.2	20
130	Functional adaptation of microbial communities from jet fuel-contaminated soil under bioremediation treatment: simulation of pollutant rebound. <i>FEMS Microbiology Ecology</i> , 2011, 78, 137-149.	2.7	20
131	<i>Lentinus (Panus) tigrinus</i> augmentation of a historically contaminated soil: Matrix decontamination and structure and function of the resident bacterial community. <i>Journal of Hazardous Materials</i> , 2011, 186, 1263-1270.	12.4	20
132	Laccase activity profiling and gene expression in PCB-degrading cultures of <i>Trametes versicolor</i> . <i>International Biodeterioration and Biodegradation</i> , 2012, 71, 22-28.	3.9	20
133	Analysis of the biodegradative and adaptive potential of the novel polychlorinated biphenyl degrader <i>Rhodococcus</i> sp. WAY2 revealed by its complete genome sequence. <i>Microbial Genomics</i> , 2020, 6, .	2.0	20
134	Degradation of polycyclic aromatic hydrocarbons by hydrogen peroxide catalyzed by heterogeneous polymeric metal chelates. <i>Applied Catalysis B: Environmental</i> , 2005, 59, 267-274.	20.2	19
135	Hyphenated ultra high-performance liquid chromatography–Nano Quantity Analyte Detector technique for determination of compounds with low UV absorption. <i>Journal of Chromatography A</i> , 2009, 1216, 5774-5778.	3.7	19
136	Respiration in wood ant (<i>Formica aquilonia</i>) nests as affected by altitudinal and seasonal changes in temperature. <i>Soil Biology and Biochemistry</i> , 2015, 86, 50-57.	8.8	19
137	Dynamics of a vertical-flow windrow vermicomposting system. <i>Waste Management and Research</i> , 2017, 35, 1121-1128.	3.9	19
138	Recent advances in PCB removal from historically contaminated environmental matrices. <i>Chemosphere</i> , 2022, 287, 132096.	8.2	19
139	Asymmetric response of root-associated fungal communities of an arbuscular mycorrhizal grass and an ectomycorrhizal tree to their coexistence in primary succession. <i>Mycorrhiza</i> , 2017, 27, 775-789.	2.8	18
140	The effect of native and introduced biofuel crops on the composition of soil biota communities. <i>Biomass and Bioenergy</i> , 2014, 60, 137-146.	5.7	17
141	Anaerobic in situ biodegradation of TNT using whey as an electron donor: a case study. <i>New Biotechnology</i> , 2015, 32, 701-709.	4.4	17
142	Micropollutant biodegradation and the hygienization potential of biodrying as a pretreatment method prior to the application of sewage sludge in agriculture. <i>Ecological Engineering</i> , 2019, 127, 212-219.	3.6	17
143	Diversity of root-associated microbial populations of <i>Tamarix parviflora</i> cultivated under various conditions. <i>Applied Soil Ecology</i> , 2018, 125, 264-272.	4.3	16
144	Photoelectrochemical and photocatalytic properties of titanium (IV) oxide nanoparticulate layers. <i>Thin Solid Films</i> , 2007, 515, 8455-8460.	1.8	15

#	ARTICLE	IF	CITATIONS
145	Relationships between respiration, chemical and microbial properties of afforested mine soils with different soil texture and tree species: Does the time of incubation matter. <i>European Journal of Soil Biology</i> , 2017, 80, 102-109.	3.2	15
146	Very-long-chain iso and anteiso branched fatty acids in N-acylphosphatidylethanolamines from a natural cyanobacterial mat of <i>Calothrix</i> sp.. <i>Phytochemistry</i> , 2009, 70, 655-663.	2.9	14
147	Chlorobenzoic acid degradation by <i>Lentinus</i> (<i>Panus</i>) <i>tigrinus</i> : In vivo and in vitro mechanistic study-evidence for P-450 involvement in the transformation. <i>Journal of Hazardous Materials</i> , 2013, 260, 975-983.	12.4	14
148	Soil fauna increase nitrogen loss in tilled soil with legume but reduce nitrogen loss in non-tilled soil without legume. <i>Soil Biology and Biochemistry</i> , 2013, 60, 105-112.	8.8	14
149	In Vitro Study of the Toxicity Mechanisms of Nanoscale Zero-Valent Iron (nZVI) and Released Iron Ions Using Earthworm Cells. <i>Nanomaterials</i> , 2020, 10, 2189.	4.1	14
150	Organic matter decomposition and carbon content in soil fractions as affected by a gradient of labile carbon input to a temperate forest soil. <i>Biology and Fertility of Soils</i> , 2020, 56, 411-421.	4.3	14
151	Mycoremediation of Organic Pollutants: Principles, Opportunities, and Pitfalls. <i>Fungal Biology</i> , 2016, , 185-231.	0.6	14
