Tim J Daniell

List of Publications by Year
in descending order

84 papers	7,082 citations	87888 38 h-index	58581 82 g-index
89 all docs	89 docs citations	89 times ranked	7777 citing authors

#	Article	IF	Citations
1	Ploughing up the wood-wide web?. Nature, 1998, 394, 431-431.	27.8	860
2	Improving intercropping: a synthesis of research in agronomy, plant physiology and ecology. New Phytologist, 2015, 206, 107-117.	7.3	805
3	Molecular diversity of arbuscular mycorrhizal fungi colonising arable crops. FEMS Microbiology Ecology, 2001, 36, 203-209.	2.7	516
4	Largeâ€scale parallel 454 sequencing reveals host ecological group specificity of arbuscular mycorrhizal fungi in a boreonemoral forest. New Phytologist, 2009, 184, 424-437.	7.3	481
5	Arbuscular mycorrhizal community composition associated with two plant species in a grassland ecosystem. Molecular Ecology, 2002, 11, 1555-1564.	3.9	390
6	Pathogenesis, parasitism and mutualism in the trophic space of microbeâ€“plant interactions. Trends in Microbiology, 2010, 18, 365-373.	7.7	278
7	Linking the bacterial community in pea aphids with host-plant use and natural enemy resistance. Ecological Entomology, 2004, 29, 60-65.	2.2	227
8	Three-dimensional Microorganization of the Soilâ€“Rootâ€“Microbe System. Microbial Ecology, 2006, 52, 151-158.	2.8	227
9	Arbuscular mycorrhizal fungal communities in plant roots are not random assemblages. FEMS Microbiology Ecology, 2011, 78, 103-115.	2.7	183
10	Soil nitrate reducing processes â€“ drivers, mechanisms for spatial variation, and significance for nitrous oxide production. Frontiers in Microbiology, 2012, 3, 407.	3.5	174
11	Symbiotic relationships between soil fungi and plants reduce N2O emissions from soil. ISME Journal, 2014, 8, 1336-1345.	9.8	156
12	High diversity of arbuscular mycorrhizal fungi in a boreal herbâ€rich coniferous forest. New Phytologist, 2008, 179, 867-876.	7.3	149
13	Links between Plant and Rhizoplane Bacterial Communities in Grassland Soils, Characterized Using Molecular Techniques. Applied and Environmental Microbiology, 2005, 71, 6784-6792.	3.1	144
14	Diversity of Bacteria Associated with Natural AphidPopulations. Applied and Environmental Microbiology, 2003, 69, 7216-7223.	3.1	129
15	Arbuscular mycorrhizal hyphae promote priming of native soil organic matter mineralisation. Plant and Soil, 2016, 408, 243-254.	3.7	96
16	Fungal and bacterial denitrification are differently affected by long-term pH amendment and cultivation of arable soil. Soil Biology and Biochemistry, 2012, 54, 25-35.	8.8	93
17	Relationship between assemblages of mycorrhizal fungi and bacteria on grass roots. Environmental Microbiology, 2008, 10, 534-541.	3.8	86
18	Isolation and identification of synthetic pyrethroid-degrading bacteria. Journal of Applied Microbiology, 2002, 92, 534-540.	3.1	83

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19	Integrating soil quality changes to arable agricultural systems following organic matter addition, or adoption of a ley-arable rotation. Applied Soil Ecology, 2010, 46, 43-53.	4.3	76
20	Viruses in soils: morphological diversity and abundance in the rhizosphere. Annals of Applied Biology, 2009, 155, 51-60.	2.5	75
21	Distribution of soil carbon and microbial biomass in arable soils under different tillage regimes. Plant and Soil, 2011, 338, 17-25.	3.7	72
22	Community-level responses of metabolically-active soil microorganisms to the quantity and quality of substrate inputs. Soil Biology and Biochemistry, 2004, 36, 841-848.	8.8	68
23	Determination of the optimal soil sample size to accurately characterise nematode communities in soil. Soil Biology and Biochemistry, 2015, 80, 89-91.	8.8	62
24	Phyllosphere of staple crops under pig manure fertilization, a reservoir of antibiotic resistance genes. Environmental Pollution, 2019, 252, 227-235.	7.5	62
25	Does microbial habitat or community structure drive the functional stability of microbes to stresses following re-vegetation of a severely degraded soil?. Soil Biology and Biochemistry, 2010, 42, 850-859.	8.8	60
26	Molecular sequencing and morphological analysis of a nematode community. Applied Soil Ecology, 2006, 32, 325-337.	4.3	58
27	Arbuscular Mycorrhizal Fungal Networks Vary throughout the Growing Season and between Successional Stages. PLoS ONE, 2013, 8, e83241.	2.5	58
28	Organic matter chemistry controls greenhouse gas emissions from permafrost peatlands. Soil Biology and Biochemistry, 2016, 98, 42-53.	8.8	55
29	The Effects of Arbuscular Mycorrhizal Fungal Colonisation on Nutrient Status, Growth, Productivity, and Canker Resistance of Apple (Malus pumila). Frontiers in Microbiology, 2018, 9, 1461.	3.5	53
30	DNA extraction from soil nematodes for multi-sample community studies. Applied Soil Ecology, 2008, 38, 20-26.	4.3	50
31	Long-term effect of re-vegetation on the microbial community of a severely eroded soil in sub-tropical China. Plant and Soil, 2010, 328, 447-458.	3.7	50
32	Differential effect of arbuscular mycorrhizal fungal communities from ecosystems along management gradient on the growth of forest understorey plant species. Soil Biology and Biochemistry, 2009, 41, 2141-2146.	8.8	49
33	Compound driven differences in N2 and N2O emission from soil; the role of substrate use efficiency and the microbial community. Soil Biology and Biochemistry, 2017, 106, 90-98.	8.8	49
34	Spatial pattern and species richness of boreonemoral forest understorey and its determinantsâ€”A comparison of differently managed forests. Forest Ecology and Management, 2007, 250, 64-70.	3.2	47
35	Does reduced usage of antibiotics in livestock production mitigate the spread of antibiotic resistance in soil, earthworm guts, and the phyllosphere?. Environment International, 2020, 136, 105359.	10.0	47
36	Genotypic variation in the ability of landraces and commercial cereal varieties to avoid manganese deficiency in soils with limited manganese availability: is there a role for rootâ€exuded phytases?. Physiologia Plantarum, 2014, 151, 243-256.	5.2	46

