

Daniel V Murphy

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4639421/publications.pdf>

Version: 2024-02-01

76
papers

5,681
citations

66343

42
h-index

79698

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. <i>New Phytologist</i> , 2015, 205, 1537-1551.	7.3	370
2	Role of dissolved organic nitrogen (DON) in soil N cycling in grassland soils. <i>Soil Biology and Biochemistry</i> , 2004, 36, 749-756.	8.8	363
3	Microbial utilisation of biochar-derived carbon. <i>Science of the Total Environment</i> , 2013, 465, 288-297.	8.0	292
4	Linking bacterial community composition to soil salinity along environmental gradients. <i>ISME Journal</i> , 2019, 13, 836-846.	9.8	283
5	Low Pore Connectivity Increases Bacterial Diversity in Soil. <i>Applied and Environmental Microbiology</i> , 2010, 76, 3936-3942.	3.1	247
6	Nitrous oxide emissions from a cropped soil in a semi-arid climate. <i>Global Change Biology</i> , 2008, 14, 177-192.	9.5	231
7	Carbon and Nitrogen Mineralization Rates after Application of Organic Amendments to Soil. <i>Journal of Environmental Quality</i> , 2006, 35, 183-193.	2.0	211
8	Biochars influence seed germination and early growth of seedlings. <i>Plant and Soil</i> , 2012, 353, 273-287.	3.7	201
9	Characterizing the relationships between soil organic matter components and microbial function and composition along a tillage disturbance gradient. <i>Soil Biology and Biochemistry</i> , 2008, 40, 763-777.	8.8	194
10	The contribution of soil organic matter fractions to carbon and nitrogen mineralization and microbial community size and structure. <i>Soil Biology and Biochemistry</i> , 2005, 37, 1726-1737.	8.8	181
11	Nano-scale secondary ion mass spectrometry – A new analytical tool in biogeochemistry and soil ecology: A review article. <i>Soil Biology and Biochemistry</i> , 2007, 39, 1835-1850.	8.8	178
12	Response of ammonia oxidizing archaea and bacteria to changing water filled pore space. <i>Soil Biology and Biochemistry</i> , 2010, 42, 1888-1891.	8.8	134
13	In Situ Mapping of Nutrient Uptake in the Rhizosphere Using Nanoscale Secondary Ion Mass Spectrometry. <i>Plant Physiology</i> , 2009, 151, 1751-1757.	4.8	132
14	pH and exchangeable aluminum are major regulators of microbial energy flow and carbon use efficiency in soil microbial communities. <i>Soil Biology and Biochemistry</i> , 2019, 138, 107584.	8.8	124
15	Clay and biochar amendments decreased inorganic but not dissolved organic nitrogen leaching in soil. <i>Soil Research</i> , 2012, 50, 216.	1.1	118
16	Ammonia-oxidising bacteria not archaea dominate nitrification activity in semi-arid agricultural soil. <i>Scientific Reports</i> , 2015, 5, 11146.	3.3	96
17	Biochars immobilize soil cadmium, but do not improve growth of emergent wetland species <i>Juncus subsecundus</i> in cadmium-contaminated soil. <i>Journal of Soils and Sediments</i> , 2013, 13, 140-151.	3.0	92
18	Influence of crop rotation and liming on greenhouse gas emissions from a semi-arid soil. <i>Agriculture, Ecosystems and Environment</i> , 2013, 167, 23-32.	5.3	89

