Roger D Finlay

List of Publications by Year
in descending order

133 papers	16,964 citations	19657 61 h-index	14759 127 g-index
143 all docs	143 docs citations	143 times ranked	13168 citing authors

#	Article	IF	Citations
1	Carbon flow in the rhizosphere: carbon trading at the soilâ€“root interface. Plant and Soil, 2009, 321, 5-33.	3.7	1,246
2	Roots and Associated Fungi Drive Long-Term Carbon Sequestration in Boreal Forest. Science, 2013, 339, 1615-1618.	12.6	1,130
3	Spatial separation of litter decomposition and mycorrhizal nitrogen uptake in a boreal forest. New Phytologist, 2007, 173, 611-620.	7.3	779
4	Botryosphaeriaceae as endophytes and latent pathogens of woody plants: diversity, ecology and impact. Fungal Biology Reviews, 2007, 21, 90-106.	4.7	647
5	Linking plants to rocks: ectomycorrhizal fungi mobilize nutrients from minerals. Trends in Ecology and Evolution, 2001, 16, 248-254.	8.7	627
6	Understanding the diversity of foliar endophytic fungi: progress, challenges, and frontiers. Fungal Biology Reviews, 2007, 21, 51-66.	4.7	623
7	Interactions between arbuscular mycorrhizal fungi and bacteria and their potential for stimulating plant growth. Environmental Microbiology, 2006, 8, 1-10.	3.8	567
8	Microbial interactions in the mycorrhizosphere and their significance for sustainable agriculture. FEMS Microbiology Ecology, 2004, 48, 1-13.	2.7	561
9	The carbon we do not seeâ€”the impact of low molecular weight compounds on carbon dynamics and respiration in forest soils: a review. Soil Biology and Biochemistry, 2005, 37, 1-13.	8.8	561
10	Carbon sequestration is related to mycorrhizal fungal community shifts during longâ€term succession in boreal forests. New Phytologist, 2015, 205, 1525-1536.	7.3	477
11	Rock-eating fungi. Nature, 1997, 389, 682-683.	27.8	450
12	Endophytic fungi in forest trees: are they mutualists?. Fungal Biology Reviews, 2007, 21, 75-89.	4.7	446
13	Ecological aspects of mycorrhizal symbiosis: with special emphasis on the functional diversity of interactions involving the extraradical mycelium. Journal of Experimental Botany, 2008, 59, 1115-1126.	4.8	411
14	Influence of arbuscular mycorrhizal mycelial exudates on soil bacterial growth and community structure. FEMS Microbiology Ecology, 2007, 61, 295-304.	2.7	336
15	Vertical distribution of ectomycorrhizal fungal taxa in a podzol soil profile. New Phytologist, 2003, 159, 775-783.	7.3	310
16	A plant perspective on nitrogen cycling in the rhizosphere. Functional Ecology, 2019, 33, 540-552.	3.6	292
17	Utilization of organic and inorganic nitrogen sources by ectomycorrhizal fungi in pure culture and in symbiosis with Pinus contorta Dougl. ex Loud.. New Phytologist, 1992, 120, 105-115.	7.3	276
18	THE STRUCTURE AND FUNCTION OF THE VEGETATIVE MYCELIUM OF ECTOMYCORRHIZAL PLANTS. I. TRANSLOCATION OF 14C-LABELLED CARBON BETWEEN PLANTS INTERCONNECTED BY A COMMON MYCELIUM. New Phytologist, 1986, 103, 143-156.	7.3	267

#	Article	IF	Citations
19	Mycorrhizal weathering: A true case of mineral plant nutrition?. Biogeochemistry, 2000, 49, 53-67.	3.5	200
20	Attachment of different soil bacteria to arbuscular mycorrhizal fungal extraradical hyphae is determined by hyphal vitality and fungal species. FEMS Microbiology Letters, 2006, 254, 34-40.	1.8	197
21	Organic acids produced by mycorrhizal Pinus sylvestris exposed to elevated aluminium and heavy metal concentrations. New Phytologist, 2000, 146, 557-567.	7.3	191
22	THE STRUCTURE AND FUNCTION OF THE VEGETATIVE MYCELIUM OF ECTOMYCORRHIZAL PLANTS. II. THE UPTAKE AND DISTRIBUTION OF PHOSPHORUS BY MYCELIAL STRANDS INTERCONNECTING HOST PLANTS. New Phytologist, 1986, 103, 157-165.	7.3	189
