Rob I Griffiths

List of Publications by Year
in descending order

81 papers	12,417 citations	71004 43 h-index	75989 78 g-index
91 all docs	91 docs citations	91 times ranked	15674 citing authors

#	Article	IF	Citations
1	Sustainable futures over the next decade are rooted in soil science. European Journal of Soil Science, 2022, 73, .	1.8	19
2	Long-Term Drought and Warming Alter Soil Bacterial and Fungal Communities in an Upland Heathland. Ecosystems, 2022, 25, 1279-1294.	1.6	13
3	Shrub expansion modulates belowground impacts of changing snow conditions in alpine grasslands. Ecology Letters, 2022, 25, 52-64.	3.0	10
4	Relative contribution of high and low elevation soil microbes and nematodes to ecosystem functioning. Functional Ecology, 2022, 36, 974-986.	1.7	5
5	Longâ€term cattle grazing shifts the ecological state of forest soils. Ecology and Evolution, 2022, 12, e8786.	0.8	3
6	Plants with arbuscular mycorrhizal fungi efficiently acquire Nitrogen from substrate additions by shaping the decomposer community composition and their net plant carbon demand. Plant and Soil, 2022, 475, 473-490.	1.8	15
7	Compound-specific amino acid 15N-stable isotope probing for the quantification of biological nitrogen fixation in soils. Soil Biology and Biochemistry, 2022, 169, 108654.	4.2	9
8	Pasture age impacts soil fungal composition while bacteria respond to soil chemistry. Agriculture, Ecosystems and Environment, 2022, 330, 107900.	2.5	6
9	Soil health cluster analysis based on national monitoring of soil indicators. European Journal of Soil Science, 2021, 72, 2414-2429.	1.8	26
10	Bacterial and archaeal taxa are reliable indicators of soil restoration across distributed calcareous grasslands. European Journal of Soil Science, 2021, 72, 2430-2444.	1.8	12
11	The effect of rootâ€associated microbes on plant growth and chemical defence traits across two contrasted elevations. Journal of Ecology, 2021, 109, 38-50.	1.9	4
12	Interacting effects of land use type, microbes and plant traits on soil aggregate stability. Soil Biology and Biochemistry, 2021, 154, 108072.	4.2	38
13	Towards a microbial process-based understanding of the resilience of peatland ecosystem service provisioning â€" A research agenda. Science of the Total Environment, 2021, 759, 143467.	3.9	15
14	Climate change alters temporal dynamics of alpine soil microbial functioning and biogeochemical cycling via earlier snowmelt. ISME Journal, 2021, 15, 2264-2275.	4.4	51
15	Comparison of greenhouse gas fluxes from tropical forests and oil palm plantations on mineral soil. Biogeosciences, 2021, 18, 1559-1575.	1.3	9
16	Beyond Taxonomic Identification: Integration of Ecological Responses to a Soil Bacterial 16S rRNA Gene Database. Frontiers in Microbiology, 2021, 12, 682886.	1.5	6
17	Shifts in Soil Structure, Biological, and Functional Diversity Under Long-Term Carbon Deprivation. Frontiers in Microbiology, 2021, 12, 735022.	1.5	7
18	Effects of acidity on dissolved organic carbon in organic soil extracts, pore water and surface litters. Science of the Total Environment, 2020, 703, 135585.	3.9	8

