Daniel V Murphy

List of Publications by Year
in descending order

76 papers	5,681 citations	66315 42 h-index	79644 73 g-index
77 all docs	77 docs citations	77 times ranked	6947 citing authors

#	Article	IF	Citations
1	Exploring the transfer of recent plant photosynthates to soil microbes: mycorrhizal pathway vs direct root exudation. New Phytologist, 2015, 205, 1537-1551.	3.5	370
2	Role of dissolved organic nitrogen (DON) in soil N cycling in grassland soils. Soil Biology and Biochemistry, 2004, 36, 749-756.	4.2	363
3	Microbial utilisation of biochar-derived carbon. Science of the Total Environment, 2013, 465, 288-297.	3.9	292
4	Linking bacterial community composition to soil salinity along environmental gradients. ISME Journal, 2019, 13, 836-846.	4.4	283
5	Low Pore Connectivity Increases Bacterial Diversity in Soil. Applied and Environmental Microbiology, 2010, 76, 3936-3942.	1.4	247
6	Nitrous oxide emissions from a cropped soil in a semiâ€arid climate. Global Change Biology, 2008, 14, 177-192.	4.2	231
7	Carbon and Nitrogen Mineralization Rates after Application of Organic Amendments to Soil. Journal of Environmental Quality, 2006, 35, 183-193.	1.0	211
8	Biochars influence seed germination and early growth of seedlings. Plant and Soil, 2012, 353, 273-287.	1.8	201
9	Characterizing the relationships between soil organic matter components and microbial function and composition along a tillage disturbance gradient. Soil Biology and Biochemistry, 2008, 40, 763-777.	4.2	194
10	The contribution of soil organic matter fractions to carbon and nitrogen mineralization and microbial community size and structure. Soil Biology and Biochemistry, 2005, 37, 1726-1737.	4.2	181
11	Nano-scale secondary ion mass spectrometry â€" A new analytical tool in biogeochemistry and soil ecology: A review article. Soil Biology and Biochemistry, 2007, 39, 1835-1850.	4.2	178
12	Response of ammonia oxidizing archaea and bacteria to changing water filled pore space. Soil Biology and Biochemistry, 2010, 42, 1888-1891.	4.2	134
13	In Situ Mapping of Nutrient Uptake in the Rhizosphere Using Nanoscale Secondary Ion Mass Spectrometry. Plant Physiology, 2009, 151, 1751-1757.	2.3	132
14	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
15	Clay and biochar amendments decreased inorganic but not dissolved organic nitrogen leaching in soil. Soil Research, 2012, 50, 216.	0.6	118
16	Ammonia-oxidising bacteria not archaea dominate nitrification activity in semi-arid agricultural soil. Scientific Reports, 2015, 5, 11146.	1.6	96
17	Biochars immobilize soil cadmium, but do not improve growth of emergent wetland species Juncus subsecundus in cadmium-contaminated soil. Journal of Soils and Sediments, 2013, 13, 140-151.	1.5	92
18	Influence of crop rotation and liming on greenhouse gas emissions from a semi-arid soil. Agriculture, Ecosystems and Environment, 2013, 167, 23-32.	2.5	89