23	Nitrogen metabolism of external hyphae of the arbuscular mycorrhizal fungus Glornus intraradices. New Phytologist, 1996, 133, 705-712.	7.3	177
24	Disruption of root carbon transport into forest humus stimulates fungal opportunists at the expense of mycorrhizal fungi. ISME Journal, 2010, 4, 872-881.	9.8	172
25	Title is missing!. Plant and Soil, 2002, 242, 123-135.	3.7	167
26	Forest structure and fungal endophytes. Fungal Biology Reviews, 2007, 21, 67-74.	4.7	164
27	Exudation-reabsorption in a mycorrhizal fungus, the dynamic interface for interaction with soil and soil microorganisms. Mycorrhiza, 1999, 9, 137-144.	2.8	156
28	Translocation of32P between interacting mycelia of a wood-decomposing fungus and ectomycorrhizal fungi in microcosm systems. New Phytologist, 1999, 144, 183-193.	7.3	141
29	Identifying the Active Microbiome Associated with Roots and Rhizosphere Soil of Oilseed Rape. Applied and Environmental Microbiology, 2017, 83, .	3.1	141
30	Advances in understanding the podzolization process resulting from a multidisciplinary study of three coniferous forest soils in the Nordic Countries. Geoderma, 2000, 94, 335-353.	5.1	140
31	Functional diversity in arbuscular mycorrhiza â€" the role ofÂgene expression, phosphorous nutrition and symbiotic efficiency. Fungal Ecology, 2010, 3, 1-8.	1.6	139
32	Community analysis of arbuscular mycorrhizal fungi and bacteria in the maize mycorrhizosphere in a long-term fertilization trial. FEMS Microbiology Ecology, 2008, 65, 323-338.	2.7	133
33	Fungal communities in mycorrhizal roots of conifer seedlings in forest nurseries under different cultivation systems, assessed by morphotyping, direct sequencing and mycelial isolation. Mycorrhiza, 2005, 16, 33-41.	2.8	132
34	Differential responses of ectomycorrhizal fungi to heavy metals in vitro. Mycological Research, 2000, 104, 1366-1371.	2.5	128
35	Seasonal Dynamics of Arbuscular Mycorrhizal Fungal Communities in Roots in a Seminatural Grassland. Applied and Environmental Microbiology, 2007, 73, 5613-5623.	3.1	125
36	Contrasting effects of ectomycorrhizal fungi on early and late stage decomposition in a boreal forest. ISME Journal, 2018, 12, 2187-2197.	9.8	112

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37	Oxalate and ferricrocin exudation by the extramatrical mycelium of an ectomycorrhizal fungus in symbiosis with Pinus sylvestris. New Phytologist, 2006, 169, 367-378.	7.3	111
38	Molecular analysis of arbuscular mycorrhizal fungi colonising a semiâ€natural grassland along a fertilisation gradient. New Phytologist, 2006, 172, 159-168.	7.3	111
39	Carbon allocation to ectomycorrhizal roots and mycelium colonising different mineral substrates. New Phytologist, 2004, 162, 795-802.	7.3	110
40	Ecology and molecular characterization of dark septate fungi from roots, living stems, coarse and fine woody debris. Mycological Research, 2004, 108, 965-973.	2.5	109
41	Endophyte symbiosis with tall fescue: how strong are the impacts on communities and ecosystems?. Fungal Biology Reviews, 2007, 21, 107-124.	4.7	107
42	Nitrogen translocation between Alnus glutinosa (L.) Gaertn. seedlings inoculated with Frankia sp. and Pinus contorta Doug, ex Loud seedlings connected by a common ectomycorrhizal mycelium. New Phytologist, 1993, 124, 231-242.	7.3	102
43	Mycelial growth and substrate acidification of ectomycorrhizal fungi in response to different minerals. FEMS Microbiology Ecology, 2004, 47, 31-37.	2.7	101
