Richard E Farrell

List of Publications by Year
in descending order

65 papers	2,505 citations	218677 26 h-index	206112 48 g-index
65 all docs	65 docs citations	65 times ranked	3070 citing authors

#	Article	IF	Citations
1	Organic residue and agricultural lime interactions on CO2 emissions from two contrasting soils: implications for carbon management in acid soils. Journal of Soils and Sediments, 2021, 21, 172-188.	3.0	11
2	Crop residues contribute minimally to spring-thaw nitrous oxide emissions under contrasting tillage and crop rotations. Soil Biology and Biochemistry, 2021, 152, 108057.	8.8	11
3	Type of pulse crop included in a 2-year rotation with wheat affects total N2O loss and intensity. Biology and Fertility of Soils, 2021, 57, 699-713.	4.3	0
4	Contribution of crop residue, soil, and fertilizer nitrogen to nitrous oxide emissions varies with long-term crop rotation and tillage. Science of the Total Environment, 2021, 767, 145107.	8.0	16
5	Spatial variation of nitrous oxide fluxes during growing and non-growing seasons at a location subjected to seasonally frozen soils. Canadian Journal of Soil Science, 2021, 101, 555-564.	1.2	5
6	Short-term effects of aglime on inorganic- and organic-derived CO2 emissions from two acid soils amended with an ammonium-based fertiliser. Journal of Soils and Sediments, 2020, 20, 52-65.	3.0	5
7	Tracing crop residue N into subsequent crops: Insight from long-term crop rotations that vary in diversity. Field Crops Research, 2020, 255, 107904.	5.1	19
8	A side-by-side comparison of biological nitrogen fixation and yield of four legume crops. Plant and Soil, 2019, 442, 169-182.	3.7	20
9	A new look at an old concept: using ¹⁵N₂O isotopomers to understand the relationship between soil moisture and N₂O production pathways. Soil, 2019, 5, 265-274.	4.9	38
10	Dynamics of soil-derived greenhouse gas emissions from shelterbelts under elevated soil moisture conditions in a semi-arid prairie environment. Agroforestry Systems, 2018, 92, 321.	2.0	2
11	Current inventory approach overestimates the effect of irrigated crop management on soil-derived greenhouse gas emissions in the semi-arid Canadian Prairies. Agricultural Water Management, 2018, 208, 19-32.	5.6	14
12	Petroleum hydrocarbon remediation in frozen soil using a meat and bonemeal biochar plus fertilizer. Chemosphere, 2017, 173, 330-339.	8.2	42
13	Greenhouse gas emissions along a shelterbelt-cropped field transect. Agriculture, Ecosystems and Environment, 2017, 241, 110-120.	5.3	12
14	Effects of Dolomitic Limestone Application on Zinc Speciation in Boreal Forest Smelterâ€€Contaminated Soils. Journal of Environmental Quality, 2016, 45, 1894-1900.	2.0	3
15	Characterizing Zinc Speciation in Soils from a Smelter-Affected Boreal Forest Ecosystem. Journal of Environmental Quality, 2016, 45, 684-692.	2.0	24
16	Greenhouse gas mitigation potential of shelterbelts: estimating farm-scale emission reductions using the Holos model. Canadian Journal of Soil Science, 2016, , .	1.2	6
17	Soilâ€“atmosphere exchange of carbon dioxide, methane and nitrous oxide in shelterbelts compared with adjacent cropped fields. Agriculture, Ecosystems and Environment, 2016, 223, 123-134.	5.3	51
18	Rapid Root Decomposition Decouples Root Length from Increased Soil C Following Grassland Invasion. Ecosystems, 2015, 18, 1307-1318.	3.4	6

