A Stuart Grandy

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/3934648/publications.pdf

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41 papers

5,015 citations

30 h-index 276875 41 g-index

43 all docs 43 docs citations

times ranked

43

5559 citing authors

#	Article	IF	CITATIONS
1	Direct evidence for microbial-derived soil organic matter formation and its ecophysiological controls. Nature Communications, 2016, 7, 13630.	12.8	954
2	Molecular C dynamics downstream: The biochemical decomposition sequence and its impact on soil organic matter structure and function. Science of the Total Environment, 2008, 404, 297-307.	8.0	467
3	Land-Use Intensity Effects on Soil Organic Carbon Accumulation Rates and Mechanisms. Ecosystems, 2007, 10, 59-74.	3.4	325
4	The origin of litter chemical complexity during decomposition. Ecology Letters, 2012, 15, 1180-1188.	6.4	316
5	Roots and fungi accelerate carbon and nitrogen cycling in forests exposed to elevated CO ₂ . Ecology Letters, 2012, 15, 1042-1049.	6.4	251
6	Microbial carbon use efficiency: accounting for population, community, and ecosystem-scale controls over the fate of metabolized organic matter. Biogeochemistry, 2016, 127, 173-188.	3.5	249
7	Controls over soil microbial biomass responses to carbon amendments in agricultural systems: A meta-analysis. Agriculture, Ecosystems and Environment, 2011, 144, 241-252.	5.3	225
8	Minerals in the rhizosphere: overlooked mediators of soil nitrogen availability to plants and microbes. Biogeochemistry, 2018, 139, 103-122.	3.5	203
9	Addressing agricultural nitrogen losses in a changing climate. Nature Sustainability, 2018, 1, 399-408.	23.7	175
10	The influence of microbial communities, management, and soil texture on soil organic matter chemistry. Geoderma, 2009, 150, 278-286.	5.1	163
11	Organic Amendment and Rotation Crop Effects on the Recovery of Soil Organic Matter and Aggregation in Potato Cropping Systems. Soil Science Society of America Journal, 2002, 66, 1311-1319.	2.2	133
12	Nitrogen deposition effects on soil organic matter chemistry are linked to variation in enzymes, ecosystems and size fractions. Biogeochemistry, 2008, 91, 37-49.	3.5	116
13	Beyond microbes: Are fauna the next frontier in soil biogeochemical models?. Soil Biology and Biochemistry, 2016, 102, 40-44.	8.8	107
14	Carbon structure and enzyme activities in alpine and forest ecosystems. Soil Biology and Biochemistry, 2007, 39, 2701-2711.	8.8	106
15	Initial cultivation of a temperate-region soil immediately accelerates aggregate turnover and CO2 and N2 O fluxes. Global Change Biology, 2006, 12, 1507-1520.	9.5	92
16	Fast-decaying plant litter enhances soil carbon in temperate forests but not through microbial physiological traits. Nature Communications, 2022, 13, 1229.	12.8	92
17	Managing Agroecosystems for Soil Microbial Carbon Use Efficiency: Ecological Unknowns, Potential Outcomes, and a Path Forward. Frontiers in Microbiology, 2019, 10, 1146.	3.5	89
18	Changes in substrate availability drive carbon cycle response to chronic warming. Soil Biology and Biochemistry, 2017, 110, 68-78.	8.8	73

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19	Priming mechanisms providing plants and microbes access to mineral-associated organic matter. Soil Biology and Biochemistry, 2021, 158, 108265.	8.8	71
20	The oribatid mite Scheloribates moestus (Acari: Oribatida) alters litter chemistry and nutrient cycling during decomposition. Soil Biology and Biochemistry, 2011, 43, 351-358.	8.8	70
21	Rapid and distinct responses of particulate and mineral-associated organic nitrogen to conservation tillage and cover crops. Geoderma, 2020, 359, 114001.	5.1	66
22	A holistic framework integrating plant-microbe-mineral regulation of soil bioavailable nitrogen. Biogeochemistry, 2021, 154, 211-229.	3. 5	63
23	Soil carbon cycling proxies: Understanding their critical role in predicting climate change feedbacks. Global Change Biology, 2018, 24, 895-905.	9.5	61
24	Manganese limitation as a mechanism for reduced decomposition in soils under atmospheric nitrogen deposition. Soil Biology and Biochemistry, 2018, 127, 252-263.	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	Management intensity alters decomposition via biological pathways. Biogeochemistry, 2011, 104, 365-379.	3. 5	58
27	Anthropogenic N deposition alters soil organic matter biochemistry and microbial communities on decaying fine roots. Global Change Biology, 2019, 25, 4369-4382.	9.5	40
28	Warming alters fungal communities and litter chemistry with implications for soil carbon stocks. Soil Biology and Biochemistry, 2019, 132, 120-130.	8.8	36
29	Stoichiometrically coupled carbon and nitrogen cycling in the MIcrobial-MIneral Carbon Stabilization model version 1.0 (MIMICS-CN v1.0). Geoscientific Model Development, 2020, 13, 4413-4434.	3.6	35
30	Assessing microbial residues in soil as a potential carbon sink and moderator of carbon use efficiency. Biogeochemistry, 2020, 151, 237-249.	3. 5	33
31	Nitrogen alters microbial enzyme dynamics but not lignin chemistry during maize decomposition. Biogeochemistry, 2016, 128, 171-186.	3.5	31
32	Management intensity interacts with litter chemistry and climate to drive temporal patterns in arthropod communities during decomposition. Pedobiologia, 2013, 56, 105-112.	1.2	30
33	Going with the flow: Landscape position drives differences in microbial biomass and activity in conventional, low input, and organic agricultural systems in the Midwestern U.S Agriculture, Ecosystems and Environment, 2016, 218, 1-10.	5.3	29
34	Increasing the spatial and temporal impact of ecological research: A roadmap for integrating a novel terrestrial process into an Earth system model. Global Change Biology, 2022, 28, 665-684.	9.5	27
35	Reconciling opposing soil processes in row-crop agroecosystems via soil functional zone management. Agriculture, Ecosystems and Environment, 2017, 236, 99-107.	5. 3	23
36	Soil organic carbon is not just for soil scientists: measurement recommendations for diverse practitioners. Ecological Applications, 2021, 31, e02290.	3.8	18

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37	SoDaH: the SOils DAta Harmonization database, an open-source synthesis of soil data from research networks, version 1.0. Earth System Science Data, 2021, 13, 1843-1854.	9.9	17
38	Fungal community response to longâ€ŧerm soil warming with potential implications for soil carbon dynamics. Ecosphere, 2021, 12, e03460.	2.2	17
39	Crop rotational complexity affects plant-soil nitrogen cycling during water deficit. Soil Biology and Biochemistry, 2022, 166, 108552.	8.8	15
40	Microbial feedbacks on soil organic matter dynamics underlying the legacy effect of diversified cropping systems. Soil Biology and Biochemistry, 2022, 167, 108584.	8.8	14
41	Saving our soils. Frontiers in Ecology and the Environment, 2010, 8, 171-171.	4.0	3