44	Combined bromodeoxyuridine immunocapture and terminal-restriction fragment length polymorphism analysis highlights differences in the active soil bacterial metagenome due to Glomusâ€ƒmosseae inoculation or plant species. Environmental Microbiology, 2005, 7, 1952-1966.	3.8	99
45	Transcriptomic changes in the plant pathogenic fungus Rhizoctonia solani AG-3 in response to the antagonistic bacteria Serratia proteamaculans and Serratia plymuthica. BMC Genomics, 2015, 16, 630.	2.8	97
46	Role of Mycorrhizal Symbioses in Phosphorus Cycling. Soil Biology, 2011, , 137-168.	0.8	91
47	Effects of continuous optimal fertilization on belowground ectomycorrhizal community structure in a Norway spruce forest. Tree Physiology, 2000, 20, 599-606.	3.1	89
48	Effects of resource availability on mycelial interactions and 32P transfer between a saprotrophic and an ectomycorrhizal fungus in soil microcosms. FEMS Microbiology Ecology, 2001, 38, 43-52.	2.7	85
49	The role of fungi in biogenic weathering in boreal forest soils. Fungal Biology Reviews, 2009, 23, 101-106.	4.7	85
50	SEVERE DEFOLIATION OF SCOTS PINE REDUCES REPRODUCTIVE INVESTMENT BY ECTOMYCORRHIZAL SYMBIONTS. Ecology, 2003, 84, 2051-2061.	3.2	82
51	Analysis of single root tip microbiomes suggests that distinctive bacterial communities are selected by <scp><i>P</i></scp><i>inus sylvestris</i> roots colonized by different ectomycorrhizal fungi. Environmental Microbiology, 2016, 18, 1470-1483.	3.8	79
52	Quantitative analysis of soluble exudates produced by ectomycorrhizal roots as a response to ambient and elevated CO2. Soil Biology and Biochemistry, 2009, 41, 1111-1116.	8.8	78
53	Effects of hardened wood ash on microbial activity, plant growth and nutrient uptake by ectomycorrhizal spruce seedlings. FEMS Microbiology Ecology, 2003, 43, 121-131.	2.7	77
54	Ectomycorrhizal mycelia reduce bacterial activity in a sandy soil. FEMS Microbiology Ecology, 1996, 21, 77-86.	2.7	76

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55	Ectomycorrhizal community structure in a limed spruce forest. Mycological Research, 1999, 103, 501-508.	2.5	73
56	Transcriptional analysis of Pinus sylvestris roots challenged with the ectomycorrhizal fungus Laccaria bicolor. BMC Plant Biology, 2008, 8, 19.	3.6	72
57	Woodâ€decay fungi in fine living roots of conifer seedlings. New Phytologist, 2007, 174, 441-446.	7.3	70
58	A tipping point in carbon storage when forest expands into tundra is related to mycorrhizal recycling of nitrogen. Ecology Letters, 2021, 24, 1193-1204.	6.4	70
59	Fungi in decayed roots of conifer seedlings in forest nurseries, afforested clear-cuts and abandoned farmland. Plant Pathology, 2006, 55, 117-129.	2.4	69
60	Activities of chitinolytic enzymes during primary and secondary colonization of wood by basidiomycetous fungi. New Phytologist, 2006, 169, 389-397.	7.3	68
61	Mycorrhizal fungi and their multifunctional roles. The Mycologist, 2004, 18, 91-96.	0.4	67
62	Growing evidence for facultative biotrophy in saprotrophic fungi: data from microcosm tests with 201 species of woodâ€decay basidiomycetes. New Phytologist, 2017, 215, 747-755.	7.3	66
63	Elevated atmospheric CO 2 alters root symbiont community structure in forest trees. New Phytologist, 2001, 152, 431-442.	7.3	65
64	Transcript profiling of a conifer pathosystem: response of Pinus sylvestris root tissues to pathogen (Heterobasidion annosum) invasion. Tree Physiology, 2007, 27, 1441-1458.	3.1	60
65	Nitrogen and Carbon Reallocation in Fungal Mycelia during Decomposition of Boreal Forest Litter. PLoS ONE, 2014, 9, e92897.	2.5	58
66	Reviews and syntheses: Biological weathering and its consequences at different spatial levels â€“ from nanoscale to global scale. Biogeosciences, 2020, 17, 1507-1533.	3.3	58
