Daryl L Moorhead

List of Publications by Year
in descending order

67	5,218	109321	102487
papers	citations	35 h-index	66 g-index

67	67	67	4988
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A THEORETICAL MODEL OF LITTER DECAY AND MICROBIAL INTERACTION. Ecological Monographs, 2006, 76, 151-174.	5.4	699
2	Carbon use efficiency of microbial communities: stoichiometry, methodology and modelling. Ecology Letters, 2013, 16, 930-939.	6.4	627
3	Antarctic climate cooling and terrestrial ecosystem response. Nature, 2002, 415, 517-520.	27.8	399
4	Vector analysis of ecoenzyme activities reveal constraints on coupled C, N and P dynamics. Soil Biology and Biochemistry, 2016, 93, 1-7.	8.8	344
5	Stoichiometry of microbial carbon use efficiency in soils. Ecological Monographs, 2016, 86, 172-189.	5.4	253
6	A theoretical model of C- and N-acquiring exoenzyme activities, which balances microbial demands during decomposition. Soil Biology and Biochemistry, 2012, 53, 133-141.	8.8	149
7	Physical Controls on the Taylor Valley Ecosystem, Antarctica. BioScience, 1999, 49, 961-971.	4.9	147
8	Extracellular enzyme kinetics scale with resource availability. Biogeochemistry, 2014, 121, 287-304.	3.5	147
9	The Millennial model: in search of measurable pools and transformations for modeling soil carbon in the new century. Biogeochemistry, 2018, 137, 51-71.	3.5	139
10	Physical Controls on the Taylor Valley Ecosystem, Antarctica. BioScience, 1999, 49, 961.	4.9	128
11	Inorganic N and P dynamics of Antarctic glacial meltwater streams as controlled by hyporheic exchange and benthic autotrophic communities. Journal of the North American Benthological Society, 2004, 23, 171-188.	3.1	124
12	Eco-enzymatic stoichiometry and enzymatic vectors reveal differential C, N, P dynamics in decaying litter along a land-use gradient. Biogeochemistry, 2016, 129, 21-36.	3.5	106
13	Effects of increasing ultraviolet B radiation on decomposition and soil organic matter dynamics: a synthesis and modelling study. Biology and Fertility of Soils, 1994, 18, 19-26.	4.3	87
14	A general model of litter decomposition in the northern Chihuahuan Desert. Ecological Modelling, 1991, 56, 197-219.	2.5	85
15	Ecological Legacies: Impacts on Ecosystems of the McMurdo Dry Valleys. BioScience, 1999, 49, 1009-1019.	4.9	80
16	Organic matter and soil biota of upland wetlands in Taylor Valley, Antarctica. Polar Biology, 2003, 26, 567-576.	1.2	72
17	Impact of fine litter chemistry on lignocellulolytic enzyme efficiency during decomposition of maize leaf and root in soil. Biogeochemistry, 2014, 117, 169-183.	3.5	65
18	Scaling microbial biomass, metabolism and resource supply. Biogeochemistry, 2015, 122, 175-190.	3.5	65

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19	Simulated patterns of litter decay predict patterns of extracellular enzyme activities. Applied Soil Ecology, 2000, 14, 71-79.	4.3	64
20	Stoichiometric models of microbial metabolic limitation in soil systems. Global Ecology and Biogeography, 2021, 30, 2297-2311.	5.8	64
21	Mechanisms of surface litter mass loss in the northern Chihuahuan desert: a reinterpretation. Journal of Arid Environments, 1989, 16, 157-163.	2.4	63
22	Decomposition processes: modelling approaches and applications. Science of the Total Environment, 1996, 183, 137-149.	8.0	63
23	Plant, microbial and ecosystem carbon use efficiencies interact to stabilize microbial growth as a fraction of gross primary production. New Phytologist, 2017, 214, 1518-1526.	7.3	62
24	The relationship between rates of lignin and cellulose decay in aboveground forest litter. Soil Biology and Biochemistry, 2008, 40, 2620-2626.	8.8	60
25	Interactions between leaf litter quality, particle size, and microbial community during the earliest stage of decay. Biogeochemistry, 2014, 117, 153-168.	3.5	59
26	Ecological Legacies: Impacts on Ecosystems of the McMurdo Dry Valleys. BioScience, 1999, 49, 1009.	4.9	58
27	Microbial substrate preference and community dynamics during decomposition of Acer saccharum. Fungal Ecology, 2011, 4, 396-407.	1.6	57
28	Soil respiration response to prescribed burning and thinning in mixed-conifer and hardwood forests. Canadian Journal of Forest Research, 2005, 35, 1581-1591.	1.7	56
29	Elevated CO2 alters belowground exoenzyme activities in tussock tundra. Plant and Soil, 1997, 189, 321-329.	3.7	50
30	Calculating co-metabolic costs of lignin decay and their impacts on carbon use efficiency. Soil Biology and Biochemistry, 2013, 66, 17-19.	8.8	47
31	Soil enzymes in response to climate warming: Mechanisms and feedbacks. Functional Ecology, 2022, 36, 1378-1395.	3.6	44
32	Succession of Macroinvertebrates in Playas of the Southern High Plains, USA. Journal of the North American Benthological Society, 1998, 17, 430-442.	3.1	40
33	Decreasing microbial phosphorus limitation increases soil carbon release. Geoderma, 2022, 419, 115868.	5.1	39
34	Effects of elevated pH and phosphorus fertilizer on soil C, N and P enzyme stoichiometry in an acidic mixed mesophytic deciduous forest. Soil Biology and Biochemistry, 2020, 150, 107996.	8.8	38
35	Development of Corpora Lutea and Plasma Progesterone Levels Associated with the Onset of the Breeding Season in White-tailed Deer (Odocoileus virginianus). Biology of Reproduction, 1980, 22, 185-191.	2.7	36
36	Effects of Climate Change on Decomposition in Arctic Tussock Tundra: A Modeling Synthesis. Arctic and Alpine Research, 1993, 25, 403.	1.3	34

