Matthias C Rillig

List of Publications by Year
in descending order

415 papers	47,976 citations	1614 105 h-index	2280 200 g-index
448 all docs	448 docs citations	448 times ranked	31795 citing authors

#	Article	IF	Citations
1	Biochar effects on soil biota â€“ A review. Soil Biology and Biochemistry, 2011, 43, 1812-1836.	8.8	3,514
2	Microplastics as an emerging threat to terrestrial ecosystems. Global Change Biology, 2018, 24, 1405-1416.	9.5	1,303
3	Mycorrhizas and soil structure. New Phytologist, 2006, 171, 41-53.	7.3	1,300
4	TRY plant trait database â€“ enhanced coverage and open access. Global Change Biology, 2020, 26, 119-188.	9.5	1,038
5	Microplastic in Terrestrial Ecosystems and the Soil?. Environmental Science & Technology, 2012, 46, 6453-6454.	10.0	1,029
6	Microplastics Can Change Soil Properties and Affect Plant Performance. Environmental Science & Technology, 2019, 53, 6044-6052.	10.0	995
7	Mycorrhizal responses to biochar in soil â€“ concepts and mechanisms. Plant and Soil, 2007, 300, 9-20.	3.7	940
8	Impacts of Microplastics on the Soil Biophysical Environment. Environmental Science & Technology, 2018, 52, 9656-9665.	10.0	930
9	Where less may be more: how the rare biosphere pulls ecosystems strings. ISME Journal, 2017, 11, 853-862.	9.8	857
10	Arbuscular mycorrhizae, glomalin, and soil aggregation. Canadian Journal of Soil Science, 2004, 84, 355-363.	1.2	776
11	Choosing and using diversity indices: insights for ecological applications from the German Biodiversity Exploratories. Ecology and Evolution, 2014, 4, 3514-3524.	1.9	697
12	Rooting theories of plant community ecology in microbial interactions. Trends in Ecology and Evolution, 2010, 25, 468-478.	8.7	666
13	Soil aggregation and carbon sequestration are tightly correlated with the abundance of arbuscular mycorrhizal fungi: results from longâ€term field experiments. Ecology Letters, 2009, 12, 452-461.	6.4	600
14	Land use intensification alters ecosystem multifunctionality via loss of biodiversity and changes to functional composition. Ecology Letters, 2015, 18, 834-843.	6.4	578
15	Microplastic in terrestrial ecosystems. Science, 2020, 368, 1430-1431.	12.6	549
16	Microplastic transport in soil by earthworms. Scientific Reports, 2017, 7, 1362.	3.3	546
17	Biodiversity at multiple trophic levels is needed for ecosystem multifunctionality. Nature, 2016, 536, 456-459.	27.8	526
18	Global ecosystem thresholds driven by aridity. Science, 2020, 367, 787-790.	12.6	526

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19	Soil microbes drive the classic plant diversityâ€“productivity pattern. Ecology, 2011, 92, 296-303.	3.2	517
20	Large contribution of arbuscular mycorrhizal fungi to soil carbon pools in tropical forest soils. Plant and Soil, 2001, 233, 167-177.	3.7	487
21	The concept and future prospects of soil health. Nature Reviews Earth & Environment, 2020, 1, 544-553.	29.7	486
22	Arbuscular mycorrhizae and terrestrial ecosystem processes. Ecology Letters, 2004, 7, 740-754.	6.4	481
23	Title is missing!. Plant and Soil, 2002, 238, 325-333.	3.7	463
24	Microplastic effects on plants. New Phytologist, 2019, 223, 1066-1070.	7.3	460
25	The role of multiple global change factors in driving soil functions and microbial biodiversity. Science, 2019, 366, 886-890.	12.6	437
26	Microplastic Incorporation into Soil in Agroecosystems. Frontiers in Plant Science, 2017, 8, 1805.	3.6	392
27	Mycorrhizal Symbioses and Plant Invasions. Annual Review of Ecology, Evolution, and Systematics, 2009, 40, 699-715.	8.3	388
28	Priming and memory of stress responses in organisms lacking a nervous system. Biological Reviews, 2016, 91, 1118-1133.	10.4	388
29	The fungal collaboration gradient dominates the root economics space in plants. Science Advances, 2020, 6, .	10.3	377
30	Characterization of glomalin as a hyphal wall component of arbuscular mycorrhizal fungi. Soil Biology and Biochemistry, 2005, 37, 101-106.	8.8	334
31	Plant root and mycorrhizal fungal traits for understanding soil aggregation. New Phytologist, 2015, 205, 1385-1388.	7.3	304
32	Biodiversity of arbuscular mycorrhizal fungi and ecosystem function. New Phytologist, 2018, 220, 1059-1075.	7.3	288
33	Phylogenetic trait conservatism and the evolution of functional trade-offs in arbuscular mycorrhizal fungi. Proceedings of the Royal Society B: Biological Sciences, 2009, 276, 4237-4245.	2.6	283
34	Arbuscular mycorrhiza and soil nitrogen cycling. Soil Biology and Biochemistry, 2012, 46, 53-62.	8.8	280
35	Transport of microplastics by two collembolan species. Environmental Pollution, 2017, 225, 456-459.	7.5	279
36	Multiple factors influence the role of arbuscular mycorrhizal fungi in soil aggregationâ€”a meta-analysis. Plant and Soil, 2014, 374, 523-537.	3.7	270