67	Quantitative analysis of root and ectomycorrhizal exudates as a response to Pb, Cd and As stress. Plant and Soil, 2008, 313, 39-54.	3.7	57
68	Simultaneous, bidirectional translocation of 32 P and 33 P between wood blocks connected by mycelial cords of Hypholoma fasciculare. New Phytologist, 2001, 150, 189-194.	7.3	56
69	Siderophores in forest soil solution. Biogeochemistry, 2004, 71, 247-258.	3.5	55
70	Changes in turnover rather than production regulate biomass of ectomycorrhizal fungal mycelium across a <i>Pinus sylvestris</i> chronosequence. New Phytologist, 2017, 214, 424-431.	7.3	54
71	Solubilisation and colonisation of wood ash by ectomycorrhizal fungi isolated from a wood ash fertilised spruce forest. FEMS Microbiology Ecology, 2001, 35, 151-161.	2.7	52
72	Afforestation of abandoned farmland with conifer seedlings inoculated with three ectomycorrhizal fungiâ€"impact on plant performance and ectomycorrhizal community. Mycorrhiza, 2007, 17, 337-348.	2.8	52

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73	Comparative analysis of transcript abundance in Pinus sylvestris after challenge with a saprotrophic, pathogenic or mutualistic fungus. Tree Physiology, 2008, 28, 885-897.	3.1	52
74	Fungal strategies for dealing with environment- and agriculture-induced stresses. Fungal Biology, 2018, 122, 602-612.	2.5	52
75	Dynamics of phosphorus translocation in intact ectomycorrhizal systems: non-destructive monitoring using a ÃŽÂ²-scanner. FEMS Microbiology Ecology, 1996, 19, 171-180.	2.7	50
76	Glucose and ammonium additions affect needle decomposition and carbon allocation by the litter degrading fungus Mycena epipterygia. Soil Biology and Biochemistry, 2008, 40, 995-999.	8.8	48
77	Fungal stress biology: a preface to the Fungal Stress Responses special edition. Current Genetics, 2015, 61, 231-238.	1.7	46
78	Effects of repeated harvesting of forest residues on the ectomycorrhizal community in a Swedish spruce forest. New Phytologist, 1999, 142, 577-585.	7.3	45
79	Growth and nutrient uptake of ectomycorrhizal Pinus sylvestris seedlings in a natural substrate treated with elevated Al concentrations. Tree Physiology, 2003, 23, 157-167.	3.1	44
80	Approaches to modelling mineral weathering by fungi. Fungal Biology Reviews, 2009, 23, 138-144.	4.7	44
81	Fungal C translocation restricts Nâ€mineralization in heterogeneous environments. Functional Ecology, 2010, 24, 454-459.	3.6	42
82	Ectomycorrhizal roots select distinctive bacterial and ascomycete communities in Swedish subarctic forests. Environmental Microbiology, 2011, 13, 819-830.	3.8	42
83	Influence of Soil Type, Cultivar and Verticillium dahliae on the Structure of the Root and Rhizosphere Soil Fungal Microbiome of Strawberry. PLoS ONE, 2014, 9, e111455.	2.5	41
84	Below-ground Ectomycorrhizal Community Structure in Two Picea abies Forests in Southern Sweden. Scandinavian Journal of Forest Research, 1999, 14, 209-217.	1.4	38
85	Mycelial production, spread and root colonisation by the ectomycorrhizal fungi Hebeloma crustuliniforme and Paxillus involutus under elevated atmospheric CO2. Mycorrhiza, 2005, 15, 25-31.	2.8	38
86	Title is missing!. Plant and Soil, 2001, 236, 129-138.	3.7	36
87	Quantitative analysis of exudates from soil-living basidiomycetes in pure culture as a response to lead, cadmium and arsenic stress. Soil Biology and Biochemistry, 2008, 40, 2225-2236.	8.8	36
88	Effects of temperature and incubation time on the ability of three ectomycorrhizal fungi to colonize Pinus sylvestris roots. Mycological Research, 1992, 96, 270-272.	2.5	35