#	Article	IF	Citations
19	Environmental and microbial controls on microbial necromass recycling, an important precursor for soil carbon stabilization. Communications Earth & Environment, 2020, 1, .	2.6	87
20	Evolution of diversity explains the impact of pre-adaptation of a focal species on the structure of a natural microbial community. ISME Journal, 2020, 14, 2877-2889.	4.4	9
21	Soil Fungal Community Characteristics and Mycelial Production Across a Disturbance Gradient in Lowland Dipterocarp Rainforest in Borneo. Frontiers in Forests and Global Change, 2020, 3, .	1.0	6
22	Rhizosphere bacteria are more strongly related to plant root traits than fungi in temperate montane forests: insights from closed and open forest patches along an elevational gradient. Plant and Soil, 2020, 450, 183-200.	1.8	24
23	Harnessing rhizosphere microbiomes for drought-resilient crop production. Science, 2020, 368, 270-274.	6.0	442
24	Zones of influence for soil organic matter dynamics: A conceptual framework for data and models. Global Change Biology, 2019, 25, 3996-4007.	4.2	13
25	Persistence of dissolved organic matter explained by molecular changes during its passage through soil. Nature Geoscience, 2019, 12, 755-761.	5.4	230
26	Primer and Database Choice Affect Fungal Functional but Not Biological Diversity Findings in a National Soil Survey. Frontiers in Environmental Science, 2019, 7, .	1.5	26
27	pH and exchangeable aluminum are major regulators of microbial energy flow and carbon use efficiency in soil microbial communities. Soil Biology and Biochemistry, 2019, 138, 107584.	4.2	124
28	The pH optimum of soil exoenzymes adapt to long term changes in soil pH. Soil Biology and Biochemistry, 2019, 138, 107601.	4.2	73
29	Soil parameters, land use, and geographical distance drive soil bacterial communities along a European transect. Scientific Reports, 2019, 9, 605.	1.6	56
30	Soil microbial communities with greater investment in resource acquisition have lower growth yield. Soil Biology and Biochemistry, 2019, 132, 36-39.	4.2	98
31	Grassland biodiversity restoration increases resistance of carbon fluxes to drought. Journal of Applied Ecology, 2019, 56, 1806-1816.	1.9	25
32	Divergent national-scale trends of microbial and animal biodiversity revealed across diverse temperate soil ecosystems. Nature Communications, 2019, 10, 1107.	5.8	104
33	Detecting macroecological patterns in bacterial communities across independent studies of global soils. Nature Microbiology, 2018, 3, 189-196.	5.9	136
34	Impacts of Climate Change on Soil Microbial Communities and Their Functioning. Developments in Soil Science, 2018, 35, 111-129.	0.5	14
35	Land use driven change in soil pH affects microbial carbon cycling processes. Nature Communications, 2018, 9, 3591.	5.8	380
36	Soil bacterial networks are less stable under drought than fungal networks. Nature Communications, 2018, 9, 3033.	5.8	992

#	Article	IF	Citations
37	Seasonality alters drivers of soil enzyme activity in subalpine grassland soil undergoing climate change. Soil Biology and Biochemistry, 2018, 124, 266-274.	4.2	13
38	Soil networks become more connected and take up more carbon as nature restoration progresses. Nature Communications, 2017, 8, 14349.	5.8	555
39	Legacy effects of drought on plantâ€"soil feedbacks and plantâ€"plant interactions. New Phytologist, 2017, 215, 1413-1424.	3.5	213
40	Bacterial Physiological Adaptations to Contrasting Edaphic Conditions Identified Using Landscape Scale Metagenomics. MBio, 2017, 8, .	1.8	46
41	Soil Fungal:Bacterial Ratios Are Linked to Altered Carbon Cycling. Frontiers in Microbiology, 2016, 7, 1247.	1.5	292
42	Differences in soil microâ€eukaryotic communities over soil <scp>pH</scp> gradients are strongly driven by parasites and saprotrophs. Environmental Microbiology, 2016, 18, 2010-2024.	1.8	94
43	Selecting cost effective and policy-relevant biological indicators for European monitoring of soil biodiversity and ecosystem function. Ecological Indicators, 2016, 69, 213-223.	2.6	80
44	Global change pressures on soils from land use and management. Global Change Biology, 2016, 22, 1008-1028.	4.2	605
45	Mapping and validating predictions of soil bacterial biodiversity using European and national scale datasets. Applied Soil Ecology, 2016, 97, 61-68.	2.1	62
46	A method of establishing a transect for biodiversity and ecosystem function monitoring across Europe. Applied Soil Ecology, 2016, 97, 3-11.	2.1	29
47	Ecological network analysis reveals the inter-connection between soil biodiversity and ecosystem function as affected by land use across Europe. Applied Soil Ecology, 2016, 97, 112-124.	2.1	184
48	<scp>PIPITS</scp>: an automated pipeline for analyses of fungal internal transcribed spacer sequences from the <scp>I</scp>llumina sequencing platform. Methods in Ecology and Evolution, 2015, 6, 973-980.	2.2	277
49	Monitoring Soil Natural Capital and Ecosystem Services by Using Large-Scale Survey Data. , 2015, , 127-155.		2
50	Rhizosphere bacterial carbon turnover is higher in nucleic acids than membrane lipids: implications for understanding soil carbon cycling. Frontiers in Microbiology, 2015, 6, 268.	1.5	47
51	Biogeochemical cycles and biodiversity as key drivers of ecosystem services provided by soils. Soil, 2015, 1, 665-685.	2.2	249
52	Soil conditions and land use intensification effects on soil microbial communities across a range of European field sites. Soil Biology and Biochemistry, 2015, 88, 403-413.	4.2	151
53	Plant diversity increases soil microbial activity and soil carbon storage. Nature Communications, 2015, 6, 6707.	5.8	949
54	Mapping natural capital: optimising the use of national scale datasets. Ecography, 2015, 38, 632-638.	2.1	7

