Mark G Johnson

List of Publications by Year
in descending order

65 papers	4,601 citations	201385 27 h-index	128067 60 g-index
65 all docs	65 docs citations	65 times ranked	5732 citing authors

#	Article	IF	Citations
1	Dynamic Molecular Structure of Plant Biomass-Derived Black Carbon (Biochar). Environmental Science & Technology, 2010, 44, 1247-1253.	4.6	2,267
2	Water uptake in biochars: The roles of porosity and hydrophobicity. Biomass and Bioenergy, 2014, 61, 196-205.	2.9	351
3	Designing relevant biochars as soil amendments using lignocellulosic-based and manure-based feedstocks. Journal of Soils and Sediments, 2014, 14, 330-343.	1.5	138
4	Elevated CO2 and conifer roots: effects on growth, life span and turnover. New Phytologist, 2000, 147, 87-103.	3.5	137
5	Germination and early plant development of ten plant species exposed to titanium dioxide and cerium oxide nanoparticles. Environmental Toxicology and Chemistry, 2016, 35, 2223-2229.	2.2	121
6	Remediation of an acidic mine spoil: Miscanthus biochar and lime amendment affects metal availability, plant growth, and soil enzyme activity. Chemosphere, 2018, 205, 709-718.	4.2	91
7	A Versatile Sunâ€lit Controlledâ€Environment Facility for Studying Plant and Soil Processes. Journal of Environmental Quality, 1996, 25, 614-625.	1.0	84
8	Biochar compost blends facilitate switchgrass growth in mine soils by reducing Cd and Zn bioavailability. Biochar, 2019, 1, 97-114.	6.2	74
9	Effects of elevated CO₂ and N fertilization on soil respiration from ponderosa pine (<i>Pinus</i><i>ponderosa</i>) in open-top chambers. Canadian Journal of Forest Research, 1995, 25, 1243-1251.	0.8	72
10	Effects of elevated CO2 and nitrogen on the synchrony of shoot and root growth in ponderosa pine. Tree Physiology, 1996, 16, 905-914.	1.4	70
11	Elevated CO2 and temperature alter nitrogen allocation in Douglas-fir. Global Change Biology, 2003, 9, 1038-1050.	4.2	67
12	Biochars impact on water infiltration and water quality through a compacted subsoil layer. Chemosphere, 2016, 142, 160-167.	4.2	67
13	Title is missing!. Plant and Soil, 2001, 229, 259-270.	1.8	66
14	Title is missing!. Plant and Soil, 1997, 189, 275-287.	1.8	59
15	Whole-seedling biomass allocation, leaf area, and tissue chemistry for Douglas-fir exposed to elevated CO2 and temperature for 4 years. Canadian Journal of Forest Research, 2003, 33, 269-278.	0.8	56
16	Ecological and water quality consequences of nutrient addition for salmon restoration in the Pacific Northwest. Frontiers in Ecology and the Environment, 2006, 4, 18-26.	1.9	56
17	Effects of elevated CO2 and N fertilization on fine root dynamics and fungal growth in seedling Pinus ponderosa. Environmental and Experimental Botany, 1997, 37, 73-83.	2.0	55
18	Effects of elevated CO2 on fine root dynamics in a Mojave Desert community: a FACE study. Global Change Biology, 2006, 12, 61-73.	4.2	45