152	<i>Pseudogemmobacter bohemicus</i> gen. nov., sp. nov., a novel taxon from the Rhodobacteraceae family isolated from heavy-metal-contaminated sludge. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 2019, 69, 2401-2407.	1.7	14
153	Nutrient addition retards decomposition and C immobilization in two wet grasslands. <i>Hydrobiologia</i> , 2012, 692, 67-81.	2.0	13
154	Receptor partial agonism and method to express receptor partial activation with respect to novel Full Logistic Model of mixture toxicology. <i>Toxicology</i> , 2018, 393, 26-33.	4.2	13
155	The effects of hydraulic/pneumatic fracturing-enhanced remediation (FRAC-IN) at a site contaminated by chlorinated ethenes: A case study. <i>Journal of Hazardous Materials</i> , 2021, 417, 125883.	12.4	13
156	Conversion of spent coffee grounds into vermicompost. <i>Bioresource Technology</i> , 2021, 341, 125925.	9.6	13
157	The role of CuZn- and Mn-superoxide dismutases in earthworm <i>Eisenia andrei</i> kept in two distinct field-contaminated soils. <i>Ecotoxicology and Environmental Safety</i> , 2018, 159, 363-371.	6.0	12
158	Implications of mycoremediated dry olive residue application and arbuscular mycorrhizal fungi inoculation on the microbial community composition and functionality in a metal-polluted soil. <i>Journal of Environmental Management</i> , 2019, 247, 756-765.	7.8	12
159	Assessment of agonistic and antagonistic properties of widely used oral care antimicrobial substances toward steroid estrogenic and androgenic receptors. <i>Chemosphere</i> , 2019, 217, 534-541.	8.2	12
160	Lamellar micelles-mediated synthesis of nanoscale thick sheets of titania. <i>Materials Letters</i> , 2007, 61, 2931-2934.	2.6	11
161	Separation of PCBs by liquid chromatography on reversed phase sub-2-micron particle columns. <i>Talanta</i> , 2010, 80, 1849-1855.	5.5	11
162	Sensitive GC/MS determination of 15 isomers of chlorobenzoic acids in accelerated solvent extracts of soils historically contaminated with PCBs and validation of the entire method. <i>International Journal of Environmental Analytical Chemistry</i> , 2014, 94, 822-836.	3.3	11

#	ARTICLE	IF	CITATIONS
163	Relative importance of honeydew and resin for the microbial activity in wood ant nest and forest floor substrate – a laboratory study. <i>Soil Biology and Biochemistry</i> , 2018, 117, 1-4.	8.8	11
164	Different twig litter (<i>Salix caprea</i>) diameter does affect microbial community activity and composition but not decay rate. <i>FEMS Microbiology Ecology</i> , 2018, 94, .	2.7	11
165	Microbial communities in local and transplanted soils along a latitudinal gradient. <i>Catena</i> , 2019, 173, 456-464.	5.0	11
166	Vermicomposting of sludge from a malt house. <i>Waste Management</i> , 2020, 118, 232-240.	7.4	11
167	Understanding the toxicity mechanism of CuO nanoparticles: the intracellular view of exposed earthworm cells. <i>Environmental Science: Nano</i> , 2021, 8, 2464-2477.	4.3	11
168	Passive sampling of pharmaceuticals and personal care products in aquatic environments. <i>European Journal of Environmental Sciences</i> , 2016, 6, 43-56.	0.2	11
169	Shifts in Soil Chemical Properties and Bacterial Communities Responding to Biotransformed Dry Olive Residue Used as Organic Amendment. <i>Microbial Ecology</i> , 2015, 70, 231-243.	2.8	10
170	Methane and carbon dioxide flux in the profile of wood ant (<i>Formica aquilonia</i>) nests and the surrounding forest floor during a laboratory incubation. <i>FEMS Microbiology Ecology</i> , 2016, 92, fiw141.	2.7	10
171	Enhancing the lipid productivity of yeasts with trace concentrations of iron nanoparticles. <i>Folia Microbiologica</i> , 2016, 61, 329-335.	2.3	10
172	Assessment of soil microbial communities involved in cellulose utilization at two contrasting Alpine forest sites. <i>Soil Biology and Biochemistry</i> , 2019, 129, 13-16.	8.8	10
173	Long-term effects of earthworms (<i>Lumbricus rubellus</i> Hoffmeister, 1843) on activity and composition of soil microbial community under laboratory conditions. <i>Applied Soil Ecology</i> , 2020, 150, 103463.	4.3	10