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37	Extracellular release ofâ€ƒa heterologous phytase from roots of transgenic plants: does manipulation of rhizosphere biochemistry impact microbial community structure?. FEMS Microbiology Ecology, 2009, 70, 433-445.	2.7	44
38	A commercial arbuscular mycorrhizal inoculum increases root colonization across wheat cultivars but does not increase assimilation of mycorrhizaâ€acquired nutrients. Plants People Planet, 2021, 3, 588-599.	3.3	44
39	Microbial and microfaunal communities in phosphorus limited, grazed grassland change composition but maintain homeostatic nutrient stoichiometry. Soil Biology and Biochemistry, 2014, 75, 94-101.	8.8	41
40	DNA Barcoding and Morphological Identification of Benthic Nematodes Assemblages of Estuarine Intertidal Sediments: Advances in Molecular Tools for Biodiversity Assessment. Frontiers in Marine Science, 2017, 4, .	2.5	41
41	Variable response of nirK and nirS containing denitrifier communities to long-term pH manipulation and cultivation. FEMS Microbiology Letters, 2018, 365, .	1.8	40
42	A comparison of molecular methods for monitoring soil nematodes and their use as biological indicators. European Journal of Soil Biology, 2010, 46, 319-324.	3.2	38
43	Improved real-time PCR estimation of gene copy number in soil extracts using an artificial reference. Journal of Microbiological Methods, 2012, 91, 38-44.	1.6	37
44	Effect of model root exudate on denitrifier community dynamics and activity at different water-filled pore space levels in a fertilised soil. Soil Biology and Biochemistry, 2018, 120, 70-79.	8.8	37
45	Ensuring water resource security in China; the need for advances in evidence-based policy to support sustainable management. Environmental Science and Policy, 2017, 75, 65-69.	4.9	36
46	Carbon mineralization kinetics and soil biological characteristics as influenced by manure addition in soil incubated at a range of temperatures. European Journal of Soil Biology, 2011, 47, 392-399.	3.2	35
47	Mineral and organic fertilization alters the microbiome of a soil nematode Dorylaimus stagnalis and its resistome. Science of the Total Environment, 2019, 680, 70-78.	8.0	35
48	Plant influence on nitrification. Biochemical Society Transactions, 2011, 39, 275-278.	3.4	31
49	Soil fungal community composition does not alter along a latitudinal gradient through the maritime and sub-Antarctic. Fungal Ecology, 2012, 5, 403-408.	1.6	31
50	Bioindication potential of using molecular characterisation of the nematode community: Response to soil tillage. European Journal of Soil Biology, 2012, 49, 92-97.	3.2	30
51	How does partial substitution of chemical fertiliser with organic forms increase sustainability of agricultural production?. Science of the Total Environment, 2022, 803, 149933.	8.0	28
52	How many fungi does it take to change a plant community?. Trends in Plant Science, 1999, 4, 81-82.	8.8	27
53	A novel molecular approach for rapid assessment of soil nematode assemblages â€“ variation, validation and potential applications. Methods in Ecology and Evolution, 2012, 3, 12-23.	5.2	26
54	A widely distributed phosphate-insensitive phosphatase presents a route for rapid organophosphorus remineralization in the biosphere. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	26

