Jonathan Sanderman

List of Publications by Year
in descending order

92	9,237	57758 44	45317 90
papers	citations	h-index	g-index

101	101	101	10349
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Improving Soil Carbon Estimates by Linking Conceptual Pools Against Measurable Carbon Fractions in the DAYCENT Model Version 4.5. Journal of Advances in Modeling Earth Systems, 2022, 14, .	3.8	13
2	A global soil spectral calibration library and estimation service. Soil Security, 2022, 7, 100061.	2.3	11
3	Mid-infrared spectroscopy for planted forest soil and foliage nutrition predictions, New Zealand case study. Trees, Forests and People, 2022, 8, 100280.	1.9	6
4	The need for knowledge transfer and communication among stakeholders in the voluntary carbon market. Biogeochemistry, 2022, 161, 41-46.	3.5	6
5	Declines in soil carbon storage under no tillage can be alleviated in the long run. Geoderma, 2022, 425, 116028.	5.1	28
6	Fine grinding is needed to maintain the high accuracy of midâ€infrared diffuse reflectance spectroscopy for soil property estimation. Soil Science Society of America Journal, 2021, 85, 263-272.	2.2	15
7	Delayed impact of natural climate solutions. Global Change Biology, 2021, 27, 215-217.	9.5	20
8	Patterns and predictors of soil organic carbon storage across a continental-scale network. Biogeochemistry, 2021, 156, 75-96.	3.5	19
9	A combined microbial and ecosystem metric of carbon retention efficiency explains land cover-dependent soil microbial biodiversityâ€“ecosystem function relationships. Biogeochemistry, 2021, 153, 1-15.	3.5	5
10	Soil organic carbon fractions in the Great Plains of the United States: an application of mid-infrared spectroscopy. Biogeochemistry, 2021, 156, 97-114.	3.5	31
11	Future carbon emissions from global mangrove forest loss. Global Change Biology, 2021, 27, 2856-2866.	9.5	93
12	Evaluating three calibration transfer methods for predictions of soil properties using midâ€infrared spectroscopy. Soil Science Society of America Journal, 2021, 85, 501-519.	2.2	11
13	Can Agricultural Management Induced Changes in Soil Organic Carbon Be Detected Using Mid-Infrared Spectroscopy?. Remote Sensing, 2021, 13, 2265.	4.0	8
14	Controls on the Spatial Distribution of Nearâ€Surface Pyrogenic Carbon on Hillslopes 1 Year Following Wildfire. Journal of Geophysical Research F: Earth Surface, 2021, 126, e2020JF005996.	2.8	5
15	Soil organic carbon estimation using VNIRâ€“SWIR spectroscopy: The effect of multiple sensors and scanning conditions. Soil and Tillage Research, 2021, 211, 105017.	5.6	16
16	Soil Organic Carbon Development and Turnover in Natural and Disturbed Salt Marsh Environments. Geophysical Research Letters, 2021, 48, e2020GL090287.	4.0	12
17	Landâ€based measures to mitigate climate change: Potential and feasibility by country. Global Change Biology, 2021, 27, 6025-6058.	9.5	114
18	Towards a global-scale soil climate mitigation strategy. Nature Communications, 2020, 11, 5427.	12.8	302

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19	Is Standardization Necessary for Sharing of a Large Mid-Infrared Soil Spectral Library?. Sensors, 2020, 20, 6729.	3.8	26
20	The role of soil carbon in natural climate solutions. Nature Sustainability, 2020, 3, 391-398.	23.7	571
21	Protecting irrecoverable carbon in Earthâ€™s ecosystems. Nature Climate Change, 2020, 10, 287-295.	18.8	159
22	Midâ€infrared spectroscopy for prediction of soil health indicators in the United States. Soil Science Society of America Journal, 2020, 84, 251-261.	2.2	53
23	Decreased Soil Organic Matter in a Longâ€Term Soil Warming Experiment Lowers Soil Water Holding Capacity and Affects Soil Thermal and Hydrological Buffering. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2019JG005158.	3.0	21
24	Drivers and modelling of blue carbon stock variability in sediments of southeastern Australia. Biogeosciences, 2020, 17, 2041-2059.	3.3	24
25	Ramped thermal analysis for isolating biologically meaningful soil organic matter fractions with distinct residence times. Soil, 2020, 6, 131-144.	4.9	32
26	Soil carbon pools and fluxes vary across a burn severity gradient three years after wildfire in Sierra Nevada mixed-conifer forest. Geoderma, 2019, 333, 10-22.	5.1	27
27	Nitrate addition stimulates microbial decomposition of organic matter in salt marsh sediments. Global Change Biology, 2019, 25, 3224-3241.	9.5	61
28	Global-change controls on soil-carbon accumulation and loss in coastal vegetated ecosystems. Nature Geoscience, 2019, 12, 685-692.	12.9	176
29	Australian vegetated coastal ecosystems as global hotspots for climate change mitigation. Nature Communications, 2019, 10, 4313.	12.8	150
30	Accurate and Precise Prediction of Soil Properties from a Large Mid-Infrared Spectral Library. Soil Systems, 2019, 3, 11.	2.6	88
31	Vulnerability of seagrass blue carbon to microbial attack following exposure to warming and oxygen. Science of the Total Environment, 2019, 686, 264-275.	8.0	42
32	Losses of mineral soil carbon largely offset biomass accumulation 15Âyears after whole-tree harvest in a northern hardwood forest. Biogeochemistry, 2019, 144, 1-14.	3.5	14
33	Soil carbon science for policy and practice. Nature Sustainability, 2019, 2, 1070-1072.	23.7	80
34	Contribution of the land sector to a 1.5 Â°C world. Nature Climate Change, 2019, 9, 817-828.	18.8	301
35	Pathways of mineralâ€associated soil organic matter formation: Integrating the role of plant carbon source, chemistry, and point of entry. Global Change Biology, 2019, 25, 12-24.	9.5	323
36	Climate-dependent topographic effects on pyrogenic soil carbon in southeastern Australia. Geoderma, 2018, 322, 121-130.	5.1	9