174	Evaluation of Hybrid Constructed Wetland Performance and Reuse of Treated Wastewater in Agricultural Irrigation. <i>Water (Switzerland)</i> , 2021, 13, 1165.	2.7	10
175	Synthesis of zirconia-immobilized copper chelates for catalytic decomposition of hydrogen peroxide and the oxidation of polycyclic aromatic hydrocarbons. <i>Chemosphere</i> , 2008, 72, 1721-1726.	8.2	9
176	Biodegradability of Dental Care Antimicrobial Agents Chlorhexidine and Octenidine by Ligninolytic Fungi. <i>Molecules</i> , 2020, 25, 400.	3.8	9
177	Degradation Products of Polychlorinated Biphenyls and Their In Vitro Transformation by Ligninolytic Fungi. <i>Toxics</i> , 2021, 9, 81.	3.7	9
178	Composting and vermicomposting used to break down and remove pollutants from organic waste: a mini review. <i>European Journal of Environmental Sciences</i> , 2020, 10, 9-14.	0.2	9
179	The driving factors of per- and polyfluorinated alkyl substance (PFAS) accumulation in selected fish species: The influence of position in river continuum, fish feed composition, and pollutant properties. <i>Science of the Total Environment</i> , 2022, 816, 151662.	8.0	9
180	Effect of methyltert-butyl ether in standard tests for mutagenicity and environmental toxicity. <i>Environmental Toxicology</i> , 2006, 21, 599-605.	4.0	8

#	ARTICLE	IF	CITATIONS
181	Determination of 15 isomers of chlorobenzoic acid in soil samples using accelerated sample extraction followed by liquid chromatography. <i>Talanta</i> , 2011, 84, 1141-1147.	5.5	8
182	Searching for <i>Heracleum mantegazzianum</i> allelopathy in vitro and in a garden experiment. <i>Biological Invasions</i> , 2015, 17, 987-1003.	2.4	8
183	New insight into isobolographic analysis for combinations of a full and partial agonist: Curved isoboles. <i>Toxicology</i> , 2018, 402-403, 9-16.	4.2	8
184	Bear trade in the Czech Republic: an analysis of legal and illegal international trade from 2005 to 2020. <i>European Journal of Wildlife Research</i> , 2020, 66, 1.	1.4	8
185	In Vitro Interactions of TiO ₂ Nanoparticles with Earthworm Coelomocytes: Immunotoxicity Assessment. <i>Nanomaterials</i> , 2021, 11, 250.	4.1	8
186	Biphenyl 2,3-Dioxygenase in <i>Pseudomonas alcaliphila</i> JAB1 Is Both Induced by Phenolics and Monoterpenes and Involved in Their Transformation. <i>Frontiers in Microbiology</i> , 2021, 12, 657311.	3.5	8
187	Microbial communities in soil macro-aggregates with less connected networks respire less across successional and geographic gradients. <i>European Journal of Soil Biology</i> , 2022, 108, 103378.	3.2	8
188	Transcriptional response of lignin-degrading enzymes to 17 β -ethinyloestradiol in two white rots. <i>Microbial Biotechnology</i> , 2013, 6, 300-306.	4.2	7
189	Biodegradation of Aromatic Pollutants by Ligninolytic Fungal Strains. <i>Environmental Science and Engineering</i> , 2012, , 291-316.	0.2	6
190	Separation of regioisomers and enantiomers of triacylglycerols containing branched fatty acids (iso) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	2.4	6
191	Differences in the flow of spruce-derived needle leachates and root exudates through a temperate coniferous forest mineral topsoil. <i>Geoderma</i> , 2022, 405, 115441.	5.1	6
192	Evaluation of estrogenic and antiestrogenic activity in sludge and explanation of individual compound contributions. <i>Journal of Hazardous Materials</i> , 2022, 423, 127108.	12.4	6
193	Changes in the root microbiome of four plant species with different mycorrhizal types across a nitrogen deposition gradient in ombrotrophic bogs. <i>Soil Biology and Biochemistry</i> , 2022, 169, 108673.	8.8	6
194	The role of bacteria and protists in nitrogen turnover in ant nest and forest floor material: A laboratory experiment. <i>European Journal of Soil Biology</i> , 2015, 69, 66-73.	3.2	5
195	Decomposition of labile and recalcitrant coniferous litter fractions affected by temperature during the growing season. <i>Journal of Forestry Research</i> , 2020, 31, 1115-1121.	3.6	5
196	Microplasticsâ€”How and What Do University Students Know about the Emerging Environmental Sustainability Issue?. <i>Sustainability</i> , 2020, 12, 9220.	3.2	5
197	Locally accumulated extractable compounds in mycorrhizal parts of maize roots suppress the growth of Hyphae of <i>Glomus intraradices</i> . <i>Folia Geobotanica</i> , 2003, 38, 125-138.	0.9	4