#	ARTICLE	IF	CITATIONS
19	Competition between plant and bacterial cells at the microscale regulates the dynamics of nitrogen acquisition in wheat (<i>Triticum aestivum</i>). <i>New Phytologist</i> , 2013, 200, 796-807.	7.3	87
20	Nitrous oxide fluxes from a grain-legume crop (narrow-leaved lupin) grown in a semiarid climate. <i>Global Change Biology</i> , 2011, 17, 1153-1166.	9.5	82
21	Soil organic carbon sequestration in upland soils of northern China under variable fertilizer management and climate change scenarios. <i>Global Biogeochemical Cycles</i> , 2014, 28, 319-333.	4.9	81
22	Oligopeptides Represent a Preferred Source of Organic N Uptake: A Global Phenomenon?. <i>Ecosystems</i> , 2013, 16, 133-145.	3.4	80
23	A novel method for the study of the biophysical interface in soils using nano-scale secondary ion mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2007, 21, 29-34.	1.5	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. <i>Applied Soil Ecology</i> , 2008, 40, 109-119.	4.3	70
25	Biochar increases availability and uptake of phosphorus to wheat under leaching conditions. <i>Biology and Fertility of Soils</i> , 2016, 52, 439-446.	4.3	70
26	Role of substrate supply on microbial carbon use efficiency and its role in interpreting soil microbial community-level physiological profiles (CLPP). <i>Soil Biology and Biochemistry</i> , 2018, 123, 1-6.	8.8	66
27	Root exudate carbon mitigates nitrogen loss in a semi-arid soil. <i>Soil Biology and Biochemistry</i> , 2015, 88, 380-389.	8.8	63
28	Long-term combined application of manure and NPK fertilizers influenced nitrogen retention and stabilization of organic C in Loess soil. <i>Plant and Soil</i> , 2012, 353, 249-260.	3.7	60
29	Nitrapyrin decreased nitrification of nitrogen released from soil organic matter but not amoA gene abundance at high soil temperature. <i>Soil Biology and Biochemistry</i> , 2015, 88, 214-223.	8.8	59
30	Influence of water potential on nitrification and structure of nitrifying bacterial communities in semiarid soils. <i>Applied Soil Ecology</i> , 2008, 40, 189-194.	4.3	58
31	Comparison of two methods that assess soil community level physiological profiles in a forest ecosystem. <i>Soil Biology and Biochemistry</i> , 2007, 39, 454-462.	8.8	57
32	Deep-C storage: Biological, chemical and physical strategies to enhance carbon stocks in agricultural subsoils. <i>Soil Biology and Biochemistry</i> , 2022, 170, 108697.	8.8	57
33	Development of Microbial Diversity and Functional Potential in Bauxite Residue Sand under Rehabilitation. <i>Restoration Ecology</i> , 2011, 19, 78-87.	2.9	56
34	Manure and Mineral Fertilizer Effects on Crop Yield and Soil Carbon Sequestration: A Meta-Analysis and Modeling Across China. <i>Global Biogeochemical Cycles</i> , 2018, 32, 1659-1672.	4.9	54
35	Biochar phosphorus concentration dictates mycorrhizal colonisation, plant growth and soil phosphorus cycling. <i>Scientific Reports</i> , 2019, 9, 5062.	3.3	53
36	Ensuring planetary survival: the centrality of organic carbon in balancing the multifunctional nature of soils. <i>Critical Reviews in Environmental Science and Technology</i> , 2022, 52, 4308-4324.	12.8	52

#	ARTICLE	IF	CITATIONS
37	Relative contribution of maize and external manure amendment to soil carbon sequestration in a long-term intensive maize cropping system. <i>Scientific Reports</i> , 2015, 5, 10791.	3.3	51
38	Is the fate of glucose-derived carbon more strongly driven by nutrient availability, soil texture, or microbial biomass size?. <i>Soil Biology and Biochemistry</i> , 2016, 103, 201-212.	8.8	51
39	Seasonal dynamics of carbon and nitrogen pools and fluxes under continuous arable and ley-arable rotations in a temperate environment. <i>European Journal of Soil Science</i> , 2007, 58, 1410-1424.	3.9	48
40	Soil nitrous oxide and methane fluxes are low from a bioenergy crop (canola) grown in a semi-arid climate. <i>GCB Bioenergy</i> , 2010, 2, 1-15.	5.6	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. <i>PLoS ONE</i> , 2016, 11, e0152521.	2.5	45
42	Incorporating organic matter alters soil greenhouse gas emissions and increases grain yield in a semi-arid climate. <i>Agriculture, Ecosystems and Environment</i> , 2016, 231, 320-330.	5.3	44
43	Angiosperm symbioses with non-mycorrhizal fungal partners enhance N acquisition from ancient organic matter in a warming maritime Antarctic. <i>Ecology Letters</i> , 2019, 22, 2111-2119.	6.4	44
44	Tillage practices altered labile soil organic carbon and microbial function without affecting crop yields. <i>Soil Research</i> , 2010, 48, 274.	1.1	40
45	Meeting bulk density sampling requirements efficiently to estimate soil carbon stocks. <i>Soil Research</i> , 2011, 49, 680.	1.1	40
46	Microbial respiration, but not biomass, responded linearly to increasing light fraction organic matter input: Consequences for carbon sequestration. <i>Scientific Reports</i> , 2016, 6, 35496.	3.3	40
47	Fate of 15-N-labeled fertilizer in soils under dryland agriculture after 19 years of different fertilizations. <i>Biology and Fertility of Soils</i> , 2013, 49, 977-986.	4.3	39
48	Regulation of amino acid biodegradation in soil as affected by depth. <i>Biology and Fertility of Soils</i> , 2008, 44, 933-941.	4.3	34
49	Influence of organic residues and soil incorporation on temporal measures of microbial biomass and plant available nitrogen. <i>Plant and Soil</i> , 2011, 347, 53-64.	3.7	34
50	Temperature and water controls on vegetation emergence, microbial dynamics, and soil carbon and nitrogen fluxes in a high Arctic tundra ecosystem. <i>Functional Ecology</i> , 2012, 26, 1366-1380.	3.6	33
51	Carbon and Nitrogen Dynamics in an Oxisol as Affected by Liming and Crop Residues under No-Till. <i>Soil Science Society of America Journal</i> , 2011, 75, 1723-1730.	2.2	31
52	Amendment of bauxite residue sand can alleviate constraints to plant establishment and nutrient cycling capacity in a water-limited environment. <i>Ecological Engineering</i> , 2014, 62, 179-187.	3.6	31
53	Molecular Weight of Dissolved Organic Carbon, Nitrogen, and Phenolics in Grassland Soils. <i>Soil Science Society of America Journal</i> , 2012, 76, 142-150.	2.2	28
54	Application of nanoscale secondary ion mass spectrometry to plant cell research. <i>Plant Signaling and Behavior</i> , 2010, 5, 760-762.	2.4	27