#	Article	IF	Citations
55	Vegetation exerts a greater control on litter decomposition than climate warming in peatlands. Ecology, 2015, 96, 113-123.	1.5	101
56	Catchment-scale biogeography of riverine bacterioplankton. ISME Journal, 2015, 9, 516-526.	4.4	202
57	Plant soil interactions alter carbon cycling in an upland grassland soil. Frontiers in Microbiology, 2013, 4, 253.	1.5	39
58	Evaluation of the ISO Standard 11063 DNA Extraction Procedure for Assessing Soil Microbial Abundance and Community Structure. PLoS ONE, 2012, 7, e44279.	1.1	113
59	The bacterial biogeography of British soils. Environmental Microbiology, 2011, 13, 1642-1654.	1.8	753
60	Niche specialization of terrestrial archaeal ammonia oxidizers. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 21206-21211.	3.3	402
61	Vegetation Affects the Relative Abundances of Dominant Soil Bacterial Taxa and Soil Respiration Rates in an Upland Grassland Soil. Microbial Ecology, 2010, 59, 335-343.	1.4	107
62	Field scale molecular analysis for the monitoring of bacterial community structures during on-site diesel bioremediation. Bioresource Technology, 2010, 101, 5235-5241.	4.8	11
63	Closely related protist strains have different grazing impacts on natural bacterial communities. Environmental Microbiology, 2010, 12, 3105-3113.	1.8	119
64	Protists have divergent effects on bacterial diversity along a productivity gradient. Biology Letters, 2010, 6, 639-642.	1.0	60
65	Effects of sieving, drying and rewetting upon soil bacterial community structure and respiration rates. Journal of Microbiological Methods, 2010, 83, 69-73.	0.7	58
66	Local Adaptation of Bacteriophages to Their Bacterial Hosts in Soil. Science, 2009, 325, 833-833.	6.0	152
67	Microbial biodiversity and ecosystem functioning under controlled conditions and in the wild. , 2009, , 121-133.		25
68	Ecological consequences of ingestion of Bacillus cereus on Bacillus thuringiensis infections and on the gut flora of a lepidopteran host. Journal of Invertebrate Pathology, 2008, 99, 103-111.	1.5	31
69	The sensitivity of a forest soil microbial community to acute gamma-irradiation. Applied Soil Ecology, 2007, 37, 1-9.	2.1	43
70	Insights into the fate of a 13C labelled phenol pulse for stable isotope probing (SIP) experiments. Journal of Microbiological Methods, 2007, 69, 340-344.	0.7	27
71	Raman-FISH: combining stable-isotope Raman spectroscopy and fluorescence in situ hybridization for the single cell analysis of identity and function. Environmental Microbiology, 2007, 9, 1878-1889.	1.8	305
72	The functions and components of the Sourhope soil microbiota. Applied Soil Ecology, 2006, 33, 114-126.	2.1	19

#	Article	IF	Citations
73	Stable Isotope Probing: A Critique of Its Role in Linking Phylogeny and Function. , 2006, , 205-216.		8
74	Functional and compositional comparison of two activated sludge communities remediating coking effluent. Environmental Microbiology, 2005, 7, 715-722.	1.8	73
75	13CO2 pulse labelling of plants in tandem with stable isotope probing: methodological considerations for examining microbial function in the rhizosphere. Journal of Microbiological Methods, 2004, 58, 119-129.	0.7	70
76	Raman Microscopic Analysis of Single Microbial Cells. Analytical Chemistry, 2004, 76, 4452-4458.	3.2	371
77	Influence of depth and sampling time on bacterial community structure in an upland grassland soil. FEMS Microbiology Ecology, 2003, 43, 35-43.	1.3	170
78	Analysis of the microbial functional diversity within water-stressed soil communities by flow cytometric analysis and CTC+ cell sorting. Journal of Microbiological Methods, 2003, 54, 257-267.	0.7	45
79	Physiological and Community Responses of EstablishedGrassland Bacterial Populations to WaterStress. Applied and Environmental Microbiology, 2003, 69, 6961-6968.	1.4	167
80	RNA Stable Isotope Probing, a Novel Means of Linking Microbial Community Function to Phylogeny. Applied and Environmental Microbiology, 2002, 68, 5367-5373.	1.4	527
81	Rapid Method for Coextraction of DNA and RNA from Natural Environments for Analysis of Ribosomal DNA- and rRNA-Based Microbial Community Composition. Applied and Environmental Microbiology, 2000, 66, 5488-5491.	1.4	1,422