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37	Mycorrhizal fungal establishment in agricultural soils: factors determining inoculation success. New Phytologist, 2013, 197, 1104-1109.	7.3	266
38	Material derived from hydrothermal carbonization: Effects on plant growth and arbuscular mycorrhiza. Applied Soil Ecology, 2010, 45, 238-242.	4.3	262
39	Nutrient limitation of soil microbial processes in tropical forests. Ecological Monographs, 2018, 88, 4-21.	5.4	261
40	Soil biota contributions to soil aggregation. Nature Ecology and Evolution, 2017, 1, 1828-1835.	7.8	257
41	Microplastic Disguising As Soil Carbon Storage. Environmental Science & Technology, 2018, 52, 6079-6080.	10.0	249
42	Global distribution of earthworm diversity. Science, 2019, 366, 480-485.	12.6	248
43	Effects of Microplastic Fibers and Drought on Plant Communities. Environmental Science & Technology, 2020, 54, 6166-6173.	10.0	244
44	Microplastic Shape, Polymer Type, and Concentration Affect Soil Properties and Plant Biomass. Frontiers in Plant Science, 2021, 12, 616645.	3.6	244
45	Interannual variation in land-use intensity enhances grassland multidiversity. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 308-313.	7.1	243
46	Glomalin, an arbuscular-mycorrhizal fungal soil protein, responds to land-use change. Plant and Soil, 2003, 253, 293-299.	3.7	241
47	Plant pathogen protection by arbuscular mycorrhizas: A role for fungal diversity?. Pedobiologia, 2010, 53, 197-201.	1.2	228
48	Role of proteins in soil carbon and nitrogen storage: controls on persistence. Biogeochemistry, 2007, 85, 25-44.	3.5	225
49	Microplastic effects on carbon cycling processes in soils. PLoS Biology, 2021, 19, e3001130.	5.6	220
50	Glomalin-related soil protein in a Mediterranean ecosystem affected by a copper smelter and its contribution to Cu and Zn sequestration. Science of the Total Environment, 2008, 406, 154-160.	8.0	218
51	Interchange of entire communities: microbial community coalescence. Trends in Ecology and Evolution, 2015, 30, 470-476.	8.7	210
52	Influences of non-herbaceous biochar on arbuscular mycorrhizal fungal abundances in roots and soils: Results from growth-chamber and field experiments. Applied Soil Ecology, 2010, 46, 450-456.	4.3	207
53	Glomalin production by an arbuscular mycorrhizal fungus: a mechanism of habitat modification?. Soil Biology and Biochemistry, 2002, 34, 1371-1374.	8.8	206
54	Soil aggregates as massively concurrent evolutionary incubators. ISME Journal, 2017, 11, 1943-1948.	9.8	206

