William C Hockaday

List of Publications by Year in descending order

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52 papers

7,373 citations

28 h-index 197818 **49** g-index

52 all docs 52 docs citations 52 times ranked 8292 citing authors

#	Article	IF	CITATIONS
1	Sorption Dynamics and Energetics of Cinnamic Acid and Its Derivatives at the Ferrihydrite–Water Interface Determined by Flow-Adsorption Microcalorimetry. ACS Earth and Space Chemistry, 2022, 6, 1022-1030.	2.7	O
2	Structure–Energy–Photochemical Activity Relationships in Fluorophoric Water-Extracted Organic Matter from (Un)charred Plant Materials. ACS ES&T Water, 2021, 1, 859-870.	4.6	1
3	Native American fire management at an ancient wildland–urban interface in the Southwest United States. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	62
4	Biochar Volatile Matter and Feedstock Effects on Soil Nitrogen Mineralization and Soil Fungal Colonization. Sustainability, 2021, 13, 2018.	3.2	9
5	High carbon losses from oxygenâ€limited soils challenge biogeochemical theory and model assumptions. Global Change Biology, 2021, 27, 6166-6180.	9.5	13
6	Molecular trade-offs in soil organic carbon composition at continental scale. Nature Geoscience, 2020, 13, 687-692.	12.9	67
7	Tradeâ€offs in soil carbon protection mechanisms under aerobic and anaerobic conditions. Global Change Biology, 2020, 26, 3726-3737.	9.5	52
8	Organic chemical structure relationships to maturity and stability in shales. International Journal of Coal Geology, 2020, 223, 103448.	5.0	10
9	Sorption temperature and the stability of iron-bound soil organic matter. Geoderma, 2019, 341, 93-99.	5.1	13
10	Pyrogenic carbon erosion after the Rim Fire, Yosemite National Park: The Role of Burn Severity and Slope. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 432-449.	3.0	25
11	Molecular and isotopic composition of modern soils derived from kerogen-rich bedrock and implications for the global C cycle. Biogeochemistry, 2019, 143, 239-255.	3.5	15
12	Decadal-scale litter manipulation alters the biochemical and physical character of tropical forest soil carbon. Soil Biology and Biochemistry, 2018, 124, 199-209.	8.8	32
13	Effect of ocean oxidation on the chemical structure of marine kerogen. Organic Geochemistry, 2017, 106, 1-12.	1.8	14
14	Soil Carbon and Nitrogen Responses to Nitrogen Fertilizer and Harvesting Rates in Switchgrass Cropping Systems. Bioenergy Research, 2017, 10, 456-464.	3.9	25
15	Nitrogen-fixing symbiosis inferred from stable isotope analysis of fossil tree rings from the Oligocene of Ethiopia. Geology, 2017, , G39213.1.	4.4	1
16	Plant species, not climate, controls aboveground biomass O ₂ :CO ₂ exchange ratios in deciduous and coniferous ecosystems. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 2314-2324.	3.0	7
17	Shortâ€Term Changes in Physical and Chemical Properties of Soil Charcoal Support Enhanced Landscape Mobility. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 3098-3107.	3.0	16
18	Organic structural properties of kerogen as predictors of source rock type and hydrocarbon potential. Fuel, 2016, 184, 792-798.	6.4	31