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37	Modelling the contribution of benthic microbial mats to net primary production in Lake Hoare, McMurdo Dry Valleys. Antarctic Science, 2005, 17, 33-45.	0.9	31
38	The contribution of abiotic processes to buried litter decomposition in the northern Chihuahuan desert. Oecologia, 1989, 79, 133-135.	2.0	30
39	Distribution and life-cycle of Scottnema lindsayae (Nematoda) in Antarctic soils: a modeling analysis of temperature responses. Polar Biology, 2002, 25, 118-125.	1.2	30
40	The geochemistry of upland ponds, Taylor Valley, Antarctica. Antarctic Science, 2012, 24, 3-14.	0.9	30
41	Mixed litter decomposition in a managed Missouri Ozark forest ecosystem. Forest Ecology and Management, 2009, 257, 688-694.	3.2	29
42	Estimating relative cellulolytic and ligninolytic enzyme activities as functions of lignin and cellulose content in decomposing plant litter. Soil Biology and Biochemistry, 2020, 141, 107689.	8.8	28
43	Plants retard litter decay in a nutrient-limited soil: a case of exploitative competition?. Oecologia, 1998, 113, 530-536.	2.0	27
44	Field and lab conditions alter microbial enzyme and biomass dynamics driving decomposition of the same leaf litter. Frontiers in Microbiology, 2013, 4, 260.	3.5	27
45	Estimating microbial carbon use efficiency in soil: Isotope-based and enzyme-based methods measure fundamentally different aspects of microbial resource use. Soil Biology and Biochemistry, 2022, 169, 108677.	8.8	26
46	Interacting Microbe and Litter Quality Controls on Litter Decomposition: A Modeling Analysis. PLoS ONE, 2014, 9, e108769.	2.5	25
47	Effect of atrazine on the productivity of artificial stream algal communities. Bulletin of Environmental Contamination and Toxicology, 1986, 37, 330-336.	2.7	24
48	Effects of timber harvest on carbon pools in Ozark forests. Canadian Journal of Forest Research, 2007, 37, 2337-2348.	1.7	23
49	A modeling study of soil temperature and moisture effects on population dynamics of Paronychiurus kimi (Collembola: Onychiuridae). Biology and Fertility of Soils, 2006, 43, 69-75.	4.3	22
50	The evolution and application of the reverse Michaelis-Menten equation. Soil Biology and Biochemistry, 2018, 125, 261-262.	8.8	22
51	Freshwater mussel community response to warm water discharge in western Lake Erie. Journal of Great Lakes Research, 2013, 39, 449-454.	1.9	18
52	Density-dependent habitat selection: evaluating isoleg theory with a Lotka-Volterra model. Oikos, 2002, 97, 184-194.	2.7	17
53	PATTERNS OF STRATIFIED SOIL WATER LOSS IN A CHIHUAHUAN DESERT COMMUNITY. Soil Science, 1989, 148, 244-249.	0.9	16
54	Environmental Factors Associated with Deep Chlorophyll Maxima in Dry Valley Lakes, South Victoria Land, Antarctica. Arctic, Antarctic, and Alpine Research, 2006, 38, 179-189.	1.1	16

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55	Respiratory carbon losses in a managed oak forest ecosystem. Forest Ecology and Management, 2012, 279, 1-10.	3.2	16
56	Impact of light regimes on productivity patterns of benthic microbial mats in an antarctic lake: A modeling study. Limnology and Oceanography, 1997, 42, 1561-1569.	3.1	15
57	Population Dynamics ofCulex restuansandCulex pipiens(Diptera: Culicidae) Related to Climatic Factors in Northwest Ohio. Environmental Entomology, 2015, 44, 1022-1028.	1.4	14
58	Feeding Preference of an Aquatic Gastropod, Marisa cornuarietis: Effects of Pre-Exposure. Journal of the North American Benthological Society, 1993, 12, 431-437.	3.1	13
59	Extracellular Acid Phosphatase Activities in Eriophorum vaginatum Tussocks: A Modeling Synthesis. Arctic and Alpine Research, 1993, 25, 50.	1.3	12
60	The impact of anhydrobiosis on the persistence of Scottnema lindsayae (Nematoda): a modeling analysis of population stability thresholds. Polar Biology, 2004, 27, 507.	1.2	11
61	Differential Responses of Soil Extracellular Enzyme Activities to Salinization: Implications for Soil Carbon Cycling in Tidal Wetlands. Global Biogeochemical Cycles, 2022, 36, .	4.9	11
62	Mesoscale Dynamics of Ephemeral Wetlands in the Antarctic Dry Valleys: Implications to Production and Distribution of Organic Matter. Ecosystems, 2007, 10, 87-95.	3.4	10
63	Diversity analysis of water sources, uses, and flows from source to use in the USA. Science of the Total Environment, 2019, 652, 1409-1415.	8.0	10
64	Progressively decreased nitrogen-stimulation of soil phosphatase activity with long-term nitrogen addition. Applied Soil Ecology, 2022, 169, 104213.	4.3	8
65	Habitat characteristics of a unionid refuge in the thermal plume of a power plant in western Lake Erie. Journal of Great Lakes Research, 2014, 40, 699-704.	1.9	4
66	A THEORETICAL MODEL OF LITTER DECAY AND MICROBIAL INTERACTION. , 2006, 76, 151.		2
67	Simulation Studies of Ideal Free Distribution and Competition. Israel Journal of Ecology and Evolution, 2008, 54, 329-344.	0.6	1