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55	Plant diversity represents the prevalent determinant of soil fungal community structure across temperate grasslands in northern China. Soil Biology and Biochemistry, 2017, 110, 12-21.	8.8	202
56	The invasive plant species Centaurea maculosa alters arbuscular mycorrhizal fungal communities in the field. Plant and Soil, 2006, 288, 81-90.	3.7	196
57	Arbuscular mycorrhizal contribution to copper, manganese and iron nutrient concentrations in crops â€" A meta-analysis. Soil Biology and Biochemistry, 2015, 81, 147-158.	8.8	196
58	Mycelium of arbuscular mycorrhizal fungi increases soil water repellency and is sufficient to maintain water-stable soil aggregates. Soil Biology and Biochemistry, 2010, 42, 1189-1191.	8.8	195
59	Nitrogen and phosphorus additions impact arbuscular mycorrhizal abundance and molecular diversity in a tropical montane forest. Global Change Biology, 2014, 20, 3646-3659.	9.5	194
60	Arbuscular mycorrhizal influence on zinc nutrition in crop plants â€" A meta-analysis. Soil Biology and Biochemistry, 2014, 69, 123-131.	8.8	193
61	Blind spots in global soil biodiversity and ecosystem function research. Nature Communications, 2020, 11, 3870.	12.8	192
62	Arbuscular mycorrhizal fungi increase grain yields: a metaâ€analysis. New Phytologist, 2019, 222, 543-555.	7.3	187
63	A mycorrhizal fungus grows on biochar and captures phosphorus from its surfaces. Soil Biology and Biochemistry, 2014, 77, 252-260.	8.8	184
64	Differential decomposition of arbuscular mycorrhizal fungal hyphae and glomalin. Soil Biology and Biochemistry, 2003, 35, 191-194.	8.8	182
65	Rise in carbon dioxide changes soil structure. Nature, 1999, 400, 628-628.	27.8	175
66	Artificial climate warming positively affects arbuscular mycorrhizae but decreases soil aggregate water stability in an annual grassland. Oikos, 2002, 97, 52-58.	2.7	174
67	Suppression of fungal and nematode plant pathogens through arbuscular mycorrhizal fungi. Biology Letters, 2012, 8, 214-217.	2.3	173
68	Abrupt rise in atmospheric CO2 overestimates community response in a model plantâ€"soil system. Nature, 2005, 433, 621-624.	27.8	171
69	Soil biota responses to long-term atmospheric CO 2 enrichment in two California annual grasslands. Oecologia, 1999, 119, 572-577.	2.0	167
70	Community assembly and coexistence in communities of arbuscular mycorrhizal fungi. ISME Journal, 2016, 10, 2341-2351.	9.8	167
71	Hydrochar and Biochar Effects on Germination of Spring Barley. Journal of Agronomy and Crop Science, 2013, 199, 360-373.	3.5	165
72	Why farmers should manage the arbuscular mycorrhizal symbiosis. New Phytologist, 2019, 222, 1171-1175.	7.3	164

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73	The arbuscular mycorrhizal fungal protein glomalin is a putative homolog of heat shock protein 60. FEMS Microbiology Letters, 2006, 263, 93-101.	1.8	161
74	Disentangling the impact of AM fungi versus roots on soil structure and water transport. Plant and Soil, 2009, 314, 183-196.	3.7	159
75	Extinction risk of soil biota. Nature Communications, 2015, 6, 8862.	12.8	158
76	Land use influences arbuscular mycorrhizal fungal communities in the farmingâ€“pastoral ecotone of northern China. New Phytologist, 2014, 204, 968-978.	7.3	157
77	Biochar increases arbuscular mycorrhizal plant growth enhancement and ameliorates salinity stress. Applied Soil Ecology, 2015, 96, 114-121.	4.3	154
78	Designing belowground field experiments with the help of semi-variance and power analyses. Applied Soil Ecology, 1999, 12, 227-238.	4.3	152
79	Tracking, targeting, and conserving soil biodiversity. Science, 2021, 371, 239-241.	12.6	151
80	Glomalin-related soil protein: Assessment of current detection and quantification tools. Soil Biology and Biochemistry, 2006, 38, 2205-2211.	8.8	150
81	Fertilization affects severity of disease caused by fungal plant pathogens. Plant Pathology, 2013, 62, 961-969.	2.4	150
82	Mycorrhizas in the Central European flora: relationships with plant life history traits and ecology. Ecology, 2013, 94, 1389-1399.	3.2	150
83	Forces that structure plant communities: quantifying the importance of the mycorrhizal symbiosis. New Phytologist, 2011, 189, 366-370.	7.3	149
84	Untangling the biological contributions to soil stability in semiarid shrublands. Ecological Applications, 2009, 19, 110-122.	3.8	148
85	Soil plastispheres as hotspots of antibiotic resistance genes and potential pathogens. ISME Journal, 2022, 16, 521-532.	9.8	148
86	Do arbuscular mycorrhizal fungi affect the allometric partition of host plant biomass to shoots and roots? A meta-analysis of studies from 1990 to 2010. Mycorrhiza, 2012, 22, 227-235.	2.8	147
87	Microplastic and soil protists: A call for research. Environmental Pollution, 2018, 241, 1128-1131.	7.5	147
88	How Soil Biota Drive Ecosystem Stability. Trends in Plant Science, 2018, 23, 1057-1067.	8.8	145
89	Arbuscular mycorrhizal fungi reduce decomposition of woody plant litter while increasing soil aggregation. Soil Biology and Biochemistry, 2015, 81, 323-328.	8.8	144
90	Microplastics Increase Soil pH and Decrease Microbial Activities as a Function of Microplastic Shape, Polymer Type, and Exposure Time. Frontiers in Environmental Science, 2021, 9, .	3.3	143