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19	Solid-state NMR reveals differential carbohydrate utilization in diapausing Culex pipiens. Scientific Reports, 2016, 6, 37350.	3.3	30
20	Exploring Educators' Environmental Education Attitudes and Efficacy: Insights Gleaned from a Texas Wetland Academy. International Journal of Science Education, Part B: Communication and Public Engagement, 2016, 6, 303-324.	1.5	4
21	Soil organic matter composition and quality across fire severity gradients in coniferous and deciduous forests of the southern boreal region. Journal of Geophysical Research G: Biogeosciences, 2015, 120, 1124-1141.	3.0	54
22	Forest soil carbon oxidation state and oxidative ratio responses to elevated CO 2. Journal of Geophysical Research G: Biogeosciences, 2015, 120, 1797-1811.	3.0	19
23	The effect of fertilization levels and genetic deployment on the isotopic signature, constituents, and chemistry of soil organic carbon in managed loblolly pine (Pinus taeda L.) forests. Forest Ecology and Management, 2015, 355, 91-100.	3.2	17
24	Characterization of Slow-Pyrolysis Bio-Oils by High-Resolution Mass Spectrometry and Ion Mobility Spectrometry. Energy &	5.1	21
25	Chemical and Isotopic Thresholds in Charring: Implications for the Interpretation of Charcoal Mass and Isotopic Data. Environmental Science & Environm	10.0	28
26	Aromaticity and degree of aromatic condensation of char. Organic Geochemistry, 2015, 78, 135-143.	1.8	207
27	Changes in fire-derived soil black carbon storage in a subhumid woodland. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 1807-1819.	3.0	7
28	Controls on the oxidative ratio of net primary production in agricultural ecosystems. Biogeochemistry, 2014, 121, 581-594.	3.5	11
29	Analysis of volatile organic compound mixtures using radio-frequency ionization/mass spectrometry. Analytical Methods, 2014, 6, 4982.	2.7	4
30	Probing Temperature-Dependent Organo-mineral Interactions with Molecular Spectroscopy and Quartz Crystal Microgravimetry., 2014,, 189-195.		0
31	Toward a "Molecular Thermometer―to Estimate the Charring Temperature of Wildland Charcoals Derived from Different Biomass Sources. Environmental Science & Technology, 2013, 47, 11490-11495.	10.0	34
32	A preliminary assessment of the interactions between the capping agents of silver nanoparticles and environmental organics. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 435, 22-27.	4.7	71
33	Nitrogen, biochar, and mycorrhizae: Alteration of the symbiosis and oxidation of the char surface. Soil Biology and Biochemistry, 2013, 58, 248-254.	8.8	90
34	Multiple Controls on the Chemical and Physical Structure of Biochars. Industrial & Engineering Chemistry Research, 2012, 51, 3587-3597.	3.7	145
35	Mineralogical controls on soil black carbon preservation. Global Biogeochemical Cycles, 2012, 26, .	4.9	61
36	Dynamics of decadally cycling carbon in subsurface soils. Journal of Geophysical Research, 2012, 117, .	3.3	48

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37	Hydrologic properties of biochars produced at different temperatures. Biomass and Bioenergy, 2012, 41, 34-43.	5.7	394
38	Biochemical Suitability of Crop Residues for Cellulosic Ethanol: Disincentives to Nitrogen Fertilization in Corn Agriculture. Environmental Science & Environmental Science & 2011, 45, 2013-2020.	10.0	24
39	Earthworm avoidance of biochar can be mitigated by wetting. Soil Biology and Biochemistry, 2011, 43, 1732-1737.	8.8	136
40	Biochar effects on soil biota – A review. Soil Biology and Biochemistry, 2011, 43, 1812-1836.	8.8	3,514
41	Controls on the origin and cycling of riverine dissolved inorganic carbon in the Brazos River, Texas. Biogeochemistry, 2011, 104, 275-291.	3.5	46
42	Topographic controls on black carbon accumulation in Alaskan black spruce forest soils: implications for organic matter dynamics. Biogeochemistry, 2010, 100, 39-56.	3.5	56
43	Temperature Sensitivity of Black Carbon Decomposition and Oxidation. Environmental Science & Emp; Technology, 2010, 44, 3324-3331.	10.0	314
44	White-Rot Basidiomycete-Mediated Decomposition of C ₆₀ Fullerol. Environmental Science & Science	10.0	89
45	Measurement of soil carbon oxidation state and oxidative ratio by $\langle \sup 13 \langle \sup \rangle C$ nuclear magnetic resonance. Journal of Geophysical Research, 2009, 114, .	3.3	55
46	Electrospray and photoionization mass spectrometry for the characterization of organic matter in natural waters: a qualitative assessment. Limnology and Oceanography: Methods, 2009, 7, 81-95.	2.0	237
47	Effects of long-term soil amendment with sewage sludges on soil humic acid thermal and molecular properties. Chemosphere, 2008, 73, 1838-1844.	8.2	27
48	The transformation and mobility of charcoal in a fire-impacted watershed. Geochimica Et Cosmochimica Acta, 2007, 71, 3432-3445.	3.9	238
49	Comparison of quantification methods to measure fireâ€derived (black/elemental) carbon in soils and sediments using reference materials from soil, water, sediment and the atmosphere. Global Biogeochemical Cycles, 2007, 21, .	4.9	483
50	New revelations on the nature of organic matter in ice cores. Journal of Geophysical Research, 2006, 111, .	3.3	84
51	Direct molecular evidence for the degradation and mobility of black carbon in soils from ultrahigh-resolution mass spectral analysis of dissolved organic matter from a fire-impacted forest soil. Organic Geochemistry, 2006, 37, 501-510.	1.8	312
52	Characterization of humic like substances obtained by chemical oxidation of eucalyptus charcoal. Organic Geochemistry, 2005, 36, 1480-1489.	1.8	120