#	ARTICLE	IF	CITATIONS
55	Afforestation alters community structure of soil fungi. <i>Fungal Biology</i> , 2010, 114, 580-584.	2.5	27
56	Spatially governed climate factors dominate management in determining the quantity and distribution of soil organic carbon in dryland agricultural systems. <i>Scientific Reports</i> , 2016, 6, 31468.	3.3	24
57	Influence of cold storage on soil microbial community level physiological profiles and implications for soil quality monitoring. <i>Soil Biology and Biochemistry</i> , 2009, 41, 1574-1576.	8.8	23
58	Soil Organic Carbon – 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. <i>Applied Soil Ecology</i> , 2005, 29, 93-98.	4.3	20
60	Clay addition to lime-amended biosolids overcomes water repellence and provides nitrogen supply in an acid sandy soil. <i>Biology and Fertility of Soils</i> , 2014, 50, 1047-1059.	4.3	18
61	Comparison of $^{15}\text{NH}_4^+$ pool dilution techniques to measure gross N fluxes in a coarse textured soil. <i>Soil Biology and Biochemistry</i> , 2005, 37, 569-572.	8.8	16
62	Rhizosphere effects on functional stability of microbial communities in conventional and organic soils following elevated temperature treatment. <i>Soil Biology and Biochemistry</i> , 2013, 57, 56-59.	8.8	14
63	Ancient landscapes and the relationship with microbial nitrification. <i>Scientific Reports</i> , 2016, 6, 30733.	3.3	13
64	<i>Bacillus subtilis</i> and surfactant amendments for the breakdown of soil water repellency in a sandy soil. <i>Geoderma</i> , 2019, 344, 108-118.	5.1	13
65	Copolymers enhance selective bacterial community colonization for potential root zone applications. <i>Scientific Reports</i> , 2017, 7, 15902.	3.3	8
66	Engineering rhizobacterial community resilience with mannose nanofibril hydrogels towards maintaining grain production under drying climate stress. <i>Soil Biology and Biochemistry</i> , 2020, 142, 107715.	8.8	8
67	Addition of base cations increases microbial carbon use efficiency and biomass in acidic soils. <i>Soil Biology and Biochemistry</i> , 2021, 161, 108392.	8.8	8
68	Increasing the Size of the Microbial Biomass Altered Bacterial Community Structure which Enhances Plant Phosphorus Uptake. <i>PLoS ONE</i> , 2016, 11, e0166062.	2.5	8
69	Response of microbial biomass and $\text{CO}_2\text{-C}$ loss to wetting patterns are temperature dependent in a semi-arid soil. <i>Scientific Reports</i> , 2017, 7, 13032.	3.3	7
70	Vacuum drying water-repellent sandy soil: Anoxic conditions retain original soil water repellency under variable soil drying temperature and air pressure. <i>Geoderma</i> , 2020, 372, 114385.	5.1	6
71	Rehabilitated Mine-Site Management, Soil Health and Climate Change. <i>Soil Biology</i> , 2011, , 287-314.	0.8	5
72	Developing Bioprospecting Strategies for Bioplastics Through the Large-Scale Mining of Microbial Genomes. <i>Frontiers in Microbiology</i> , 2021, 12, 697309.	3.5	4

#	ARTICLE	IF	CITATIONS
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.	5.1	2
75	Thermal imaging of a hydrophobic soil's response to surfactant application at the Avon River Catchment Critical Zone Observatory. Geoderma, 2020, 368, 114309.	5.1	1
76	Preface: Soil biology in Australian farming systems. Soil Research, 2006, 44, 1.	1.1	0