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91	The effects of arbuscular mycorrhizas on soil aggregation depend on the interaction between plant and fungal species. New Phytologist, 2004, 164, 365-373.	7.3	142
92	Below-Ground Microbial and Microfaunal Responses to Artemisia tridentata Grown Under Elevated Atmospheric Co 2. Functional Ecology, 1996, 10, 527.	3.6	141
93	Fungal superhighways: do common mycorrhizal networks enhance below ground communication?. Trends in Plant Science, 2012, 17, 633-637.	8.8	140
94	The arbuscular mycorrhizal fungal protein glomalin: Limitations, progress, and a new hypothesis for its function. Pedobiologia, 2007, 51, 123-130.	1.2	133
95	Contributions of biotic and abiotic factors to soil aggregation across a land use gradient. Soil Biology and Biochemistry, 2010, 42, 2316-2324.	8.8	130
96	Effects of hydrochar application on the dynamics of soluble nitrogen in soils and on plant availability. Journal of Plant Nutrition and Soil Science, 2014, 177, 48-58.	1.9	125
97	Effects of microplastics and drought on soil ecosystem functions and multifunctionality. Journal of Applied Ecology, 2021, 58, 988-996.	4.0	124
98	Choice of methods for soil microbial community analysis: PLFA maximizes power compared to CLPP and PCR-based approaches. Pedobiologia, 2006, 50, 275-280.	1.2	123
99	Does herbivory really suppress mycorrhiza? A metaâ€analysis. Journal of Ecology, 2010, 98, 745-753.	4.0	123
100	The Fungal Fast Lane: Common Mycorrhizal Networks Extend Bioactive Zones of Allelochemicals in Soils. PLoS ONE, 2011, 6, e27195.	2.5	123
101	Crop cover is more important than rotational diversity for soil multifunctionality and cereal yields in European cropping systems. Nature Food, 2021, 2, 28-37.	14.0	120
102	Branching out: Towards a trait-based understanding of fungal ecology. Fungal Biology Reviews, 2015, 29, 34-41.	4.7	118
103	Effects of Different Microplastics on Nematodes in the Soil Environment: Tracking the Extractable Additives Using an Ecotoxicological Approach. Environmental Science & Technology, 2020, 54, 13868-13878.	10.0	118
104	Locally rare species influence grassland ecosystem multifunctionality. Philosophical Transactions of the Royal Society B: Biological Sciences, 2016, 371, 20150269.	4.0	117
105	Neighboring plant influences on arbuscular mycorrhizal fungal community composition as assessed by T-RFLP analysis. Plant and Soil, 2005, 271, 83-90.	3.7	116
106	Mycorrhizal responsiveness trends in annual crop plants and their wild relativesâ€"a meta-analysis on studies from 1981 to 2010. Plant and Soil, 2012, 355, 231-250.	3.7	116
107	Impacts of domestication on the arbuscular mycorrhizal symbiosis of 27 crop species. New Phytologist, 2018, 218, 322-334.	7.3	116
108	Evolutionary implications of microplastics for soil biota. Environmental Chemistry, 2019, 16, 3.	1.5	114