89	Bacterial microbiomes of individual ectomycorrhizal <i>Pinus sylvestris</i> roots are shaped by soil horizon and differentially sensitive to nitrogen addition. Environmental Microbiology, 2017, 19, 4736-4753.	3.8	35
90	Soil, But Not Cultivar, Shapes the Structure of Arbuscular Mycorrhizal Fungal Assemblages Associated with Strawberry. Microbial Ecology, 2011, 62, 25-35.	2.8	34

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91	Title is missing!. Water, Air and Soil Pollution, 2003, 3, 63-76.	0.8	32
92	Responses of oribatid mites to tree girdling and nutrient addition in boreal coniferous forests. Soil Biology and Biochemistry, 2008, 40, 2881-2890.	8.8	31
93	Occurrence and impact of the root-rot biocontrol agent Phlebiopsis gigantea on soil fungal communities in Picea abies forests of northern Europe. FEMS Microbiology Ecology, 2012, 81, 438-445.	2.7	29
94	Complete genome sequence of the rapeseed plant-growth promoting Serratia plymuthica strain AS9. Standards in Genomic Sciences, 2012, 6, 54-62.	1.5	27
95	The biogeochemical impact of ectomycorrhizal conifers on major soil elements (Al, Fe, K and Si). Geoderma, 2006, 136, 364-377.	5.1	26
96	Non-contiguous finished genome sequence of plant-growth promoting Serratia proteamaculans S4. Standards in Genomic Sciences, 2013, 8, 441-449.	1.5	26
97	Fractionation and assimilation of Mg isotopes by fungi is species dependent. Environmental Microbiology Reports, 2016, 8, 956-965.	2.4	24
98	Ectomycorrhizal colonisation of roots and ash granules in a spruce forest treated with granulated wood ash. Forest Ecology and Management, 2002, 160, 65-74.	3.2	23
99	Title is missing!. Water, Air and Soil Pollution, 2003, 3, 167-188.	0.8	22
100	Complete genome sequence of the plant-associated Serratia plymuthica strain AS13. Standards in Genomic Sciences, 2012, 7, 22-30.	1.5	22
101	Nitrogen availability affects saprotrophic basidiomycetes decomposing pine needles in a long term laboratory study. Fungal Ecology, 2011, 4, 408-416.	1.6	20
102	Expression analysis of Clavata1-like and Nodulin21-like genes from Pinus sylvestris during ectomycorrhiza formation. Mycorrhiza, 2012, 22, 271-277.	2.8	20
103	Complete genome sequence of Serratia plymuthica strain AS12. Standards in Genomic Sciences, 2012, 6, 165-173.	1.5	19
104	Transcriptional responses of the bacterial antagonist <scp><i>S</i></scp><i>erratia plymuthica</i> to the fungal phytopathogen <scp><i>R</i></scp><i>hizoctonia solani</i>. Environmental Microbiology Reports, 2015, 7, 123-127.	2.4	17
105	Oxalotrophic bacterial assemblages in the ectomycorrhizosphere of forest trees and their effects on oxalate degradation and carbon fixation potential. Chemical Geology, 2019, 514, 54-64.	3.3	17
106	Transcriptome Analysis Provides Novel Insights into the Capacity of the Ectomycorrhizal Fungus <i>Amanita pantherina</i> To Weather K-Containing Feldspar and Apatite. Applied and Environmental Microbiology, 2019, 85, .	3.1	16
107	The influence of substrate pH on carbon translocation in ectomycorrhizal and nonâ€mycorrhizal pine seedlings. New Phytologist, 1991, 119, 235-242.	7.3	15
108	Integrated nutrient cycles in boreal forest ecosystems â€“ the role of mycorrhizal fungi. , 2006, , 28-50.		15

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109	Root associated fungi respond more strongly than rhizosphere soil fungi to N fertilization in a boreal forest. Science of the Total Environment, 2021, 766, 142597.	8.0	14
110	Chapter 13 Responses of mycorrhizal fungi to stress. British Mycological Society Symposia Series, 2008, , 201-219.	0.5	13