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19	Manipulation of rhizosphere organisms to enhance glomalin production and C sequestration: Pitfalls and promises. Canadian Journal of Plant Science, 2014, 94, 1025-1032.	0.9	23
20	Differentiating between the supply of N to wheat from above and belowground residues of preceding crops of pea and canola. Biology and Fertility of Soils, 2014, 50, 563-570.	4.3	33
21	Nitrogen supply from belowground residues of lentil and wheat to a subsequent wheat crop. Biology and Fertility of Soils, 2014, 50, 507-515.	4.3	30
22	Greenhouse gas production and consumption in High Arctic deserts. Soil Biology and Biochemistry, 2014, 68, 158-165.	8.8	28
23	Greenhouse gas flux in a temperate grassland as affected by landform and disturbance. Landscape Ecology, 2013, 28, 709-723.	4.2	16
24	Estimating belowground nitrogen inputs of pea and canola and their contribution to soil inorganic N pools using 15N labeling. Plant and Soil, 2013, 371, 67-80.	3.7	32
25	Advances in Understanding Organic Nitrogen Chemistry in Soils Using State-of-the-art Analytical Techniques. Advances in Agronomy, 2013, 119, 83-151.	5.2	46
26	Effects of edaphic conditions on site quality for Salix purpurea â€˜Hotelâ€™ plantations across a large climatic gradient in Canada. New Forests, 2013, 44, 899-918.	1.7	12
27	Temporal dynamics of nitrogen rhizodeposition in field pea as determined by ¹⁵N labeling. Canadian Journal of Plant Science, 2013, 93, 941-950.	0.9	15
28	Early Effects of Afforestation with Willow (Salix purpurea, â€œHotelâ€) on Soil Carbon and Nutrient Availability. Forests, 2013, 4, 137-154.	2.1	26
29	Plant root exudates impact the hydrocarbon degradation potential of a weathered-hydrocarbon contaminated soil. Applied Soil Ecology, 2012, 52, 56-64.	4.3	119
30	Comparison of human exposure pathways in an urban brownfield: Reduced risk from paving roads. Environmental Toxicology and Chemistry, 2012, 31, 2423-2430.	4.3	13
31	Intercropping Caragana arborescens with Salix miyabeana to Satisfy Nitrogen Demand and Maximize Growth. Bioenergy Research, 2012, 5, 719-732.	3.9	25
32	N2O flux from plant-soil systems in polar deserts switch between sources and sinks under different light conditions. Soil Biology and Biochemistry, 2012, 48, 69-77.	8.8	29
33	Greenhouse gas soil production and surface fluxes at a high arctic polar oasis. Soil Biology and Biochemistry, 2012, 52, 1-12.	8.8	47
34	Nitrous Oxide Emissions from Ephemeral Wetland Soils are Correlated with Microbial Community Composition. Frontiers in Microbiology, 2011, 2, 110.	3.5	19
35	Glomalin-related soil protein contains non-mycorrhizal-related heat-stable proteins, lipids and humic materials. Soil Biology and Biochemistry, 2011, 43, 766-777.	8.8	156
36	XANES and Pyrolysis-FIMS Evidence of Organic Matter Composition in a Hummocky Landscape. Soil Science Society of America Journal, 2011, 75, 1741-1755.	2.2	26

