Marco Keiluweit

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/5775335/publications.pdf

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43 papers	8,415 citations	172457 29 h-index	243625 44 g-index
54 all docs	54 docs citations	54 times ranked	9579 citing authors

#	Article	IF	Citations
1	Beyond bulk: Density fractions explain heterogeneity in global soil carbon abundance and persistence. Global Change Biology, 2022, 28, 1178-1196.	9.5	67
2	Sulfur Biogeochemical Cycling and Redox Dynamics in a Shaleâ€Dominated Mountainous Watershed. Journal of Geophysical Research G: Biogeosciences, 2022, 127, .	3.0	5
3	Long-Term Warming Decreases Redox Capacity of Soil Organic Matter. Environmental Science and Technology Letters, 2021, 8, 92-97.	8.7	15
4	Simple Plant and Microbial Exudates Destabilize Mineral-Associated Organic Matter via Multiple Pathways. Environmental Science & Technology, 2021, 55, 3389-3398.	10.0	63
5	Development of energetic and enzymatic limitations on microbial carbon cycling in soils. Biogeochemistry, 2021, 153, 191-213.	3.5	14
6	A holistic framework integrating plant-microbe-mineral regulation of soil bioavailable nitrogen. Biogeochemistry, 2021, 154, 211-229.	3.5	63
7	Redox Properties of Pyrogenic Dissolved Organic Matter (pyDOM) from Biomass-Derived Chars. Environmental Science & Technology, 2021, 55, 11434-11444.	10.0	21
8	Priming mechanisms providing plants and microbes access to mineral-associated organic matter. Soil Biology and Biochemistry, 2021, 158, 108265.	8.8	71
9	Proteins unbound â€“ how ectomycorrhizal fungi can tap a vast reservoir of mineralâ€associated organic nitrogen. New Phytologist, 2020, 228, 406-408.	7.3	4
10	Enzymes, Manganese, or Iron? Drivers of Oxidative Organic Matter Decomposition in Soils. Environmental Science & Technology, 2020, 54, 14114-14123.	10.0	63
11	Effect of Cover Crop on Carbon Distribution in Size and Density Separated Soil Aggregates. Soil Systems, 2020, 4, 6.	2.6	8
12	Shale as a Source of Organic Carbon in Floodplain Sediments of a Mountainous Watershed. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2019JG005419.	3.0	14
13	An open-source database for the synthesis of soil radiocarbon data: International Soil Radiocarbon Database (ISRaD) version 1.0. Earth System Science Data, 2020, 12, 61-76.	9.9	48
14	Shifting mineral and redox controls on carbon cycling in seasonally flooded mineral soils. Biogeosciences, 2019, 16, 2573-2589.	3.3	30
15	Root-driven weathering impacts on mineral-organic associations in deep soils over pedogenic time scales. Geochimica Et Cosmochimica Acta, 2019, 263, 68-84.	3.9	29
16	Soil exchange rates of COS and CO18O differ with the diversity of microbial communities and their carbonic anhydrase enzymes. ISME Journal, 2019, 13, 290-300.	9.8	20
17	Mobilization of ferrihydrite-associated organic carbon during Fe reduction: Adsorption versus coprecipitation. Chemical Geology, 2019, 503, 61-68.	3.3	66
18	Effect of simulated diagenesis on the compositions, chemical stability and sorption properties of natural and engineered organic matter with different mineral contents. Organic Geochemistry, 2018, 120, 1-11.	1.8	7

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19	Beyond clay: towards an improved set of variables for predicting soil organic matter content. Biogeochemistry, 2018, 137, 297-306.	3.5	423
20	Anoxic microsites in upland soils dominantly controlled by clay content. Soil Biology and Biochemistry, 2018, 118, 42-50.	8.8	109
21	Quantifying biogeochemical heterogeneity in soil systems. Geoderma, 2018, 324, 89-97.	5.1	23
22	Networking our science to characterize the state, vulnerabilities, and management opportunities of soil organic matter. Global Change Biology, 2018, 24, e705-e718.	9.5	92
23	Manganese-Driven Carbon Oxidation at Oxicâ€“Anoxic Interfaces. Environmental Science & Technology, 2018, 52, 12349-12357.	10.0	54
24	The Ability of Soil Pore Network Metrics to Predict Redox Dynamics is Scale Dependent. Soil Systems, 2018, 2, 66.	2.6	16
25	Improving understanding of soil organic matter dynamics by triangulating theories, measurements, and models. Biogeochemistry, 2018, 140, 1-13.	3.5	83
26	Minerals in the rhizosphere: overlooked mediators of soil nitrogen availability to plants and microbes. Biogeochemistry, 2018, 139, 103-122.	3.5	203
27	Anaerobic microsites have an unaccounted role in soil carbon stabilization. Nature Communications, 2017, 8, 1771.	12.8	276
28	Airborne soil organic particles generated byÂprecipitation. Nature Geoscience, 2016, 9, 433-437.	12.9	71
29	Are oxygen limitations under recognized regulators of organic carbon turnover in upland soils?. Biogeochemistry, 2016, 127, 157-171.	3.5	236
30	Mineralâ€“Organic Associations: Formation, Properties, and Relevance in Soil Environments. Advances in Agronomy, 2015, 130, 1-140.	5.2	801
31	Mineral protection of soil carbon counteracted by root exudates. Nature Climate Change, 2015, 5, 588-595.	18.8	694
32	Long-term litter decomposition controlled by manganese redox cycling. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E5253-60.	7.1	168
33	Aromaticity and degree of aromatic condensation of char. Organic Geochemistry, 2015, 78, 135-143.	1.8	207
34	Redox Properties of Plant Biomass-Derived Black Carbon (Biochar). Environmental Science & Technology, 2014, 48, 5601-5611.	10.0	791
35	3D spectral imaging with synchrotron Fourier transform infrared spectro-microtomography. Nature Methods, 2013, 10, 861-864.	19.0	91
36	Sorptive fractionation of organic matter and formation of organo-hydroxy-aluminum complexes during litter biodegradation in the presence of gibbsite. Geochimica Et Cosmochimica Acta, 2013, 121, 667-683.	3.9	54

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37	Synchrotron-Based Mass Spectrometry to Investigate the Molecular Properties of Mineralâ€“Organic Associations. Analytical Chemistry, 2013, 85, 6100-6106.	6.5	16
38	Polar and aliphatic domains regulate sorption of phthalic acid esters (PAEs) to biochars. Bioresource Technology, 2012, 118, 120-127.	9.6	163
39	Nano-scale investigation of the association of microbial nitrogen residues with iron (hydr)oxides in a forest soil O-horizon. Geochimica Et Cosmochimica Acta, 2012, 95, 213-226.	3.9	107
40	Solvent-Extractable Polycyclic Aromatic Hydrocarbons in Biochar: Influence of Pyrolysis Temperature and Feedstock. Environmental Science & Technology, 2012, 46, 9333-9341.	10.0	238
41	Sorption of fluorinated herbicides to plant biomass-derived biochars as a function of molecular structure. Bioresource Technology, 2011, 102, 9897-9903.	9.6	148
42	Dynamic Molecular Structure of Plant Biomass-Derived Black Carbon (Biochar). Environmental Science & Technology, 2010, 44, 1247-1253.	10.0	2,267
43	Molecular-Level Interactions in Soils and Sediments: The Role of Aromatic Ï€-Systems. Environmental Science & Technology, 2009, 43, 3421-3429.	10.0	467