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19	Competition between plant and bacterial cells at the microscale regulates the dynamics of nitrogen acquisition in wheat (Triticum aestivum). New Phytologist, 2013, 200, 796-807.	3.5	87
20	Nitrous oxide fluxes from a grainâ€“legume crop (narrowâ€leafed lupin) grown in a semiarid climate. Global Change Biology, 2011, 17, 1153-1166.	4.2	82
21	Soil organic carbon sequestration in upland soils of northern China under variable fertilizer management and climate change scenarios. Global Biogeochemical Cycles, 2014, 28, 319-333.	1.9	81
22	Oligopeptides Represent a Preferred Source of Organic N Uptake: A Global Phenomenon?. Ecosystems, 2013, 16, 133-145.	1.6	80
23	A novel method for the study of the biophysical interface in soils using nano-scale secondary ion mass spectrometry. Rapid Communications in Mass Spectrometry, 2007, 21, 29-34.	0.7	77
24	Effect of heat-induced disturbance on microbial biomass and activity in forest soil and the relationship between disturbance effects and microbial community structure. Applied Soil Ecology, 2008, 40, 109-119.	2.1	70
25	Biochar increases availability and uptake of phosphorus to wheat under leaching conditions. Biology and Fertility of Soils, 2016, 52, 439-446.	2.3	70
26	Role of substrate supply on microbial carbon use efficiency and its role in interpreting soil microbial community-level physiological profiles (CLPP). Soil Biology and Biochemistry, 2018, 123, 1-6.	4.2	66
27	Root exudate carbon mitigates nitrogen loss in a semi-arid soil. Soil Biology and Biochemistry, 2015, 88, 380-389.	4.2	63
28	Long-term combined application of manure and NPK fertilizers influenced nitrogen retention and stabilization of organic C in Loess soil. Plant and Soil, 2012, 353, 249-260.	1.8	60
29	Nitrapyrin decreased nitrification of nitrogen released from soil organic matter but not amoA gene abundance at high soil temperature. Soil Biology and Biochemistry, 2015, 88, 214-223.	4.2	59
30	Influence of water potential on nitrification and structure of nitrifying bacterial communities in semiarid soils. Applied Soil Ecology, 2008, 40, 189-194.	2.1	58
31	Comparison of two methods that assess soil community level physiological profiles in a forest ecosystem. Soil Biology and Biochemistry, 2007, 39, 454-462.	4.2	57
32	Deep-C storage: Biological, chemical and physical strategies to enhance carbon stocks in agricultural subsoils. Soil Biology and Biochemistry, 2022, 170, 108697.	4.2	57
33	Development of Microbial Diversity and Functional Potential in Bauxite Residue Sand under Rehabilitation. Restoration Ecology, 2011, 19, 78-87.	1.4	56
34	Manure and Mineral Fertilizer Effects on Crop Yield and Soil Carbon Sequestration: A Metaâ€Analysis and Modeling Across China. Global Biogeochemical Cycles, 2018, 32, 1659-1672.	1.9	54
35	Biochar phosphorus concentration dictates mycorrhizal colonisation, plant growth and soil phosphorus cycling. Scientific Reports, 2019, 9, 5062.	1.6	53
36	Ensuring planetary survival: the centrality of organic carbon in balancing the multifunctional nature of soils. Critical Reviews in Environmental Science and Technology, 2022, 52, 4308-4324.	6.6	52

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37	Relative contribution of maize and external manure amendment to soil carbon sequestration in a long-term intensive maize cropping system. Scientific Reports, 2015, 5, 10791.	1.6	51
38	Is the fate of glucose-derived carbon more strongly driven by nutrient availability, soil texture, or microbial biomass size?. Soil Biology and Biochemistry, 2016, 103, 201-212.	4.2	51
39	Seasonal dynamics of carbon and nitrogen pools and fluxes under continuous arable and leyâ€arable rotations in a temperate environment. European Journal of Soil Science, 2007, 58, 1410-1424.	1.8	48
40	Soil nitrous oxide and methane fluxes are low from a bioenergy crop (canola) grown in a semiâ€arid climate. GCB Bioenergy, 2010, 2, 1-15.	2.5	45
41	Carbon and Nitrogen Mineralization in Relation to Soil Particle-Size Fractions after 32 Years of Chemical and Manure Application in a Continuous Maize Cropping System. PLoS ONE, 2016, 11, e0152521.	1.1	45
42	Incorporating organic matter alters soil greenhouse gas emissions and increases grain yield in a semi-arid climate. Agriculture, Ecosystems and Environment, 2016, 231, 320-330.	2.5	44
43	Angiosperm symbioses with nonâ€mycorrhizal fungal partners enhance N acquisition from ancient organic matter in a warming maritime Antarctic. Ecology Letters, 2019, 22, 2111-2119.	3.0	44
44	Tillage practices altered labile soil organic carbon and microbial function without affecting crop yields. Soil Research, 2010, 48, 274.	0.6	40
45	Meeting bulk density sampling requirements efficiently to estimate soil carbon stocks. Soil Research, 2011, 49, 680.	0.6	40
46	Microbial respiration, but not biomass, responded linearly to increasing light fraction organic matter input: Consequences for carbon sequestration. Scientific Reports, 2016, 6, 35496.	1.6	40
47	Fate of 15â€‰N-labeled fertilizer in soils under dryland agriculture after 19Âyears of different fertilizations. Biology and Fertility of Soils, 2013, 49, 977-986.	2.3	39
48	Regulation of amino acid biodegradation in soil as affected by depth. Biology and Fertility of Soils, 2008, 44, 933-941.	2.3	34
49	Influence of organic residues and soil incorporation on temporal measures of microbial biomass and plant available nitrogen. Plant and Soil, 2011, 347, 53-64.	1.8	34
50	Temperature and water controls on vegetation emergence, microbial dynamics, and soil carbon and nitrogen fluxes in a high Arctic tundra ecosystem. Functional Ecology, 2012, 26, 1366-1380.	1.7	33
51	Carbon and Nitrogen Dynamics in an Oxisol as Affected by Liming and Crop Residues under No-Till. Soil Science Society of America Journal, 2011, 75, 1723-1730.	1.2	31
52	Amendment of bauxite residue sand can alleviate constraints to plant establishment and nutrient cycling capacity in a water-limited environment. Ecological Engineering, 2014, 62, 179-187.	1.6	31
53	Molecular Weight of Dissolved Organic Carbon, Nitrogen, and Phenolics in Grassland Soils. Soil Science Society of America Journal, 2012, 76, 142-150.	1.2	28
54	Application of nanoscale secondary ion mass spectrometry to plant cell research. Plant Signaling and Behavior, 2010, 5, 760-762.	1.2	27