#	ARTICLE	IF	CITATIONS
109	Tropical Andean Forests Are Highly Susceptible to Nutrient Inputsâ€"Rapid Effects of Experimental N and P Addition to an Ecuadorian Montane Forest. PLoS ONE, 2012, 7, e47128.	2.5	111
110	Landâ€use intensity and host plant identity interactively shape communities of arbuscular mycorrhizal fungi in roots of grassland plants. New Phytologist, 2015, 205, 1577-1586.	7.3	111
111	Divergent consequences of hydrochar in the plantâ€"soil system: Arbuscular mycorrhiza, nodulation, plant growth and soil aggregation effects. Applied Soil Ecology, 2012, 59, 68-72.	4.3	107
112	Basic Principles of Temporal Dynamics. Trends in Ecology and Evolution, 2019, 34, 723-733.	8.7	107
113	Microsite differences in fungal hyphal length, glomalin, and soil aggregate stability in semiarid Mediterranean steppes. Soil Biology and Biochemistry, 2003, 35, 1257-1260.	8.8	105
114	Evidence for functional divergence in arbuscular mycorrhizal fungi from contrasting climatic origins. New Phytologist, 2011, 189, 507-514.	7.3	104
115	Highâ€resolution community profiling of arbuscular mycorrhizal fungi. New Phytologist, 2016, 212, 780-791.	7.3	104
116	A connection between fungal hydrophobins and soil water repellency?. Pedobiologia, 2005, 49, 395-399.	1.2	101
117	Towards an Integrated Mycorrhizal Technology: Harnessing Mycorrhiza for Sustainable Intensification in Agriculture. Frontiers in Plant Science, 2016, 7, 1625.	3.6	101
118	Foliar elemental composition of <scp>E</scp>uropean forest tree species associated with evolutionary traits and present environmental and competitive conditions. Global Ecology and Biogeography, 2015, 24, 240-255.	5.8	100
119	Foliar and soil concentrations and stoichiometry of nitrogen and phosphorous across <scp>E</scp>uropean <i><scp>P</scp>inus sylvestris</i> forests: relationships with climate, <scp>N</scp> deposition and tree growth. Functional Ecology, 2016, 30, 676-689.	3.6	99
120	Towards an integrative understanding of soil biodiversity. Biological Reviews, 2020, 95, 350-364.	10.4	97
121	Ecosystem service and biodiversity trade-offs in two woody successions. Journal of Applied Ecology, 2011, 48, 926-934.	4.0	96
122	Small-scale spatial heterogeneity of arbuscular mycorrhizal fungal abundance and community composition in a wetland plant community. Mycorrhiza, 2007, 17, 175-183.	2.8	92
123	Statistically reinforced machine learning for nonlinear patterns and variable interactions. Ecosphere, 2017, 8, e01976.	2.2	92
124	Application of the microbial community coalescence concept to riverine networks. Biological Reviews, 2018, 93, 1832-1845.	10.4	92
125	Visualizing the dynamics of soil aggregation as affected by arbuscular mycorrhizal fungi. ISME Journal, 2019, 13, 1639-1646.	9.8	91
126	Spatial characterization of arbuscular mycorrhizal fungal molecular diversity at the submetre scale in a temperate grassland. FEMS Microbiology Ecology, 2008, 64, 260-270.	2.7	90