111	The impact of trees, ectomycorrhiza and potassium availability on simple organic compounds and dissolved organic carbon in soil. Soil Biology and Biochemistry, 2006, 38, 1912-1923.	8.8	12
112	Weathering rates in Swedish forest soils. Biogeosciences, 2019, 16, 4429-4450.	3.3	11
113	Metabolism of [15N]Alanine in the Ectomycorrhizal Fungus Paxillus involutus. Experimental Mycology, 1995, 19, 297-304.	1.6	10
114	Immobilization of Carbon in Mycorrhizal Mycelial Biomass and Secretions. , 2017, , 413-440.		10
115	Distribution patterns of fungal taxa and inferred functional traits reflect the non-uniform vertical stratification of soil microhabitats in a coastal pine forest. FEMS Microbiology Ecology, 2019, 95, .	2.7	8
116	Biological enhancement of mineral weathering by <i>Pinus</i> <i>sylvestris</i> seedlings â€“ effects of plants, ectomycorrhizal fungi, and elevated CO₂. Biogeosciences, 2019, 16, 3637-3649.	3.3	8
117	Determination of 15N-labelled ammonium and total nitrogen in plant and fungal systems using mass spectrometry. Journal of Microbiological Methods, 1990, 11, 169-176.	1.6	7
118	Geomycology. Fungal Biology Reviews, 2009, 23, 91-93.	4.7	7
119	Changes in the root fungal microbiome of strawberry following application of residues of the biofumigant oilseed radish. Applied Soil Ecology, 2021, 168, 104116.	4.3	7
120	Ectomycorrhizal mycelia reduce bacterial activity in a sandy soil. FEMS Microbiology Ecology, 1996, 21, 77-86.	2.7	7
121	Mycorrhizal symbiosis: myths, misconceptions, new perspectives and further research priorities. The Mycologist, 2005, 19, 90.	0.4	6
122	Minimizing tillage modifies fungal denitrifier communities, increases denitrification rates and enhances the genetic potential for fungal, relative to bacterial, denitrification. Soil Biology and Biochemistry, 2022, 170, 108718.	8.8	6
123	Ericaceous dwarf shrubs contribute a significant but droughtâ€sensitive fraction of soil respiration in a boreal pine forest. Journal of Ecology, 2022, 110, 1928-1941.	4.0	6
124	Enzymatic Activities of Mycelia in Mycorrhizal Fungal Communities. Mycology, 2005, , 331-348.	0.5	4
125	(Further) links from rocks to plants: Response from Hoffland, Landeweert, Finlay, Kuyper and van Breemen. Trends in Ecology and Evolution, 2001, 16, 544.	8.7	3
126	Heterologous array analysis in Heterobasidion: Hybridisation of cDNA arrays with probe from mycelium of S, P or F-types. Journal of Microbiological Methods, 2008, 75, 219-224.	1.6	3

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127	Effects of resource availability on mycelial interactions and 32P transfer between a saprotrophic and an ectomycorrhizal fungus in soil microcosms. FEMS Microbiology Ecology, 2001, 38, 43-52.	2.7	3
128	Solubilisation and colonisation of wood ash by ectomycorrhizal fungi isolated from a wood ash fertilised spruce forest. FEMS Microbiology Ecology, 2001, 35, 151-161.	2.7	3
129	Dynamics of phosphorus translocation in intact ectomycorrhizal systems: non-destructive monitoring using a Î²-scanner. FEMS Microbiology Ecology, 1996, 19, 171-180.	2.7	2
130	Mycorrhizal symbiosis: myths, misconceptions, new perspectives and future research priorities. The Mycologist, 2005, 19, 90-95.	0.4	2
131	Siderophores in forest soil solution. Biogeochemistry, 2005, 71, 247-258.	3.5	2
132	Fungal endophytes in forests, woody plants and grassland ecosystems: diversity, functional ecology and evolution. Fungal Biology Reviews, 2007, 21, 49-50.	4.7	2
133	The effects of liming on mycelial colonization and carbon allocation in ectomycorrhizal mycelia attached to Pinus silvestris plants. Agriculture, Ecosystems and Environment, 1990, 28, 111-114.	5.3	1