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37	Repeatâ€pulse ¹³CO₂ labeling of canola and field pea: implications for soil organic matter studies. Rapid Communications in Mass Spectrometry, 2010, 24, 2791-2798.	1.5	22
38	Landscape controls on N2O and CH4 emissions from freshwater mineral soil wetlands of the Canadian Prairie Pothole region. Geoderma, 2010, 155, 308-319.	5.1	97
39	Nitrifier dominance of Arctic soil nitrous oxide emissions arises due to fungal competition with denitrifiers for nitrate. Soil Biology and Biochemistry, 2009, 41, 1104-1110.	8.8	58
40	Rapid biomass estimation using optical stem density of willow (Salix spp.) grown in short rotation. Biomass and Bioenergy, 2009, 33, 174-179.	5.7	10
41	Does expansion of western snowberry enhance ecosystem carbon sequestration and storage in Canadian Prairies?. Agriculture, Ecosystems and Environment, 2009, 134, 269-276.	5.3	14
42	Field-scale assessment of weathered hydrocarbon degradation by mixed and single plant treatments. Applied Soil Ecology, 2009, 42, 9-17.	4.3	83
43	Profiling Rhizosphere Chemistry: Evidence from Carbon and Nitrogen Kâ€Edge XANES and Pyrolysisâ€FIMS. Soil Science Society of America Journal, 2009, 73, 2002-2012.	2.2	31
44	Calibration method at the NK-edge using interstitial nitrogen gas in solid-state nitrogen-containing inorganic compounds. Journal of Synchrotron Radiation, 2008, 15, 532-534.	2.4	42
45	Relationship between nitrifier and denitrifier community composition and abundance in predicting nitrous oxide emissions from ephemeral wetland soils. Soil Biology and Biochemistry, 2008, 40, 1114-1123.	8.8	112
46	Hydrocarbon degradation potential and activity of endophytic bacteria associated with prairie plants. Soil Biology and Biochemistry, 2008, 40, 3054-3064.	8.8	137
47	Soil Formate Regulates the Fungal Nitrous Oxide Emission Pathway. Applied and Environmental Microbiology, 2008, 74, 6690-6696.	3.1	37
48	Assessing spatial distribution and joint uncertainty of TPH-fractions: Indicator kriging and sequential indicator simulation. Canadian Journal of Soil Science, 2007, 87, 551-563.	1.2	1
49	Upslope length improves spatial estimation of soil organic carbon content. Canadian Journal of Soil Science, 2007, 87, 291-300.	1.2	10
50	Assessing the potential of ammonia oxidizing bacteria to produce nitrous oxide in soils of a high arctic lowland ecosystem on Devon Island, Canada. Soil Biology and Biochemistry, 2007, 39, 2001-2013.	8.8	86
51	Probability Distribution and Spatial Dependence of Nitrous Oxide Emission. Soil Science Society of America Journal, 2006, 70, 753-762.	2.2	88
52	Wavelet Spectra of Nitrous Oxide Emission from Hummocky Terrain during Spring Snowmelt. Soil Science Society of America Journal, 2006, 70, 1110-1120.	2.2	29
53	Influence of montmorillonite layered silicate on plasticized poly(l-lactide) blown films. Polymer, 2005, 46, 11716-11727.	3.8	227
54	Characterizing spatial and temporal variations in CO2 fluxes from ground surface using three complimentary measurement techniques. Journal of Hydrology, 2005, 311, 80-90.	5.4	17

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55	Plant-Assisted Degradation of Phenanthrene as Assessed by Solid-Phase Microextraction (SPME). International Journal of Phytoremediation, 2004, 6, 253-268.	3.1	13
56	Natural revegetation of hydrocarbon-contaminated soil in semi-arid grasslands. Canadian Journal of Botany, 2004, 82, 22-30.	1.1	35
57	Hydrocarbon Tolerance Correlates with Seed Mass and Relative Growth Rate. Bioremediation Journal, 2004, 8, 185-199.	2.0	12
58	Ability of Cold-Tolerant Plants to Grow in Hydrocarbon-Contaminated Soil. International Journal of Phytoremediation, 2003, 5, 105-123.	3.1	30
59	AN INTER-LABORATORY COMPARISON OF NITROUS OXIDE ANALYSIS IN WESTERN CANADA. Communications in Soil Science and Plant Analysis, 2002, 33, 2705-2713.	1.4	2
60	Title is missing!. Journal of Polymers and the Environment, 2000, 8, 81-89.	5.0	3
61	Processing, performance and biodegradability of a thermoplastic aliphatic polyester/starch system. Polymer, 1999, 40, 6777-6788.	3.8	200
62	Effects of cultivation on the activity and kinetics of arylsulfatase in Saskatchewan soils. Soil Biology and Biochemistry, 1994, 26, 1033-1040.	8.8	34
63	Recycling of the naturally-occurring 15N In an established stand of Leucaena leucocephala. Soil Biology and Biochemistry, 1994, 26, 757-762.	8.8	69
64	Construction and evaluation of a reference electrode assembly for use in monitoringin situsoil redox potentials. Communications in Soil Science and Plant Analysis, 1991, 22, 1059-1068.	1.4	20
65	Construction and evaluation of a potassium-selective tube-mounted membrane electrode. Talanta, 1984, 31, 1005-1007.	5.5	6