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37	A global map of mangrove forest soil carbon at 30â€‰m spatial resolution. Environmental Research Letters, 2018, 13, 055002.	5.2	231
38	Comment on â€œClimate legacies drive global soil carbon stocks in terrestrial ecosystemsâ€• Science Advances, 2018, 4, e1701482.	10.3	11
39	Variability and Vulnerability of Coastal â€˜Blue Carbonâ€™ Stocks: A Case Study from Southeast Australia. Ecosystems, 2018, 21, 263-279.	3.4	54
40	Natural climate solutions for the United States. Science Advances, 2018, 4, eaat1869.	10.3	333
41	Exploring drivers of litter decomposition in a greening Arctic: results from a transplant experiment across a treeline. Ecology, 2018, 99, 2284-2294.	3.2	38
42	Global mapping of potential natural vegetation: an assessment of machine learning algorithms for estimating land potential. PeerJ, 2018, 6, e5457.	2.0	94
43	Assessing soil carbon vulnerability in the Western USA by geospatial modeling of pyrogenic and particulate carbon stocks. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 354-369.	3.0	17
44	Pyrogenic carbon distribution in mineral topsoils of the northeastern United States. Geoderma, 2017, 296, 69-78.	5.1	7
45	The soil carbon erosion paradox. Nature Climate Change, 2017, 7, 317-319.	18.8	35
46	Sediment anoxia limits microbial-driven seagrass carbon remineralization under warming conditions. FEMS Microbiology Ecology, 2017, 93, .	2.7	82
47	Is demineralization with dilute hydrofluoric acid a viable method for isolating mineral stabilized soil organic matter?. Geoderma, 2017, 304, 4-11.	5.1	19
48	Carbon sequestration by Australian tidal marshes. Scientific Reports, 2017, 7, 44071.	3.3	112
49	Natural climate solutions. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 11645-11650.	7.1	1,709
50	Soil carbon debt of 12,000 years of human land use. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 9575-9580.	7.1	713
51	Dissolved organic matter retention in volcanic soils with contrasting mineralogy: a column sorption experiment. Biogeochemistry, 2017, 135, 293-306.	3.5	4
52	A Global Assessment of the Chemical Recalcitrance of Seagrass Tissues: Implications for Long-Term Carbon Sequestration. Frontiers in Plant Science, 2017, 8, 925.	3.6	67
53	Post-wildfire Erosion in Mountainous Terrain Leads to Rapid and Major Redistribution of Soil Organic Carbon. Frontiers in Earth Science, 2017, 5, .	1.8	27
54	Greater soil carbon stocks and faster turnover rates with increasing agricultural productivity. Soil, 2017, 3, 1-16.	4.9	49