#	ARTICLE	IF	CITATIONS
19	Intergenerational responses of wheat (Triticum aestivum L.) to cerium oxide nanoparticles exposure. Environmental Science: Nano, 2017, 4, 700-711.	2.2	43
20	Title is missing!. Plant and Soil, 1997, 190, 19-28.	1.8	40
21	Effects of Elevated CO 2 and Nitrogen on Ponderosa Pine Fine Roots and Associated Fungal Components. Journal of Biogeography, 1995, 22, 281.	1.4	37
22	Estimates of Douglas-fir fine root production and mortality from minirhizotrons. Forest Ecology and Management, 2005, 204, 359-370.	1.4	34
23	Cerium oxide nanoparticles transformation at the rootâ€“soil interface of barley (<i>Hordeum) Tj ETQq1 1 0.784314 rgBT /Overlock 10	2.2	34
24	Potential for metal contamination by direct sonication of nanoparticle suspensions. Environmental Toxicology and Chemistry, 2013, 32, 889-893.	2.2	32
25	Concentration and Release of Phosphorus and Potassium From Lignocellulosic- and Manure-Based Biochars for Fertilizer Reuse. Frontiers in Sustainable Food Systems, 2018, 2, .	1.8	31
26	Effects of elevated CO2 and O3 on soil respiration under ponderosa pine. Soil Biology and Biochemistry, 2006, 38, 1764-1778.	4.2	30
27	Relating fine root biomass to soil and climate conditions in the Pacific Northwest. Forest Ecology and Management, 2007, 242, 195-208.	1.4	27
28	Phytostabilization of acidic mine tailings with biochar, biosolids, lime, and locally-sourced microbial inoculum: Do amendment mixtures influence plant growth, tailing chemistry, and microbial composition?. Applied Soil Ecology, 2021, 165, 103962.	2.1	27
29	CO2 and N-fertilization effects on fine-root length, production, and mortality: a 4-year ponderosa pine study. Oecologia, 2006, 148, 517-525.	0.9	25
30	Effects of Biochar Blends on Microbial Community Composition in Two Coastal Plain Soils. Agriculture (Switzerland), 2015, 5, 1060-1075.	1.4	23
31	Phytostabilization of Zn and Cd in Mine Soil Using Corn in Combination with Biochars and Manure-Based Compost. Environments - MDPI, 2019, 6, 69.	1.5	21
32	Optimizing minirhizotron sample frequency for an evergreen and deciduous tree species. New Phytologist, 2003, 157, 155-161.	3.5	20
33	Can Biochar Covers Reduce Emissions from Manure Lagoons While Capturing Nutrients?. Journal of Environmental Quality, 2017, 46, 659-666.	1.0	19
34	Effect of organic matter concentration and characteristics on mercury mobilization and methylmercury production at an abandoned mine site. Environmental Pollution, 2021, 271, 116369.	3.7	18
35	Bole water content shows little seasonal variation in century-old Douglas-fir trees. Tree Physiology, 2007, 27, 737-747.	1.4	17
36	Elevated CO₂ and temperature alter net ecosystem C exchange in a young Douglas fir mesocosm experiment. Plant, Cell and Environment, 2007, 30, 1400-1410.	2.8	17