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127	Global root traits (GRooT) database. Global Ecology and Biogeography, 2021, 30, 25-37.	5.8	90
128	Elevated carbon dioxide and irrigation effects on water stable aggregates in a Sorghum field: a possible role for arbuscular mycorrhizal fungi. Global Change Biology, 2001, 7, 333-337.	9.5	89
129	The Influence of Different Stresses on Glomalin Levels in an Arbuscular Mycorrhizal Fungusâ€"Salinity Increases Glomalin Content. PLoS ONE, 2011, 6, e28426.	2.5	89
130	Abiotic and Biotic Factors Influencing the Effect of Microplastic on Soil Aggregation. Soil Systems, 2019, 3, 21.	2.6	89
131	What is the role of arbuscular mycorrhizal fungi in plant-to-ecosystem responses to Elevated atmospheric CO 2 ?. Mycorrhiza, 1999, 9, 1-8.	2.8	88
132	Arbuscular mycorrhizal fungal communities are phylogenetically clustered at small scales. ISME Journal, 2014, 8, 2231-2242.	9.8	88
133	Soil fungalâ€arthropod responses to Populus tremuloides grown under enriched atmospheric CO 2 under field conditions. Global Change Biology, 1997, 3, 473-478.	9.5	85
134	Deciphering the relative contributions of multiple functions within plantâ€"microbe symbioses. Ecology, 2010, 91, 1591-1597.	3.2	85
135	Interspecific differences in the response of arbuscular mycorrhizal fungi to Artemisia tridentata grown under elevated atmospheric CO2. New Phytologist, 1998, 138, 599-605.	7.3	84
136	Seasonality of arbuscular mycorrhizal hyphae and glomalin in a western Montana grassland. Plant and Soil, 2003, 257, 71-83.	3.7	84
137	Do arbuscular mycorrhizal fungi stabilize litterâ€derived carbon in soil?. Journal of Ecology, 2016, 104, 261-269.	4.0	84
138	Functional Traits and Spatio-Temporal Structure of a Major Group of Soil Protists (Rhizaria:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 302 Td	3.5	82
139	Arbuscular mycorrhizal fungi pre-inoculant identity determines community composition in roots. Soil Biology and Biochemistry, 2009, 41, 1173-1179.	8.8	81
140	Understanding mechanisms of soil biota involvement in soil aggregation: A way forward with saprobic fungi?. Soil Biology and Biochemistry, 2015, 88, 298-302.	8.8	81
141	Protein accumulation and distribution in floodplain soils and river foam. Ecology Letters, 2004, 7, 829-836.	6.4	80
142	Linking the community structure of arbuscular mycorrhizal fungi and plants: a story of interdependence?. ISME Journal, 2017, 11, 1400-1411.	9.8	78
143	Mycorrhizal status helps explain invasion success of alien plant species. Ecology, 2017, 98, 92-102.	3.2	77
144	Fungal Traits Important for Soil Aggregation. Frontiers in Microbiology, 2019, 10, 2904.	3.5	77

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145	Evolutionary criteria outperform operational approaches in producing ecologically relevant fungal species inventories. Molecular Ecology, 2011, 20, 655-666.	3.9	76
146	Creating novel urban grasslands by reintroducing native species in wasteland vegetation. Biological Conservation, 2013, 159, 119-126.	4.1	76
147	Functional role of microarthropods in soil aggregation. Pedobiologia, 2015, 58, 59-63.	1.2	76
148	The Global Plastic Toxicity Debt. Environmental Science & Technology, 2021, 55, 2717-2719.	10.0	72
149	Phylogeny of arbuscular mycorrhizal fungi predicts community composition of symbiosis-associated bacteria. FEMS Microbiology Ecology, 2006, 57, 389-395.	2.7	71
150	Root traits are more than analogues of leaf traits: the case for diaspore mass. New Phytologist, 2017, 216, 1130-1139.	7.3	71
151	Contrasting latitudinal diversity and co-occurrence patterns of soil fungi and plants in forest ecosystems. Soil Biology and Biochemistry, 2019, 131, 100-110.	8.8	71
152	Seventeen years of carbon dioxide enrichment of sour orange trees: final results. Global Change Biology, 2007, 13, 2171-2183.	9.5	69
153	Ecological understanding of root-infecting fungi using trait-based approaches. Trends in Plant Science, 2014, 19, 432-438.	8.8	68
154	Interplay of soil water repellency, soil aggregation and organic carbon. A meta-analysis. Geoderma, 2016, 283, 39-47.	5.1	68
155	Microplastic Research Should Embrace the Complexity of Secondary Particles. Environmental Science & Technology, 2020, 54, 7751-7753.	10.0	68
156	Hydrochar amendment promotes microbial immobilization of mineral nitrogen. Journal of Plant Nutrition and Soil Science, 2014, 177, 59-67.	1.9	67
157	Longâ€term effects of soil nutrient deficiency on arbuscular mycorrhizal communities. Functional Ecology, 2012, 26, 532-540.	3.6	66
158	Plant community, geographic distance and abiotic factors play different roles in predicting AMF biogeography at the regional scale in northern China. Environmental Microbiology Reports, 2016, 8, 1048-1057.	2.4	66
159	Historical biome distribution and recent human disturbance shape the diversity of arbuscular mycorrhizal fungi. New Phytologist, 2017, 216, 227-238.	7.3	66
160	Losses of glomalin-related soil protein under prolonged arable cropping: A chronosequence study in sandy soils of the South African Highveld. Soil Biology and Biochemistry, 2007, 39, 445-453.	8.8	65
161	Compositional divergence and convergence in arbuscular mycorrhizal fungal communities. Ecology, 2012, 93, 1115-1124.	3.2	65
162	Root trait responses to drought are more heterogeneous than leaf trait responses. Functional Ecology, 2020, 34, 2224-2235.	3.6	65