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55	Redefining the inert organic carbon pool. Soil Biology and Biochemistry, 2016, 92, 149-152.	8.8	27
56	The global significance of omitting soil erosion from soil organic carbon cycling schemes. Nature Climate Change, 2016, 6, 187-191.	18.8	168
57	Abiotic dissolution and biological uptake of nitrous oxide inÂMediterranean woodland and pasture soil. Soil Biology and Biochemistry, 2015, 82, 62-64.	8.8	11
58	Deciphering sedimentary organic matter sources: Insights from radiocarbon measurements and NMR spectroscopy. Limnology and Oceanography, 2015, 60, 739-753.	3.1	9
59	Subtropical giant podzol chronosequence reveals that soil carbon stabilisation is not governed by litter quality. Biogeochemistry, 2015, 124, 205-217.	3.5	13
60	Losses and recovery of organic carbon from a seagrass ecosystem following disturbance. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20151537.	2.6	102
61	Divergent responses of organic matter composition to incubation temperature. Geoderma, 2015, 259-260, 279-287.	5.1	3
62	Microbial degradation of organic carbon sorbed to phyllosilicate clays with and without hydrous iron oxide coating. European Journal of Soil Science, 2015, 66, 83-94.	3.9	36
63	Microbial community structure mediates response of soil C decomposition to litter addition and warming. Soil Biology and Biochemistry, 2015, 80, 175-188.	8.8	180
64	Impacts of Rotational Grazing on Soil Carbon in Native Grass-Based Pastures in Southern Australia. PLoS ONE, 2015, 10, e0136157.	2.5	43
65	Similar composition but differential stability of mineral retained organic matter across four classes of clay minerals. Biogeochemistry, 2014, 121, 409-424.	3.5	72
66	Biogeochemistry of Decomposition and Detrital Processing. , 2014, , 217-272.		4
67	Carbon sequestration under subtropical perennial pastures II: Carbon dynamics. Soil Research, 2013, 51, 771.	1.1	20
68	Carbon sequestration under subtropical perennial pastures I: Overall trends. Soil Research, 2013, 51, 760.	1.1	21
69	Uncertainty in soil carbon accounting due to unrecognized soil erosion. Global Change Biology, 2013, 19, 264-272.	9.5	50
70	The sorption of organic carbon onto differing clay minerals in the presence and absence of hydrous iron oxide. Geoderma, 2013, 209-210, 15-21.	5.1	117
71	Differential production yet chemical similarity of dissolved organic matter across a chronosequence with contrasting nutrient availability in Hawaii. Biogeochemistry, 2013, 113, 259-269.	3.5	8
72	Quantifying the allocation of soil organic carbon to biologically significant fractions. Soil Research, 2013, 51, 561.	1.1	129

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73	Identifying sources and processes influencing nitrogen export to a small stream using dual isotopes of nitrate. Water Resources Research, 2013, 49, 5715-5731.	4.2	38
74	Allocation into soil organic matter fractions of 14C captured via photosynthesis by two perennial grass pastures. Soil Research, 2013, 51, 748.	1.1	14
75	Predicting contents of carbon and its component fractions in Australian soils from diffuse reflectance mid-infrared spectra. Soil Research, 2013, 51, 577.	1.1	175
76	Whole Farm Net Greenhouse Gas Abatement from Establishing Kikuyu-Based Perennial Pastures in South-Western Australia. Animals, 2012, 2, 316-330.	2.3	9
77	Sorption of dissolved organic matter in salt-affected soils: Effect of salinity, sodicity and texture. Science of the Total Environment, 2012, 435-436, 337-344.	8.0	74
78	Effects of clay mineralogy and hydrous iron oxides on labile organic carbon stabilisation. Geoderma, 2012, 173-174, 104-110.	5.1	114
79	The dynamics of soil redistribution and the implications for soil organic carbon accounting in agricultural southâ€eastern <scp>A</scp>ustralia. Global Change Biology, 2012, 18, 2081-2088.	9.5	48
80	Can management induced changes in the carbonate system drive soil carbon sequestration? A review with particular focus on Australia. Agriculture, Ecosystems and Environment, 2012, 155, 70-77.	5.3	102
81	Longâ€term carbon storage through retention of dissolved aromatic acids by reactive particles in soil. Global Change Biology, 2012, 18, 2594-2605.	9.5	236
82	Salinity and sodicity affect soil respiration and dissolved organic matter dynamics differentially in soils varying in texture. Soil Biology and Biochemistry, 2012, 45, 8-13.	8.8	158
83	Soil Carbon Dioxide Production and Climatic Sensitivity in Contrasting California Ecosystems. Soil Science Society of America Journal, 2010, 74, 1356-1366.	2.2	15
84	Accounting for soil carbon sequestration in national inventories: a soil scientistâ€™s perspective. Environmental Research Letters, 2010, 5, 034003.	5.2	118
85	A comparative study of dissolved organic carbon transport and stabilization in California forest and grassland soils. Biogeochemistry, 2009, 92, 41-59.	3.5	51
86	Spatial patterns and controls of soil chemical weathering rates along a transient hillslope. Earth and Planetary Science Letters, 2009, 288, 184-193.	4.4	47
87	Linking soils and streams: Sources and chemistry of dissolved organic matter in a small coastal watershed. Water Resources Research, 2009, 45, .	4.2	114
88	Dissolved organic carbon chemistry and dynamics in contrasting forest and grassland soils. Biogeochemistry, 2008, 89, 181-198.	3.5	173
89	A comparative study of dissolved organic carbon transport and stabilization in California forest and grassland soils. Biogeochemistry, 2008, 89, 309-327.	3.5	83
90	Role of large-scale soil structure in organic carbon turnover: Evidence from California grassland soils. Journal of Geophysical Research, 2006, 111, .	3.3	67

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91	Application of eddy covariance measurements to the temperature dependence of soil organic matter mean residence time. Global Biogeochemical Cycles, 2003, 17, n/a-n/a.	4.9	93
92	Biogeochemistry of Decomposition and Detrital Processing. , 2003, , 249-316.		16