198	Performance of base hydrolysis methods in extracting bound lipids from plant material, soils, and sediments. <i>Organic Geochemistry</i> , 2017, 113, 97-104.	1.8	4

#	ARTICLE	IF	CITATIONS
199	The sensitivity of multiple ecotoxicological assays for evaluating <i>Microcystis aeruginosa</i> cellular algal organic matter and contribution of cyanotoxins to the toxicity. <i>Toxicol</i> , 2021, 195, 69-77.	1.6	4
200	Predominant Biphenyl Dioxygenase From Legacy Polychlorinated Biphenyl (PCB)-Contaminated Soil Is a Part of Unusual Gene Cluster and Transforms Flavone and Flavanone. <i>Frontiers in Microbiology</i> , 2021, 12, 644708.	3.5	4
201	Composting Practices for the Remediation of Matrices Contaminated by Recalcitrant Organic Pollutants. <i>Applied Environmental Science and Engineering for A Sustainable Future</i> , 2020, , 467-494.	0.5	4
202	Exposure of rats to exogenous endocrine disruptors 17alpha-ethinylestradiol and benzo(a)pyrene and an estrogenic hormone estradiol induces expression of cytochromes P450 involved in their metabolism. <i>Neuroendocrinology Letters</i> , 2016, 37, 84-94.	0.2	4
203	Photochemical degradation of polybrominated diphenyl ethers in microreactor. <i>Research on Chemical Intermediates</i> , 2015, 41, 9373-9381.	2.7	3
204	Estimation of competitive antagonist affinity by the Schild method and from functional inhibition curves using a novel form of the Gaddum equation. <i>Toxicology</i> , 2019, 420, 21-28.	4.2	3
205	Impact of plant species and atmospheric CO ₂ concentration on rhizodeposition and soil microbial activity and community composition. <i>Journal of Plant Nutrition and Soil Science</i> , 2020, 183, 327-337.	1.9	3
206	Soil Organic Carbon Content Decreases in Both Surface and Subsoil Mineral Horizons by Simulated Future Increases in Labile Carbon Inputs in a Temperate Coniferous Forest. <i>Ecosystems</i> , 2021, 24, 2028-2041.	3.4	3
207	PILOT-SCALE VERMICOMPOSTING OF DEWATERED SEWAGE SLUDGE FROM MEDIUM-SIZED WWTP. <i>Detritus</i> , 2022, , 35-41.	0.9	3
208	Biodegradation of methyl tert-butyl ether using bacterial strains. <i>Folia Microbiologica</i> , 2008, 53, 411-416.	2.3	2
209	Analytical determination of oestrogenic endocrine disruptors: the method of choice for wastewater treatment plant effluents. <i>Environmental Chemistry</i> , 2021, 18, 143-155.	1.5	2
210	Comparison of temperature and oxygen concentration driven aeration methods for biodrying of municipal solid waste. <i>European Journal of Environmental Sciences</i> , 2021, 11, 38-45.	0.2	2
211	Effects of silver sulfide nanoparticles on the earthworm <i>Eisenia andrei</i> . <i>Comparative Biochemistry and Physiology Part - C: Toxicology and Pharmacology</i> , 2022, 257, 109355.	2.6	2
212	Asymmetric Interaction Between Two Mycorrhizal Fungal Guilds and Consequences for the Establishment of Their Host Plants. <i>Frontiers in Plant Science</i> , 0, 13, .	3.6	2
213	“Self activation” properties of the nanophase photocatalytic titania precursors. <i>Reaction Kinetics and Catalysis Letters</i> , 2005, 86, 281-289.	0.6	1
214	A study on 17alpha-ethinylestradiol metabolism in rat and <i>Pleurotus ostreatus</i> . <i>Neuroendocrinology Letters</i> , 2015, 36 Suppl 1, 5-12.	0.2	1
215	Are ivory antiques actually antique?. <i>Crime, Law and Social Change</i> , 2021, 76, 219-231.	1.1	0
216	Tool V: Microbiological Methods for Monitoring nZVI Performance in Groundwater Conditions. <i>Applied Environmental Science and Engineering for A Sustainable Future</i> , 2020, , 645-657.	0.5	0

#	ARTICLE	IF	CITATIONS
217	Key parameter optimization using multivariable linear model for the evaluation of the in vitro estrogenic activity assay in T47D cell lines (CXCLâ€test). Journal of Applied Toxicology, 2021, , .	2.8	0
218	Methods for Design and Bioremediation Applications of Reactors Based on Immobilized Fungi. Springer Protocols, 2022, , 71-92.	0.3	0
219	The invasive tree Piper aduncum alters soil microbiota and nutrient content in fallow land following small scale slash-and-burn farming in tropical lowland forest in Papua New Guinea. Applied Soil Ecology, 2022, 176, 104487.	4.3	0