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55	Plantâ€“environment microscopy tracks interactions of Bacillus subtilis with plant roots across the entire rhizosphere. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	24
56	Resource sharing in plantâ€“fungus communities: did the carbon move for you?. Trends in Ecology and Evolution, 1999, 14, 70-70.	8.7	21
57	Microbial population dynamics related to temporal variations in nitrification in three arable fields. European Journal of Soil Science, 2003, 54, 707-714.	3.9	20
58	Using nematode communities to test a European scale soil biological monitoring programme for policy development. Applied Soil Ecology, 2016, 97, 78-85.	4.3	19
59	Gas chromatographic metabolic profiling: A sensitive tool for functional microbial ecology. Journal of Microbiological Methods, 2008, 75, 491-500.	1.6	18
60	Insights into the mechanism of the interference of sulfadiazine on soil microbial community and function. Journal of Hazardous Materials, 2021, 419, 126388.	12.4	18
61	How Conserved Are the Bacterial Communities Associated With Aphids? A Detailed Assessment of the <I>Brevicoryne brassicae</I> (Hemiptera: Aphididae) Using 16S rDNA. Environmental Entomology, 2012, 41, 1386-1397.	1.4	17
62	Genotypic variation in maize (Zea mays) influences rates of soil organic matter mineralization and gross nitrification. New Phytologist, 2021, 231, 2015-2028.	7.3	16
63	Greater coverage of the phylum Nematoda in SSU rDNA studies. Biology and Fertility of Soils, 2011, 47, 333-339.	4.3	15
64	Microbial properties and nitrogen contents of arable soils under different tillage regimes. Soil Use and Management, 2014, 30, 152-159.	4.9	15
65	The potential role of Mucoromycotina â€˜fine root endophytesâ€™ in plant nitrogen nutrition. Physiologia Plantarum, 2022, 174, e13715.	5.2	14
66	Alternate thermoregulation and functional binding ofEscherichia colitype 1 fimbriae in environmental and animal isolates. FEMS Microbiology Letters, 2016, 363, fnw251.	1.8	13
67	Mycorrhizas for a changing world: Sustainability, conservation, and society. Plants People Planet, 2020, 2, 98-103.	3.3	13
68	Variation in mycorrhizal growth response among a spring wheat mapping population shows potential to breed for symbiotic benefit. Food and Energy Security, 2022, 11, .	4.3	13
69	Alfalfa cell cultures treated with a fungal elicitor accumulate flavone metabolites rather than isoflavones in the presence of the methylation inhibitor tubericidin. Phytochemistry, 1997, 44, 285-291.	2.9	12
70	Temporal and land use effects on soil bacterial community structure of the machair, an EU Habitats Directive Annex I low-input agricultural system. Applied Soil Ecology, 2014, 73, 116-123.	4.3	12
71	Changes in protein methylation associated with the elicitation response in cell cultures of alfalfa (Medicago sativaL.). FEBS Letters, 1995, 360, 57-61.	2.8	10
72	Development of a genetically modified bacteriophage for use in tracing sources of pollution. Journal of Applied Microbiology, 2000, 88, 860-869.	3.1	10

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73	Prevalence and diversity of Escherichia coli isolated from a barley trial supplemented with bulky organic soil amendments: green compost and bovine slurry. Letters in Applied Microbiology, 2014, 58, 205-212.	2.2	9
74	Plant treatment, pollutant load, and soil type effects in rhizosphere ecology of trace element polluted soils. Ecotoxicology and Environmental Safety, 2010, 73, 970-981.	6.0	8
75	Preceding crop and weed management history affect denitrification and denitrifier community structure throughout the development of durum wheat. Agriculture, Ecosystems and Environment, 2015, 212, 49-63.	5.3	6
76	Directed terminal restriction analysis tool (DRAT): an aid to enzyme selection for directed terminalâ€restriction fragment length polymorphisms. Methods in Ecology and Evolution, 2012, 3, 24-28.	5.2	5
77	Impact of land use and management practices on soil nematode communities of Machair, a low-input calcareous ecosystem of conservation importance. Science of the Total Environment, 2020, 738, 140164.	8.0	5
78	Role of microbial communities in conferring resistance and resilience of soil carbon and nitrogen cycling following contrasting stresses. European Journal of Soil Biology, 2021, 104, 103308.	3.2	5
79	Evidence of a plant genetic basis for maize roots impacting soil organic matter mineralization. Soil Biology and Biochemistry, 2021, 161, 108402.	8.8	5
80	Molecular tools for analysing nematode assemblages.. , 2009, , 188-207.		5
81	Probing soil physical and biological resilience data from a broad sampling of arable farms in Scotland. Soil Use and Management, 2015, 31, 491-503.	4.9	4
82	Soil carbon and nitrogen and barley yield responses to repeated additions of compost and slurry. Journal of Agricultural Science, 2017, 155, 141-155.	1.3	4
83	Methylation reactions and the phytoalexin response in alfalfa suspension cultures. Planta, 1997, 201, 359-367.	3.2	3
84	Using molecular phylogeny to investigate the bacteria associated with the cabbage aphid (Brevicoryne) Tj ETQq0 0 0 rgBT /Overlock 10 T 2009, 153, S47.	1.8	0