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163	Effects of Microplastic Fibers on Soil Aggregation and Enzyme Activities Are Organic Matter Dependent. Frontiers in Environmental Science, 2021, 9, .	3.3	65
164	Influence of commercial inoculation with Glomus intraradices on the structure and functioning of an AM fungal community from an agricultural site. Plant and Soil, 2009, 317, 257-266.	3.7	64
165	Do closely related plants host similar arbuscular mycorrhizal fungal communities? A meta-analysis. Plant and Soil, 2014, 377, 395-406.	3.7	64
166	Priorities for research in soil ecology. Pedobiologia, 2017, 63, 1-7.	1.2	64
167	Plant species-specific changes in root-inhabiting fungi in a California annual grassland: responses to elevated CO 2 and nutrients. Oecologia, 1998, 113, 252-259.	2.0	63
168	Relationship between communities and processes; new insights from a field study of a contaminated ecosystem. Ecology Letters, 2005, 8, 1201-1210.	6.4	63
169	Subsoil Arbuscular Mycorrhizal Fungi for Sustainability and Climate-Smart Agriculture: A Solution Right Under Our Feet?. Frontiers in Microbiology, 2019, 10, 744.	3.5	63
170	Determinants of rootâ€associated fungal communities within <scp>A</scp>steraceae in a semiâ€arid grassland. Journal of Ecology, 2014, 102, 425-436.	4.0	62
171	Movementâ€mediated community assembly and coexistence. Biological Reviews, 2020, 95, 1073-1096.	10.4	62
172	Global Change and Mycorrhizal Fungi. Ecological Studies, 2002, , 135-160.	1.2	61
173	Microbiota accompanying different arbuscular mycorrhizal fungal isolates influence soil aggregation. Pedobiologia, 2005, 49, 251-259.	1.2	61
174	Soil microbes and community coalescence. Pedobiologia, 2016, 59, 37-40.	1.2	61
175	Opposing effects of nitrogen versus phosphorus additions on mycorrhizal fungal abundance along an elevational gradient in tropical montane forests. Soil Biology and Biochemistry, 2016, 94, 37-47.	8.8	61
176	Arbuscular mycorrhizal fungi enhance spotted knapweed growth across a riparian chronosequence. Biological Invasions, 2010, 12, 1481-1490.	2.4	60
177	Biochars reduce infection rates of the root-lesion nematode Pratylenchus penetrans and associated biomass loss in carrot. Soil Biology and Biochemistry, 2016, 95, 11-18.	8.8	60
178	Increasing Temperature and Microplastic Fibers Jointly Influence Soil Aggregation by Saprobic Fungi. Frontiers in Microbiology, 2019, 10, 2018.	3.5	60
179	Arbuscular mycorrhizae respond to elevated atmospheric CO2 after long-term exposure: evidence from a CO2 spring in New Zealand supports the resource balance model. Ecology Letters, 2000, 3, 475-478.	6.4	60
180	Soil biota effects on soil structure: Interactions between arbuscular mycorrhizal fungal mycelium and collembola. Soil Biology and Biochemistry, 2012, 50, 33-39.	8.8	59

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181	Global Plastic Pollution Observation System to Aid Policy. Environmental Science & Technology, 2021, 55, 7770-7775.	10.0	59
182	Shaping Up: Toward Considering the Shape and Form of Pollutants. Environmental Science & Technology, 2019, 53, 7925-7926.	10.0	58
183	Inhibition of colonization by a native arbuscular mycorrhizal fungal community via Populus trichocarpa litter, litter extract, and soluble phenolic compounds. Soil Biology and Biochemistry, 2008, 40, 709-717.	8.8	57
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