#	Article	IF	Citations
37	Effects of season and interval of prescribed burns on pyrogenic carbon in ponderosa pine stands in the southern Blue Mountains, Oregon, USA. Geoderma, 2019, 348, 1-11.	2.3	17
38	Minirhizotron installation in sandy, rocky soils with minimal soil disturbance. Soil Science Society of America Journal, 2000, 64, 761-764.	1.2	16
39	Gasified Grass and Wood Biochars Facilitate Plant Establishment in Acid Mine Soils. Journal of Environmental Quality, 2016, 45, 1013-1020.	1.0	15
40	13C isotopic signature and C concentration of soil density fractions illustrate reduced C allocation to subalpine grassland soil under high atmospheric N deposition. Soil Biology and Biochemistry, 2018, 125, 178-184.	4.2	15
41	A rapid-test for screening biochar effects on seed germination. Communications in Soil Science and Plant Analysis, 2018, 49, 2025-2041.	0.6	14
42	Preferential interaction of Na+ over K+ with carboxylate-functionalized silver nanoparticles. Science of the Total Environment, 2014, 490, 11-18.	3.9	13
43	Elevated temperature, soil moisture and seasonality but not CO2 affect canopy assimilation and system respiration in seedling Douglas-fir ecosystems. Agricultural and Forest Meteorology, 2007, 143, 30-48.	1.9	12
44	Elevated CO2 and O3 effects on fine-root survivorship in ponderosa pine mesocosms. Oecologia, 2009, 160, 827-837.	0.9	11
45	Independent and contrasting effects of elevated CO2 and N-fertilization on root architecture in Pinus ponderosa. Trees - Structure and Function, 2005, 19, 43-50.	0.9	10
46	A two-probe method for measuring water content of thin forest floor litter layers using time domain reflectometry. Soil and Tillage Research, 1996, 9, 199-207.	0.4	9
47	Sapwood moisture in Douglas-fir boles and seasonal changes in soil water. Canadian Journal of Forest Research, 2007, 37, 1263-1271.	0.8	9
48	Elemental and Spectroscopic Characterization of Low-Temperature (350Â°C) Lignocellulosic- and Manure-Based Designer Biochars and Their Use as Soil Amendments. , 2019, , 37-58.		9
49	Douglas-Fir (<i>Pseudotsuga menziesii</i> (Mirb.) Franco) Transcriptome Profile Changes Induced by Diesel Emissions Generated with CeO₂ Nanoparticle Fuel Borne Catalyst. Environmental Science & Technology, 2018, 52, 10067-10077.	4.6	8
50	Biochar affects growth and shoot nitrogen in four crops for twoÂsoils. , 2020, 3, e20067.		8
51	13C and15N in microarthropods reveal little response of Douglas-fir ecosystems to climate change. Global Change Biology, 2007, 13, 1386-1397.	4.2	7
52	Soil life in reconstructed ecosystems: Initial soil food web responses after rebuilding a forest soil profile for a climate change experiment. Applied Soil Ecology, 2010, 45, 26-38.	2.1	7
53	Biochar for Mine-land Reclamation. , 2019, , 75-90.		7
54	Microbial response to designer biochar and compost treatments for mining impacted soils. Biochar, 2021, 3, 299-314.	6.2	7

#	Article	IF	Citations
55	A spatial analysis of fine-root biomass from stand data in the Pacific Northwest. Canadian Journal of Forest Research, 2004, 34, 2169-2180.	0.8	5
56	Shifts in N and Î´15N in wheat and barley exposed to cerium oxide nanoparticles. NanoImpact, 2018, 11, 156-163.	2.4	5
57	Biochar Affects Essential Nutrients of Carrot Taproots and Lettuce Leaves. Hortscience: A Publication of the American Society for Hortcultural Science, 2020, 55, 261-271.	0.5	5
58	The effects of biochar and redox conditions on soil Pb bioaccessibility to people and waterfowl. Chemosphere, 2022, 294, 133675.	4.2	5
59	Do mesocosms influence photosynthesis and soil respiration?. Environmental and Experimental Botany, 2008, 62, 36-44.	2.0	4
60	The Occurrence of Legacy P Soils and Potential Mitigation Practices Using Activated Biochar. Agronomy, 2021, 11, 1289.	1.3	4
61	Applying fingerprint Fourier transformed infrared spectroscopy and chemometrics to assess soil ecosystem disturbance and recovery. Journal of Soils and Water Conservation, 2018, 73, 443-451.	0.8	3
62	Microbial Response to Phytostabilization in Mining Impacted Soils Using Maize in Conjunction with Biochar and Compost. Microorganisms, 2021, 9, 2545.	1.6	3
63	Seasonal and long-term effects of CO2 and O3 on water loss in ponderosa pine and their interaction with climate and soil moisture. Tree Physiology, 2009, 29, 1381-1393.	1.4	2
64	Focused Microbiome Shifts in Reconstructed Wetlands Correlated with Elevated Cu Concentrations Originating from Micronized Copper Azole Treated Wood. Environmental Toxicology and Chemistry, 2021, 40, 3351-3368.	2.2	0
65	Investigations of nanoparticle toxicity and uptake of Cerium oxide and Titanium dioxide in Arabidopsis thaliana (L.). FASEB Journal, 2012, 26, 580.4.	0.2	0