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55	Afforestation alters community structure of soil fungi. Fungal Biology, 2010, 114, 580-584.	1.1	27
56	Spatially governed climate factors dominate management in determining the quantity and distribution of soil organic carbon in dryland agricultural systems. Scientific Reports, 2016, 6, 31468.	1.6	24
57	Influence of cold storage on soil microbial community level physiological profiles and implications for soil quality monitoring. Soil Biology and Biochemistry, 2009, 41, 1574-1576.	4.2	23
58	Soil Organic Carbon â€“ Role in Rainfed Farming Systems. , 2011, , 339-361.		23
59	Oribatid mite species richness and soil organic matter fractions in agricultural and native vegetation soils in Western Australia. Applied Soil Ecology, 2005, 29, 93-98.	2.1	20
60	Clay addition to lime-amended biosolids overcomes water repellence and provides nitrogen supply in an acid sandy soil. Biology and Fertility of Soils, 2014, 50, 1047-1059.	2.3	18
61	Comparison of 15NH4+ pool dilution techniques to measure gross N fluxes in a coarse textured soil. Soil Biology and Biochemistry, 2005, 37, 569-572.	4.2	16
62	Rhizosphere effects on functional stability of microbial communities in conventional and organic soils following elevated temperature treatment. Soil Biology and Biochemistry, 2013, 57, 56-59.	4.2	14
63	Ancient landscapes and the relationship with microbial nitrification. Scientific Reports, 2016, 6, 30733.	1.6	13
64	Bacillus subtilis and surfactant amendments for the breakdown of soil water repellency in a sandy soil. Geoderma, 2019, 344, 108-118.	2.3	13
65	Copolymers enhance selective bacterial community colonization for potential root zone applications. Scientific Reports, 2017, 7, 15902.	1.6	8
66	Engineering rhizobacterial community resilience with mannose nanofibril hydrogels towards maintaining grain production under drying climate stress. Soil Biology and Biochemistry, 2020, 142, 107715.	4.2	8
67	Addition of base cations increases microbial carbon use efficiency and biomass in acidic soils. Soil Biology and Biochemistry, 2021, 161, 108392.	4.2	8
68	Increasing the Size of the Microbial Biomass Altered Bacterial Community Structure which Enhances Plant Phosphorus Uptake. PLoS ONE, 2016, 11, e0166062.	1.1	8
69	Response of microbial biomass and CO2-C loss to wetting patterns are temperature dependent in a semi-arid soil. Scientific Reports, 2017, 7, 13032.	1.6	7
70	Vacuum drying water-repellent sandy soil: Anoxic conditions retain original soil water repellency under variable soil drying temperature and air pressure. Geoderma, 2020, 372, 114385.	2.3	6
71	Rehabilitated Mine-Site Management, Soil Health and Climate Change. Soil Biology, 2011, , 287-314.	0.6	5
72	Developing Bioprospecting Strategies for Bioplastics Through the Large-Scale Mining of Microbial Genomes. Frontiers in Microbiology, 2021, 12, 697309.	1.5	4

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73	Managing Soil Microbial Biomass for Sustainable Agro-Ecosystems. , 2017, , 67-101.		3
74	Soil water repellency in sandy soil depends on the soil drying method, incubation temperature and specific surface area. Geoderma, 2021, 402, 115264.	2.3	2
75	Thermal imaging of a hydrophobic soilâ€™s response to surfactant application at the Avon River Catchment Critical Zone Observatory. Geoderma, 2020, 368, 114309.	2.3	1
76	Preface: Soil biology in Australian farming systems. Soil Research, 2006, 44, I.	0.6	0